APPENDIX B

Salvation Army Camp and Retreat Biological Report

Prepared by Merkel & Associates

The biology report has been updated to reflect the County's recently amended Resource Protection Ordinance and revised upland and wetland impacts, and expanded open space reconfiguration.

SALVATION ARMY DIVISIONAL CAMP AND RETREAT BIOLOGICAL REPORT

MUP #: 70-379W[2]
Log #: ER98-14-023

Prepared for:
BRG Consulting, Inc.
304 Ivy Street
San Diego, California 92108
Contact: Tim Gnibus

Prepared by:
Merkel & Associates, Inc.
5434 Ruffin Road
San Diego, California 92123
Contact: Melissa A. Booker
Phone: (858) 560-5465
Fax: (858) 560-7779

Final Revised April 19, 2008

_____
Principal Consultant

_____
Lead Biologist

TABLE OF CONTENTS

Summary 1
Introduction 5
Project Description 5
Location 8
Methods 11
Focused and Protocol Survey Methods 14
Wildlife Corridor Analysis 15
Wetland Delineation Methods 16
Jurisdiction of Wetlands and Waterways 17
Impact Assessment Methods 19
General Survey Limitations 21
Existing Conditions 23
Geology and Soils 23
Vegetation Communities 23
Wetland Delineation Results 28
Flora 35
Zoological Resources 35
Sensitive Biological Resources 42
Impacts 54
Thresholds of Significance 54
Vegetation Community Impacts 55
Jurisdictional Wetland and Non-Wetland Waters of the U.S. Direct Impacts 61
Wetlands and Non-Wetland Waters of the U.S. Indirect Impacts 63
Wildlife Corridor Impacts/ Applicable MSCP/BMO Design Criteria 63
Sensitive Species Impacts 67
Edge Effect/Indirect Impacts 75
Cumulative Impacts 78
Project Based Analysis 78
Mitigation 82
Habitat-based Mitigation 82
Jurisdictional Wetland Mitigation 85
Additional Mitigation Requirements 88
Cumulative Impact Mitigation 95
RPO, MSCP, and BMO Conformance 96
Preparer's Qualifications 98

TABLE OF TABLES

Table 1. Survey Dates, Times, Staff[1], Purpose, and Weather Conditions 12
Table 2. On-site Vegetation Communities 24
Table 3. Acreages of Jurisdictional Wetlands, Non-Wetland Waters of the U.S., and Streambeds 28
Table 4. Buffer determination factors and wetland buffer widths 34
Table 5. On-site Sensitive Flora Population Estimates and Significance 44
Table 6. On-site Sensitive Fauna Population Estimates and Significance 45
Table 7. Vegetation Community Impacts by Project Alternative 56
Table 8 . Impact Acreages for Jurisdictional Wetlands and Non-Wetland Waters of the U.S./Streambed 61

Table 9. Sensitive MSCP Faunal Species Detected within the Camp Preserve Areas and Corresponding MSCP Conditions of Coverage 68
Table 10. Faunal Species Detected or Expected within the Camp Preserve Areas and Corresponding MSCP Conditions of Coverage 74
Table 11. Potential Edge Effects and Corresponding Project Design Features 76
Table 12. Project-based Cumulative Impacts and Mitigation for Habitat Types Impacted by the Salvation Army Camp Project 81
Table 13a. Impacts to On-Site Vegetation Communities Under the Preferred Plan, Applicable Mitigation Ratios, and Proposed Mitigation[1] 83
Table 13b. Impacts to On-Site Vegetation Communities Under Reduced Alternatives I and II including impacts from the 2007 Fire Protection Plan, Applicable Mitigation Ratios, and Proposed Mitigation 84
Table 14. County Jurisdictional Wetland Impacts and Proposed Mitigation, Reduced Alternative Plan I and II Impacts and Mitigation are based on Updated 2007 RPO Jurisdictional Assessment 86
Table 15. Recommended Wetland Mitigation Site Plant Materials, Unit Size, and Density 88
Table 16a. Preferred Plan Habitat-based Mitigation and Open Space Easement Constituents[1] 92
Table 16b. Alternative I or II Habitat-based Mitigation and Open Space Easement Constituents 92

TABLE OF FIGURES

Summary Figure. DEIR and FEIR habitat impact comparison map 4
Figure 1. Project Vicinity Map 10
Figure 2a1-11, 2b1-11, and 2c1-11 ..... Inserted at Back
Figure 3. Wetland Delineation Data Points, Photo Points, Jurisdictional Wetlands, and Non-Wetland Waters of the U.S./Streambeds 29
Figure 4. Salvation Army Camp Biological Survey Areas 50
Figure 5. Golden Eagle Nest Site in Relation to Existing and Proposed Development 71
Figure 6. Biological Cumulative Study Area and the Locations of Projects Utilized for the Cumulative Biological Analysis 80
Figure 7. Recommended Fencing to Avoid Wetland Impacts 90
Figure 8. Trail Impact Mitigation Map 94

TABLE OF APPENDICES

Appendix 1. Floral Checklist of Species Observed
Appendix 2. Faunal Checklist of Species Observed
Appendix 3. Plant and Animal Sensitivity Guidelines
Appendix 4. Local Sensitive Plant Species Presence and Status
Appendix 5. Local Sensitive Faunal Species Presence and Status
Appendix 6. Routine Wetland Data Forms and Photo Points
Appendix 7. California Natural Diversity Database Forms
Appendix 8. CalEPPC List of Exotic Pest Plants of Greatest Ecological Concern
Appendix 9. Report of Presence/Absence Trapping Surveys for Stephens' Kangaroo Rat
Appendix 10. Salvation Army Expansion: Effects on Golden Eagles
Appendix 11. 45-day Letter Report of Quino Checkerspot Butterfly Focused Surveys for the Salvation Army Project
Appendix 12. Intensified Wetland Delineation Forms
Appendix 13. Intensified Wetland Delineation Photo Points

Salvation Army Divisional Camp and Retreat Biological Report

SUMMARY

Merkel & Associates, Inc. (M&A) has prepared this biological impact analysis report for the County of San Diego for the proposed Salvation Army Divisional Camp and Retreat Project (County of San Diego Case Number MUP #: 70-379W2, Log #: ER98-14-023). The purpose of this report is to document the existing study area biological conditions; identify potential biological resource impacts that could result from proposed project implementation; and recommend measures to avoid, minimize, and/or mitigate significant impacts consistent with the California Environmental Quality Act (CEQA), the County of San Diego Multiple Species Conservation Program (MSCP) Subarea Plan, Resource Protection Ordinance (RPO), and Biological Mitigation Ordinance (BMO).

Located on Mussey Grade Road in Ramona, the Salvation Army Divisional Camp and Retreat project site is primarily comprised of Southern Mixed Chaparral but also contains Non-Native Woodland, Disturbed Habitat, Urban/Developed, Diegan Coastal Sage Scrub, Mafic Southern Mixed Chaparral, Coastal Sage-Chaparral Scrub, Non-Native Grasslands, Southern Coast Live Oak Riparian Forest, Mule Fat Scrub, Southern Willow Scrub, Emergent Wetland, and Coast Live Oak Woodland. The areas with reduced biological sensitivity generally occur in the immediate vicinity of the existing development. The least disturbed areas occur within the drainages and chaparral covered slopes on the north and western portions of the site. The site is located within San Diego County's MSCP Subarea Plan area and is subject to the BMO as well as the San Diego County (County) RPO. The on-site native and semi-native habitats meet the criteria for Biological Resource Core Areas (BRCA) as defined by the BMO.

The Salvation Army Divisional Camp and Retreat project includes a proposed 20-year phased expansion of existing camp facilities including some combination of expanded cabin facilities, increased tent camping/yurts, an educational camp, a retreat center building and associated facilities, additional staff housing, relocated maintenance facilities, expanded support facilities, improved parking, improved fire services and utilities, and the necessary leach fields and septic system components. Exactly what facility components are included varies between the 3 project alternatives. The project alternatives have been reconfigured to minimize impacts to sensitive biological resources including jurisdictional wetlands, wetland buffers, and oak woodlands. The 3 project alternatives are referred to as the Preferred Site Plan or Preferred Plan, which supports the largest number of camp users and facilities, and Reduced Alternatives I and II, which both support a decreased number of on-site activities and camp users. The Preferred Site Plan does not comply with some existing ordinances (BMO and RPO) and has been deemed not approvable. It is still included in this Biological Technical Report, as it was part of the original alternatives analysis. However, this report does not analyze the biological effects of a Fire Protection Plan for the Preferred Site Plan, as it cannot be approved and thus, an updated analysis is not necessary or relevant.

The Preferred Site Plan and each of the 2 Reduced Alternative Plot Plans each proposes significant impacts to Southern Mixed Chaparral, Coastal Sage Scrub, Coastal Sage-Chaparral Scrub, Non-Native Grasslands, Southern Coast Live Oak Riparian Forest, and Coast Live Oak Woodlands. Although a small area of Emergent Wetlands (less than 0.01 acre) lies within the project footprint (under any of the alternatives), impacts shall be avoided through fencing, signage, and monitoring as proposed herein. The remaining on-site impacts would occur within Disturbed Habitat, Non-Native Woodlands/Vegetation, or Developed areas and would not be significant. Finally, 0.04 acre of the oak impacts and 0.17 acre of the Non-Native Grassland impacts would occur off-site, as a result of construction, and 3.25 acres of on-site sage scrub and 0.28 acre of chaparral were previously cleared for percolation testing (these numbers are included within the habitat impact totals throughout the document). The off-site impacts and impacts from clearing are both significant and require mitigation. The 2 Reduced Alternative Plot Plans reduce quantitative vegetation community impacts by eliminating project elements and relocating facilities in less environmentally sensitive locations.

The Preferred Site Plan includes a retreat center and access road that would significantly impact the on-site wildlife corridor. The alternative plans relocate this facility, eliminating the associated wildlife corridor impacts.

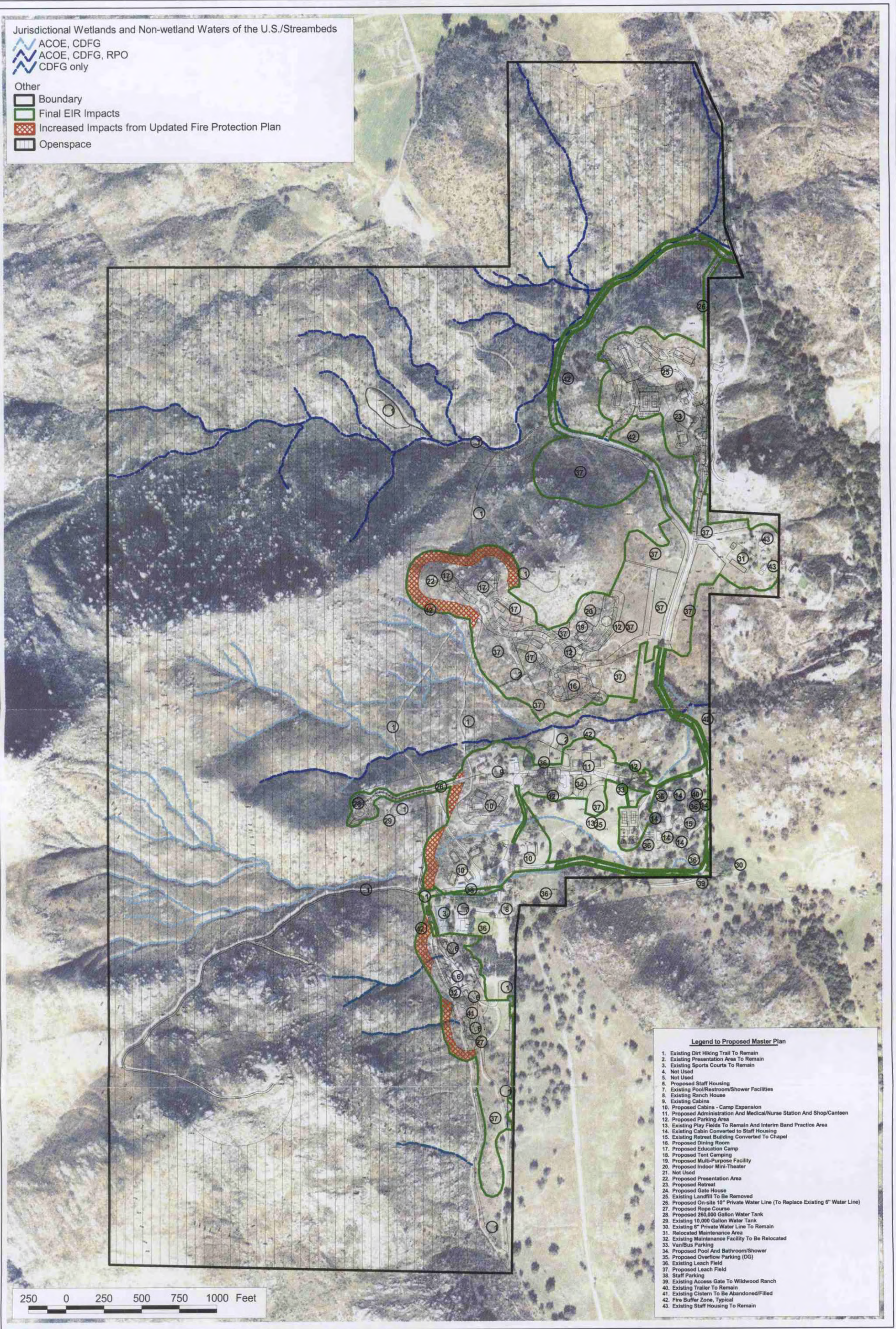
The project site supports a variety of (County) sensitive species typically associated with chaparral, sage scrub, and oak woodland habitats within the region. Most notable of these are Engelmann Oak (*Quercus engelmannii*), San Diego Horned Lizard (*Phrynosoma coronatum blainvillii*), Orange-throated Whiptail (*Cnemidophorus hyperythrus*), Cooper's Hawk (*Accipiter cooperii*), Red-shouldered Hawk (*Buteo lineatus*), Southern California Rufous-crowned Sparrow (*Aimophila ruficeps canescens*), and Mule Deer (*Odocoileus hemionus*). As proposed, (under any alternative), the project would not impact any state or federally listed species; however, the Preferred Site Plan and either of the Reduced Project Alternatives would have significant impacts to Engelmann Oak.

Biological mitigation is required for any new facilities, utilities, or clearing that impacts native plant communities, wildlife habitat, or sensitive biological resources. Habitat-based mitigation would occur within the Camp property in the form of an open space easement. In accordance with the County's MSCP Subarea Plan, mitigation lands would be protected through fee title transfer, conservation easement, or other appropriate title encumbrances acceptable to the County. Management and maintenance of mitigation lands is required to ensure that biological resource values are maintained; thus, the mitigation/preserved land will be managed and maintained by a qualified land manager. In addition, a small amount of wetland creation/restoration is anticipated on-site to off set impacts Non-Wetland Waters of the U.S. and jurisdictional wetlands (the proposed restoration area is currently occupied by Non-Native Grassland and has thus been included in the habitat impact totals listed previously).

This updated biological report contains revisions in response to comments received on the Draft Environmental Impact Report. In response to these comments and 2007 amendments to the RPO, the updated Fire Protection Plan (approved by the County) was developed, some County wetland jurisdictional boundaries have changed, and the open space easement has been reconfigured. These changes resulted in corresponding adjustments to the habitat

and jurisdictional wetland impact and mitigation quantifications. While no new impacts have been identified, some previous impacts have increased or decreased accordingly; however, there is no change in the degree of impact significance and all habitat impacts remain mitigable on-site. Overall, the amount of habitat impacts has increased due to the need for larger fire management zones. The total area of County jurisdictional wetlands on-site has decreased, based on 2007 changes to the definition of an RPO wetland; and the open space easement has been enlarged and reconfigured to minimize edge effects and include all riparian forest adjacent to an RPO wetland, while exceeding habitat mitigation requirements.

The aforementioned changes between the biological technical report for the Draft Environmental Impact Report (EIR) and this final biological technical report have also been depicted within the Summary Figure, which indicates where increases in impacts would occur, displays the new open space easement, and provides updated RPO jurisdictional wetland locations.



Draft EIR and Final EIR Habitat Impact Comparison Map

Salvation Army Divisional Camp Alternative Plan

Summary Figure

INTRODUCTION

This document reports the results of 1999, 2000, 2001, 2006, and 2007 biological surveys and wetland delineations performed by Merkel & Associates (M&A) at the Salvation Army Divisional Camp and Retreat site (Camp) on behalf of BRG Consulting. Quantification of impacts was based on the project plot plans supplied by Matalon Architecture and Planning, details regarding the impact assessment are provided in the Methods section.

In preparing this document, M&A reviewed existing biological information from the Camp and neighboring lands and conducted general biological surveys, focused surveys, wetland delineations, and a corridor analysis. The document has been revised to address comments from public review.

Currently, the Camp supports a church retreat and recreational facilities including staff housing, cabins, a dining hall, a swimming pool, activities buildings, outdoor recreational facilities, and trails over approximately 578 acres.

PROJECT DESCRIPTION

The Preferred Site Plan is a 20-year expansion, low-density camping facility. At the end of the 20-year expansion, the Camp would accommodate up to a maximum of 748 users. The Preferred Site Plan would include the major components described below.

A cabin camp component that expands the existing 5 masonry cabins to a total of 12 cabins and adds a building for arts and crafts. The tent camp component would expand and relocate 6 more permanent dome-shaped tent-like structures (yurts) to a total of 10. In addition, a toilet/shower building and outdoor meeting area with wood log seating are proposed. At the proposed nature study/educational camp, campers would stay in cabins and use nearby classrooms and the adjacent natural areas to learn about their surrounding environment. An eventual build-out of 9 cabins with toilets and showers, a building for classrooms, and an outdoor meeting area made of concrete steps for seating are planned for the nature study area. The 2 existing staff housing buildings would remain. The 4 cabins in the southeastern portion of the Camp would be converted to house staff members once the new retreat component is constructed. Four new staff housing buildings in the southeast portion of the Camp would house additional staff members. The maintenance operation would be moved from its current location, in the southeastern portion of the site, to a new location in the central portion of the project site. The existing facility would be demolished, and a new facility would be constructed. A 6-foot chain link fence would enclose the 2 buildings, along with a yard area between them, for security purposes.

A new central dining facility would service the cabin camp, tent camp, nature study/educational camp, as well as any day-uses. Additionally, a new multi-purpose building would be located in the east-central portion of the Camp. An indoor mini-theater would be located adjacent to the multi-purpose building. A new central administrative cluster of buildings is also proposed to service the Camp.

The existing retreat facility would be converted to a chapel. The new retreat, at eventual build-out, would include 5 two-story buildings, which would house approximately 175 overnight guests. Functions would include retreats and conferences for young adults, couples, men's groups, women's groups, seniors, and other compatible users. A building with a flexible meeting room, kitchen, and

breakout space is also proposed. The existing playing fields, courts, and swimming pool would remain. Additional recreation areas would include new tennis and basketball courts, a new swimming pool, a recreational rope course, and a new bathroom/shower building. The proposed parking areas (188 spaces) would be covered with decomposed granite. Potable water is supplied by an existing 6-inch water line in Mussey Grade Road. An existing 10,000-gallon water storage tank located within the existing Camp would remain. To increase fire fighting water capacity and flows, a new approximately 250,000-gallon water tank would be added near the existing 10,000-gallon water tank. A new on-site private water line would connect with the existing 6-inch water line in Mussey Grade Road at the main entry to the Camp. The existing Camp is serviced by a standard septic system with leach fields. The expanded Camp would also be serviced by a standard septic system with leach fields. Infiltration basins and grass swales would be used to prevent adverse water quality impacts.

Under the Reduced Alternative I, all components would be the same as the Preferred Site Plan with the following exceptions: expanded and relocated tent camping component (a total of 10 yurts, a restroom/shower building, outdoor seating area, and an outdoor presentation area) and the gate house would be eliminated, and the retreat center would be decreased by one 16-unit cabin. Under this alternative, the retreat center would also be relocated to the south of its Preferred Site Plan location. The proportionate reduction in staff necessary for this alternative would be 12 people. Implementation of Reduced Alternative I would reduce the calculated capacity of the Camp by 133 users for an overall Camp capacity of 615 users and would decrease the total project building footprint by 11,150 square feet.

Under the Reduced Alternative II, all components would be the same as the Preferred Site Plan with the following exceptions: the expanded and relocated tent camping component (a total of 10 yurts, a restroom/shower building, outdoor seating area, and an outdoor presentation area) and the gate house would be eliminated; the retreat center would be relocated nearer to the other Camp facilities and decreased by one 16-unit and one 18-unit cabin; the education camp would be decreased by 3 cabins; and the multi-purpose building would be reduced in size and capacity. The proportionate reduction in staff necessary for this alternative would be 12 people. Implementation of Reduced Alternative II would reduce the calculated capacity of the Camp by 235 overnight users for an overall Camp capacity of 513 users and would decrease the total project's building footprint by 39,900 square feet.

Much of the project site will remain undeveloped under any of the proposed alternatives. These undeveloped areas shall not be subject to grading, clearing, construction or other disturbance associated with project construction and/or Camp operations.

The Camp project has undergone a number of changes over the course of the past 9 years. Some of the more substantial changes have taken place, largely as a result of County Department of Planning and Land Use (County) review and public comments. The most substantial project changes are outlined herein:

- An additional alternative, which further reduces Camp capacity, was developed for review.
- All previously proposed new trails and overnight camping activities have been eliminated from the project. All that remains, in terms of hiking trails, are the existing trails open for day use by camp visitors only. This has reduced the potential for trail impacts to the wildlife corridor and eliminated any use within 4,000 feet of a Golden Eagle (*Aquila chrysaetos*) nest.
- The recreational vehicle component of the project has been eliminated from the alternatives.
- Roadway improvements are to be avoided, to the extent feasible, within environmental sensitive areas.

- In response to public comments, the project's open space easement has been increased in total size and configured to minimize edge effects.
- Wetlands and wetland buffers were re-examined relative to the 2007 Resource Protection Ordinance (RPO) and the open space was increased to include oak woodlands adjacent to RPO wetlands.
- The Fuel Modification Zone was enlarged, based on a site-specific, County approved Fire Protection Plan, and impacts were assessed accordingly for the Reduced Alternatives (but were not addressed for the Preferred Site Plan as it is unapprovable).

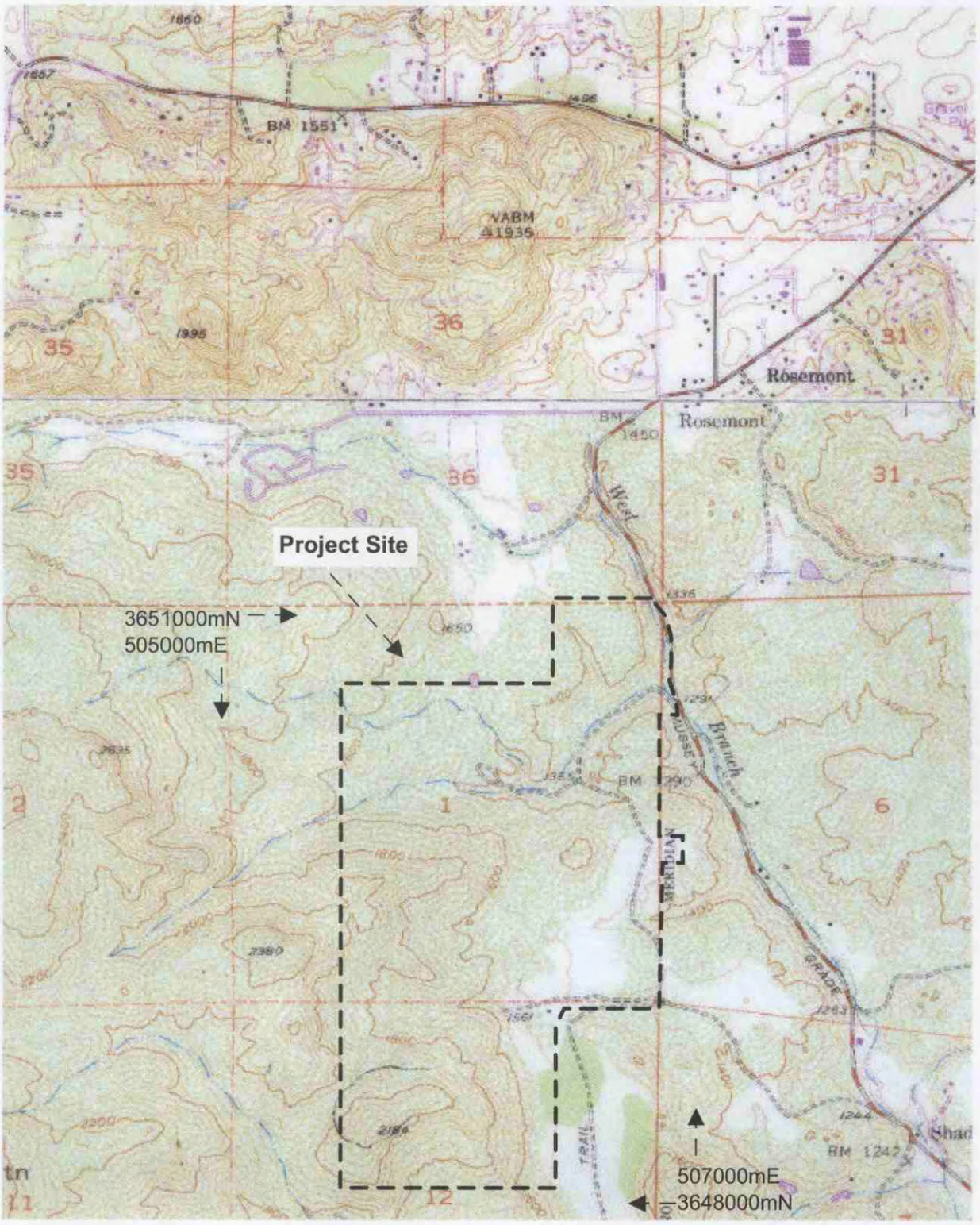
The project has incorporated a number the previous biological report's recommendations as "Design Features" in an effort to avoid and/or minimize biological impacts. These Features are listed below and will be referred back to throughout the document where appropriate:

1) The open space area on-site shall be dedicated as a conservation easement to the County of San Diego with the California Department of Fish and Game (CDFG) as a third party;
2) Habitat Management Plan (HMP) shall be prepared for the conservation easement and submitted to the County of San Diego prior to grading, clearing or use/reliance on the Major Use Permit. An established conservancy group subject to County approval shall be selected to manage the habitat in accordance with the approved HMP;
3) If it is necessary to apply an herbicide for weed control before laying asphalt or other impermeable surfaces, one such as dichlobenil (Casoron®) or glyphosate (Roundup®) shall be utilized by a licensed pesticide applicator in order to prevent damage to existing tree roots or roots that later may grow beneath the pavement;
4) Any staging/storage areas for equipment and materials shall be located within identified development areas;
5) All excavated soils (from trenching operations) shall be stored above the ordinary high water mark for all drainages;
6) Silty turbid water shall not be discharged into any drainage; such water shall be settled, filtered, or otherwise clarified prior to discharge (this condition may augment, but shall not override anything within the project's Regional Water Quality Control Board Certification);
7) Spoil, trash, or any debris from construction of the project or operation of the facilities shall be promptly removed and transferred to an approved disposal facility off-site;
8) Speed bumps or similar speed reduction devices shall be installed from the site entrance to the Retreat Center access road.
9) The 15 mph speed limit currently established on the Camp shall be maintained;
10) No re-grading of the dirt road "cross" trail shall occur in areas of sensitive plants and new trails shall be prohibited;
11) Foot stakes shall be installed on the dirt "cross" trail border every 100 feet;
12) Signage shall be posted at regular 200-foot intervals along both sides of the dirt "cross" trail instructing hikers to remain on the marked trail and refrain from collecting flowers/plants;
13) The existing trail in the northwestern portion of the project site shall be bound by signs that prohibit human intrusion into surrounding habitats and indicate the presence of environmentally sensitive areas;
14) Low-pressure sodium lamps shall be used in conjunction with cut-off shields (fully shielded/full cut off lighting) to reduce the adverse effects of artificial lighting spilling into native habitats;
15) New lighting shall not be allowed within 100 feet of the property boundary, wildlife corridor, or preserved areas;

16) Fencing (non-barbed) shall be constructed at the perimeter of open space easements where they border development (a Camp facility or roadway) to prevent intrusion into the preserve areas;
17) Wildlife crossing signage shall be posted in the vicinity of the local movement corridor;
18) Fencing shall also be installed to facilitate use of the Mussey Grade Road culvert at the West Fork of San Vicente Creek by wildlife;
19) Signage shall be installed in the area of the Camp entrance to notify visitors of the presence of sensitive flora and fauna within the vicinity and the need for adherence to postings throughout the project site;
20) Install Slow – Wildlife Crossing signs and speed bumps at the turnout for the Retreat Center for entering visitors, 100 feet upslope for existing visitors, and on both sides of the road every 250 feet along the camp access road from the junction of the access road with Mussey Grade Road;
21) Signage shall be posted along the perimeter of the open space easements that adjoin the project site and more frequently in the vicinity of any sensitive habitat; the distance between signs will vary depending on topography, vegetation density and other factors that affect visibility, generally, signs will be about 100 feet apart unless factors indicate that signs should be closer or farther apart;
22) Temporary construction fencing shall be erected to delineate Emergent Wetlands along the roadway. Temporary construction fencing and monitoring by a qualified biologist shall be maintained throughout the construction period to prevent inadvertent impacts. Permanent split-rail fencing shall be installed and maintained following construction. Both temporary construction and permanent split-rail fencing shall include signs that mark the areas as an "Environmentally Sensitive Area – No Entry."
23) Landscaping within the project area shall not include invasive exotic species, as defined by the California Native Plant Society;
24) Leash law restrictions shall be posted and enforced on-site;
25) Resident staff shall be prohibited from keeping cats, unless they are strictly confined to indoors. The applicant shall enforce this regulation with a signed agreement (covenant) with any personnel living temporarily or permanently on-site which details all of the sites rules and regulations and allows for eviction or fee imposition if the regulations are violated;
26) Promote oak seedling recruitment through planting programs by Camp users and growth in the road fire-clearance zones;
27) Conduct weekly fugitive dust monitoring activities from April through November and prior to any large special events;
28) Perform road-wetting immediately prior to and during any special events and, if dust levels are such that roadside plants are coated with dirt, immediately after weekly fugitive dust monitoring;
29) Remove any trash or roadkill from the internal roadway to avoid luring other animals into the roadway; and,
30) All buildings shall be constructed to eliminate cavities and crevasses or other measures to reduce the likelihood of bat colonization. Any unused structure shall be dismantled before bats have an opportunity to colonize it. Any structure slated for removal shall be examined for sensitive bat species before demolition and, if significant impacts would occur, mitigation shall be developed and implemented to the satisfaction of the DPLU Director.

LOCATION

The project site includes portions of sections 1 and 12 of Township 14 South, Ranges 1 West and 1 East of USGS 7.5' San Vicente Quadrangle, San Bernardino Base Meridian (Figure 1). Site elevation ranges from approximately 1,300 to 2,000 feet. The project site is bounded on the northeast by Mussey Grade Road and on the west by extensive undisturbed chaparral. To the north, south, and southeast are areas of rural or extensive agricultural development. The project site lies within the County of San Diego's Multiple Species Conservation Program (MSCP) Subarea Plan boundary and qualifies as a Biological Resource Core Area (BRCA).



1" = 2,000'

Project Vicinity Map

Source: USGS 7.5' San Vicente Reservoir and San Pasqual, CA Quadrangles

Figure 1

METHODS

Field investigations were performed by Merkel & Associates biologists: Melissa A. Booker, Craig H. Reiser, Kyle L. Ince, David A. Mayer, Vanessa A. Lee, Navroop K. Jassal, Antonette T. Gutierrez, Jean-Paul W. LaCount, Adam H. Behle, Tracey A. Wurth, Kara A. Altvater, Brian D. Parker, Daylon L. Teel, Rebecca A. Atiles, Roland A. Sosa, and Stephen Rink (Table 1).

Vegetation communities were initially plotted on a 1" = 550' color aerial photograph (dated January 18, 1997), then transferred to an ArcView® (Version 3.2) project file. The 1999 vegetation map was revised based on vegetation mapping from a 2000 1"=200' color aerial photograph and ground-truthing surveys. The map was further revised based on 2001 intensified wetland investigations.

In 1999, general biological surveys were conducted in April/May. Additional biological investigations were conducted in 2000, 2001, 2003, 2006, and 2007. Plant communities and slope exposures within the specified study area were surveyed on-foot. Plant identifications were either resolved in the field or were later determined through verification of voucher specimens. Soil types were determined based on the U.S. Department of Agriculture Soil Conservation Service San Vicente Reservoir Quadrangle map and were further investigated for the purposes of the wetland delineation, as necessary.

Presence of wildlife species was determined through direct observation (aided by 7 x 35 power binoculars), identification of avian songs or call notes, or by location of sign.

Biological survey reports from the immediate area and California Natural Diversity Database (CNDDB) records were reviewed for the presence of sensitive biological resources (CDFG 1997 and 2006, PSBS 1993, Merkel & Associates 2001, Scheidt 1997).

Scientific nomenclature used in this report is from the following references: vegetation, Holland (1986) and Oberbauer (1996); flora, Hickman (1993) and Baldwin et al. (2004); butterflies, Opler and Wright (1999); amphibians and reptiles, Crother et al. (2001 and 2003); birds, American Ornithologists' Union (1998 and 2005); and mammals, Wilson and Reeder (1993). Nomenclature for this final report has been retained from the 2006 report to avoid confusion.

U.S. Fish and Wildlife Service (USFWS) protocol California Gnatcatcher (*Polioptila californica*) surveys were conducted in July and August 1999. Sensitive plant surveys for late-flowering sensitive plants such as Orcutt's Brodiaea (*Brodiaea orcuttii*) and Delicate Clarkia (*Clarkia delicata*), vegetation map ground truthing, and a wetland delineation were conducted in May 2000. Additional sensitive plant surveys [Heart-leaved Pitcher Sage (*Lepechinia cardiophylla*)], wetland delineation work, oak tree surveys, impact analysis, vegetation map ground truthing, and a Least Bell's Vireo (*Vireo bellii pusillus*) habitat assessment were conducted in November 2000 and February 2001. A habitat assessment of the site for Stephens' Kangaroo Rat (*Dipodomys stephensi*) suitability led to small mammal trapping surveys in 2001. The specific methods of the assessment and trapping are detailed in Appendix 9, Presence/Absence Trapping Surveys for Stephens' Kangaroo Rat Salvation Army Mussey Grade Project Ramona, California. Also in spring 2001, protocol USFWS Quino Checkerspot Butterfly (*Euphydryas editha quino*) surveys were performed throughout the project site. In the winter of 2001, an intensive wetland delineation was conducted along the West Fork of San Vicente Creek and in other areas where development may impact wetlands or Non-Wetland

Waters of the U.S. (Non-Wetland Waters). The methodology for each of the focused surveys and the wetland delineation are discussed further within the following sub-sections.

The site was revisited in 2003, following the Cedar Fire, to assess the vegetative damage and potential for recovery; and again in 2006 to quantify oak tree impacts (by number of trees) and review the County jurisdictional wetland conditions. Lastly, the on-site wetlands were re-assessed in 2007 based on the 2007 RPO revised wetland definition. A summary of surveys is provided in Table 1.

Table 1. Survey Dates, Times, Staff[1], Purpose, and Weather Conditions

DATE	TIME	STAFF	PURPOSE	CONDITIONS
April 21, 1999	0915-1640	MAB, CHR	Vegetation mapping, sensitive plant surveys, and general zoological surveys	Overcast; calm, wind 0-5 mph; temperatures ranging from 60-65°F
April 28, 1999	1000-1400	MAB, KLI	Vegetation mapping, sensitive plant surveys, and general zoological surveys	Overcast; drizzle; moderate breeze approximately 15 mph; temperatures ranging from 55-60°F
May 25, 1999	0700-0830	MAB	Vegetation mapping, mapping of cleared percolation testing areas	Partially cloudy, clearing fog; calm, wind 0-5 mph; temperature 64°F
July 26, 1999	0735-1055	MAB	California Gnatcatcher protocol survey	Sunny; calm, wind 0-5 mph; temperatures ranging from 63-75°F
August 5, 1999	0700-1030	MAB	California Gnatcatcher protocol survey	Overcast, cloud cover burns off at 0900 to sunny; wind light 1-7 mph; temperatures ranging from 63-75°F
August 13, 1999	0820-1100	MAB, NKJ	California Gnatcatcher protocol survey	Sunny; wind 1-3 mph rising to 4-7 mph; temperatures ranging from 68-75°F
March 27, 2000	1115-1215	MAB	Quino Checkerspot Butterfly habitat assessment	Overcast, light rain; wind 4-12 mph; temperature 58°F
April 14, 2000	0900-0943	MAB, DAM	Arroyo Toad habitat assessment	Partly cloudy, drizzle; calm, wind 0-3 mph; temperature 64°F
May 5, 2000	1100-1600	VAL, NKJ	Wetland delineation	Partly cloudy; wind 0-4 mph; temperature 67°F
May 8, 2000	1030-1530	VAL, NKJ	Wetland delineation	Partly cloudy; wind 0-4 mph; temperatures ranging from 72-80°F
May 12, 2000	0900-1500	VAL, KLI, AHB	Wetland delineation and sensitive plant survey	Sunny; wind 0-3 mph; temperatures ranging from 80-85°F
May 22, 2000	0930-1430	VAL, AHB	Wetland delineation	Sunny; wind 1-3 mph; temperatures ranging from 88-92°F
December 13, 2000	0800-1430	MAB, VAL, ATG, KAA, NKJ	Wetland delineation, additional vegetation mapping, and Least Bell's Vireo habitat assessment	Partly cloudy; wind 0-5 mph; temperatures 60-64°F
December 14, 2000	1000-1530	KLI, AHB, KAA, DMJ, VAL	Rare plant survey and oak survey	Sunny; wind 0-5 mph; temperature 65°F

DATE	TIME	STAFF	PURPOSE	CONDITIONS
December 15, 2000	0900-1400	AHB, KAA	Oak survey	Sunny; wind 0-4 mph; temperature 67°F
December 20, 2000	0830-1340	KLI, CHR, VAL	Rare plant survey	Sunny; wind 0-2 mph; temperature 55°F
February 14, 2001	1100-1530	VAL, TAW	Oak survey and additional vegetation mapping	Cloudy; wind 0-4 mph; temperature 56°F
March 5, 2001	0930-1410	VAL, CHR, NKJ	Quino Checkerspot Survey	Sunny; wind 3-5 mph; temperature 65-70°F
March 13, 2001	0930-1530	VAL, ATG, JPL	Quino Checkerspot Survey	Sunny; wind 1-4 mph; temperature 67-74°F
March 15, 2001	1000-1530	NKJ, ATG, JPL	Quino Checkerspot Survey	Partly cloudy; wind 1-4 mph; temperature 68-70°F
March 22, 2001	1100-1230	VAL, KLI, NKJ	Quino Checkerspot Survey Attempted	Mostly cloudy; wind 1-3 mph; temperature 64-68°F
March 26, 2001	1145-1300	VAL, KLI, NKJ	Quino Checkerspot Survey Attempted	Mostly cloudy; wind 0-5 mph; temperature 63°F
March 29, 2001	0900-1200	VAL, ATG, CHR	Quino Checkerspot Survey Attempted	Mostly cloudy; wind 3-5 mph; temperature 61-62°F
March 30, 2001	0945-1530	VAL, JPL	Quino Checkerspot Survey	Sunny; wind 0-5 mph; temperature 78-83°F
April 2, 2001	1045-1200	VAL, ATG, NKJ	Quino Checkerspot Survey Attempted	Mostly cloudy; wind 3-7 mph; temperature 64-60°F
April 5, 2001	0930-1330	VAL, NKJ, JPL	Quino Checkerspot Survey	Sunny; wind 3-5 mph; temperature 65-67°F
April 10, 2001	1020-1300	VAL, SRR, JPL	Quino Checkerspot Survey Attempted	Mostly cloudy; wind 0-5 mph; temperature 63°F
April 13, 2001	0930-1415	ATG, NKJ, JPL	Quino Checkerspot Survey	Sunny; wind 1-8 mph; temperature 67-74°F
December 17, 2001	1230-1600	MAB, VAL, KAA	Wetland Delineation	Partially cloudy; calm, wind 0-3 mph; temperatures ranging from 55-60°F
December 18, 2001	1100-1600	VAL, KAA	Wetland Delineation	Sunny; calm, wind 0-3 mph; temperatures ranging from 60-62°F
December 19, 2001	1100-1600	VAL, KAA	Wetland Delineation	Sunny; calm, wind 0-3 mph; temperature 64°F
December 20, 2001	1030-1600	VAL, BDP	Wetland Delineation	Partially cloudy; calm, wind 0-3 mph; temperatures ranging from 59-60°F

DATE	TIME	STAFF	PURPOSE	CONDITIONS
December 26, 2001	1000-1630	VAL, KAA	Wetland Delineation	Sunny; calm, wind 0-3 mph; temperatures ranging from 68-70°F
November 18, 2003	0800-1200	MAB, ATG	Post-fire Assessment	Sunny (0% cover); wind 5 mph; temperature 70-75°F
May 9, 2006	0930-1400	MAB, RAA, RAS	Impact Oak Tree Inventory	Partially cloudy (70% cover); wind 0-5 mph; temperature 64°F
June 15, 2006	0800-1300	MAB, DLT	Field review of County Jurisdictional Wetlands	Partially cloudy; wind 0-5 mph; temperature 70-75°F
July 2, 2007	0800-1100	MAB, SRR	Field review of County Jurisdictional Wetlands per 2007 RPO	Sunny (0% cover); wind 5-10 mph; temperature 80-93°F

MAB = Melissa A. Booker, CHR = Craig H. Reiser, KLI = Kyle L. Ince, NKJ = Navroop K. Jassal, DAM = David A. Mayer, VAL = Vanessa A. Lee, AHB = Adam H. Behle, ATG = Antonette Gutierrez, TAW = Tracy A. Wurth, KAA = Kara A. Altvater, JPL = Jean-Paul W. LaCount, BDP = Brian Parker, RAA = Rebecca A. Atiles, RAS = Roland A. Sosa, DLT = Daylon L. Teel, and Stephen R. Rink = SRR

[1] Staff conducted listed species surveys under USFWS Recovery Permits 797999-6 and 068072-1.

FOCUSED AND PROTOCOL SURVEY METHODS

The rare and narrow endemic plant surveys were undertaken in all areas of potential occurrence. Suitable habitats were visually investigated for species presence/absence.

The site was assessed for the potential presence of Arroyo Toads (*Bufo californicus*) on April 14, 2000. The West Fork of San Vicente Creek was examined for the presence of suitable habitat conditions including creekbed width and substrate; type and density of overhanging vegetation; presence of adjacent sandy benches or terraces; and the size of the supporting watershed as well as the condition of nearby and/or downstream habitat. The creekbed and associated vegetation were examined on-site from the Camp entrance upstream until the riparian vegetation is replace by Southern Mixed Chaparral and continues off-site, downstream for a short distance. M&A biologist, Melissa Booker, also performed an assessment of the site's potential to support Least Bell's Vireo in 2001. The assessment included the riparian habitats that border the West Fork of San Vicente Creek from Mussey Grade Road west until the riparian vegetation is replaced by dense chaparral. Habitat suitability was visually assessed based on known species habitat preferences and requirements.

In order to determine the presence/absence of the Quino Checkerspot Butterfly, M&A conducted focused surveys for this federally endangered butterfly at the project site. The surveys followed the recommended guidelines of the USFWS Quino Checkerspot Butterfly Survey Protocol dated January 2000.

M&A biologists, authorized under the federal Endangered Species Act (ESA) section 10(a)(1)(A) permit #797999, conducted protocol surveys for the federally threatened Coastal California Gnatcatcher according to the required conditions noted in the USFWS California Gnatcatcher protocol (USFWS 1997). California Gnatcatcher survey dates and times varied according to weather and scheduling conditions, and individual biologists used professional judgment to comply with USFWS protocol as closely as possible. The project site was located within a jurisdiction which is signatory to an approved Natural Communities Conservation Plan (NCCP) (County of San Diego MSCP); therefore, a 3-visit presence/absence survey was performed. California Gnatcatcher surveys

covered all areas of on-site Diegan Coastal Sage Scrub. Additionally, where Coastal Sage-Chaparral Scrub occurred within areas of potential impact, surveys were conducted within this habitat type.

Due to the presence of potentially suitable habitat, a habitat assessment and trapping surveys were conducted to determine the presence/absence of the Stephens' Kangaroo Rat on-site. Mr. Philippe Vergne of ENVIRA conducted the work, under USFWS permit PRT 831-207. The habitat assessment consisted of an initial "walkover" survey, which identified kangaroo rat sign on-site (Vergne 2001). The site was then trapped using standard protocols developed for Stephens' Kangaroo Rat.

WILDLIFE CORRIDOR ANALYSIS

The corridor analysis completed for the Camp included analysis of regional aerial photography, regional vegetation, topography, and the results of fieldwork that investigated the presence of tracks, scat, or other sign and documented wildlife sightings within or immediately adjacent to the site. The determinations within this report were reached through a map-based analysis of likely corridor areas, supplemented with the results of general biological fieldwork, and review of wildlife movement work from the vicinity. The premise behind the map-based analysis is that wildlife typically follow the path of least resistance that affords them sufficient cover. This concept of least-cost-path (LCP) corridor analysis is defined and discussed in peer review literature and has been used extensively to develop Geographic Information System (GIS) based models for predicting wildlife movement and defining wildlife habitat corridors (Hartley and Aplet undated, Walker and Craighead 1997, Casterline et al. 2003). The key assumption of the LCP analysis allows that "animals will follow an optimum route between two points that minimizes their exposure to low quality habitat" (Hartley and Aplet undated). It is a method of delineating the movement routes that would be most likely used by the majority of wildlife to transit an area. In order to utilize this method, one must assess wildlife habitat quality within and surrounding the project site and one must determine regionally where wildlife would be traveling to and from, or what should be "connected" for the purposes of supporting wildlife populations in perpetuity. The value of habitats for wildlife movement is determined both by the characteristics of the habitat and the species-specific needs. However, in the absence of a "target" species, a more general approach has been taken to assess the value of habitats relative to their ability to support the movement of multiple species known from the area. Therefore, the on-site habitats were assessed for potential to support general wildlife movement, based on their position relative to connecting off-site significant wildlife habitat areas, the level of vegetative cover they provide/habitat quality, the topography, and the distance from existing human use and/or development.

To assess the habitat quality surrounding the project site and determine regionally where wildlife would be traveling to and from, or what should be "connected", M&A utilized habitat quality assessments conducted for the MSCP, examined recent aerial photography, and regional vegetation maps.

Having identified the larger areas of high quality habitat and the smaller, more linear areas that connect them, M&A next examined topography to identify paths of least resistance in terms of energetics and likely movement routes (mammals are expected to move along canyon bottoms, through riparian corridors, and along ridgelines).

Finally, an examination of existing human use and/or development relative to potential corridors can help to identify more likely movement routes. The concept of protecting corridors from development

is based on the assumption that wildlife avoid areas of human development in favor of higher quality habitats that afford greater protection and distance from humans and their developments. Thus, areas with appropriate topography may not be as readily traveled by wildlife if their native habitats are fragmented or replaced by non-native habitats or development.

WETLAND DELINEATION METHODS

M&A biologists conducted the initial wetland delineation work within the project footprint in May 2000. Additional wetland delineation work was conducted in December 2000, which covered areas outside of the proposed project footprint and compiled wetland delineation data for the remainder of the site. A more intensive wetland delineation was conducted in response to County staff comments and requests. The more intensive wetland delineation survey was performed December 17 through December 20 and December 26, 2001. Finally, the site was revisited in 2006 to photo document the conditions of all San Diego County jurisdictional wetlands and in 2007 to reassess jurisdictional wetlands following the adoption of the 2007 RPO, which altered the definition of County jurisdictional wetlands. While the purpose of the 2007 fieldwork was to re-assess County wetland jurisdiction under the 2007 RPO, all wetland locations and boundaries were checked and previously inaccessible areas were mapped. Mapping utilized a Global Positioning System (GPS) and/or updated aerial photograph, which provided a much clearer view of the drainages due to the loss of overstory and dense chaparral from the Cedar Fire.

Delineations were performed using the routine on-site determination methods noted in the 1987 ACOE Wetland Delineation Manual (Environmental Laboratory 1987). In addition, the delineation effort was expanded to identify Non-Wetland Waters under federal jurisdiction and streambeds under the jurisdiction of the CDFG and the County's RPO. Data points were taken along transects at regular, close (approximately 10-foot) intervals to delineate jurisdictional wetlands to the satisfaction of County staff. The wetlands and other jurisdictional waterways on-site were delineated on a 1" = 80' color Infrared aerial photograph overlaid with topography, then transferred to an ArcView® (Version 3.2) project file. Streambed widths were noted on the topographic map to provide true jurisdictional dimensions. Evidence supporting jurisdictional determinations was recorded on wetland field data forms and depicted in photographs of the project site (Appendices 6, 12, and 13). (Appendix 12 and 13, respectively, contain wetland field data forms and photographs from the 2001 intensified delineation.)

The presence or absence of 3 parameters was assessed to determine if an area was a jurisdictional wetland: 1) hydrophytic vegetation, 2) wetland hydrology, and 3) hydric soils. These parameters are discussed additionally below.

Vegetation

Vegetation communities which meet the criteria of wetland-associated vegetation are dominated by a preponderance (>50%) of species classified as obligate wetland plants (OBL) (estimated probability of occurring in wetlands, >99%), facultative wetland plants (FACW) (estimated probability of occurring in wetlands, 67% to 99%), or facultative plants (FAC) (estimated probability of occurring in wetlands, 33% to 67%) based on the **National List of Plant Species that Occur in Wetlands** (U.S. Fish & Wildlife Service 1988).

Hydrology

Wetland hydrology is indicated by the presence of surficial characteristics or sub-surficial hydric characteristics, showing that "the presence of water has an overriding influence on characteristics of vegetation and soils due to anaerobic and reducing conditions, respectively". Surficial hydrology can be determined through visual observation of surface flow, drainage patterns, watermarks, and/or drift lines. Sub-surficial characteristics include saturated soils or presence of free water in the test pit.

Hydric Soils

Hydric soil indicators are present when soils "have formed under conditions of saturation, flooding, or ponding long enough during the growing season to develop anaerobic conditions in the upper part" (United States Department of Agriculture Natural Resources Conservation Service undated). To determine the presence/absence of hydric soils, samples were taken from various depths and were examined for physical and chemical evidence of hydric conditions. The color of excavated soils was evaluated using the chroma index from the Munsell Soil Color Charts (Munsell Color 2000). Low-chroma color or gleyed soils are indicators of hydric soils under normal conditions. Additional indicators of hydric soils such as vertical streaking, high organic matter content in the surface horizon, mottling, and sulfidic odor were also evaluated during the delineation.

JURISDICTION OF WETLANDS AND WATERWAYS

The extent of jurisdictional boundaries was determined according to the ACOE, CDFG, and RPO definitions of wetlands, Non-Wetland Waters, and streambeds.

U.S. Army Corps of Engineers Jurisdiction

Under Section 404 of the Clean Water Act, ACOE has regulatory authority over the discharge of dredged or fill materials into the waters of the United States (33 USC 1344). The term "waters of the United States" is defined in 33 CFR Part 328(a) as: (1) all navigable waters (including all waters subject to the ebb and flow of the tide); (2) all interstate waters and wetlands; (3) all other waters such as intrastate lakes, rivers, streams, (including intermittent streams), mudflats, wetlands, sloughs, prairie potholes, wet meadows, playa lakes, or natural ponds, the use, degradation or destruction of which could affect interstate or foreign commerce; (4) all impoundments of water mentioned above; (5) all tributaries to waters mentioned above; (6) the territorial seas; and, (7) all wetlands adjacent to waters mentioned above.

Wetlands are defined at 33 CFR 328.3(b) as "those areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support ... a prevalence of vegetation typically adapted for life in saturated soil conditions". To be considered a jurisdictional wetland under ACOE, all 3 parameters (hydrophytic vegetation, hydric soils, and hydrology) must be met.

Non-isolated drainages or streams that lack one or 2 of the wetland parameters may still be jurisdictional under ACOE as Non-Wetland Waters. In the absence of wetlands and non-tidal waters, the limits of ACOE jurisdiction in drainages and streams extend to the ordinary high water mark (OHWM) which is defined at 33 CFR 328.3(e) as, "that line on the shore established by the fluctuation of water and indicated by physical characteristics such as clear, natural line impressed on the bank, shelving, changes in the character of soil, destruction of terrestrial vegetation, the presence

of litter and debris, or other appropriate means that consider the characteristics of the surrounding areas".

California Department of Fish and Game Jurisdiction

CDFG regulates alterations of "Streambeds" through the development of a Streambed Alteration Agreement (Agreement) pursuant to Division 2, Chapter 6 of the Fish and Game Code. An Agreement is required whenever a project would "divert, obstruct or change the natural flow or bed, channel or bank of any river, stream or lake designated by the Department".

The breadth of jurisdiction under the CDFG differs from the ACOE in that a "Streambed" is not limited to the OHWM, but rather encompasses the entire width of the streambed, from bank to bank, regardless of the water level. In addition, jurisdictional wetlands under the CDFG only require that one wetland parameter be present, but the wetlands must be associated, within or adjacent, to a streambed. Furthermore, CDFG jurisdiction extends over "adjacent riparian habitat", including riparian habitat supported by a river, stream or lake, even if the riparian area does not necessarily meet the hydrophytic vegetation criteria as defined by the ACOE.

County of San Diego

The County regulates wetlands under the RPO. Under the newly approved, 2007 RPO, the County has defined an RPO jurisdictional "wetland" as lands having one or more of the following attributes:

- At least periodically, the land supports a predominance of hydrophytes (plants whose habitat is water or very wet places);
- The substratum is predominantly undrained hydric soil; or
- An ephemeral or perennial stream is present, whose substratum is predominately non-soil and such lands contribute substantially to the biological functions or values of wetlands in the drainage system.

The RPO goes on to state, "Notwithstanding the paragraph (1) [above], the following shall not be considered "wetlands":
Lands which have attribute(s) specified in paragraph (1) solely due to man-made structures (e.g., culverts, ditches, road crossings, or agricultural ponds), provided that the Director of Planning and Land Use determines that they:

- Have negligible biological function or value as wetlands;
- Are small and geographically isolated from other wetland systems;
- Are not Vernal Pools; and,
- Do not have substantial or locally important populations of wetland dependent sensitive species.

The RPO also defines a wetland buffer as, "Lands which provide a buffer area of an appropriate size to protect the environmental and functional habitat values of the wetland, or which are integrally important in supporting the full range of the wetland and adjacent upland biological community." In terms of buffer widths, the RPO states that they shall be 50 to 200 feet from the edge of the wetland as appropriate based on the above factors, and where oak woodland occurs adjacent to the wetland, the buffer shall include the oak woodland (not to exceed 200 feet). The RPO regards these buffer areas much the same way as wetlands, by restricting development to only a few permitted uses.

IMPACT ASSESSMENT METHODS

Oak woodland impacts were determined using the methods recommended by County staff (Dickman 2000). All individual mature oak trees found within the development bubble or within 50 feet of the edge of open space were mapped on the vegetation map per the direction of staff (Dickman 2000). This established the location of individual oaks as well as oak woodlands, for subsequent impact evaluation. Standard 6" diameter at breast height (dbh) was used to determine maturity; to quantify impacts, the circumference of each tree's dripline was measured and converted to acreage. The total acreage of individual trees was added the to the oak woodland community acreage. Where an oak woodland or oak riparian forest was present, individual oaks within the woodland area were not initially counted. However, in response to public comments, a count of individual mature oaks (at least 6" dbh) considered impacted was completed in 2006.

Based on review of the site by the lead biologist, some Coast Live Oaks (*Quercus agrifolia*) within the existing development area were assessed to have little biological value (due to their location immediately adjacent to structures, isolation from native habitat, and exposure to on-going human activities). Further impacts to these oaks by the proposed additional development are not expected, thus, they were excluded from the oak woodland impact acreage totals (per County direction, Dickman 2001).

A non-clearance area of at least 100 feet (limited building zone) surrounding the recommended biological open space easements has been incorporated into the recommended easement design. More specifically, no buildings have been located within 100 feet of Dedicated Open Space, thereby avoiding the potential for fire clearing in preserved habitats. While roads lie adjacent to the proposed open space easements in areas, sufficient fire clearing acreage (10 feet or more) lies between the 2. The above, outlined impact assessment methodology should address the potential direct impact of all the proposed facilities within the project site.

For the purposes of quantifying impacts, M&A used an AutoCAD file converted to a GIS readable format (provided by Matalon Architecture and Planning), which outlined the boundary of impacts. Buffer or impact area assumptions, listed below, were based upon information supplied by BRG Consulting, Nasland Engineering, the County, and Matalon Architecture and Planning.

Buffer/Impact Assumptions:

- The area considered impacted included all areas within the "development bubble", as drawn by Matalon Architecture and Planning and displayed on the plans, with the following exceptions: 1) areas of existing development where no change is proposed and no new fire clearing is required (e.g., existing leach fields) were not considered as a new impact; and 2) areas of existing development where Coast Live Oak Woodland occurs within the existing developed area (e.g., between buildings) were not considered impactive to the oaks as a biological resource requiring mitigation (Dickman 2001).
- A minimum 100-foot fire management/brush clearing zone (FMZ) around all proposed buildings, as shown on the plan was considered an impact. The FMZ around existing buildings was considered part of existing conditions, unless the Fire Management Plan called for a greater FMZ width, which was considered a project impact. A 10-foot FMZ around all existing roads was considered to be part of existing conditions except where the roadways were new. For any new road/driveways, the 10-foot FMZ was considered a project impact.
- Oaks within 25 feet of a ground disturbing impact, but outside the development bubble were considered impacted as a result of the development (except along existing roadways); and,

although oaks may not be removed as a result of fire clearing, removal of the understory was considered an impact for oaks and oak woodland that qualify as a biological resource.

- The limits of construction were assumed to be the development bubble as presented on the Proposed Master Plan drawings, except where the bubble incorporates existing development with no proposed change or fire clearing requirements (no new impact); or where a proposed ground altering impact would occur within 25 feet of an oak tree not otherwise considered impacted (oak then considered impacted).
- Impacts associated with installation of a waterline will be confined to within the existing on-site road area where the line runs under the road (Mike Matalon pers. com.). Outside of roadways, installation of the waterline would result in a 6-foot wide direct impact to native vegetation and oaks within 20 feet of the waterline's 6-foot wide direct impact were considered impacted (M. Johnson pers. com. from D. Dickman pers. com.).
- All construction staging areas will be confined to areas considered directly, permanently impacted on the Preferred Site Plan and/or alternative site plans. No temporary staging areas will occur within native or semi-native habitats outside of those areas considered directly, permanently impacted.
- Vegetation between new and existing facilities has been considered impacted where it is expected to be trampled as visitors move between facilities.
- Where staff housing is proposed or exists, an impact footprint that connects the proposed and existing facilities has not been delineated, as there would be no substantial change from existing conditions in terms of foot traffic.
- The plan (all alternatives) currently indicates limited road widening in portions of the site; this limited measure has been incorporated to avoid direct impacts to County wetlands and oaks from road improvements. However, fire clearing in these areas has still been considered impactive to oak woodlands (10 feet out from the road) due to the loss of understory species and the potential loss of replacement oak seedlings.

Indirect impacts were determined based upon the intended use and location of the proposed facilities relative to sensitive biological resources. Indirect impacts were also assessed based on the presence or absence of such features as lighting, roads, fencing, and the likelihood of domestic animal presence.

The cumulative impact analysis was based upon information regarding proposed or approved developments within the surrounding area as provided by BRG Consulting and acquired from the County by M&A.

GENERAL SURVEY LIMITATIONS

Biological inventories are generally subject to various limitations. Depending on the season during which the field survey is conducted, some amphibians, reptiles, migratory birds, mammals, and annual plants may be difficult to inventory. Database [e.g., California Natural Diversity Database (CNDDB) and USFWS GIS database] and literature reviews were performed to compensate for potential limitations.

Biological surveys of the Camp did not include the following:

Site-wide Individual Oak Tree Survey. Surveying and tagging of all on-site oaks was not undertaken. Oak woodlands were mapped where they occurred throughout the project site based on the Holland community definition of Southern Coast Live Oak Riparian Forest and Coast Live Oak Woodland. All individual oaks (mapped outside of an oak woodland but within the project footprint or buffer area) were mapped; then standard 6" dbh was recorded and the canopy of the tree was measured for conversion to acreage. County staff recommended this methodology for the purposes of project impact analysis (Dickman 2000). In addition, in 2006 M&A biologists inventoried all mature oak trees within the impact area (as previously defined in the Impact Assessment Methods section).

Focused surveys for the Southwestern Willow Flycatcher (*Empidonax traillii extimus*). Surveys were not conducted on-site as the Camp habitats do not appear to be suitable for Southwestern Willow Flycatchers and neither a survey nor a habitat assessment was requested by the County. Although other willow flycatcher subspecies may breed in shrubby habitats away from water, the Southwestern Willow Flycatcher breeds only in dense riparian vegetation near surface water or saturated soil (Sogge et al. 1997). Surface water is not known to persist within the Camp into the late spring and summer when the Southwestern Willow Flycatcher is present for breeding. In addition, there are no recent records of this species from the project vicinity.

Indirect impact assessment limitations resulted from the inability to determine impacts to individual Engelmann Oaks (*Quercus engelmannii*), which lie off-site but within 25 feet of the development footprint. Since the adjacent properties are not part of the project area and were not accessed, the species-specific identity of oaks is not known. However, oaks along the edge of the project area could be impacted.

County staff requested a population estimate for sensitive species observed or detected on-site. The current biological investigations are insufficient to provide an accurate quantitative estimate of population size for faunal species. This report calls upon all available information to provide qualitative assessments of on-site populations or the potential for sensitive species occurrence on-site; data on habitat suitability (based on soils, elevation, vegetation present, predator-prey relationships, etc.), natural history information, extrapolations from limited sample sizes, and assessments by local experts were employed. This information is presented to meet County staff requests, but caution should be exercised in using this information for any purposes beyond the current project impact assessment as quantitative population estimates were not the source of the species-specific assessments and the status of a species can change dramatically within a small area over a relatively short time. It is particularly important to recognize that the effects of the Cedar fire on individual populations may not be known for several years.

Relative to the wetland delineation work, in arid regions, such as southern California, wetland hydrology indicators can be difficult to identify. At times it is useful to examine supplemental data such as hydrology reports, groundwater studies, rainfall data, or data from a stream, lake, or tide gauge. Unfortunately, this type of information was not available for the Salvation Army Camp study area. A preliminary hydrology report was prepared for the site (Nasland Engineering 2001); however, it did not contain sufficient data to make assessments regarding hydrology within specific drainages on-site. Lacking recorded information, this wetland delineation survey relied heavily upon field indicators for hydrology such as drainage patterns, inundation, saturation, drift lines, etc. However, because the hydrology field indicators generally coincided with the data gathered for vegetation and soils, the information is expected to be adequate.

The wetland delineation survey was also limited by restricted access. Much of the riparian areas on-site are dominated by Western Poison Oak in the understory. Where large, dense patches of this plant occurred, data points and test pits could not be performed. In these situations, data points were taken as close as possible to the areas being surveyed. Access to other areas of riparian vegetation was restricted by dense vegetation or rugged terrain such as large boulders or steep slopes. No data points were taken from these areas; rather, boundaries were approximated using aerial photography and topography. These locations and boundaries were reviewed in 2007, as previously described in the wetland delineation methods.

EXISTING CONDITIONS

GEOLOGY AND SOILS

The Camp lies within the Foothill Province of north central San Diego County. Topographically, the project vicinity is characterized by steep slopes in the western portions grading into rolling hills and pasture-like areas, which are occasionally bisected by intermittent and ephemeral drainages. The elevation at the site is between approximately 1,300 to 2,000 feet above sea level.

The soil association dominant within the project site is Cieneba-Fallbrook Association, very rocky. The dominant soils on the site belong to the Cieneba Series. The Cieneba Series is characterized by very shallow-to-shallow coarse sandy loams, which are excessively drained. The slopes of this series range from 5 to 75 percent and are often characterized by rock outcrops (Bowman et al. 1973).

A small area within the southwestern portion of the site has been identified as the Friant-Escondido Association, Eroded. The Friant-Escondido Association is represented by metasedimentary soil. Metasedimentary soils are important because they support regionally unique endemic habitats, which are considered particularly sensitive by the resources agencies. The small portion of the site, identified with metasedimentary soils (about 5 acres which includes a small portion of the final hairpin turn on the western hiking trail depicted on the plans and biological resource maps), belongs to a Friant series found on 30 to 70 percent slopes (Bowman et al. 1973).

The soils over a majority of the site also tend to be well to excessively drained, with severe erosion potentials. The drainage and erosion characteristics of these soils are not conducive to holding or ponding water for significant periods of time (Bowman et al. 1973).

VEGETATION COMMUNITIES

Thirteen vegetation categories were delineated on the site: Non-Native Woodland, Disturbed, Urban/Developed, Diegan Coastal Sage Scrub, Southern Mixed Chaparral, Mafic Southern Mixed Chaparral, Coastal Sage-Chaparral Scrub, Non-Native Grasslands, Southern Coast Live Oak Riparian Forest, Mule Fat Scrub, Southern Willow Scrub, Emergent Wetland, and Coast Live Oak Woodland (Figures 2a1-11 2b1-11, 2c1-11 and map index, see inserts at back of report). Extensive areas of rock outcrop are also scattered throughout the site. The approximate acreage of on-site habitats was determined using ArcView 3.2®.

A note regarding the Biological Resources Maps (Figures 2a1-11, 2b1-11, and 2c1-11), the "cross trail" in the southwestern portion of the project site is intended to remain within the existing alignment mapped as disturbed, no change in alignment or additional impacts are proposed. However, due to an AutoCAD (Computer Aided Drawing) error in the original architectural files, the alignment of the trail depicted does not match the actual trail alignment. The remainder of the proposed project elements and existing roadways are properly aligned and it has been concluded that the alignment error is restricted to this single project element. This misalignment does not impact the project impact analysis and is a graphic misrepresentation only.

Vegetation communities are quantified in Table 2, mapped in Figures 2a1-11, 2b1-11, and 2c1-11 (inserted at back), and described in the text following the table.

Table 2. On-site Vegetation Communities

Vegetation Community	Holland and/or Oberbauer Code	MSCP/BMO Tier	Acreage On-site
Non-Native Woodland	11000	IV	4.39
Disturbed Habitat	11300	IV	16.58
Urban/Developed Lands	12000	N/A	7.76
Diegan Coastal Sage Scrub	32500	II	16.43
Southern Mixed Chaparral	37120	III	402.55
Mafic Southern Mixed Chaparral	37122	I	6.48
Coastal Sage-Chaparral Scrub	37G00	II	46.23
Non-Native Grasslands	42200	III	22.83
Emergent Wetland	52440	I	0.03
Southern Coast Live Oak Riparian Forest	61310	I	33.63
Mule Fat Scrub	63310	I	0.02
Southern Willow Scrub	63320	I	0.73
Coast Live Oak Woodland	71160	I	20.34
		Total	**578.00**

Non-Native Woodland

Groves of Eucalyptus trees (Holland 11100) (*Eucalyptus* sp.) and Mission Olives (*Olea europea*) occur within developed portions of the site. Understory plants are generally absent from these stands due to the allelopathic nature of the Eucalyptus trees and current landscaping efforts. Additional non-native tree species include Cypress (*Cupressus* sp.), Juniper (*Juniperus* sp.), California Incense Cedar (*Calocedrus decurrens*), Pine (*Pinus* sp.), and Thread Palm (*Washingtonia robusta*). All of these are located within disturbed or developed portions of the Camp.

Disturbed Habitat

The County has a very restrictive application of "Disturbed Land/Habitat". For the purposes of this report, Disturbed Land/Habitat is limited to "land that has been permanently altered by previous legal human activity including grading and/or repeated clearing for fuel management purposes or shows evidence of being built upon; the land must show evidence that the previous disturbance has eliminated all future biological value of the land; no natural vegetation remains; the land does not have value for sensitive wildlife, including foraging potential for raptors; and the site shows evidence of building foundations, past grading or domestic animal use that has removed its capability as a potential viable habitat" (Dickman 2000).

Disturbed habitats on the site include the areas around the existing development that have been historically cleared or brushed and are maintained through a similar regime, as well as areas that were more recently grubbed or cleared. These areas are comprised of maintained dirt roads. The areas mapped as Disturbed do not include the Non-Native Grasslands associated with existing development or areas. [Per County staff's request, areas cleared for percolation testing are mapped as the habitat present prior to disturbance.]

Urban/Developed Lands

Portions of this site are occupied by residences and Camp facilities, as well as roads, and parking areas. Exotic, ornamental plantings are associated with this development.

Diegan Coastal Sage Scrub

Diegan Coastal Sage Scrub includes a dominance of low, soft-woody sub-shrubs that are typically drought deciduous. California Sagebrush (*Artemisia californica*) and Flat-top Buckwheat (*Eriogonum fasciculatum*) are most common with significant incursions of Laurel Sumac (*Malosma laurina*) and White Sage (*Salvia apiana*). The Diegan Coastal Sage Scrub understory includes Coastal Deerweed (*Lotus scoparius* var. *scoparius*), Caterpillar Phacelia (*Phacelia cicutaria* var. *hispida*), and non-native grasses. Sage scrub occurs in the Camp's southeastern region, the central eastern region, and to a lesser extent in the northeast.

Southern Mixed Chaparral

In general, this habitat can be described as a relatively tall (1.5-3 m) plant community dominated by broad-leaved, deep-rooted, woody shrubs. It occurs on dry, rocky, often steep slopes with sparse soils. Shaded north-facing slopes are generally where the densest vegetation occurs, while south-facing slopes are more open. Chaparral dominates the higher elevations on the Camp. Prior to the Cedar Fire, a dense impenetrable canopy was formed by woody shrubs such as Scrub Oak (*Quercus berberidifolia*), Mission Manzanita (*Xylococcus bicolor*), Chaparral Whitethorn (*Ceanothus leucodermis*), Holly-leaf Cherry (*Prunus ilicifolia* ssp. *ilicifolia*), and Chamise (*Adenostoma fasciculatum*); however, the Cedar Fire decreased chaparral shrub density throughout the Camp. Included in this vegetation are infrequent individual Coast Live Oaks, as well as Our Lord's Candle (*Yucca whipplei*), Spanish Bayonet (*Yucca schidigera*), Climbing Bush Penstemon (*Keckiella cordifolia*), and Blue Elderberry (*Sambucus mexicana*). Occasionally within the understory of the chaparral, are herbaceous species such as California Peony (*Paeonia californica*) and Pacific Sanicle (*Sanicula crassicaulis*).

Mafic Southern Mixed Chaparral

Southern Mixed Chaparral accounts for most of the on-site chaparral, but it is replaced in some of the higher elevations with Mafic Southern Mixed Chaparral. This subtype is typically differentiated from Southern Mixed Chaparral based upon soil type, as floristic distinctions between subtypes are not clearly defined. The Friant soils, which are known to support Mafic Southern Mixed Chaparral species, were not mapped in all of the Camp areas delineated as Mafic Southern Mixed Chaparral (Bowman et al. 1973). However, Soil Conservation Service maps are gross in nature and may not reflect smaller scale soils variations. For the purposes of this report, portions of the on-site chaparral habitat were designated as Mafic Southern Mixed Chaparral due to the presence of plant species typically associated with the soils, which support Mafic Southern Mixed Chaparral. In response to County staff comments, the on-site area mapped as Mafic Southern Mixed Chaparral was reduced, to more closely follow the pattern of plant species associated with this vegetation community.

Coastal Sage-Chaparral Scrub

A mix of sclerophyllous, woody chaparral species and drought-deciduous, malacophyllous sage scrub species characterize this habitat (Holland 1986). Areas mapped as chaparral scrub on-site

contain predominately chaparral associated species with irregular sage scrub species presence. This intermediate or ecotonal vegetation type is generally a post-fire successional community; however, it may also develop in tracts with shallow soils. Shallow soil areas may not adequately support chaparral-associated species and sage scrub species will occupy remaining open areas. This community occurs throughout the Camp, intermixed with swathes of chaparral and sage scrub.

Non-Native Grasslands

Non-Native Grasslands are well distributed in the central portion of the site. Such communities develop most commonly where native scrub has been disturbed by grazing, discing, or fire. As on-site, they usually occur in close association with rural land uses.

Local grasslands have a preponderance of non-native grasses and forbs, such as the bromes (*Bromus* spp.) and slender wild oat (*Avena barbata*), with only occasional representation from native elements. On-site Non-Native Grasslands are limited in size and are disturbed on an on-going basis through mowing.

Emergent Wetland

Herbaceous wetland occupies isolated portions of Non-Native Grasslands, which appear to have been historically disturbed. These areas are further described within the Wetland Delineation results section.

Southern Coast Live Oak Riparian Forest

Oak woodlands with Coast Live Oaks with scattered large Western Sycamores (*Platanus racemosa*) are concentrated within drainages on the Camp property forming bands of Southern Coast Live Oak Riparian Forest. Oaks within the riparian corridor are typically mature trees. The density of the riparian oaks was decreased by the Cedar Fire, but they continue to form a riparian forest. Where streambeds underlie the oak canopy, a lush understory occurs. The locally dominant plant is Western Poison Oak (*Toxicodendron diversilobum*), but Holly-leaf Redberry (*Rhamnus ilicifolia*), Yellow Wood-Sorrel (*Oxalis corniculata*), and Ripgut Grass (*Bromus diandrus*) also occur.

Mule Fat Scrub

This riparian community is characterized by Mule Fat (*Baccharis salicifolia*). It typically persists along intermittent stream channels with fairly coarse substrate and moderate depth to the water table (Holland 1986). On-site, this habitat occurred at one location, near the base of the "cross trail", where a small area of wetland was surrounded by non-native grasses and other species indicative of disturbance to the northeast and Southern Mixed Chaparral to the west. However, following the Cedar Fire, this habitat did not recover; nevertheless, it remains mapped as Mule Fat Scrub for the purposes of this analysis. Additional descriptions of this and other wetland habitats on-site are found within the Wetland Delineation section.

Southern Willow Scrub

Southern Willow Scrub consists of broad-leafed, winter-deciduous riparian thickets dominated by several *Salix* species (Holland 1986). There is typically little to no understory component within this community. Southern Willow Scrub occupies portions of the West Fork drainage and was found at

the location previously proposed for the southern-most pond, although it no longer persists their as a community, following the Cedar Fire. However, following the Cedar Fire, Southern Willow Scrub has grown up within a drainage northwest of the existing cabin complex where a Non-Wetland Water polygon dominated by Non-Native Grassland was previously mapped. The longterm viability of this area of willow scrub is unknown, but it is mentioned herein as it lies within open space that will be subject to management.

Coast Live Oak Woodland

Excellent stands of Coast Live Oak Woodland with 2 species of large oaks occur on the site. Coast Live Oaks are the dominant component of the habitat, which occupies the flatter meadows. In addition, Engelmann Oaks are interspersed with Coast Live Oaks throughout the Camp. These trees are not ornamental but native.

Near the existing Camp facilities, the habitat surrounding the oaks has been degraded as a result of historic and existing land uses. Away from existing facilities, sage scrub, chaparral, and non-native grasses typically surround oaks. A mixture of shrubs, annual grasses, and leaf litter comprises the understory in such areas. Deergrass (*Muhlenbergia rigens*), a robust, clumping bunchgrass, occurs at scattered low-lying swales, while Blue Wild Rye (*Elymus glaucus*) is occasional throughout the woodlands. Purple Clarkia (*Clarkia purpurea*) is widespread, particularly in areas of partial shade.

Rock Outcrops

Large boulders, rock slabs, and outcrops are a dominant characteristic of the landscape and merit special discussion. In the chaparral, rocky areas create unvegetated islands that are used by species that may not otherwise occur in dense vegetation. Rock outcrops increase habitat heterogeneity, which is positively correlated with species diversity. Saxicolous species such as silver-leaf lotus (*Lotus argophyllus* var. *argophyllus*), California figwort (*Scrophularia californica* ssp. *Floribunda*), Ladies-Fingers (*Dudleya edulis*), Red-skin Onion (*Allium haematochiton*), and Bigelow's Mossfern (*Selaginella bigelovii*) were all associated with rock outcrops on the site.

WETLAND DELINEATION RESULTS

Physical Characteristics and Soils

Soils types identified on-site were previously discussed. None of the soil types identified on-site are listed as hydric soils by the United States Department of Agriculture - Soil Conservation Service. However, according to the same list, there is an unnamed inclusion within Visalia Sandy Loam that is considered a hydric soil if it meets specified criteria (USDA-Soil Conservation Service 1992). The soils sampled during the survey did not meet these criteria.

Wetlands, Jurisdictional Non-Wetland Resources, and other Areas Surveyed

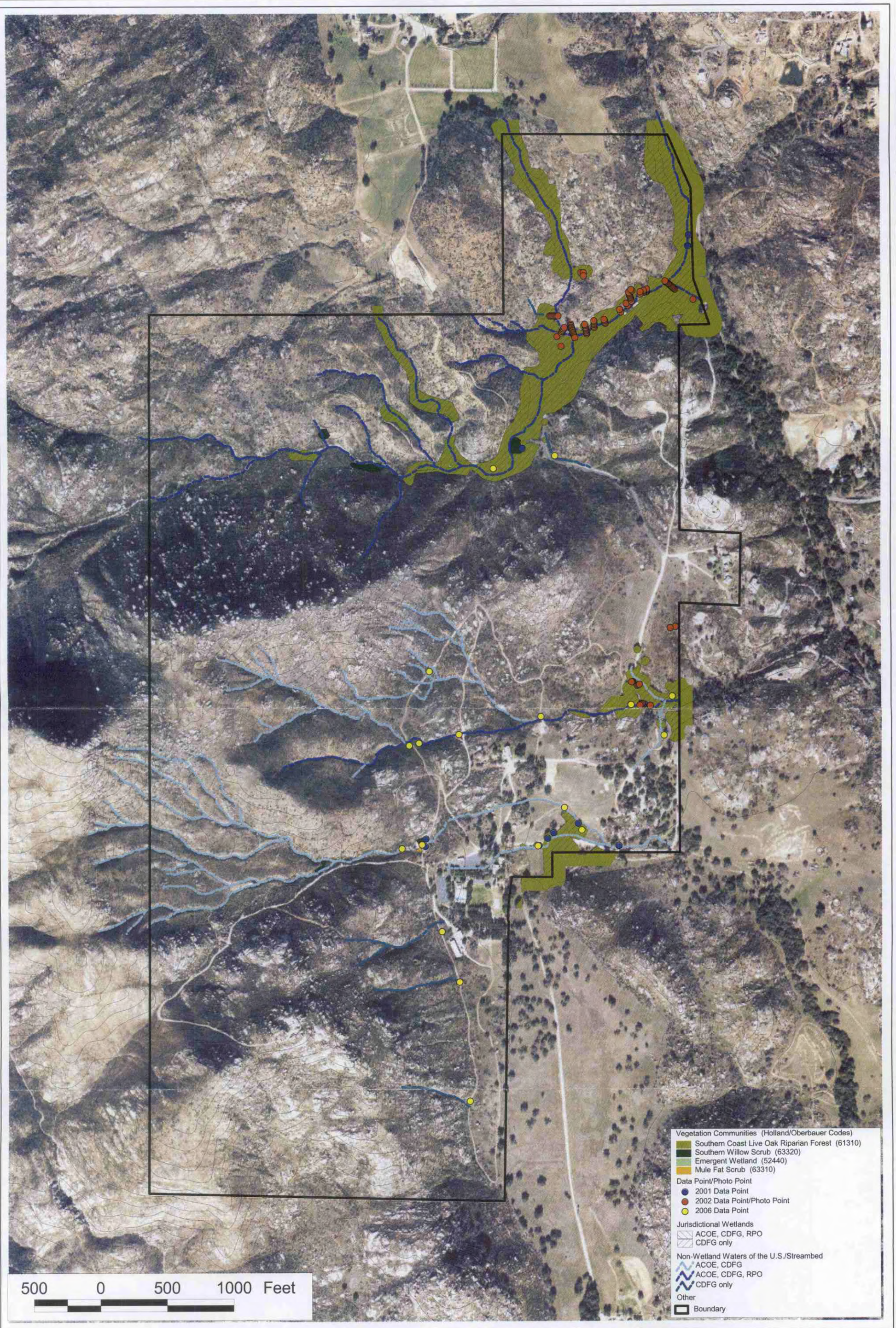
Figures 2a1-11, 2b1-11, and 2c1-11 depict the ACOE, CDFG, and RPO jurisdictional wetlands and Non-Wetland Waters/Streambeds on-site along with the Preferred Plot Plan, Reduced Alternative I, and Reduced Alternative II, respectively, in compliance with the County Mapping Requirements. The wetland data points, photo points, and the jurisdictional wetland resources are also depicted on a smaller scale in Figure 3. Figure 3 supplements Figures 2a1-11, 2b1-11, and 2c1-11, and unlike these figures is not intended to meet the mapping requirement standards that those figures meet. Figure 3 provides a simplified view of the on-site jurisdictional resources.

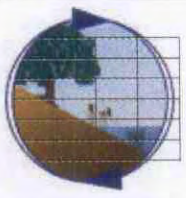
Non-Wetland Waters/Streambed and 4 wetland or wetland-associated vegetation types (Southern Coast Live Oak Riparian Forest, Southern Willow Scrub, Mule Fat Scrub, and Emergent Wetland) have been mapped on the Camp. The following table (Table 3) provides a summary of acreages of jurisdictional wetlands and Non-Wetland Waters/Streambeds.

Table 3. Acreages of Jurisdictional Wetlands, Non-Wetland Waters of the U.S., and Streambeds

Jurisdictional Areas	ACOE Jurisdictional Acreage	CDFG Jurisdictional Acreage	County RPO Jurisdictional Acreage[1]	Total Acreage
Southern Coast Live Oak Riparian Forest (SCLORF)[2]	0.00	33.56	0.00	33.56
Southern Willow Scrub[2]	0.73	0.73	0.73	0.73
Mule Fat Scrub[2]	0.02	0.02	0.02	0.02
Emergent Wetland[2]	0.03	0.03	0.03	0.03
Total Wetland Acreage[2]	**0.78**	**34.34**	**0.78**	**34.34**
Non-Wetland Waters/Streambed[3]	4.59	4.75	2.82	4.75
Total Jurisdictional Acreage (acre)	**5.37**	**39.09**	**3.60**	**39.09**

[1]Pursuant to the 2007 RPO definition of wetlands
[2]Does not include the underlying Non-Wetland Waters/Streambed, which lack the vegetative wetland component, and are quantified in the lower portion of the table and totaled at the bottom
[3]Includes all Non-Wetland Waters/Streambed separate from the surrounding vegetation community





Wetland Delineation Data Points, Photo Points, Jurisdictional Wetlands, and Non-Wetland Waters of the U.S./Streambed

Salvation Army Divisional Camp and Retreat

Figure 3

Southern Coast Live Oak Riparian Forest

Most of the Southern Coast Live Oak Riparian Forest on-site is dominated by non-wetland-indicator species such as Coast Live Oak, Western Poison Oak, Holly-leaf Redberry with Yellow Wood-Sorrel, and Ripgut Grass in the understory. Although a few FAC, FACW, and OBL species are present, including Bristly Ox-tongue (*Picris echioides*), Western Sycamore, and Lance-leaf Willow (*Salix lucida* ssp. *lasiandra*), they are not, in most cases, present in such abundance that would satisfy the hydrophytic vegetation criteria. Despite the lack of wetland vegetation, this riparian vegetation community occurs along drainages/streambeds and is, therefore, considered jurisdictional "Adjacent Riparian" habitat by CDFG.

A few areas of Southern Coast Live Oak Riparian Forest, located within the northeastern portion of the property, have sufficient hydrophytic vegetation, and are mapped as jurisdictional wetlands.

The hydrology indicator beneath the Southern Coast Live Oak Riparian Forest consists of incised, cobble-lined channels. Neither water nor sign of water was present in some drainages during any of the wetland delineation surveys. This made the determination of hydrology limits problematic. CDFG jurisdiction was measured from bank to bank, while both ACOE and County jurisdictions were limited to the ordinary high water mark, which was approximated using the width of the channel bed and/ or the width of the cobble within the channel.

Sandy loam is the predominant soil structure beneath the Southern Coast Live Oak Riparian Forest canopy. No hydric indicators and no evidence of saturation were found in these soils during the time of the survey.

Southern Willow Scrub

The on-site Southern Willow Scrub areas are dominated by Lance-leaf Willows, which is an obligate wetland species and contain Fremont Cottonwood (*Populus fremontii*), Mule Fat, Western Sycamore, and Mugwort (*Artemisia douglasiana*), which are all facultative wetland species. Areas of Southern Willow Scrub also exhibit hydrology (drainage patterns) and hydric soil indicators.

A small stand of Southern Willow Scrub occurs adjacent to the area where the westernmost proposed "refurbished pond" was formerly planned (it is no longer a component of the project). The habitat consists of Fremont Cottonwood, Mule Fat, Lance-leaf Willow, and Red Brome (*Bromus madritensis* ssp. *rubens*). Although the area meets both the hydrophytic vegetation and hydrological criteria, it is lacking the hydric soil indicators found in other areas of Southern Willow Scrub on site. However, the surrounding area appears to have been subject to significant disturbance, which is indicated by the placement of fill soils and cobble into this basin shaped area. Because the area has been altered, this stand of Southern Willow Scrub is deemed an atypical situation, and is, therefore, jurisdictional under ACOE. Portions of the areas previously delineated as jurisdictional willow scrub did not recover following the Cedar Fire; however, the original jurisdictional mapping has been utilized for the purposes of this project analysis.

Mule Fat Scrub

The on-site Mule Fat Scrub was dominated by Mule Fat and Nievitas Cryptantha (*Cryptantha intermedia*). The Mule Fat Scrub also contained non-native upland species in the understory such as Red Brome, filaree (*Erodium* sp.), and Short-pod Mustard (*Hirschfeldia incana*) that do not represent

hydrophytic vegetation. The stand of Mule Fat is within the disturbed area that is described in the above text. Hydrological characteristics are exhibited, but the other parameters are lacking. Due to the disturbed nature of this area, it is deemed an atypical situation, and is jurisdictional under ACOE, CDFG, and the County. As noted earlier in the report, this stand of mule fat scrub has not recovered from the Cedar Fire, but the jurisdictional area stands as originally mapped.

Emergent Wetland

Vegetation typical of the Emergent Wetland within the study site includes Common Monkeyflower (*Mimulus guttatus*), Grass Poly (*Lythrum hyssopifolia*), Soft Chess (*Bromus hordeaceus*), and Pale Spike-Sedge (*Eleocharis macrostachya*). The dominance of facultative wetland and obligate wetland species indicate hydrophytic vegetation in these areas. The stands of Emergent Wetland exhibit signs of hydrology, predominantly in the form of drainage patterns in wetland areas. Soil samples from test pits revealed indicators of hydric soils that are present in these areas.

RPO Wetlands

Passed in 2007, Ordinance No. 9842 (New Series), An Ordinance Codifying And Amending The Resource Protection Ordinance, Relating To Wetlands, Prehistoric And Historic Sites, Agricultural Operations, Enforcement, And Other Matters, revised the 1991 County RPO definition of a "wetland". The revised definition of a wetland is less inclusive than the 1991 RPO definition. As a result, some areas previously delineated as County jurisdictional wetlands may no longer qualify as RPO wetlands and may not be subject to the RPO development restrictions within wetlands and wetland buffers. Specifically, under the 1991 RPO, lands whose "substratum is non-soil and is saturated with water or covered by water at some time during the growing season of each year" would qualify as RPO wetlands. Under the revised 2007 definition of a wetland, such lands must support an ephemeral or perennial stream, whose substratum is predominately non-soil **and such lands must contribute substantially to the biological functions or values of wetlands in the drainage system**. Thus, the updated definition of a wetland is based not solely on form but on functions and values.

In the case of the Camp, the majority of the areas previously delineated as County RPO jurisdictional wetlands meet the 2007 definition of a wetland (based on the presence of hydrophytic vegetation or their contributions of the functions and values of the drainage system). In contrast, 2 areas previously delineated as RPO wetlands do not qualify as wetlands under the 2007 definition. The Central Camp Tributary Drainage and Southern Camp Drainages contain ephemeral drainages within the existing camp use area. These drainages lack hydrophytic vegetation, are not part of a wildlife corridor, and do not support any sensitive species. In terms of functions and values, these are narrow drainages that lack herbaceous vegetation within the channel; thus, they tend to flow quicker, yielding significantly less groundwater recharge, sediment retention, toxicant retention, and nutrient transformation. These drainages, thus, have low physical and chemical functions. In addition, the Southern Camp Drainages lack connectivity, precluding any substantial contributions to the drainages system.

The Central Camp Tributary Drainage and Southern Camp Drainages function solely to convey water from higher elevation lands in the west eastward, in some cases connecting with lower drainages; however, this function is the result of topography and is not dependant upon the specific morphology of the drainage. The water flow of the site's western hills will continue to flow eastward regardless of the presence or absence of these small, unvegetated channels; thus, their conveyance of water does

not qualify as a substantial contribution to the biological functions or values of wetlands in the drainage system. They support a purely physical function, which is not dependent upon their presence, but simply reflects the path of least resistance for water flow. Absence of these drainages (while not proposed by the project) would not prevent flow of water eastward into the drainage system.

Having analyzed the conditions of the drainages on-site, the Central Camp Tributary Drainage and Southern Camp Drainages do not qualify as County wetlands pursuant to the 2007 RPO.

Non-Wetland Waters of the U.S./Streambed

Non-Wetland Waters are composed primarily of incised drainages of varying width that lack hydrophytic vegetation and/or hydric soil indicators. A majority of the Non-Wetland Waters found on-site consist of the drainages that run beneath the Southern Coast Live Oak Riparian Forest. Hydrology within some drainages is indicated by occasional drift lines, sediment deposits, or exposed root systems of adjacent trees where the banks had eroded. The lack of watermarks and drift lines outside of these incised drainages indicates that the ordinary high watermark does not rise above the depth of the channel. Some drainages lacked signs of water, which made the determination of hydrology limits problematic. In these cases, CDFG jurisdiction remained from bank to bank, while both ACOE and County jurisdictions were limited to the width of the channel bed and/ or the cobble within the channel. The soils within the streambeds that underlie Southern Coast Live Oak Riparian Forest consist of cobble or rock. These areas could not be sampled due to the impenetrability of the substrate. It is possible that sediment deposits between the cobble satisfy hydric conditions; however, this could not be determined. In these cases, soils are considered to be natural atypical situations, and the presence of hydric soils is assumed, but due to the lack of hydrophytic vegetation these areas remain Non-Wetland Waters/Streambeds.

The additional wetland delineation work conducted in November 2000 revealed a disturbed area that was previously mapped as Non-Wetland Waters. The disturbance consisted of what appeared to be the placement and compaction of fill material into approximately 0.006 acre of Non-Wetland Waters (not RPO jurisdictional). This one-foot wide disturbed drainage is located in the eastern portion of the property, approximately 800 feet east of the main parking lot. A portion of the drainage originally ran beneath a stand of Southern Coast Live Oak Riparian Forest; however, no wetland-associated vegetation actually existed within the drainage, and no impacts to wetland vegetation occurred as a result of this disturbance. This acreage has been included in the impact analysis for the project.

Diegan Coastal Sage Scrub

In the northeastern portion of the property, relatively small inclusions of Diegan Coastal Sage Scrub are interspersed within breaks of the Southern Coast Live Oak Riparian Forest canopy. Although not a wetland vegetation community, data points were also performed in these areas, because they could potentially contain wetland characteristics, as they are directly adjacent to riparian habitat and the associated drainage system.

These areas almost entirely consist of upland vegetation including Flat-top Buckwheat and non-native grasses like Ripgut Grass and Soft Chess. The only wetland parameters (hydrology and assumed hydric soils) found within the Diegan Coastal Sage Scrub occur in the drainage/streambed, which has been addressed above under Non-Wetland Waters/Streambeds.

Non-Native Grassland

A0.38-acre area classified as Non-Native Grassland occurs immediately adjacent to Southern Coast Live Oak Riparian Forest in the northeastern portion of the property. It is located in a low-lying area, north of the West Fork of San Vicente Creek at the base of a hill. Although the area consists completely of non-wetland indicator species, such as Milk-thistle (*Silybum marianum*) and Radish (*Raphanus sativus*), it appears to have more mesic conditions; therefore, data points were also performed throughout the vegetation.

Neither hydric soil indicators nor hydrology indicators were found in this vegetation community during the time of the survey. The soils in this area were mildly moist but not saturated even at depths of 14 inches, indicating the absence of a high groundwater table. A portion of this area is proposed as a wetland creation/mitigation site.

Wetlands Functions and Values

The on-site wetland habitats mostly consist of dense, continuous Southern Coast Live Oak Riparian Forest, which is a relatively high quality habitat. Although the majority of this habitat lacked the necessary hydrophytic vegetation characteristics to be considered ACOE jurisdictional wetlands, it is nonetheless considered to be high quality wildlife habitat. This vegetation community provides a multi-layer canopy, which supports common riparian birds such as Song Sparrow (*Melospiza melodia*), Lesser Goldfinch (*Carduelis psaltria*), Yellow-rumped Warbler (*Dendroica coronata*), and Common Yellowthroat (*Geothlypis trichas*). Additionally, the smaller ponding areas and abundance of leaf litter may provide breeding habitat for various amphibian species including the Pacific Treefrog (*Pseudacris regilla*), and Western Toad (*Bufo boreas*). The tall heights of the Coast Live Oaks, Western Sycamores, and occasional willows are indicative of a mature, well-developed riparian system.

Overall, the on-site wetlands and waterways have varied physical and chemical functions. The high functions are mostly attributed to the areas of the drainage that run beneath the Southern Coast Live Oak Riparian Forest. The herbaceous vegetation in the understory and the widening of the drainage allows for better groundwater recharge, sediment retention, toxicant retention, and nutrient transformation. The sediment and toxicant retention of these areas improves the conditions of the areas downstream by reducing sediment loading. However, most of the upstream portions of the on-site waterways consist of narrower drainages that lack herbaceous vegetation within the channel. Waters in these drainages tend to flow quicker, yielding significantly less groundwater recharge, sediment retention, and nutrient transformation. Thus, these drainages have lower physical and chemical functions. The functions and values of intermediate areas along the drainage, including small pockets of Southern Willow Scrub and Mule Fat Scrub have moderate functions and values, as they provide herbaceous wetland vegetation that assists with sediment retention, toxicant retention, and nutrient transformation, but are too small to effectively provide high levels of retention or transformation or much groundwater recharge. The functions and values of the various wetland resources on-site are addressed further within the subsequent Wetland Buffers section.

Although the Diegan Coastal Sage Scrub and Non-Native Grassland habitats on-site lack wetland characteristics, these areas, particularly the Non-Native Grassland, offer considerably potential for wetland mitigation sites. These areas occur along the same drainage system and have generally the same soil composition as the neighboring riparian habitat. The Non-Native Grassland is especially suited for wetland mitigation, because it occurs in a low-lying area, which appears to be more mesic

than surrounding upland habitats. Although this area is classified as a Non-Native Grassland according to the County's habitat identification information (County of San Diego, Department of Planning and Land Use 2001), it contains no grasses, only invasive, exotic forbs, which are too dense and tall to provide quality raptor foraging habitat. The biological value of this area would increase if the existing vegetation were replaced with native, wetland/ riparian species.

Wetland Buffers

The on-site wetland buffers have been revised from those originally proposed to meet the 2007 RPO. The County Mapping Requirements' wetland buffer factors have been assessed for each of the on-site wetlands. Summary of the analysis, along with resulting buffer widths, are provided within the table below according to location within the Camp and the wetland type (i.e., drainage, riparian scrub, emergent wetland...).

Table 4. Buffer determination factors and wetland buffer widths

Location/ Description	Hydrophytic Vegetation	Wildlife Corridor	Sensitive Species	Condition/ Quality	Connectivity	Buffer Width
West Fork of San Vicente and Tributary Drainages	No (see wetland habitats below)	Yes	Yes	Low to Moderate	Yes	100 feet from centerline
West Fork of San Vicente Jurisdictional Riparian Forest	Yes	Yes	Yes	High	Yes	100 feet from edge of habitat
West Fork of San Vicente Southern Willow Scrub	Yes	Yes	No	Moderate	Yes	50 feet from edge of habitat
Central Camp Primary Drainage	No	No	Yes	Moderate	Yes	50 feet from centerline
Central Camp Southern Willow Scrub	Yes	No	No	Low	Yes	50 feet from edge of habitat
Central Camp Emergent Wetland	Yes	No	No	Low	Yes	50 feet from habitat edge
Southern Camp Riparian Scrubs	Yes in the western portion of the drainage, but area just north of the Cross Trail Base did not recover after the Cedar Fire	No	No	Low	Yes	50 feet from habitat edge in western Southern Willow Scrub location; no buffer where the habitat did not recover post-fire
Southern Camp Emergent Wetland	Yes	No	No	Low	Yes	50 feet from habitat edge

FLORA

A total of 288 species of plants were found at the Camp, of which, 64 are non-native (Appendix 1). This substantial floristic diversity reflects the variety of habitats and microhabitats present, the relatively large size of the property, and the intermediate geographic location of the site between the coast and higher mountains. Habitat value and floristic diversity on-site are considered excellent. Undisturbed areas beneath the oak canopy are particularly productive in terms of botanical diversity, and sensitive species were particularly well represented within Mafic Southern Mixed Chaparral at higher elevations.

ZOOLOGICAL RESOURCES

Wildlife Habitat

The value of an area to wildlife is primarily dependent on physical and biological factors. Other important factors include the location relative to other land uses, the quality of habitat on and adjacent to the area, and the uniqueness of the habitat within a regional context. The size of the Camp provides a mosaic of suitable habitat niches, which would be expected to support a great diversity of native wildlife on the site. Similarly, drainages and ridges, which pass through the site, provide corridors for wildlife movement that would contribute to the diversity of fauna on the site. Finally, the confirmed presence of native predators, such as Bobcat (*Lynx rufus*) and Coyote (*Canis latrans*), and potential use of the property by Mountain Lion (*Puma concolor*) are expected to help maintain the balance of the local ecosystem, supporting species diversity and abundance.

Diegan Coastal Sage Scrub, Coastal Sage-Chaparral Scrub, chaparral, and oak woodlands are extremely valuable to native fauna. Disturbed or non-native habitats, such as Eucalyptus Woodlands, Non-Native Grasslands, and agricultural areas, provide foraging, wintering, and even breeding habitat for some bird, small mammal, and reptile species. Developed and adjacent agricultural areas, though more highly disturbed, also add to the vegetative diversity of the site. Although not delineated as a separate habitat type, rock outcrops are a topographic feature essential to some wildlife species.

Chaparral and Rock Outcrops

Chaparral (Southern Mixed Chaparral and Mafic Southern Mixed Chaparral) provides habitat for a variety of mammalian and avian species. Small rodents are important elements of the chaparral fauna; however, this habitat plays an equally important role to large species including the Mountain Lion. A number of species of birds forage among the leaf-litter, including the California Thrasher (*Toxostoma redivivum*), California Towhee (*Pipilo crissalis*), and Spotted Towhee (*Pipilo erythrophthalmus*). During the winter months, Hermit Thrush (*Catharus guttatus*) may utilize the leaf litter found beneath areas of mature shrub cover for foraging. More specifically, on-site chaparral habitats support several sensitive plant species, increasing their sensitivity.

Areas with extensive amounts of rock, particularly relatively undisturbed slopes or peaks, are habitat for reptiles, provide roost sites for bats, and perch sites for raptors. Large rock outcroppings may provide habitat for the Granite Night Lizard (*Xantusia henshawi*), a species dependent on such features.

Coastal Sage-Chaparral Scrub

The functions and values of this habitat type are comparable to on-site chaparral. It is occupied by the Dusky-footed Woodrat (*Neotoma fuscipes*) and may provide habitat for whiptail lizards and numerous snake species. These areas of intergrade are not expected to support California Gnatcatchers due to the predominance of chaparral species.

Diegan Coastal Sage Scrub

The limited tracts of Diegan Coastal Sage Scrub present exhibit a rather open, low profile that is ideal for whiptail lizards, horned lizards, and a variety of snakes. Vegetation that is more substantial and may be capable of supporting California Gnatcatchers is also present at a few locations, although California Gnatcatchers have not been identified on-site during M&A focused or general surveys and are not known from the immediate region. Typically, many species found in chaparral habitats will also utilize sage scrub.

Coast Live Oak Woodlands and Southern Coast Live Oak Riparian Forest

Oak woodland (Coast Live Oak Woodland and Southern Coast Live Oak Riparian Forest) is a strategically important habitat for many vertebrate species. Of the 632 terrestrial vertebrates native to California, over half (331) use oak woodlands, still other species may occupy oak habitats intermittently during migration (Giusti and Tinnin 1993). Oak woodlands may be considered a "keystone habitat", as they are essential to a wide variety of plants and animals.

Habitat diversity typically influences wildlife abundance. Plant density, composition, age structure, and cover within and adjacent to woodlands affect habitat diversity, (which may be measured by the degree of vertical and horizontal habitat structure). Oak woodlands are composed of several vertical layers including canopy, shrub, herb, and ground. In contrast to many other tree species, oaks have a greater proportion of biomass in branches (canopy), which provides a network of feeding and hiding sites for wildlife (Giusti and Tinnin 1993). Woodland overstory provides valuable roosting, foraging, and breeding areas, while the understory is utilized by foraging birds and mammals. The trees themselves provide extensive foliage and bark surface for foraging, insectivorous birds. Although overall wildlife diversity is generally greater where vertical vegetation structure is well developed, species-specific occurrence can frequently be linked to the quality or presence of one component of the vertical structure. Several components within oak woodlands are of particular value to wildlife, among these are riparian areas, cavity trees, downed woody debris, and acorn trees.

Riparian areas usually harbor greater wildlife diversity and abundance than upland areas. Riparian habitat, represented on-site as Southern Coast Live Oak Riparian Forest, can be an important breeding habitat for a number of species of migratory birds. Many vertebrates predominantly utilizing peripheral habitats, such as Southern Mixed Chaparral, also utilize riparian habitats to varying degrees. A number of birds are expected to forage in the insect rich, riparian forest habitat.

Cavity trees provide shelter and breeding sites for avian and mammalian species. Abandoned woodpecker holes and natural cavities which form in large oaks can be important nesting sites, not only for woodpeckers, but for secondary cavity nesting species such as Oak Titmouse (*Baeolophus inornatus*), Ash-throated Flycatcher (*Myiarchus cinerascens*), Western Bluebird (*Sialia mexicana*), wrens, and Western Screech Owl (*Otus kennicottii*). For secondary cavity nesters the presence of existing cavity trees may be a limiting factor.

Downed woody debris affords a moist environment and is an important habitat component for amphibians and reptiles. Fallen oak logs and the leaf litter under large trees support diverse invertebrate faunas; various species of amphibians, reptiles, small mammals, and birds forage in these areas. Arboreal Salamanders (*Aneides lugubris*) will also estivate in deep cavities in live oaks during the summer dry season.

Finally, acorns not only allow for oak regeneration, but many wildlife species are dependent upon them as a food source. Some oaks are better acorn producers than others are and the wildlife value of an individual tree may be in part attributable to the tree's acorn production capacity. Acorns provide a rich food source for many species including woodpeckers, quail, jays, Mule Deer (*Odocoileus hemionus*), and woodrats.

Wetlands and Riparian Habitats

On-site wetland habitats, other than the jurisdictional stands of oak riparian forest, are restricted to pockets of riparian scrub and emergent wetland. Although they may not significantly enhance wildlife habitat for wetland dependent species, due to their limited size and isolation, they increase the biological diversity of the site. Species that may utilize these areas include Common Yellowthroat and Song Sparrow.

While some riparian areas may not be delineated as jurisdictional wetlands, they may be essential to local plants and animals. For example, riparian ecosystems provide permanent as well as temporary habitat to many terrestrial organisms (see previous oak woodland riparian component discussion). They also provide primary movement corridors. Riparian ecosystems benefit a variety of species through their value as habitat, their highly productive vegetation, and their ability to buffer the effects of organic nutrients and toxins (Peck 1993).

Non-Native Woodlands

Exotic trees may enhance nearby native woodlands, and some non-native trees provide perch and nest sites for raptorial and passerine species. However, they do not generally provide noteworthy resources to native vertebrates. No raptor nests were located within the on-site Non-Native Woodlands.

Non-Native Grasslands

On-site Non-Native Grasslands support gophers, ground squirrels, and other small mammals. They may be of modest foraging value to raptors, such as Red-shouldered Hawk (*Buteo lineatus*) and Red-tailed Hawk (*Buteo jamaicensis*). These grasslands are not known to support sensitive plant species.

Disturbed

Disturbed locations support fewer species of native vertebrates compared to more pristine, native habitats found at the Camp. However, a few species such as the California Ground Squirrel (*Spermophilus beecheyi*) are abundant in on-site Disturbed areas. Granivorous birds, such as the White-crowned Sparrow (*Zonotrichia leucophrys*) can be abundant during the winter months in weedy areas.

Fauna

A checklist of animal species detected on-site by M&A biologists is provided as Appendix 2. The Appendix 2, Faunal Checklist, does not include species detected on-site during investigations conducted by sub-consultants [e.g., Stephen's Kangaroo Rat Trapping] as these observations are addressed within the attached sub-consultant reports and were not made by M&A biologists. Most species found on-site are discussed below, along with species not detected, but expected to occur, on-site.

Butterflies

Pacific Orange-tip (*Anthocharis sara*), Desert Orange-tip (*Anthocharis cethura*), Coastal Green Hairstreak (*Callophrys* dumetorum), Gray Hairstreak (*Strymon melinus*), Funereal Duskywing (*Erynnis funeralis*), Behr's Metalmark (*Apodemia virgulti*), Silvery Blue (*Glaucopsyche lygdamus*), California Sister (*Adelpha bredowii*), Mourning Cloak (*Nymphalis antiopa*), Lorquin's Admiral (*Limenitis lorquini*), West Coast Lady (*Vanessa anabella*), Common Ringlet (*Coenonympha tuilla*) and Gabb's Checkerspot (*Chlosyne gabbii*) were all observed on-site. Western Tiger Swallowtail (*Papilio rutulus*) and Pale Swallowtail (*Papilio eurymedon*) were also observed on-site, specifically, within riparian habitats.

Focused surveys for the Quino Checkerspot Butterfly were conducted on-site in 2001. The results of the surveys were negative. Additional details regarding survey results are discussed in the Focused Sensitive Resource Surveys section and Appendix 11.

Although not detected on-site or reported from the immediate area in the CNDDB (2006), the (Harbison's) Dun Skipper (*Euphyes vestris harbisoni*) has potential to occur on-site based on the presence of its host plant, San Diego Sedge (*Carex spissa*).

Amphibians

No amphibians were found on the site during M&A fieldwork; however, nocturnal investigations of riparian habitats were not conducted. The Pacific Treefrog and Western Toad are expected to occur on-site. The Arboreal Salamander, Large-blotched Ensatina (*Ensatina eschscholtzi klauberi*), and Garden Slender Salamander (*Batrachoseps major major*) may occur in the oak woodlands and/or the heavier-canopied chaparral. The presence of fallen logs, sporadically found in the woodland understory along the primary drainages at the Camp, is an important microhabitat for these species. Lastly, Western Spadefoot (*Spea hammondii*) may occur within on-site habitats. Although spadefoot breeding habitat typically consists of temporary ponding water, and suitable breeding habitat was extremely limited on-site; they will aestivate within coastal sage scrub, chaparral, or oak woodlands.

An evaluation of the site's riparian and wetland habitats for Arroyo Toad suitability was conducted in spring 2000 and indicated that the site was not suitable. The methods and results of this investigation are detailed in Focused Surveys section under Arroyo Toad.

Reptiles

A number of Western Fence Lizards (*Sceloporus occidentalis*) were observed, as well as Side-blotched Lizard (*Uta stansburiana*), San Diego Horned Lizard (*Phrynosoma coronatum blainvillii*), Orange-throated Whiptail (*Aspidoscelis hyperythra*), and California Striped Racer (*Masticophis*

lateralis lateralis). Remains of either Southern Pacific Rattlesnake (*Crotalus viridis helleri*) or Red Diamond Rattlesnake (*Crotalus ruber*) were found on-site following the Cedar Fire.

San Diego Banded Gecko (*Coleonyx variegatus abbotti*), Coastal Western Whiptail (*Aspidoscelis tigris stejnegeri*), Common Kingsnake (*Lampropeltis getula*), and Gopher Snake (*Pituophis catenifer*) can be found regularly in similar chaparral, grassy areas, and rocky outcrops such as occur at the Camp. Species such as the Southern Alligator Lizard (*Elgaria multicarinata*) and Ringneck Snake (*Diadophis punctatus*) are expected in the oak woodlands. Also, the Coronado Skink (*Eumeces skiltonianus interparietalis*) is regularly is found in shaded areas with heavy leaf litter such as occurs in the oak woodlands on-site. Two-striped Garter Snakes (*Thamnophis hammondii*) may forage seasonally in the West Branch of San Vicente Creek on the property. As previously mentioned, the Granite Night Lizard may occur within the western portions of the Camp where large, undisturbed expanses of rock outcrop persist.

Recorded snakes trapped or observed by Lawrence Klauber (unpublished notes) from nearby "Mussey" are the Rosy Boa (*Lichanura trivirgata*), Lyre Snake (*Trimorphodon biscutatus*) Coast Patch-nosed Snake (*Salvadora hexalepis virgultea*) Speckled Rattlesnake (*Crotalus mitchelli*), and Night Snake (*Hypsiglena torquata*). Finally, CNDDB data indicates the presence of the Coast Patch-nosed Snake in the immediate vicinity of the Camp (Scheidt 1994 in CDFG 2006). CNDDB data (CDFG 2006) also confirms the presence of the following reptile species within the Camp/Mussey Grade Road area: Western Whiptail and San Diego Horned Lizard.

Birds

A total of 44 species of birds were observed on the site during the April 1999 fieldwork, an additional 4 species were observed during spring 2000 work, and finally 4 additional species were recorded during 2001 fieldwork. Many of these are typical of oak or chaparral habitats. These include the Common Barn Owl (*Tyto alba*), Northern Flicker (*Colaptes auratus*), Western Scrub-Jay (*Aphelocoma californica*), Common Bushtit (*Psaltriparus minimus*), Bewick's Wren (*Thryomanes bewickii*), House Finch (*Carpodacus mexicanus*), California Quail (*Callipepla californica*), Wrentit (*Chamaea fasciata*), California Thrasher, Spotted Towhee, California Towhee, Pacific-slope Flycatcher (*Empidonax difficilis*), House Wren (*Troglodytes aedon*), Lesser Goldfinch (*Carduelis psaltria*), and Southern California Rufous-crowned Sparrow (*Aimophila ruficeps canescens*). Canyon Wrens (*Catherpes mexicanus*) were present at the rocky, higher elevations, adjacent to burned portions of chaparral on the western site boundary. A Hermit Thrush was found dead, although apparently not depredated, along a trail through chaparral. Also, a female hummingbird, either a Rufous Hummingbird (*Selasphorus rufus*) or Allen's Hummingbird (*Selasphorus sasin*), was observed during one visit to the site (identification of Rufous Hummingbird or Allen's Hummingbird females generally requires in-hand examination). Lazuli Buntings (*Passerina amoena*) were observed on-site during the wetland delineation work and are expected to utilize portions of the property during migration.

A California Gnatcatcher was identified during previous biological surveys; however, no California Gnatcatchers were observed during general or focused surveys in 1999-2001 and CNDDB data (2006) does not indicate the presence of the species within the Camp or immediate vicinity. For additional information regarding the methods and results of 1999 USFWS protocol California Gnatcatcher surveys, see Focused Surveys section.

Nuttall's Woodpeckers (*Picoides nuttallii*) and Acorn Woodpeckers (*Melanerpes formicivorus*) were common on the site in oak canopy. In addition, Dark-eyed Junco (*Junco hyemalis*), Orange-crowned Warbler (*Vermivora celata*), Warbling Vireo (*Vireo gilvus*), Phainopepla (*Phainopepla nitens*), Ash-throated Flycatcher, Nashville Warbler (*Vermivora ruficapilla*), Black-headed Grosbeak (*Pheucticus melanocephalus*), Oak Titmouse, and Lark Sparrow (*Chondestes grammacus*) were observed within the oak woodlands. Song Sparrow, Black Phoebe (*Sayornis nigricans*), Common Yellowthroat, and Wilson's Warbler (*Wilsonia pusilla*), species typically associated with wetlands, were found in the riparian areas.

Species observed in a variety of habitats on-site included American Robin (*Turdus migratorius*), Mourning Dove (*Zenaida macroura*), Anna's Hummingbird (*Calypte anna*), Costa's Hummingbird (*Calypte costae*), American Crow (*Corvus brachyrhynchos*), Common Raven (*Corvus corax*), Western Kingbird (*Tyrannus verticalis*), and European Starling (*Sturnus vulgaris*). Western Bluebirds were also observed on-site utilizing Non-Native Grasslands adjacent to oaks or Non-Native Woodlands. A Common Raven nest was identified just off-site to the west.

Red-tailed Hawk, Red-shouldered Hawk, Cooper's Hawk (*Accipiter cooperii*), and American Kestrel (*Falco sparverius*) were observed on-site during spring fieldwork. An active Red-tailed Hawk nest was located at the northern property boundary and previous biological work located a Cooper's Hawk nest within oak woodlands on-site. Although a Red-shouldered Hawk nest could not be confirmed on-site, consistent observations of a pair suggest that an on-site nesting location is likely. Both Cooper's Hawks and Red-shouldered Hawks were flushed from the oak woodlands, while a Red-tailed Hawk was observed perched in a Eucalyptus tree overlooking Disturbed uplands and Non-Native Grasslands. Golden Eagles have been documented nesting in several nearby locations, the closest of which is within a mile of the Camp boundary. In addition, a Western Screech Owl and Common Barn Owl were flushed from on-site oak woodlands, and numerous Turkey Vultures (*Cathartes aura*) were consistently observed.

Some species not observed by M&A biologists but expected to utilize portions of the site include Bullock's oriole (*Icterus bullockii*), White-tailed Kite (*Elanus leucurus*), and Golden Eagle. Species with low potential for occurrence on-site during the appropriate season include Yellow Warbler (*Dendroica petechia*), Sharp-shinned Hawk (*Accipiter striatus*), and Ferruginous Hawk (*Buteo regalis*).

Finally, a Green Parakeet (*Aratinga holochbra*), observed during 2000 fieldwork, is likely an escaped pet.

Mammals

Ten species of mammals were either directly observed or detected by observation of their tracks, scat, nests, or other sign. Without trapping, a number of resident mammals may not be readily detected. Many mammals are nocturnal and secretive; signs for a number of species, particularly rodents, can be similar.

One of the most conspicuous mammals in coastal California is the California Ground Squirrel. These large, diurnal rodents are often common (as they are on the Camp) around rural developments, and on disturbed lands. They are an important prey item for mammalian carnivores, raptors, and large snakes. Another common mammal, the Botta's Pocket Gopher (*Thomomys bottae*) is also found on the site, as indicated by characteristic burrows. Numerous Desert Cottontails (*Sylvilagus*

audubonii) were observed and Lagomorph scat is found throughout the property. The presence of the Dusky-footed Woodrat is evident by the appearance of its very large stick nests, which were found in oak woodland and dense chaparral. Mule Deer scat was also observed on-site; a single individual was detected on-site in 2000 and 2 deer were observed in 2007. At least 2 carnivores are present, as indicated by their scat, Coyote and fox, presumably Gray Fox (*Urocyon cinereoargenteus*). Bobcats were observed during current and previous biological work on-site and Mountain Lion likely occur occasionally within relatively undisturbed areas of chaparral. The Ringtail (*Bassariscus astutus*), a rarely documented nocturnal mammal, is also expected due to the presence of extensive uninterrupted chaparral habitats. Other mammals that are likely resident in the chaparral and oak habitats include Virginia Opossum (*Didelphis virginiana*), Western Spotted Skunk (*Spilogale gracilis*), Raccoon (*Procyon lotor*), and Striped Skunk (*Mephitis mephitis*). Skunk scent was detected within oak riparian woodland.

Undoubtedly there are a number of bats species that forage over the site; without surveys it is impossible to determine what species utilize the site regularly. Some bat species roost in trees (e.g., *Lasiurus* species) and may occupy woodland habitat on the site. Potentially present in the area are the Yuma Myotis (*Myotis yumanensis*), which occurs in oaks and broken chaparral habitat; California Myotis (*Myotis californicus*), which regularly occurs near wooded canyons and in chaparral; the Western Small-footed Myotis (*Myotis ciliolabrum*) and Mexican Free-tailed Bat (*Tadarida brasiliensis*), which roost mainly in crevices and forage in multiple habitats; and the regionally common Big Brown Bat (*Eptesicus fuscus*). Both the Long-eared Myotis (*Myotis evotis*) and the Townsend's Big-eared Bat (*Plecotus townsendii townsendii*) could use Camp woodlands and riparian forests for foraging, but no site-specific information is available to more accurately determine the likelihood of species occurrence on-site. Known from the San Vicente Reservoir area are the Pallid Bat (*Antrozous pallidus*) and the California Mastiff Bat (*Eumops perotis californicus*), a sensitive species sometimes associated with chaparral and live oaks (PSBS 1993b). The Western Pipistrelle (*Pipistrellus hesperus*) is a common bat in San Diego County and has been identified roosting in the vicinity of the Camp (PSBS 1993a). Finally, the Big free-tailed Bat (*Nyctinomops macrotis*), and Pocketed Free-tailed Bat (*Nyctinomops femorosaccus*) are not expected to roost on-site but it may utilize nearby cliff nesting sites and forage within the Camp's riparian and edge habitats. According to local bat researcher, Drew Stokes, the following species have a high probability of foraging within at least a portion of the Camp: California Myotis, Small-footed Myotis, Mexican Free-tailed Bat, Big Brown Bat, Long-eared Myotis, Townsend's Big-eared Bat, Pallid Bat, California Mastiff Bat, Western Pipistrelle, and Pocketed Free-tailed Bat (D. Stokes pers. com.).

Small mammal fauna within a project site cannot be described with complete certainty absent extensive trapping efforts. However, based on the results of limited trapping and the presence of suitable habitats, the following species are known or expected to occur on-site: Northwestern San Diego Pocket Mouse (*Chaetodipus fallax fallax*), Dulzura Kangaroo Rat (*Dipodomys simulans*), San Diego Desert Woodrat (*Neotoma lepida intermedia*), California Mouse (*Peromyscus californicus*), Western Harvest Mouse (*Reithrodontomys megalotis*), Cactus Mouse (*Peromyscus eremicus*), and Deer Mouse (*Peromyscus maniculatus*). The California Vole (*Microtus californicus*) is also expected to occur within Camp property. In general, the quality of the habitats present at the Camp indicates that a fairly rich mammalian fauna is present.

SENSITIVE BIOLOGICAL RESOURCES

Sensitive Habitats

Sensitive habitats are those habitats considered sensitive by the County for the purposes of California Environmental Quality Act (CEQA), RPO, and MSCP Subarea Plan/Biological Mitigation Ordinance (BMO) compliance.

The BMO and MSCP Subarea Plan classify wildlife habitats according to a 4-tier system. Habitats are classified in order of decreasing sensitivity. Tier I habitats include wetlands and riparian habitats, oak woodlands, and Mafic Southern Mixed Chaparral. Diegan Coastal Sage Scrub and Coastal Sage-Chaparral Scrub are Tier II. Tier III habitats include Southern Mixed Chaparral and Non-Native Grasslands. Finally, Tier IV habitats are Disturbed, Agricultural Lands, and Eucalyptus or other Non-Native Woodlands. Although lower Tier habitats (III or IV) may have increased sensitivity status due to the presence of sensitive species or foraging potential, examination of on-site Tier III and IV habitats did not reveal an overall increase in sensitivity. The only exception is the area of Southern Mixed Chaparral that supports Gander's Butterweed or Ragwort (*Packera* [formerly *Senecio*] *ganderi*), located in the western portion of the project site.

Wildlife Corridors

The BMO defines "Corridor" as a specific route that is used for movement and migration of species. A corridor may be different from a "Linkage" because it represents a smaller or more narrow avenue for movement. The BMO goes on to define a "Linkage" as an area of land which supports or contributes to the long-term movement of wildlife and genetic material (County of San Diego 1996).

Neither the County MSCP Subarea Plan nor the Poway Habitat Conservation Plan/Natural Communities Conservation Planning (HCP/NCCP) Subarea Plan identifies a corridor in this area (Ogden 1996a and County of San Diego 1997).

As addressed within the earlier methods section, a map-based (GIS) analysis was conducted to identify potential on-site corridors. After considering the presence of high quality habitats, conducive topography, and human encroachment or development, field indicators were used to augment the map-based analysis.

Within the project region, there are several expansive, significant biological areas, which have been assessed as high quality habitat on the Habitat Evaluation Map contained within the County MSCP Subarea Plan. These areas include lands surrounding State Route 67 to the west of the project site, lands to the southwest (San Vicente Open Space Preserve), and lands to the southeast, which form a connection with the recently preserved Monte Vista Ranch lands. In the immediate project vicinity, these regional high quality habitat areas connect via the high quality oak riparian habitat associated with the West Fork of San Vicente Creek (County MSCP Subarea Plan Figure 4-1) and high to very high quality habitats that border the southeastern edge of the Camp.

As expected, much of the topography that favors movement (canyon bottoms) also favors higher quality habitats; thus, likely movement routes delineated based on topography generally corresponded with the high quality linear habitat connections. In some cases, topography and habitats create a "dead-end" route, where drainages abut steep slopes; these areas are less likely to support wildlife movement.

In the case of the Camp, existing on-site development in the central valley portion of the site and ranching development to the north and south, limit the likelihood of extensive north-south wildlife movement, despite the advantageous topography.

Thus, having examined regional connectivity potential, habitat quality, topography, and existing human development, the primary movement routes identified were east-west routes south of the Camp and along the West Fork of San Vicente Creek within the northern Camp property. Fieldwork conducted over several years supported designation of the West Fork of San Vicente Creek as a corridor. Through observation of tracks, scat, and individual mammals, bobcat, coyote, grey fox, and mule deer were identified as utilizing the West Fork corridor on-site. Although each of these species was also identified in other on-site areas, track abundance was higher at the West Fork-Mussey Grade Road connection than at other areas examined.

The Camp's contiguous riparian oak woodlands associated with the West Fork of San Vicente Creek, form the local east-west corridor. This local corridor crosses Mussey Grade Road at the entrance to the Camp where an underpass, if utilized, permits the continued safe passage of wildlife to the southeast and provides evidence of local corridor use, in the form of numerous tracks. To the east, this local corridor connects with the Iron Mountain Preserve lands. On-site, the corridor appears to be utilized by meso-predators, Bobcat, Coyote, and Mule Deer.

[The Biological Monitoring Plan for the Multiple Species Conservation Program is one of the few MSCP documents to address regional vs. local corridors. It states that: "regional corridors link 2 or more large areas of natural open space and are necessary to maintain demographic and genetic exchange between wildlife populations residing within these geographically disjunct areas. Local corridors allow resident animals access to necessary resources within a large habitat patch and they may function as secondary connections to the regional corridor system" (Ogden 1996b).] A regional corridor has not been identified on-site, as there is a lack of habitat connectivity to the north, east, and south of the site (regionally), due to residential development. No evidence exists that on-site habitats are necessary to maintain the viability of wildlife populations in the region. Specifically, rural residential development occupies the land eastward and additional development has been approved immediately east of Mussey Grade Road; north of the site, native habitats have largely been converted to agricultural use (Golden Eagle Ranch and other equestrian facilities in southern Ramona); and south of the site, limited agricultural and rural development combined with Mussey Grade Road's impact on the riparian corridor and the area's topography (numerous steep north-south ridgelines) limit the suitability of the area for regional north-south wildlife movement. Finally, a more suitable (east-west) regional corridor exists to the south through the San Vicente Open Space Preserve.

Additional evidence of wildlife movement (the presence of scat, predominantly Coyote) was observed along some of the maintained and non-maintained trails. The use of a "least resistance route" with sufficient cover is expected to account for these observations. As no specific linear feature or habitat is associated with such "trail" routes they are likely advantageous movement avenues, but not necessary corridors for daily or seasonal movement.

Sensitive Plant Species

Sensitive plants include those listed by USFWS (1999), CDFG (2006), the County (County of San Diego 2007), and the California Native Plant Society (CNPS) (CNPS 2001). Five sensitive plant species were identified within the Camp property: Gander's Butterweed or Ragwort, Felt-leaved

Monardella (*Monardella hypoleuca* ssp. *lanata*), Ramona Horkelia (*Horkelia truncata*), Ashy Spike-moss (*Selaginella cinerascens*), and Engelmann Oak. Ashy Spike-moss is no longer considered sensitive by CNPS but remains on the County's Sensitive Plant List as of September 2006. The population totals for the sensitive species detected on-site, with the exception of Ashy Spike-moss, and expected significance of these populations are addressed below (Table 5).

Table 5. On-site Sensitive Flora Population Estimates and Significance

Common Name Scientific Name	Status	On-site Population (approx. # individuals)[1]	Local and Regional Significance Notes
Ramona Horkelia (*Horkelia truncata*)	CNPS List: 1B County List: A	10	Ramona Horkelia populations are presently stable in San Diego County; however, all populations should be protected (Reiser 1996). The state and global rankings for this species indicate that it is less vulnerable than the above species. Given this information, and the small size of the on-site population, the population is expected to be locally but not regional significant.
Felt-leaved Monardella (*Monardella hypoleuca* ssp. *lanata*)	CNPS List: 1B County List: A	7	Populations are presumed stable in San Diego County. All substantial populations should be protected, and significant portions of all smaller populations are also recommended for protection (Reiser 1996). Based on state and CNPS rankings, this species has significantly declined and is vulnerable to extinction. The on-site population also lies in close proximity to the MSCP Critical Population at Iron Mountain. The on-site population of this species is significant on a regional and local level.
Gander's Ragwort/ Butterweed (*Senecio ganderi*)[2]	CNPS List: 1B County List: A	3	Populations are presently stable in San Diego and Riverside Counties (Reiser 1996); however, based on global, state, and CNPS rankings, this species has significantly declined and is vulnerable to extinction. On-site populations of this species are significant on a regional and local level.
Engelmann Oak (*Quercus engelmannii*)	CNPS List: 4 County List: D	>53	Engelmann Oak populations in southern California are still relatively abundant and stable (Reiser 1996). Engelmann Oak has the lowest global, state, and CNPS ranking of all the sensitive plants found on-site. While oak woodlands are a significant declining resource as a vegetation community, this particular on-site oak population is not significant regionally. However, the importance of this population locally should not be underestimated, the on-site population is expected to be a significant local resource.
Ashy Spike-moss (*Selaginella cinerascens*)	County List: D	Abundant, exact total not calculated	Ashy Spike-moss is declining due to urban expansion along the coast. Nevertheless, it still occurs at locations numbering in the thousands, and has recently been de-listed by CNPS. In sheer numbers, this may be one of the most common plants in the County and does not warrant sensitivity status (Reiser 2001). Nearby populations are found on Iron Mountain and west of Daney Canyon. The on-site population is not expected to be significant due to the low sensitivity of this species and its presence throughout much of the region.

[1] Numbers reflect populations prior to Cedar Fire
[2] Name changed to *Packera ganderi*

Despite focused, site-wide surveys, other sensitive plants known from the region including San Diego Thorn-mint (*Acanthomintha ilicifolia*), Encinitas Baccharis (*Baccharis vanessae*), Lakeside Lilac (*Ceanothus cyaneus*), Southern Mountain Misery (*Chamaebatia australis*), San Miguel Savory (*Satureja chandleri*), and Parry's Tetracoccus (*Tetracoccus dioicus*) were not identified on-site during the 1999 or 2000 biological survey work. Lakeside Lilac was previously mapped on the project site, but 1999 botanical investigations indicate that the shrub mapped as Lakeside Lilac was a hybrid. Hybrid *Ceanothus* are relatively common in the region. Heart-leaved Pitcher Sage is known from a ridge leading up to Iron Mountain, south of Dos Picos, and immediately north of the Camp (Oberbauer 1985 in CDFG 1997). This species was not identified on-site, despite efforts to locate it, which included surveys of the entire site in fall 2000. Finally, the potential for occurrence of Delicate Clarkia and Orcutt's Brodiaea on-site was investigated in spring 2000. Surveys indicated the absence of these species on-site.

Ashy Spike-moss was observed in association with rock outcrops throughout the site, particular in the mid to high elevations. Ramona Horkelia, Felt-leaved Monardella, and Gander's Butterweed were all located within chaparral at high elevations within the site. Each species was identified near the western trail that leads to a cross/scenic overlook. Gander's Butterweed was also identified in the northern portion of the project site adjacent to an existing hiking trial. Engelmann Oaks are scattered throughout the property, but occur primarily as individuals within Non-Native Grassland, Coastal Sage Scrub, or Disturbed habitats. Additional information regarding the status, presence, likelihood of occurrence on-site, and habitat of the aforementioned species is available in Appendix 4.

Sensitive Wildlife Species

Sensitive wildlife species include those listed by USFWS (1999), CDFG (2006), and those considered regionally or locally sensitive by the County of San Diego (2000 and 2007)(also included within this list are MSCP covered species). Sensitive species observed on-site were limited; however, numerous mammalian species can be difficult to detect during limited diurnal surveys. A number of sensitive species recorded from the area are expected to use portions of the Camp property. Sensitive species observed or detected within the project site include San Diego Horned Lizard, Orange-throated Whiptail, Turkey Vulture, Cooper's Hawk, Red-shouldered Hawk, Southern California Rufous-crowned Sparrow, Western Bluebird, Northwestern San Diego Pocket Mouse, San Diego Desert Woodrat, and Mule Deer. Table 6 provides information on the numbers of each species observed and the expected significance of the on-site populations.

Table 6. On-site Sensitive Fauna Population Estimates and Significance

Common Name	Status	Individuals observed (#)[1]	Local and Regional Significance Notes
San Diego Horned Lizard	DFG: CSC County Group: 2	1	The on-site San Diego Horned Lizard population would not be significant locally or regionally. This low sensitivity species is present on-site in low numbers and while the site provides suitable habitat, it does not provide extensive areas of high quality habitat.
Orange-throated Whiptail	DFG: CSC County Group: 2	1	Similar to the horned lizard, the on-site whiptail population would not be locally or regionally significant. No evidence of a dense, substantial population was identified on-site currently or historically.
Turkey Vulture	County Group: 1	~6	Observations of Turkey Vultures on-site do not indicate the presence of an on-site breeding area, nor was a roosting area

Common Name	Status	Individuals observed (#)[1]	Local and Regional Significance Notes
			observed. Therefore, the on-site observations do not reflect a locally or regionally significant habitat feature or population.
Cooper's Hawk	DFG: CSC County Group: 1	≥1	Cooper's Hawk observations, coupled with the previous identification of a nest indicate at least historic breeding activity on-site. As an on-site breeding resident, it would be significant locally but not regionally. Cooper's Hawks are an MSCP covered species.
Red-shouldered Hawk	County Group: 1	2	The on-site pair of Red-shouldered Hawks does not represent a significant local or regional population. This species is common in appropriate habitat and has shown stable or increasing populations locally (Unitt 2004).
Western Bluebird	County Group: 2	~8	This seasonally present species does not occupy the site in substantial numbers and would not be considered a locally or regionally significant population due to its low sensitivity coupled with low site use.
Southern California Rufous-crowned Sparrow	DFG: CSC County Group: 1	~4	The on-site biological surveys detected this species presence in low numbers that do not reflect local or regional significance. The relatively limited amount of sage scrub habitat on-site likely precludes a significant population.
Northwestern San Diego Pocket Mouse	DFG: CSC County Group: 2	7	This low sensitivity species is ubiquitously present in suitable habitat throughout the region; therefore, the small on-site population is not locally or regionally significant.
San Diego Desert Woodrat	DFG: CSC County Group: 2	4	This low sensitivity species is ubiquitously present in suitable habitat throughout the region; therefore, the limited on-site population is not locally or regionally significant.
Mule Deer	County Group: 2	3	This species is expected to occur at relatively low densities on-site; while it is an important part of the site's fauna, the on-site population is not significant locally or regionally due to its low sensitivity and the absence of high numbers on-site.

[1] Population estimates for faunal species are not possible without more detailed species-specific investigations. The numbers of individuals observed are presented for information, but do not reflect an active, specific search for these species on the project site.

Sensitive or protected wildlife with potential to occur in the project area include Harbison's Dun Skipper, Western Spadefoot, Silvery Legless Lizard (*Anniella pulchra pulchra*), San Diego Banded Gecko, Coastal Western Whiptail, Northern Red Diamond Rattlesnake, San Diego Ringneck Snake, Coronado Skink, Coast Patch-nosed Snake, Two-striped Garter Snake, Coastal Rosy Boa, Sharp-shinned Hawk, White-tailed Kite, Golden Eagle, California Horned Lark (*Eremophila alpestris actia*), Bell's Sage Sparrow (*Amphispiza belli*), Yellow Warbler, Ferruginous Hawk, Yuma Myotis, Long-eared Myotis, Small-footed Myotis, Spotted Bat, Pallid Bat, Townsend's Big-eared Bat, Pocketed Free-tailed Bat, Big Free-tailed Bat, California Mastiff Bat, San Diego Black-tailed Jackrabbit (*Lepus californicus bennettii*), Ringtail, and Mountain Lion. Of the aforementioned sensitive species with potential to occur on-site, the following are covered under the MSCP: Ferruginous Hawk, Golden Eagle and Mountain Lion. A table of sensitive species' presence, status, habitat, and potential for occurrence is provided as Appendix 5.

Of the above-mentioned species, some have only a low probability of occurrence while others are expected, although not observed. Those species, not previously discussed in detail, which have

strong potential to occur on-site (as indicated by a probability of occurrence assessment of "good" or "excellent" in Appendix 5) are discussed in the text below. This information has been collected and is discussed in response to the County's request for further textual discussion of all sensitive species that have a strong potential to use the site.

The San Diego Banded Gecko occurs in coastal and cismontane southern California from interior Ventura Co. south, although it is absent from extreme outer coast. It is uncommon in coastal scrub and chaparral, most often occurring in granite or rocky outcrops in these habitats (Stebbins 1972). This species has been detected at only 3 sites within the San Diego MSCP USGS monitoring study area, La Cresta, Marron Valley, and the San Diego Wild Animal Park (Rochester et al. 2001). Within the sites where they occur, this species is typically very rare. Due to the presence of suitable habitat and a lack of fragmentation, it is believed that this species may occur on-site, undetected, in low numbers similar to those recorded in suitable habitats at La Cresta, the closest MSCP monitoring site to the project site.

The Silvery Legless Lizard was shown to be nearly as uncommon as the San Diego Banded Gecko during monitoring within the MSCP region (Rochester et al. 2001). It was detected at only 5 study sites, the Tijuana Estuary National Wildlife Refuge (NWR), Wild Animal Park, and occasional captures at Point Loma, San Diego NWR, and Torrey Pines (Rochester et al. 2001). The limited occurrence of this species may be due to specific habitat requirements. This lizard prefers loose sandy soils, which are common along the coast or along river drainages. Legless lizards are thought to be soil moisture-limited at the edges of portions of their geographic range. While this lizard may occur within the riparian habitats of the project area, it is not expected in significant numbers, as the availability of suitable soils is limited on-site.

The Coastal Western Whiptail can be found in open, often rocky areas with little vegetation or open microhabitats within shrub or grassland associations. USGS monitoring recorded this species at 9 of the 13 MSCP survey sites (Rochester et al. 2001). This whiptail has been reported from the immediate area and likely exists on-site in relatively low numbers. Although the site supports a considerable amount of rock outcrop, it is typically surrounded by dense chaparral limiting the availability of open, preferred whiptail habitat. Still, Coastal Western Whiptail likely occur in non-substantial numbers within openings in shrub habitats resulting from fires and possibly along sage scrub chaparral edges.

The Coronado Skink seems generalized in the sense that it occurs in a variety of plant associations ranging from coastal sage, chaparral, oak woodlands, pinon-juniper, and riparian woodlands to pine forests (Stebbins 1985), but within these associations it is often restricted to the more mesic pockets (Zeiner et al. 1988). This skink was the most widespread of the sensitive species monitored by USGS in the MSCP region and occurred at all but one study site (Rochester et al. 2001). The USGS monitoring studies indicated that Argentine Ant (*Linepithema hamile*), formerly (*Iridomyrmex humilis*), and Coronado Skink populations may be inversely correlated (Rochester et al. 2001). As the species is somewhat of a habitat generalist and no evidence of a substantial Argentine Ant population was recorded on-site, it is believed that the Camp supports a healthy population of Coronado Skinks.

San Diego Ringneck Snakes are most common in open, relatively rocky areas within chaparral and annual grass habitats where suitable surface litter provides habitat. They tend to prefer areas with increased moisture levels, including riparian zones. The project site provides high quality riparian habitat with an abundance of surface litter. However, the factors that limit this species distribution

within the County are not well understood and as such it is difficult to determine the status of any on-site population. Based on previous reporting by Klauber (Klauber unpublished data), the availability of suitable habitat and the limited presence of non-native predators (domestic or feral cats), a moderate ringneck snake population is expected on-site.

Coast Patch-nosed Snake historically probably occurred throughout the region, particularly in areas with sage scrub and chaparral. This snake seems to require at least a low shrub structure of minimum density since they are not found in habitats lacking this structural component. They are presumed to take refuge and perhaps overwinter in burrows or woodrat nests, so the presence of one or more burrow or refuge-creating mammals may be necessary for this snake to be present. The presence of dense chaparral, sage scrub, and ecotonal scrub chaparral mixes in conjunction with woodrats and ground squirrels provides excellent habitat capable of supporting a substantial population. The species was previously collected within Mussey Grade by Klauber (Klauber unpublished data) and certainly persists in moderate numbers.

The Coastal Rosy Boa is widely but sparsely distributed in desert and chaparral habitats throughout southern California, south of Los Angeles. It inhabits rocky chaparral-covered hillsides and canyons. This species is expected on-site in low numbers in association with suitable habitats in the higher elevations of the Camp, these rocky hillsides are reasonably isolated and are unlikely to have experienced herpetological collection to any significant degree. The species was previously collected within Mussey Grade by Klauber (Klauber unpublished data).

The Northern Red Diamond Rattlesnake was widespread throughout southern California historically and still appears to be widespread but with a patchier distribution (Rochester et al. 2001). It was detected at 8 of the USGS MSCP study sites, appearing to be more common at larger, more inland study sites (Rochester et al. 2001). Although Northern Red Diamond Rattlesnakes are recorded from a number of vegetative associations, they seem to occur more frequently in habitats with heavy brush associated with large rocks or boulders. These rattlesnakes eat mostly and rabbits as adults, but lizards are also significant in the diet of juveniles. Previous collection from the Mussey Grade area by Klauber (Klauber unpublished data), the Camp's relatively large size, inland location, extensive brushy habitats with large rock outcrops, and seemingly diverse and abundant prey base likely indicate a sizable Northern Red Diamond Rattlesnake population in the suitable portions (upper elevations of the western half) of the site.

The Sharp-shinned Hawk is an uncommon migrant and winter visitor, casual in the summer. This species prefers riparian habitats and north facing slopes with perches, but occurs in woodlands, parks, and residential areas throughout San Diego County and a few trees seem to be their only winter requirement. As with other Accipiters, this hawk preys almost exclusively on passerines and may be attracted to residential bird feeders. It may occur in very low numbers as a migrant but would not breed on-site.

The Yuma Myotis is known from the San Vicente Reservoir area and is a common bat species in San Diego. Since suitable habitat exists on-site, it is expected. Substantial populations are not known from the site, but cannot be ruled out. The Pallid Bat, another species known from San Vicente area, utilizes open forest and grassland habitats for feeding and multiple habitats for roosting; there's potential foraging habitat on the Camp. Finally, the California Mastiff Bat is also known from San Vicente area, and expected to forage on-site. Since the Camp supplies open areas with roost locations in rock outcrops, oaks, and chaparral it is likely that this species is present on-site.

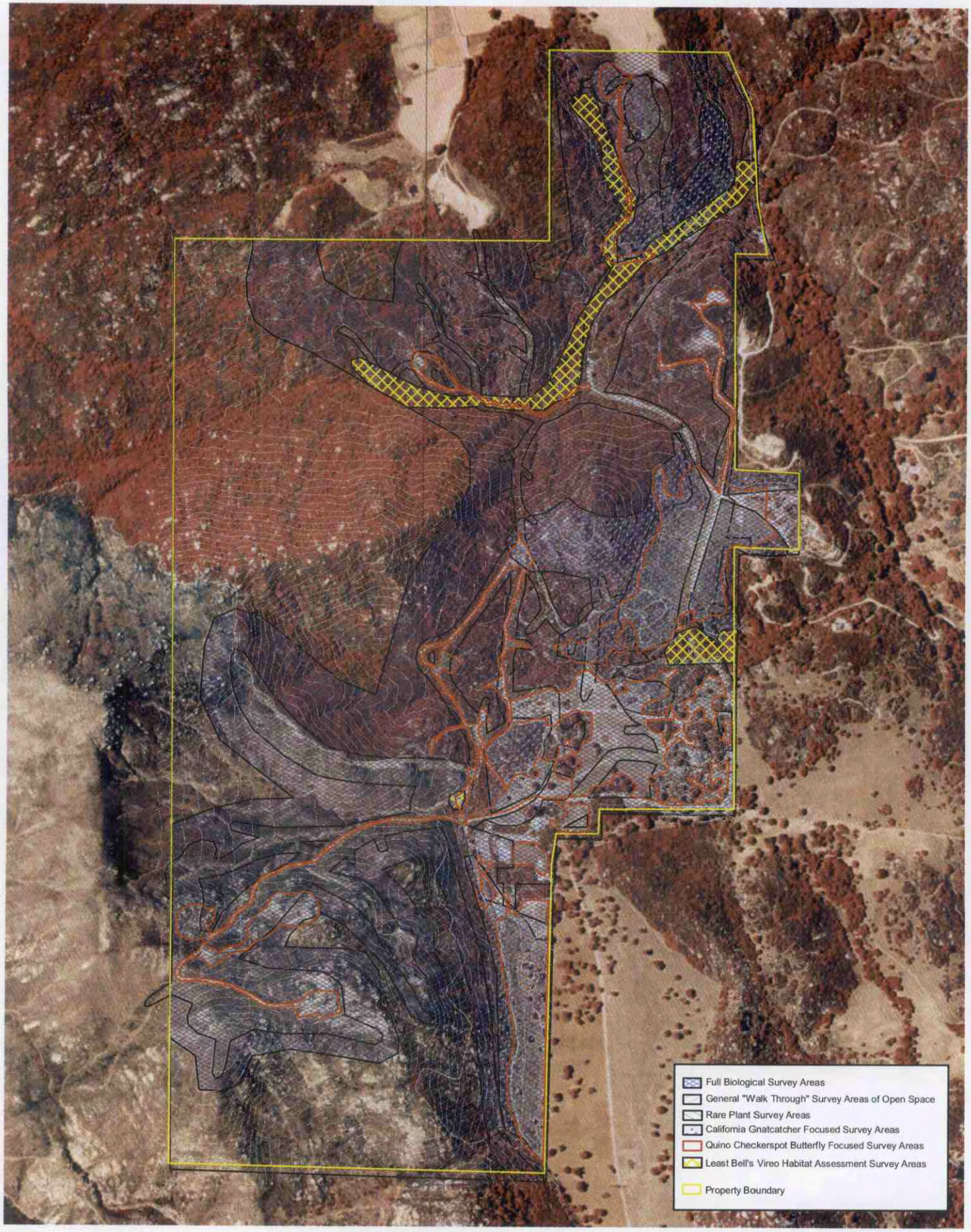
Townsend's Big-eared Bat has a strong foraging association with oak woodland, but is a cave rooster. It may forage on-site but is not expected to roost there. Similarly, the Pocketed Free-tailed Bat has good potential to forage on-site but not roost within the Camp area. Even after additional literature searches and consultation with local bat researchers, there is insufficient information to determine, more accurately, the probability of occurrence for the Long-eared Myotis, Small-footed Myotis, and Big Free-tailed Bat. However, none are expected to occur on-site in substantial numbers.

The San Diego Black-tailed Jackrabbit occurs in suitable grassland, sage scrub, and chaparral habitats. They do not typically occur within areas that support dense vegetation exclusively, as they require a degree of openness for locomotion. They may occur in low numbers within the lower elevation open sage scrub and scrub-grassland edge habitats of the Camp, but are unlikely to occur undetected after so many field surveys. Therefore, a substantial population is not expected as no jackrabbits were observed on-site, despite the species somewhat obvious presence.

Both the Ringtail and Mountain Lion are rarely seen; but they are believed present, at least intermittently, on-site. The presence of dense native vegetation, ridgelines and canyons, and, in the case of the cougar, a prey base, lead to the conclusion that while the site is not likely to support a significant population of either species, it is likely utilized by both.

Focused Sensitive Resource Surveys

In addition to general botanical and zoological surveys, a number of focused sensitive species surveys were conducted on-site in 1999 and 2000. Areas of the site covered are either described textually or depicted in Figure 4. The results of these surveys are detailed on the following pages.



N

400 0 400 800 1200 Feet

Salvation Army Camp
Biological Survey Areas

Figure 4

Seasonal Surveys for Sensitive Plants

Initial site surveys in 1999 indicated the presence of several sensitive or rare plant species on-site. Further Delicate Clarkia and Orcutt's Brodiaea surveys were conducted in 2000. Surveys in appropriate habitat on-site were negative for both species. In fall 2000, the Camp was systematically surveyed for Heart-leaved Pitcher Sage and any other sensitive floral species known from the region. Surveyors did not identify this MSCP Narrow Endemic plant anywhere within the Camp, but additional occurrences of other rare plants were documented within the site.

Arroyo Toad Habitat Assessment

The on-site habitat is believed to be suboptimal to support the Arroyo Toad. This is based on the narrowness of most of the channel bottoms (generally 3 feet in width) and the limited amount and duration of water flow in most years. The creek is expected to carry only intermittent and relatively small amounts of water during the course of the year, and is believed to be extremely inadequate to support the early life history stages of the Arroyo Toad. The streambed was largely dry by the mid-April site visit, and the presence of upland species (various sage scrub and chaparral shrubs, and non-native grasses) emphasize the absence of a more substantial hydrologic regime. In addition, the creekbed lacks characteristic breeding habitat features (sand berms, etc.) as well as adjacent sand benches or terraces favored by newly metamorphosed Arroyo Toads. In addition, the segment of the west fork of San Vicente Creek, into which the on-site drainage connects, is only slightly improved habitat over that which occurs on-site. The off-site habitat was shadowed by a dense canopy of mature Coast Live Oaks, and the streambed lacked any standing or flowing water on the April survey date. It is therefore believed unsuitable to support newly metamorphosed Arroyo Toads which are known to stay associated with the sandy edges or terraces of (flowing) streams for extended periods in the late summer and early fall. As no suitable Arroyo Toad habitat was found either on-site or on the adjacent, downstream property to the east/southeast, this species is not expected on-site.

Least Bell's Vireo Habitat Assessment

Least Bell's Vireos were not recorded on-site during previous or current biological investigations. Furthermore, there are no CNDDB database records (2006) of this species from this area, nor is it an occupied site according to the Draft Recovery Plan data for San Diego County (Fish and Wildlife Service 1998). However, riparian habitat exists on-site and was assessed for Least Bell's Vireo suitability in fall 2000.

Least Bell's Vireos are obligate riparian breeders. This species typically nests in willow-dominated areas and are known to prefer early successional habitat, but species composition does not appear to be as important a determinant as habitat structure (Fish and Wildlife Service 1998). Two habitat features appear to be essential for Least Bell's Vireo habitat: the presence of dense cover within one to 2 meters of the ground and a dense stratified canopy for foraging (Fish and Wildlife Service 1998).

The on-site riparian habitats are believed to be low quality in terms of Least Bell's Vireo suitability. They are generally mature oak woodlands characterized by a tall canopy, which shades out the lower shrub layer, limiting the amount of nesting habitat. The persistence of this mature oak canopy throughout virtually all of the site's riparian areas severely limits the amount of potential vireo habitat. Where notable understory occurs it is primarily composed of Poison Oak, not the typical willow or Mule Fat so often utilized by breeding vireos. These patches of understory may, in theory,

be utilized by vireos; however such utilization is seen as unlikely prior to further population recovery.

California Gnatcatcher Focused Survey

California Gnatcatcher habitat consists of on-site Diegan Coastal Sage Scrub, which occupies a small percentage of this site. Some patches of Diegan Coastal Sage Scrub in the southern project area have historically been grubbed, further decreasing habitat quality. As stated earlier, the elevation of the site is within the upper range for California Gnatcatcher occupation in San Diego County.

No California Gnatcatchers were detected on-site during the 1999 focused surveys.

Although a California Gnatcatcher sighting was previously reported from the site, the sighting was never confirmed and was not made by a USFWS incidental take permitted individual. Despite the many field visits to the site by M&A biologists, no evidence of gnatcatcher presence has been detected. In addition, M&A biological investigations of other properties within the immediate area have failed to identify California Gnatcatchers. It is believed that the previously reported sighting may have been a misidentification or a dispersing juvenile from the region but not the immediate area.

Quino Checkerspot Butterfly Focused Survey

The project site contained approximately 100 acres of moderate to moderately high quality Quino Checkerspot Butterfly habitat. The site also contained many nectaring resources, trails, open areas, hilltopping areas, and rock outcrops. However, the site lacked Dot-seed Plantain (*Plantego erecta*), which is a primary Quino Checkerspot Butterfly host plant. Only a few relatively small populations of secondary host plants, Purple Owl's Clover (*Castilleja exserta*) and Bird's Beak (*Cordylanthus rigidus*), were found on-site. No Quino Checkerspot Butterflies were detected during the surveys.

Golden Eagle Nest Site Assessment

A Golden Eagle territory lies adjacent to the project site. An assessment of this nest site was conducted by Wildlife Research Institute (WRI). The assessment was undertaken to provide the necessary data to determine the status of the nest site (active or inactive), the potential for impacts to a nesting pair, and the distance of the nest site from the proposed impact area to determine MSCP Subarea Plan compliance.

The WRI Golden Eagle report noted that although the Iron Mountain nest last fledged young in 1996, the eagle pair within this territory made several nesting attempts since that time, which appeared to have failed due to human disturbance. Courtship and nest building activity were observed in 2001, but any breeding attempt failed. The report outlines a series of factors affecting the Iron Mountain eagle pair (and most Golden Eagle pairs in the County), which can essentially be summarized as loss of foraging habitat due to agricultural and residential development, detrimental agricultural practices (ground squirrel poisoning, eagle shooting), human disturbance of nesting areas, and development associated mortality.

The specific effects of the proposed development are discussed within the WRI report, but these findings were made based on the first plot plan, which is no longer proposed. Distances from the nest site to proposed or existing facilities within the report are, therefore, no longer accurate. An

updated analysis can be found within the Impacts section. The updated analysis was completed by M&A based on the original WRI report, regional eagle information, the County MSCP Subarea Plan, and the updated plot plans and project description. The Golden Eagle report is supplied as Appendix 10.The WRI report also states that loss of foraging area, through development of the Camp, could adversely impact the local eagle pair. This is further addressed in the Impacts section.

Stephens' Kangaroo Rat Trapping Surveys

The results of the trapping survey were negative for Stephens' Kangaroo Rat. Surveys revealed the presence of 2 low sensitivity mammal species, Northwestern San Diego Pocket Mouse and San Diego Desert Woodrat. Additional details are provided within the Presence/Absence Trapping Surveys for Stephens' Kangaroo Rat Report, included as Appendix 9.

IMPACTS

This section provides biological impact thresholds of significance, quantifies or qualifies impacts to biological resources, and provides a significance determination for each impact.

Direct impacts occur when biological resources are altered or destroyed during the course, or as a result, of project implementation. According to the CEQA Guidelines, direct impacts refer to a direct physical change in the environment, which is caused by and immediately related to the project. Examples of such impacts include removal or grading of native vegetation and filling wetlands. Other direct impacts may include substantial loss of foraging or nesting habitat and loss of individuals of sensitive species as a result of habitat clearing.

Although, increased lighting, noise, or dust that is immediately related to and a reasonably assured result of a project would qualify under recent CEQA Guidelines as direct impacts, they are not quantifiable impacts and their effects on biological resources may not occur until later in time. Therefore, for the purposes of this analysis these impacts are grouped under indirect impacts (predominantly addressed under "Edge Effects"). Indirect impacts may include the effects of elevated noise, excessive night lighting within wildlife habitat, change in surface water within a floodplain, and increased erosion or sedimentation.

Typically existing facilities and uses are not considered an impact; thus, existing camp facilities and their associated uses have generally been excluded from the impact analysis (as discussed here). No trail impacts have been identified, the existing trails are not expected to receive a detectable increase in use and project design measures (signs and footstakes) will help to prevent off-trail excursions. The trails are well-established and typically surrounded by dense, uninviting chaparral vegetation. They currently show no indications of off-trail human intrusion, and no change from existing conditions is expected in this regard. No erosion issues, which might be exacerbated by increased use, were identified on existing trails; therefore, increased use of trails is not anticipated to pose a problem or impact. New impacts were also not assessed for existing headquarters, pool, playing fields, and ball court facilities. Roads, parking, and non-native plantings surround these areas, all of which are unlikely to be markedly effected by an increase in use.

THRESHOLDS OF SIGNIFICANCE

The significance of impacts to biological resources is assessed through the CEQA review process and through the review of the project's consistency with the County's RPO, MSCP Subarea Plan, and the BMO. There will generally be a significant effect on biological resources if the project will: 1) substantially affect an endangered, rare, or threatened species or the habitat of such a species; 2) interfere substantially with the movement of any resident or migratory fish or wildlife species, or; 3) substantially diminish habitat for fish, wildlife, or plants. The direct, indirect, and cumulative impacts of a project must be analyzed for significance. Impacts should be evaluated on a case-by-case basis. It is important to note that significance of a given activity is variable according to the setting. The significance of an impact is evaluated after ordinance requirements are incorporated into the project. Resources generally considered significant include vegetation communities that support sensitive plant or animal species, and unique vegetation communities that are limited in distribution and have a critical ecological role. Habitats supporting species considered rare or threatened by the agencies that enforce the California and Federal Endangered Species Act are also regarded as significant resources. A list of sensitive habitat types (RPO 2007, BMO 1996) was presented in the Sensitive Resources section. Impacts to these sensitive resources meet the threshold of significance.

In order to determine the extent of impacts, the acreage of each habitat type impacted and any encroachments into BRCAs should be quantified. When possible, the number of individuals of sensitive species expected to be "taken" should also be quantified. Significance of impacts to habitats is based upon habitat value (as defined in the BMO and MSCP) and the amount of habitat that would be impacted. Impacts to individual species, in addition to impacts to habitat, may be considered significant based upon the rarity and extent of impacts. Impacts to state and federally listed species and all MSCP narrow endemics are considered significant. A determination of significance for other species is based on severity of the impact relative to species distribution (regional core populations), rarity, and conservation afforded the species and its habitat under the MSCP. Impacts to lower sensitivity species (species of special concern, special animals, etc.) are frequently not significant. However, if potential exists for species to occur in numbers such that a potential population impact could be detectable (measurable increment of loss within the regional populations) it is considered significant. According to the CEQA Guidelines (§ 15065), any impact that would reduce the number or restrict the range of an endangered, threatened, or rare species would be considered significant. As such, impacts to non-listed species that do not result in a restriction or alteration of range or a discernable decrease in overall population have not been considered significant.

The County considers impacts to Southern Mixed Chaparral and Non-Native Grassland to be significant due to general historic loss of native and naturalized habitat. The County thus requires mitigation for impacts to these habitats.

Impacts under the alternative site plans have been updated to reflect changes in County wetland jurisdictional boundaries pursuant to the 2007 RPO and the current (2007) Fire Protection Plan. Impacts under the Preferred Site Plan have not been updated herein as the Preferred Site Plan does not comply with certain County ordinances (and is thus not approvable); whereas, the alternative plans are complaint and approvable. To avoid confusion, all tables of impacts have shading over the Preferred Plan column to indicate that these numbers are not reflective of total impacts, but that this plan option is no longer being pursued.

VEGETATION COMMUNITY IMPACTS

Impacts are discussed below according to each project alternatives, Tier (IV through I in ascending order), and vegetation community (habitat) within the Tier and summarized in Table 7. The jurisdictional wetland and Non-Wetland Waters/Streambeds are addressed following the vegetation community discussion.

Table 7. Vegetation Community Impacts by Project Alternative

Vegetation Communities	Existing On-site Acreage	Impacts under Preferred Plan (acres)[1]	Impacts Alternative Plan I (acres)	Impacts under Alternative Plan II (acres)
Emergent Wetland	0.03	0.00	0.00	0.00
Southern Coast Live Oak Riparian Forest	33.63	2.00	1.36	1.36
Mule Fat Scrub	0.02	0.00	0.00	0.00
Southern Willow Scrub	0.73	0.00	0.00	0.00
Coast Live Oak Woodland	20.34	7.29	7.96	7.96
Mafic Southern Mixed Chaparral	6.48	0.00	0.00	0.00
Diegan Coastal Sage Scrub	16.43	13.12	12.29	12.29
Coastal Sage-Chaparral Scrub	46.23	9.26	8.18	8.18
Southern Mixed Chaparral	402.55	37.36	36.73	36.73
Non-Native Grasslands	22.83	12.45[2]	12.41[2]	12.41[2]
Non-Native Woodland	4.39	1.64	1.63	1.63
Disturbed	16.58	9.52	9.37	9.37
Urban/Developed	7.76	4.73	4.72	4.72
Totals	**578.00**	**97.37**	**94.65**	**94.65**

[1] Impacts as calculated in previous versions of this report and not reflective of the 2007 Fire Protection Plan requirements are shaded to indicate that the Preferred Plan is not an approvable project
[2]Includes impacts from wetland creation site

With the application of the Fire Protection Plan that mandated an increased fire management zone, some habitat impacts have increased from those assessed under the Draft EIR. The following habitat impact increases have been noted under the Alternative I Plan: 0.29 acre of Disturbed Habitat, 0.11 acre of Diegan Coastal Sage Scrub, 3.85 acres of Southern Mixed Chaparral, and 1.11 acres of Coast Live Oak Woodland. Similarly, under the Alternative II Plan, the following impact increases have been noted: 0.29 acre of Disturbed Habitat, 0.11 acre of Diegan Coastal Sage Scrub, 4.82 acres of Southern Mixed Chaparral, and 1.11 acres of Coast Live Oak Woodland. The increased impacts to Disturbed areas are not significant. Increases in Diegan Coastal Sage Scrub (<1%), Southern Mixed Chaparral (12% under Alternative I and 15% under Alternative II), and Coast Live Oak Woodland (16%) are minor relative to the total impacts. These increases do not change the degree of habitat impact significance and all impacts would still be mitigated to a level below significant through on-site habitat preservation and management.

Tier IV Habitats

Non-Native Vegetation/Woodland (Holland Code 11000)

Impacts to Non-Native Vegetation/Woodlands occur primarily in the south-central portion of the Camp near existing Camp facilities. Impacts would occur as a result of cabin fire clearance and construction of staff housing.

Due to the exotic nature of the component species and limited wildlife value associated with non-native habitats, impacts would not be considered significant. As Tier IV habitats, no mitigation for impacts is required (County of San Diego 1996). Non-Native Woodlands may have value as a roosting and occasional nesting resource; however, oak woodland is extensive in the immediate area and the on-site Non-Native Woodlands do not necessarily provide overall high or unique wildlife value. Field investigations did not reveal any raptor nests or frequently used perch sites within the exotic on-site woodlands.

Disturbed Habitat (Holland Code 11300)

Impacts to Disturbed Habitat on-site would occur in areas proposed for the construction of staff housing, the education camp, roads, and waterlines. All areas cleared for percolation testing, which now appear disturbed, were done so without the appropriate permits and still require mitigation. Therefore, impacts have been calculated for these areas based on the original vegetation community. Per County direction, these percolation testing areas have been mapped according to their original vegetation community, not as Disturbed.

On-site Disturbed areas do not contain native vegetation and have little biological value; however, they may provide basking sites for reptiles and local travel routes for mammals. Regardless, impacts to Disturbed habitat on-site would not be significant. Due to the presence of native habitats throughout most of the project site the on-site Disturbed habitats do not provide any type of essential connectivity and likely receive little use by wildlife in comparison to neighboring vegetation communities.

Urban/Developed Lands (Holland Code 12000)

Impacts to Urban/Developed Lands include impacts to existing roads, parking areas, or any other existing development feature. Impacts would result from construction of staff housing, cabins, a pool, bathhouse, roads, and parking areas. Impacts are not considered significant as Urban/Developed Lands have little to no biological value and are not regulated under the BMO.

Tier III Habitats

Southern Mixed Chaparral (Holland Code 37120)

Impacts to Southern Mixed Chaparral are anticipated as a result of the proposed project. Chaparral occupies a majority of the Camp and several proposed structures and landscape features will directly impact chaparral. Southern Mixed Chaparral would be directly impacted by the proposed retreat center, leach fields, dining room, education camp, presentation area, and staff housing under the Preferred Site Plan. Approximately 0.28 acre of Southern Mixed Chaparral was cleared outside of

the proposed impact areas for percolation testing, this amount is included in the impact totals within the previous table.

Impacts to Southern Mixed Chaparral are considered significant. As a Tier III habitat, mitigation is required for direct losses, to offset biological impacts on the project site and within the region.

Non-Native Grasslands (Holland Code 42200)

Impacts to Non-Native Grasslands would occur as a result of maintenance building, parking lot, recreational facility (ball courts), cabin, and leach field construction. A 0.47-acre impact to Non-Native Grasslands would occur as a result of on-site wetland creation, this has been included in the table totals.

Grasslands are disappearing rapidly in Southern California because they generally occur on relatively flat ground and are easily developed. Non-Native Grasslands are not comparable to native-dominated areas, and the significance of an impact to this habitat should be addressed based on wildlife value.

Non-Native Grasslands present on-site contribute to species diversity; however, the wildlife value of this community is limited by its location amongst existing Camp facilities and the maintenance (mowing) activities which occur therein. Although Non-Native Grasslands are used extensively for raptor foraging in other parts of Ramona, such abundant utilization was neither observed nor expected on-site. While local Buteos and Accipiters undoubtedly occasionally use the on-site grassland areas, these areas do not support significant raptor foraging for residents or winter visitors. Non-Native Grasslands adjacent to the site provide better raptor foraging habitat and appear to be higher in overall wildlife value. Although the potential loss of grasslands does not represent a significant raptor foraging impact, it is County policy that impacts to this habitat type are significant due to overall recent and historic losses.

Tier II Habitats

Diegan Coastal Sage Scrub (Holland Code 32500)

Impacts to Diegan Coastal Sage Scrub would result from the proposed staff housing, leach fields, parking areas, central Camp roads, and the retreat center access road.

April 1999 fieldwork revealed areas cleared for percolation testing and peripheral areas, which were grubbed. The southeastern portion of the site, between the fenced property boundary and base of the chaparral-covered slope, was historically mapped as Disturbed uplands and Coastal Sage Scrub. The majority of this area had been grubbed; these portions had few shrubs, sections cleared to bare ground, some non-native grasses, some recovering sage scrub indicators, and numerous weedy species. These areas were mapped as Diegan Coastal Sage Scrub based on the presence of recovering sage scrub species as indicators of the original vegetation community and these impacts (3.25 acres in total) were included within the previous table's impact acreages.

There has been a significant loss of this sensitive, native vegetation community throughout the County. In southern California, Diegan Coastal Sage Scrub supports the California Gnatcatcher, a federally threatened species, as well as a host of other regionally or locally sensitive species. The

proposed Diegan Coastal Sage Scrub project impacts are considered significant and will require mitigation.

Coastal Sage-Chaparral Scrub (Holland Code 37G00)

Direct impacts to Coastal Sage-Chaparral Scrub are anticipated from the construction of the leach fields, staff housing, cabins, education camp, and a dining room under the Preferred Site Plan. Clearing for percolation testing had also occurred locally in Coastal Sage-Chaparral Scrub on the eastern-central portion of the site. Although the surrounding uncleared vegetation was predominantly chaparral, previous mapping suggests that portions of cleared areas contained Coastal Sage Scrub species.

Impacts to Coastal Sage-Chaparral Scrub are significant, as it is a Tier II habitat and similar to Diegan Coastal Sage Scrub may support sensitive species and narrow endemics.

Tier I Habitats

Mafic Southern Mixed Chaparral (Holland Code 37122)

No impacts to Mafic Southern Mixed Chaparral are anticipated as a result of the proposed Camp project (under any proposed alternative). Mafic Southern Mixed Chaparral is restricted to higher elevations, where no alteration of existing conditions is proposed. It is proposed for inclusion within the open space easement in its entirety, regardless of the plan alternative selected.

Southern Coast Live Oak Riparian Forest (Holland Code 61310) and Coast Live Oak Woodlands (Holland Code 71160)

Potential impacts to oak trees can occur at various levels. The most severe impact is the direct removal of a tree or trees. The next level of severity, which ultimately has the same result, is any action that may result in the early loss of a tree well before natural senescence. Development within oak woodlands at other locations has shown that various construction practices seriously injure or inadvertently kill oaks. Among these practices are irrigation, soil compaction, filling, and paving. A number of indirect oak impacts, such as eventual oak loss due to change in moisture regime or soil compaction, can also occur as a result of various construction practices

The root zone encompasses an area one-third larger than the drip line. Construction practices that may directly or indirectly impact the tree should be avoided within this area. Pruning of Coast Live Oaks has not been studied sufficiently to model the effects of this activity on tree growth and survival. The ultimate project effects on oak trees cannot be ascertained but the chances are high that health of some trees will be negatively affected, possibly resulting in early mortality.

According to the County (Dickman 2000), oak impacts should be assessed as follows:

> "Any oak woodlands or riparian forest within the proposed development bubble are considered impacted since the biological value of the habitat, including the understory, will be significantly decreased by potential grading development, foot traffic, equipment storage, and various other potential activities within the development area. Wildlife use of the habitat will be severely limited to those species accustomed to human interaction.

> Individual trees not mapped within an oak woodland or forest are treated the same with regard in determining which are impacted. Those trees that have their canopy inside or within 25 feet of a ground disturbing/altering impact are considered impacted (this excludes existing roadway paving). Individual oaks within areas that are currently heavily used by existing Camp facilities may not be considered a biological resource and therefore, may not require mitigation. Regardless of whether an oak tree is considered biologically valuable, it is considered sensitive in the County for aesthetic reasons. For this reason, the Major Use Permit may have a condition that no oak trees may be removed except for health and safety purposes."

A portion of the on-site oaks would be directly impacted through removal. In addition, pruning of trees adjacent to facilities would be necessary, both to allow construction machinery to maneuver, and to enable safe access to and from project amenities. Finally, project design will require grading or trenching within the drip-line of some oaks. Consequently, a number of long-term impacts to oak woodland resources may occur as a result of this activity.

Both individual oaks and areas of oak woodland would be affected by the proposed project. According to Preferred Site Plan, impacts to Southern Coast Live Oak Riparian Forest would result from the construction of the retreat center and access road, waterlines, and leach fields. As previously mentioned, impacts to individual oaks are only addressed where a mature tree (greater than 6" dbh) lies outside of a woodland or forest; within woodland and forest areas, individual trees were not counted or mitigated separately, but were assessed by acreage.

The proposed retreat center and access road, parking lots, dining facilities, maintenance building, staff housing, leach fields, cabins, and roads would also directly and/or indirectly impact Coast Live Oak Woodlands.

Finally, by imposing the County directive that oaks within 25 feet of an unbuffered development should be considered impacted, potential off-site oak impacts would result from the project. The location of leach fields adjacent to the property boundary could impact off-site oak woodlands. A total of 0.04 acre of off-site oak impacts may result under the Preferred Site Plan or either Reduced Alternative Plan. These impacts have been taken into consideration in determining impacts and are included within the previous table totals.

Oak impacts are considered significant because of the high number of oak trees present on-site, the size of the proposed project, and the quality of oak woodland and forest habitat on-site, as well as the sensitivity of oak habitats (i.e., County Tier I).

Mule Fat Scrub (Holland Code 63310)

Impacts to Mule Fat Scrub are not anticipated under any project alternative.

Southern Willow Scrub (Holland Code 63320)

The on-site Southern Willow Scrub would not be impacted by project construction under any project alternative.

Emergent Wetlands (Oberbauer 52440)

Emergent Wetland occurs in several locations on-site, 2 of these locations fall within the Proposed or Reduced Alternative Plans' development bubble. To avoid impacts within these 2 areas, the project has incorporated permanent fencing and signage design elements and included requirements for construction fencing and monitoring relative to protection of this habitat. All of these avoidance measures will be conditions of project approval. The purpose of the temporary "construction" fencing and monitoring is to ensure that clearing, grading, and/or use or storage of heavy equipment does not occur within this sensitive habitat. Since Emergent Wetlands can be difficult to identify by the lay person, it would be expected that without obvious delineation this area would be impacted during the course of construction or subsequent fire clearing. The use of construction fencing to delineate environmentally sensitive areas is a common practice and generally accepted as a means of impact avoidance, if monitored. Since the Emergent Wetland areas are situated adjacent to roadways that will require fire clearing, without permanent delineation they could be impacted by future mowing and/or clearing for fuel reduction. The project proposes the implementation of permanent split-rail fencing at each of the 2 locations with signs affixed that designate the area beyond as a sensitive habitat exempt from fire clearing. This is discussed subsequently under the Project-Specific Mitigation And Impact Avoidance Design Elements section. These project measures would avoid impacts to Emergent Wetlands under any alternative.

JURISDICTIONAL WETLAND AND NON-WETLAND WATERS OF THE U.S. DIRECT IMPACTS

The following table (Table 8) summarizes the impacts to jurisdictional wetlands resulting from the Preferred Plan and the 2 Reduced Alternatives. Although some on-site drainages previously jurisdictional under the RPO are no longer RPO jurisdictional, there is no development proposed in these areas and they will remain undeveloped (100%) and almost entirely (92%) within dedicated biological open space.

Table 8 . Impact Acreages for Jurisdictional Wetlands and Non-Wetland Waters of the U.S./Streambed

Jurisdictional Habitats	Impacts from the Preferred Plan (acre)[1]	Impacts from the Reduced Alternative I Plan (acre)	Impacts from the Reduced Alternative II Plan (acre)
Southern Coast Live Oak Riparian Forest (SCLORF) (Holland Code 61310)			
ACOE Jurisdiction	0.002	0.00	0.00
CDFG Jurisdiction	2.00	1.36	1.36
County Jurisdiction	0.05	0.00	0.00
Southern Willow Scrub (Holland Code 63320)			
ACOE/CDFG/County Jurisdiction	0.00	0.00	0.00
Mule Fat Scrub (Holland Code 63310)			
ACOE/CDFG/County Jurisdiction	0.00	0.00	0.00
Emergent Wetland (Oberbauer Code 52440)			
ACOE/CDFG/County	0.00	0.00	0.00

Jurisdictional Habitats	Impacts from the Preferred Plan (acre)[1]	Impacts from the Reduced Alternative I Plan (acre)	Impacts from the Reduced Alternative II Plan (acre)
Jurisdiction			
Non-Wetland Waters of the U.S./Streambed			
ACOE Jurisdiction	0.17	0.13	0.13
CDFG Jurisdiction	0.23	0.15	0.15
County Jurisdiction	0.17	0.03	0.03
Total			
ACOE Jurisdiction	0.17	0.13	0.13
CDFG Jurisdiction	2.23	1.51	1.51
County Jurisdiction	0.22	0.03	0.03

[1] Impacts as calculated in previous versions of this report and not reflective of the 2007 Fire Protection Plan requirements are shaded to indicate that the Preferred Plan is not an approvable project

An explanation of which project elements would result in the impacts to jurisdictional habitats was addressed under the previous vegetation communities' impacts text.

Any impacts to wetlands or Non-Wetland Waters/Streambed are significant prior to mitigation. The project would result in impacts to wetlands and waters and/or streambeds that fall under either or both state and federal regulatory programs. Under Section 404 of the Clean Water Act, placement of dredged or fill material within Waters of the U.S. requires a permit issued by the ACOE. The Clean Water Act also requires the issuance of a state water quality certification or waiver under Section 401 to be issued by the Regional Water Quality Control Board (RWQCB) for any action that may result in degradation of the waters of the State. In addition to the federal act requirements, the proposed work would constitute an alteration of a streambed and would fall under the jurisdiction of CDFG pursuant to Section 1600 et seq. of the California Fish and Game Code.

Non-Wetland Waters of the U.S.

Impacts to County jurisdictional Non-Wetland Waters are expected from the retreat center access road (under the Preferred Plan) and human foot traffic. Non-Wetland Waters transverse the existing Camp facilities in several locations. Where foot traffic is anticipated to cross these Non-Wetland Waters (drainages) impacts have been assessed. Vegetation communities isolated by existing and proposed physical development are considered impacted (based on County direction and reduced wildlife value), but the Non-Wetland Waters drainages are only considered impacted if they lie within an area of direct impact (from construction and/or foot traffic).

Based on what was mapped during the wetland delineation survey in May 2000, it is estimated that an additional 0.006-acre of Non-Wetland Waters was impacted by the unpermitted filling activities in 2000. Since wetland permits were not granted prior to the filling activities, after-the-fact permits would be required, or fill may be required to be removed prior to processing new permit applications. All impacts to Non-Wetland Waters are significant and require mitigation.

Rock Outcrops

Rock outcrops are considered a sensitive habitat by CDFG as listed in CNDDB. Impacts to rock outcrops would occur under the Preferred Site Plan or either Reduced Alternative Plan. Specifically, the proposed education camp on the northwest portion of the site is expected to impact limited areas of rock outcrop and encroach upon more extensive outcroppings to the north.

These impacts would not be considered significant. The proposed project (all alternatives) will result in limited impacts to this habitat feature and will maintain extensive Rock Outcrops on the western portion of the Camp.

WETLANDS AND NON-WETLAND WATERS OF THE U.S. INDIRECT IMPACTS

Potential indirect impacts to downstream resources may occur as a result of construction and post-construction activities. These impacts will be largely avoided and reduced to a level below significance through implementation of Best Management Practices (BMPs). When development occurs, flow patterns may be slightly altered, runoff diverted, and the chemical composition of the water changed. Because animals and plants are limited by their adaptations, changes in the flow or composition of water will impact the ecosystem (Peck 1993). Maintaining or restoring hydrologic patterns is therefore critical to maintaining the ecological processes that support species abundance and diversity. The proposed project has been redesigned to avoid wetlands, including drainages, to the extent feasible; however, minimal impacts to on-site hydrology and water composition are anticipated due to a road crossing, drainage treatment elements, and the increase in impermeable surface area. Indirect impacts, which could occur but would be avoided or minimized by use of BMPs, may include downstream sedimentation, erosion, and storm water pollution. Measures to avoid and minimize these impacts are addressed in the Mitigation section, and in conjunction with permit-required BMPs, and Design Features 4 through 7 are expected to prevent significant water quality impacts.

WILDLIFE CORRIDOR IMPACTS/ APPLICABLE MSCP/BMO DESIGN CRITERIA

The wildlife corridor impact discussion has been restructured to address the County MSCP Subarea Plan's standards/requirements for wildlife corridors [MSCP (page 4-9) and BMO (Attachment H)]. The MSCP Subarea Plan and BMO contain design criteria for linkages and corridors. Only those criteria that apply to corridors have been addressed herein as a linkage has not been identified within the project site (SANDAG 1996). [The Biological Core and Linkage Area GIS layer and metadata are available from SANDAG (SANDAG 1996)]. Therefore, Design Criteria for Linkages and Corridors numbered 1, 2, 4 and 5, have not been addressed, as they do not apply. Also, criteria number 11 addresses stepping-stone corridors and is not relevant to this project site; therefore, it has not been addressed. Each remaining, applicable criterion is discussed with an evaluation of how it relates to the Preferred Plan. Discussion of how the Reduced Alternatives relate to the corridor standards is included at the end of this section.

Preferred Plan

3) Corridors with good vegetative and/or topographic cover will be protected.

The on-site corridor consists of riparian woodlands and upland habitats adjacent to the West Fork of San Vicente Creek. This local corridor had good vegetative and topographic cover preceding the

Cedar Fire. The amount of vegetative cover within the corridor following the fire has substantially decreased, but in relation to the surrounding burned landscape it still has relatively good cover.

Under the Preferred Plan, the corridor would not be protected in its entirety. The proposed retreat center access road would bisect the corridor in a single location, resulting in direct impacts to Southern Coast Live Oak Riparian Forest and upland habitats adjacent to the West Fork of San Vicente Creek.

Also, a fire clearing requirement of 10 feet from the existing Camp roadway will be imposed; however, due to the presence of a sensitive habitat (Southern Coast Live Oak Riparian Forest) adjacent to the roadway, the fire clearing will exempt removal of oaks (Delgadillo and Porter 2002). Based on a review of existing biological conditions adjacent to the roadway, this fire clearing requirement is not expected to substantially reduce cover or significantly impact the movement of wildlife through the area. While the loss of understory may have ecological impacts, they are not directly related to the functionality of the local corridor for movement. However, construction of the retreat center access road would result in a reduction in vegetative cover and a potential barrier to movement for some species within the corridor under the Preferred Plan.

To minimize the corridor impact, project design includes two 36-inch diameter box culverts under the proposed retreat center access road and no lighting within 100 feet of the corridor. In addition, Design Features 17 through 20 and 26 through 29 are intended to provide protection for the corridor's vegetation communities and transient wildlife.

6) *If a corridor is relatively long, it must be wide enough for animals to hide in during the day. Generally, wide linkages are better than narrow ones. If narrow corridors are unavoidable, they should be relatively short. If the minimum width of a corridor is 400 feet, it should be no longer than 500 feet. A width of greater than 1,000 feet is recommended for large mammals and birds. Corridors for bobcats, deer, and other large animals should reach rim-to-rim along drainages, especially if the topography is steep.*

The corridor associated with the West Fork of San Vicente varies in length as it passes through and off the site. Under existing conditions it's boundary may be defined by the Camp access road to the south and steep topography with increasing shrub density to the north. To the west, the corridor continues along the West Fork as the existing Camp access road turns southward and the corridor is then defined (and limited) solely by vegetative cover and topography. Aside from the Camp access road, all adjacent lands are currently vacant/open space.

The effective corridor width (based on biological surveys that show increased wildlife activity) ranges from approximately 110 feet to over 200 within the Camp property; however, aside from the direct access road there are no restrictions or alterations within the corridor and rim-to-rim corridor width exceeds 1,000 feet. The primary pinch point is where the corridor enters the site on the east, through a large box culvert under Mussey Grade Road. Downstream (southeast) of the site the corridor parallels Mussey Grade Road and maintains a width of approximately 100 feet, bounded to the west by the road and to the east by residential development. On the western side of the site, the corridor effectively dissipates, as the vegetation is dominated by monotypic chaparral and the drainage becomes narrower and steeper, but no land use constraints exist. The total corridor length on-site is approximately 4,900 feet.

Under the Preferred Plan the corridor would be impacted for a road crossing. The proposed encroachment would include the removal of riparian forest and upland habitats (which compose the corridor) within the footprint of an access road proposed to cross the West Fork of San Vicente Creek. This alternative would not meet the 1,000-foot guideline.

In an effort to maintain an effective corridor width, and as stated previously, it is recommended that understory clearing adjacent to the existing Camp access roadway avoid removal of seedling/recruiting oaks and/or sycamores (Design Feature 26).

7) *Visual continuity (i.e., long lines-of-site) will be provided within movement corridors. This makes it more likely that animals will keep moving through it. Developments along the rim of a canyon used as a corridor should be set back from the canyon rim and screened to minimize their visual impact.*

The on-site corridor is a typical local canyon corridor. It supports riparian vegetation on the eastern half of the site and upland chaparral dominated habitat on the west. The natural topography includes curves and visual continuity varies as habitats change through the corridor, but there are no existing gaps in native vegetation or human-induced visual impacts.

Under the Preferred Plan visual continuity would be interrupted by the proposed retreat center access road that would bisect the corridor.

8) *Corridors with low levels of human disturbance, especially at night, will be selected. This includes maintaining low noise levels and limiting artificial lighting.*

As previously addressed, the land uses that currently surround the corridor are largely vacant/open space with the exception of Mussey Grade Road to the east and Golden Eagle Ranch to the north, and the existing Camp facilities farther south. Under existing conditions, the noise and lighting impacts to the corridor are extremely low.

Under the proposed project (all alternatives) traffic will increase on the Camp's existing access road, increasing traffic-related noise and lighting (from automotive headlights) within the corridor. However, this increase is expected to be minimal with regard to times when the corridor would receive the bulk of its use by wildlife (early morning and night). Also, noise below 60 dBA is not typically considered an impact to wildlife; the project's noise study determined that noise levels would not exceed 60 dBA within sensitive habitats (including the on-site Southern Coast Live Oak Riparian Woodland of the corridor).

To maintain low light levels, lighting within 100 feet of the corridor has been prohibited (Design Feature 15).

Additional Design Features to minimize automotive-related noise and light impacts to the corridor include, establishment and enforcement of a 15-mph speed limit within the Camp and the use of speed bumps, Design Features 9 and 8, respectively.

9) *Barriers, such as roads, will be minimized. Roads that cross corridors should have 10 foot high fencing that channels wildlife to underpasses located away from interchanges. The length-to-width ratio for wildlife underpasses is less than 2, although this restriction can be relaxed for underpasses with a height of greater than 30 feet.*

The Preferred Plan includes one crossing (barrier) of the corridor, the retreat center access road. The roadway would incorporate an underpass composed of two 36-inch diameter box culverts. The Retreat Center Access Road has been designed to the narrowest width (24 feet) allowed by the County to minimize movement barriers and maximize the length to width ratio of the underpass. However, even with the combined width of the 2 box culverts, the length the width ratio is 4:1, not the desired less than 2:1.

10) Where possible at wildlife crossings, road bridges for vehicular traffic rather than tunnels for wildlife use will be employed. Box culverts will only be used when they can achieve the wildlife crossing/movement goals for a specific location. Crossings will be designed as follows: sound insulation materials will be provided; the substrate will be left in a natural condition, and vegetated with native vegetation if possible; a line-of-site to the other end will be provided; and if necessary, low-level illumination will be installed in the tunnel.

This criterion establishes desired design standards for road crossings in areas with wildlife corridors. It includes the qualifier "where possible" which implies that it is not absolutely required; however, per the County staff, "every effort should be made to meet these standards". In the location of the retreat access road a bridge is not feasible. The drainage here is low and the canyon is relatively open. Attempts to bridge the creek or corridor would result in increased corridor encroachment. Thus, box culverts have been included within the roadway design. These culverts would permit movement of medium sized mammals. They may permit movement of Coyotes and Bobcats, but these species are known to cross at grade even where underpasses exist. Under the Preferred Plan, natural vegetation would persist surrounding the proposed crossing and the box culverts were permit a line of sight to the other end.

In summary, the Preferred Plan does not appear to comply with criteria 3, 6, 7, or 9, but does comply with 8 and 10.

Reduced Alternatives

Under the Reduced Alternatives, the corridor would be maintained in its entirety (meeting all MSCP design criteria). There would be no change in vegetative or topographic cover and the 1,000-foot corridor width guideline would be met. Also, visual continuity will be maintained under the Reduced Alternatives, which proposed no alternation from existing vegetative conditions.

The significance of wildlife corridor impacts for projects within the County MSCP Subarea Plan boundary is based upon the project's consistency with the MSCP/BMO Design Criteria for Linkages and Corridors. Under the Preferred Plan, the on-site wildlife corridor would be directly impacted. To reduce the Preferred Plan's biological corridor impacts, Design Features have been incorporated into the project; however, even with incorporation of the Design Features the Preferred Plan does not meet all the design criteria applicable to corridors and thus, the impact would remain significant. The Reduced Alternatives would meet the MSCP/BMO Design Criteria for Linkages and Corridors; therefore, a significant corridor impact has not been assessed under either alternative.

SENSITIVE SPECIES IMPACTS

Sensitive Flora Impacts

Direct impacts to Ramona Horkelia, Gander's Butterweed, and Felt-leaved Monardella are not anticipated as a result of the proposed project under either plan. Populations of these sensitive plants are located to the west of all proposed development. Although these species are adjacent to a hiking trail, improvements or other alterations are not proposed for the trail. According to the Preferred Site Plan, no re-grading of the dirt road should occur in areas of sensitive plants, regardless of the future erosion on the road as sensitive shrubs currently grow at the roadway. Nonetheless, indirect impacts, due to increased foot traffic through the area within which these populations are located, could occur as a result of the project. To avoid such impacts the project has incorporated Design Features 10 through 13.

The County has requested that additional information be provided to support impact conclusions, the information below is provided for this purpose. All of the sensitive plants mapped lie within 100 feet of an existing trail. The plant populations are not evenly distributed because of the influences of slope, aspect, fire, and moisture influences. The sensitive plants are found in the area of the trail because of the disturbance. More specifically, the creation and/or prior maintenance of the trail (which is what is meant by the prior reference to "disturbance") created an opening in otherwise typically dense chaparral habitat occupying the surrounding areas. Thus, the trail alignment has created a microclimate with more light within a dense chaparral slope. The individuals mapped along the trail have likely taken advantage of the appropriate soil conditions, and the microclimate created by both the trail and openings in the chaparral from fire. Use of the trail by both people and wildlife maintains the microhabitat at least within the vicinity of the trail, not from off-trail intrusion by humans, but from maintenance of the existing trail as an opening and the use of numerous animal pathways which branch off of the trail. Since natural communities are typically dynamic in nature, the number of Gander's Butterweed, Ramona Horkelia, and/or Felt-leaved Monardella is not expected to remain static within the area. However, County staff's recommendation of fencing off the populations would likely result in loss of the populations from competition with unchecked growth of chaparral vegetation more rapidly than would occur otherwise. The recommended signage and foot stakes Design Features are better suited for the preservation of sensitive plants on-site.

The trail along which these sensitive plant species occur shows no evidence of off-trail intrusion. Topography, rocky soils, and a generally uninviting landscape appear to have discouraged off-trail use of the area. It is also possible that the demographic most likely to venture off of marked trails is not represented within the Camp population. Taking all of this into consideration, coupling it with the limited increase in use under the proposed project (any alternative) (see previous project description), and applying the project Design Features 10 through 13 should result in a non-significant impact.

In addition, the MSCP conditions of coverage would apply (Table 9). The project's Design Features are expected to support the goal of reducing detrimental edge effects on Felt-leaved Monardella and Gander's Butterweed and ensure compliance with the MSCP conditions of coverage for these species.

Table 9 . Sensitive MSCP Faunal Species Detected within the Camp Preserve Areas and Corresponding MSCP Conditions of Coverage

MSCP Covered Species	Conditions of Coverage (Based on MSCP Table 3-5)
Felt-leaved Monardella	Measures to protect against detrimental edge effects
Gander's Butterweed	Protect against detrimental edge effects and measures to address the autecology and natural history of the species.

Ashy Spike-moss is scattered throughout appropriate habitat on-site and impacts may occur as a result of project implementation. Since the project avoids many of the major rock outcrop areas on-site, it is expected to correspondingly avoid the major Ashy Spike-moss populations on-site. In addition, this species was most commonly observed at higher site elevations, which have not, for the most part, been included in the development footprint. Impacts to Ashy Spike-moss would not be considered significant, as this is a regionally common plant and is expected to occupy much of the Camp not slated for development. The portions of the on-site population within the impact area could be lost in their entirety and it would not affect the viability of regional populations.

Direct and indirect impacts to Engelmann Oaks are anticipated as a result of project construction and subsequent facility operations. Under the Preferred Site Plan, a maximum of 38 Engelmann Oaks would be directly or indirectly impacted through project construction or reasonably foreseeable future impacts resulting from the proposed construction. A total of 28 oaks will be impacted directly by the proposed construction, another 10 oaks lie within an existing development area slated for a conversion from cabins to staff housing and roadway paving. The majority of these impacted oaks are mapped as portions of Coast Live Oak Woodland, although one is mapped as part of Southern Coast Live Oak Riparian Forest, and 3 are mapped as individual trees in sage scrub, chaparral and scrub-chaparral. (Its should be noted that the numbers of impacted Engelmann Oaks provided above and below are pre-Cedar Fire numbers. The current number of impacted Engelmann Oaks is less than previously stated, due to some permanent loss of this species to the fire.)

Under the Reduced Alternative Plan, 32 Engelmann Oaks would be impacted. The majority of the Engelmann Oak impacts are the result of proposed leach fields in the central and southern portion of the project site. Additional Engelmann Oak impacts would result from installation of the water line, cabins, the administration center, roadway near the pool, staff housing, and under the Preferred Plan the retreat center access road. A minimum of 22 Engelmann Oaks will be impacted directly by the proposed construction and 10 additional oaks lie within an existing development area slated for a conversion from cabins to staff housing and roadway paving.

Direct and indirect impacts to Engelmann Oaks would be significant under either plan since the species is a County List B species and the project could have the effect of substantially reducing the viability of the affected population through direct and indirect impacts. Engelmann Oak may not have high levels of recruitment within some populations and the loss of 32 of approximately 53 trees could affect population long-term viability.

Sensitive Wildlife Impacts

Impacts to California Gnatcatcher are not expected based on the negative results of the 1999 focused surveys. County staff expressed concern that impacts to California Gnatcatchers may have occurred

as a result of sage scrub clearing conducted for percolation testing. Since the initial clearing was undertaken prior to focused 1999 gnatcatcher surveys and did not include any type of biological clearance it cannot be definitively determined that there was no impact to California Gnatcatchers. However, the clearing consisted of removal of a series of small patches within sage suitable habitat, and the remaining habitat did not subsequently reveal the presence of gnatcatchers. Based on the availability of suitable habitat on-site it is likely that any gnatcatcher displaced by clearing activities would have shifted its territory to occupy sage scrub within the project area or boundary, but no gnatcatchers were ever detected. It is unlikely that percolation clearing conducted for the project impacted California Gnatcatchers. Also, based on the negative findings of the focused surveys and a lack of gnatcatcher presence on adjacent lands (based on CNDDB 2006 data) there appears to be no potential for indirect (noise) impacts to gnatcatchers.

Impacts to nesting Cooper's Hawks may occur as a result of the proposed project under either plan. Previous and current biological investigations have repeatedly identified Cooper's Hawks within the project's oak woodlands. Direct impacts to a Cooper's Hawk nest would be considered significant; however, recent biological investigations did not identify an active nest on-site. The seasonal avoidance requirements or survey requirements discussed in the paragraph below for Red-shouldered Hawk also apply for Cooper's Hawk and would ensure no direct impacts occur. The potential impacts to the Cooper's Hawk through loss of habitat would not be considered significant under either plan due to coverage of the species under the MSCP and project compliance with the MSCP's species-specific conditions of coverage. The Preferred Site Plan has been redesigned to minimize impacts to sensitive habitats, including riparian oak forest and oak woodlands, which would be utilized by Cooper's Hawk. The Reduced Alternatives further minimize oak woodland and riparian oak forest impacts by reducing the scale of the proposed project and reconfiguring the project layout.

The Red-shouldered Hawk will also be impacted by the proposed project through the loss of Coastal Sage Scrub, chaparral, and oak woodlands. Through relocation of the retreat center facilities, the Reduced Alternatives would decrease potential for impacts to Red-shouldered Hawk. For all alternatives, construction should be undertaken in the non-breeding season to avoid impacts to resident raptors and/or nesting passerine species. If this is infeasible, surveys by a qualified biologist should be conducted immediately prior to construction to ensure no direct nest impacts. Although adverse, impacts to Red-shouldered Hawk would not be considered significant if project construction were undertaken in the non-breeding season (15 August to 1 February).

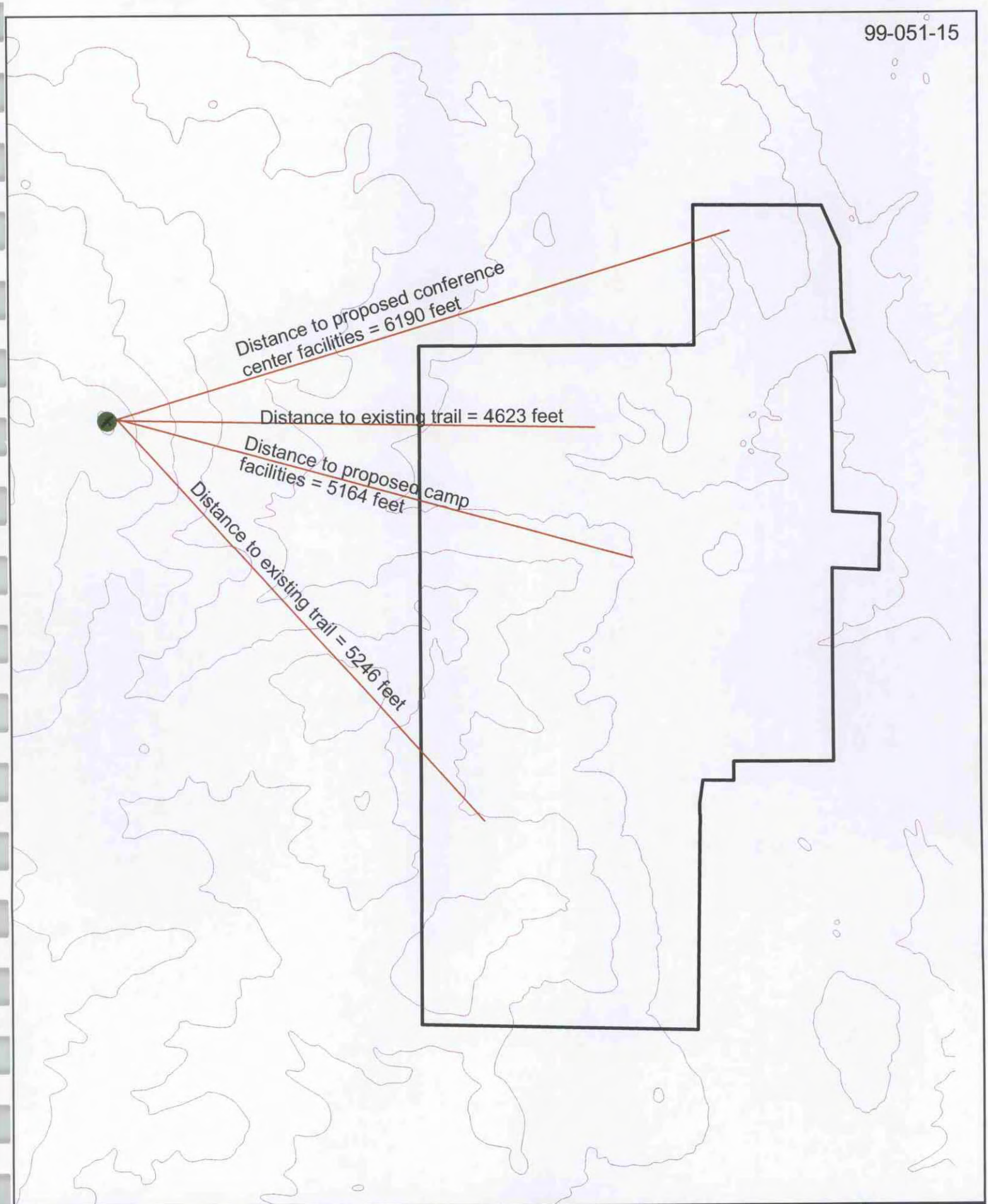
The proposed redesigned project has eliminated previous project elements in the northwestern corner of the project site, closest to the Golden Eagle nest site. The Preferred Site Plan and Reduced Alternative Site Plans do not propose any impacts within 4,000 feet of the Iron Mountain nest site. Under the Preferred Site Plan and Reduced Alternative Plans, the closest new Camp facility (education camp) would be 5,164 feet from the Iron Mountain (Sole Peak) nest site and the closest activity would be hiking along an existing northwestern trail 4,623 feet from the nest site (Figure 5). This trail does not represent a change from current conditions. All of these proposed and existing uses are greater than 4,000 feet from the nest site, which is the County MSCP Subarea Plan required buffer distance. This distance is also greater than one half mile from the nest site, the distance referenced in the Golden Eagle report (Appendix 10)(Wildlife Research Institute [WRI] 2001). This having been said, any trail that leads toward Iron Mountain and provides a clear view of the Sole Peak may increase the likelihood of trail blazing and human disturbance in the vicinity. The project incorporates Design Feature 13 to address this concern.

The resident pair of eagles may be impacted through direct loss of foraging habitat or indirect loss of habitat due to fragmentation and disturbance. The WRI report (2001) states that loss of eagle foraging area, through development of the Salvation Army Camp could adversely impact the local eagle pair. Observations by M&A biologists indicate that while upper elevation areas may be utilized for foraging by eagles, the central Camp does not provide high quality eagle foraging habitat. The central Camp is broken up by existing structures and ornamental plantings and, based on a qualitative assessment, does not support the dense prey base observed on the neighboring Wildwood Ranch and Golden Eagle Ranch properties. Locating the retreat center in native habitats on the northern portion of the project as planned in the Preferred Site Plan, could result in impacts to Golden Eagle foraging within these native habitats and the adjacent Golden Eagle Ranch. Conversely, the Reduced Alternative Plans, which focus Camp development within the center of the site, away from the Golden Eagle nest site and contiguous native habitats, are much less likely to impact important forging areas. In addition, the revised open space design would preserve extensive foraging habitat on-site, which is contiguous with off-site preserved lands. Ultimately, impacts to Golden Eagle through loss of foraging habitat would not be considered significant under either plan due the species coverage under the MSCP and project compliance with the MSCP conditions of coverage.

Potential impacts through habitat loss (under either plan) are also anticipated for the following sensitive species: Harbison's Dun Skipper, Western Spadefoot, San Diego Banded Gecko, San Diego Horned Lizard, Coronado Skink, Orange-throated Whiptail, Coastal Whiptail, Silvery Legless Lizard, Coastal Rosy Boa, Coast Patch-nose Snake, San Diego Ringneck Snake, Two-striped Garter Snake, Northern Red Diamond Rattlesnake, Turkey Vulture, White-tailed Kite, Southern California Rufous-crowned Sparrow, Western Bluebird, Pallid Bat, Townsend's Big-eared Bat, California Mastiff Bat, Pocketed free-tailed Bat, Long-eared Myotis, Northwestern San Diego Pocket Mouse, and San Diego Desert Woodrat.

The Pallid Bat, Pocketed free-tailed Bat, Long-eared Myotis, and Townsend's Big-eared Bat have a strong association with oak woodlands in this region (D. Stokes pers. com.). The Pallid Bat may feed on the ground, taking terrestrial arthropods and would be adversely affected by the loss of oak woodland, riparian forest, or woodland understory (D. Stokes pers. com.). Other bat species not listed here, but potentially present, are not as strongly associated with oak woodlands, the project site is on the periphery of their known range, or information necessary to assess an impact is lacking (D. Stokes pers. com.). To avoid conflicts with and impacts to bats, all buildings should be constructed in a manner that reduces the likelihood of bat colonization. Certain bat species have an affinity for human-made structures and may be adversely affected if they establish a roost and are subsequently disturbed or removed. Bat proofing of on-site buildings should be accomplished by eliminating cavities and crevasses. In addition, any unused structure should be dismantled before bats have an opportunity to colonize it, unless the presence of a bat colony will be tolerated and disturbance will be prevented or minimized. Any structure slated for removal should be examined for sensitive bat species prior to demolition.

Potential impacts to the low sensitivity species listed above would not be significant; because, although these species have either been identified on the Camp property proposed for development, or have potential to occur there, they are not known to occur in numbers, which if impacted, would be considered significant.



N

600 0 600 Feet

Golden Eagle Nest Site In Relation to Existing and Proposed Development

Figure 5

Additional discussion of and biological support for faunal impact significance determinations, has been provided below. It represents the results of searches of available regional data, additional field analysis, comparisons of on-site data with data from neighboring sites, and natural history review for the species in question. Unfortunately, little to no (quantitative) information is available on the actual population status of a number of low sensitivity species within the MSCP region.

As previously mentioned, Harbison's Dun Skipper was not detected on-site by M&A biologists, nor has it been reported from the immediate area; thus, no significant impacts are expected.

Western Spadefoots require temporary rain pools that last 3 weeks in order to metamorphose successfully (Jennings and Hayes 1994). Such conditions do not persist on the project site, or have not persisted within the period of the biological surveys. The only tadpoles identified on-site during the biological surveys were Pacific Treefrog, which occurred in a small pool drying up prior to their successful metamorphosis in 2006. It is, therefore, not expected that a significant toad population occurs on-site or that impacts to on-site habitats would result in any detectable or measurable change in local amphibian populations.

Impacts to the San Diego Banded Gecko would be limited to development within areas of scrub or chaparral with rocky outcrops. Most of this habitat is not being developed as it lies in the upper elevation of the site and would be included in the biological open space (all alternatives). If any impacts occur to this gecko species they would be so small as to be undetectable within the regional population, as most suitable habitat is outside the development area.

Silvery Legless Lizards are expected within loose sandy substrates with sufficient moisture content. On-site, the most superficially suitable habitat occurs on the downstream portion of the West Fork of San Vicente Creek, near the Mussey Grade Road underpass. Here the soils are looser and the creek would provide moisture. No impacts are proposed for this specific area, but other similar areas are slated for impacts under the Preferred Site Plan. Nevertheless, impacts to suitable legless lizard habitat have been largely avoided to comply with RPO restrictions and the limited remaining impacts would not impact an area large enough to support a significant population of legless lizards.

Most of the high quality San Diego Horned Lizard habitat on-site lies outside of the development footprint and within the proposed biological open space. Chaparral and scrub on the western portion of the project site with openings from fire and rock outcrops represent some of the best habitat on-site;second to these areas, are chaparral habitats with trails. The trails provide a necessary opening in the dense chaparral habitat. Loss of on-site sage scrub and chaparral scrub will decrease the availability of suitable habitat and impact the on-site population; however, there is no evidence from biological surveys that a significant population exists on-site. In fact, surveys by M&A biologists of nearby properties revealed much higher lizard densities than those observed on the Camp. Based on this information, no significant impact has been assessed for any project alternative.

MSCP herpetological sampling has indicated that the Coronado Skink and Orange-throated Whiptail are quite common. The skink is a habitat generalist and can persist within a number of vegetation associations. Although the Orange-throated Whiptail is more of a habitat specialist, it can occur in sage scrub, disturbed areas, and chaparral given suitable vegetative resources persist to support it's prey and the habitat is not too dense. These species' flexibility and regionally common status favor a determination of not significant. The loss of on-site populations within development areas is not anticipated to be detectable regionally and thus is not significant. The Western Whiptail prefers more open habitats, or at least sunny microhabitats. Much of the Camp's native habitats are too

dense to provide good whiptail habitat. Where openings occur naturally or in conjunction with trails or disturbance this species is expected. The number of whiptails (both species) on-site is not expected to be significant and, as stated for the Orange-throated Whiptail, the loss of a portion of the on-site population would not be measurable or significant.

Rosy Boas and Northern Red Diamond Rattlesnakes prefer areas with moderate to dense vegetation and rocky cover. They are expected in the upper, western reaches of the project site, within proposed open space. Impacts to areas with suitable habitat for these species are limited to the retreat center and some leach field areas. These species, if resident on-site, would be expected almost exclusively outside of the development area and within open space. Thus no significant impacts have been assessed for any alternative.

The Coast Patch-nose Snake is another resident snake species, which likely inhabits chaparral and scrub on-site. Sufficient suitable habitat lies within the project's open space to avoid elimination of the species from the project site and certainly from the region. Impacts would not be significant.

The San Diego Ringneck Snake is another habitat generalist, found in most habitats, including sage scrub, chaparral, oak woodlands, riparian areas, and grasslands. It has been recorded within suburban development areas and appears capable of persisting within limited tracks of habitat. Impacts to this species are particularly possible in areas of riparian grassland edge, but such impacts on-site are limited under any alternative. This species is expected to persist on-site with no detectable or significant effect on the population.

The Two-striped Garter Snake may intermittently forage on-site, but is not expected to be a resident as suitable foraging habitat is seasonally limited.

Neither the Turkey Vulture nor the White-tailed Kite nest on-site. The loss of habitat for foraging for the Turkey Vulture would not be significant as suitable foraging habitat occurs throughout much of the County. Similarly higher quality kite foraging habitat exists off-site and no significant raptor foraging activity was ever observed on-site, probably due to limited prey base and existing activities/uses.

The Southern California Rufous-crowned Sparrow is locally common in open sage scrub in San Diego County, and occurs wherever suitable habitat remains in large blocks. Despite the loss of some suitable habitat from proposed development (all alternatives), much of the on-site suitable habitat is not proposed for impact and would be preserved. In addition, extensive tracts of suitable habitat border the site to the west. The loss of a small number of territories from the project would not significantly effect this species' local or regional population.

The Western Bluebird is a common to very common resident and winter visitor in San Diego County (Unitt 1984). It is a bird of edge habitats and prefers oak woodlands where they adjoin meadows or grassland. The habitats utilized heavily by bluebirds at the Camp now lie within or adjacent to existing developed areas. Concern exists over the effects of aggressive cavity nesting competitors in breeding habitat. This concern would not apply here as the site is only known to support transient and wintering birds. There would be only a small impact on the migrant bluebird population through loss of on-site oak woodlands. Although winter occupied habitat may shift, the habitat loss is not expected to have any corresponding impact on the bluebird population, as suitable habitat will remain on-site and adjacent to the site.

The significance of impacts to the Pallid Bat, California Mastiff Bat, Townsend's Big-eared Bat, Pocketed free-tailed Bat, and Long-eared Myotis has been assessed based on the amount of oak woodland impacts relative to the available remaining oak woodlands within an approximate 10 km distance. Despite impacts, the proposed open space easement would preserve a large area of oak woodlands on-site (over 30 acres). Also, the immediate region supports high quality riparian oak forest associated with San Vicente Creek and its tributaries and upland oak woodlands. Unlike coastal areas, the eastern portion of San Diego County has retained a fair amount of oak woodland habitat. Despite the loss of bat habitat, the persistence of oak woodlands in relatively high numbers on-site and within the immediate region should prevent any significant impacts under the proposed project (all alternatives).

The Northwestern San Diego Pocket Mouse inhabits sage scrub, sage scrub/grassland ecotones, and chaparral communities. This species remains relatively common within the San Diego/Riverside region (Dudek & Associates 2000). In the coastal region, the San Diego Desert Woodrat is considered to be a habitat generalist because of the region's relatively mesic climate and abundant shelter and food availability (Bleich 1973 in Dudek & Associates 2000). The generalist nature of both these species, along with their low sensitivity status, and the preservation of large tracts of suitable habitat on-site, results in the determination of no significant impacts.

Finally, the Ringtail and Mountain Lion likely use the project area during wide range movements and are expected to occasionally forage on-site. Under either plan, direct impacts to these species may occur through loss of habitat and habitat fragmentation, but these impacts are not expected to be significant.

The project is also required to comply with the MSCP species-specific conditions of coverage as a condition of project approval (Table 10). It is anticipated that Design Features incorporated into the project to address edge effects and management of the on-site open space easement will meet the applicable conditions of coverage.

Table 10. Faunal Species Detected or Expected within the Camp Preserve Areas and Corresponding MSCP Conditions of Coverage

MSCP Covered Species	Conditions of Coverage from MSCP Table 3-5
Orange-throated Whiptail	Address edge effects
San Diego Horned Lizard	Maintain native ant populations, discourage the Argentine Ant and protect against detrimental edge effects.
Cooper's Hawk	In the Metro-Lakeside-Jamul segment preserve areas shall conserve patches of oak woodland and oak riparian forest of adequate size for nesting and foraging habitat. A 300-foot impact avoidance area around nests and minimization of disturbance in oak woodlands and oak riparian forests is required.
Golden Eagle	Measures to avoid human disturbance while the nest is active, establishment of a 4,000-foot disturbance avoidance area (within preserve lands), and nest site monitoring.
Western Bluebird	None
Southern California Rufous-crowned Sparrow	Maintenance of dynamic processes, such as fire, to perpetuate some open phases of Coastal Sage Scrub with herbaceous components.
Mule Deer	None

EDGE EFFECT/INDIRECT IMPACTS

The focus of this section is to prove an understanding of indirect impacts (impacts that would occur in the future) specifically associated with development-induced edge. The section provides a general discussion of potential edge effects, a description of those edge effects that could occur in association with this project's proposed development, and the project design measures that have been incorporated into the project (project Design Features) to avoid and/or minimize edge effects.

Fragmentation of wildlife habitat, that would occur as a result of the proposed project, would reduce the quality of existing habitats for many large mammalian predators, birds of prey, and their prey species. Habitat fragmentation occurs when a native vegetation community is not entirely altered or developed, but what remains has a diminished wildlife habitat value. Fragmentation increases the amount of edge. While diversity may be highest at natural edges, there are deleterious effects associated with edges. Boundary areas often have altered microclimates, hydrology, and soil conditions. Native flora is apt to encounter increased competition from weedy species, which in turn affects the value of the habitat for wildlife. Edges between natural systems and human land uses can amplify these detrimental edge effects and add others such as increased incidences of disease and pollution risks (Peck 1993).

Woodland species are more susceptible to depredation at edges than within the interior of a habitat patch; they are also more likely to experience brood parasitism and increased competition for nesting cavities from non-native species. Several studies have demonstrated a negative correlation between nest depredation and the size of vegetation remnants (Wilcove and Murphy 1985, Small and Hunter 1988, Gibbs 1991, Donovan et al. 1995). Within fragments, the search pattern of predators maybe simplified by what is essentially a one-dimensional habitat, resulting in higher predation efficiency (Major et al. 1999). Also, fragmented habitats may no longer be able to support large predators. The presence of these large predators has been demonstrated to hold in check populations of smaller, meso-predators. In the absence of larger predators, smaller meso-predators [domestic or feral cats (*Felis catus*), skunks, Raccoons, jays, etc.] become more abundant as large predators no longer limit their populations. Without the presence of large predators, avian and small mammal diversity and abundance declines, presumable due to increased predation pressure from non-native meso-predators (Crooks 1999, Crooks and Soule 2000, Giusti and Tinnin 1993).

Increases in artificial light and noise levels also typically occur in association with development-induced edges. The specific effects of noise and artificial lighting increases on some species have been documented. Such adverse impacts include physiological and behavioral impacts on resident wildlife and plants. For example, seasonal changes in night length induce parallel changes in the duration of melatonin secretion. The circadian rhythms of some plants change under continuous light, causing changes in leaf loss timing in deciduous trees (Upgren 1996). Buchanan (1993) found that artificial lighting significantly reduced the ability of nocturnal frogs to detect and consume prey. Similarly, outdoor lighting disturbs the flight, navigation, vision, migration, dispersal, oviposition, mating, feeding, and crypsis in some moths (Frank 1988). The effect of night illumination on moths has a corresponding effect on some high flying bat species, which congregate to feed within the area of the light source (Rydell and Baagoe 1996). Drawing insects out of their native habitats into lighted areas may reduce food availability for bat species that employ gleaning as a foraging method and the effects on bats attracted to the artificial congregations of insects near a light source are unknown. Thus the presence of artificial nighttime light has implications for a number of species, including the potential to artificially increase predation rates on vulnerable species.

The effects of increased noise on wildlife populations have been investigated since the 1970s. The results of the research have been widely varied, depending on study site, study subject, type of noise, etc. While numerous studies have demonstrated the detrimental effects of noise on wildlife a few have indicated that some species habituate to increased noise levels. There appears to be a wide degree of tolerance variability, which may even occur on an individual level. Generally speaking, noise levels below 60 dBA are not considered a significant impact by the resource agencies. Since the project's noise study determined that on-site traffic noise would result in levels under 60 dBA Leq at sensitive habitats, such as sage scrub and riparian forest, this is not considered a significant impact.

Free-ranging domestic animals have a direct impact on local fauna. The introduction of domestic cats has been shown to result in decreased avifuana diversity and abundance (Crooks 2000). These mesopredators are known to take small mammals, birds, and reptiles indiscriminately (Crooks 1998). Domestic dogs will also take small game and disrupt the behavior of larger species including deer and Mountain Lion.

Project-specific potential edge effects and project Design Features incorporated into the Preferred Plan and Reduced Alternatives to avoid and/or minimize these indirect impacts are addressed below within Table 11. Overall, the edge effect impacts are expected to be greater under the Preferred Plan than the Reduced Alternatives. The primary difference between the Preferred Plan and the Reduced Alternatives is the relocation of the retreat center toward the central camp facilities under the Reduced Alternatives and different configurations of the open space easements. These planning alterations reduce edge effects by clustering development and maximizing the area of open space with minimal perimeter. (The difference in edge effect impacts between the 2 Reduced Alternatives is not expected to be detectable.) Since the MSCP Findings require "The project provides for the creation of significant blocks of habitat to reduce edge effects and maximize the ratio of surface area to the perimeter of conserved habitats", the Reduced Alternatives are superior to the Preferred Plan relative to this finding due to their decreased amount of open space perimeter relative to the overall open space area.

Table 11. Potential Edge Effects and Corresponding Project Design Features

Potential Edge Effects	**Project Design Features to Avoid, Minimize, and/or Mitigate Edge Effects**
Vegetation Communities	
Oak woodlands may be sensitive to edge effects resulting from irrigation, soil compaction, filling, and paving in and around oaks. Potential adverse effects on the natural ecosystem from the use of herbicides, fungicides, pesticides, and fertilizers required to maintain turf and landscaping and during paving operations.	Any ground disturbance within 25 feet of an oak has been addressed as a direct impact and mitigated as such. Design Feature 3
Increased competition from weedy species near habitat edges.	Design Feature 23 (see Appendix 8)
Vegetation communities within the open space easement could be subject to indirect impacts resulting from human trampling of vegetation.	Design Features 16, 19, and 21
Sensitive Plants	
The project's potential for edge effect impacts to sensitive flora are	Design Features 10 through 13

Potential Edge Effects	**Project Design Features to Avoid, Minimize, and/or Mitigate Edge Effects**
limited to the effects of human intrusion into populations of Felt-leaved Monardella and Gander's Butterweed.	
Sensitive Wildlife Resources	
Artificial lighting could negatively impact the on-site wildlife corridor and the deciduous trees within it or other high quality wildlife habitats adjacent to development. Artificial lighting may also adversely effected bats (including sensitive species).	Design Features 14 and 15
Impacts to wildlife species may result from roadkill where traffic frequencies increase.	Design Features 8, 9, 17, 18, 20 and 29
The introduction of invasive species into the Camp biological open space areas could have long-term, serious effects on wildlife habitat.	Design Feature 23 (see Appendix 8)
The presence of any free-ranging domestic animals within the project site is expected to negatively effect wildlife use of the property and may result in direct mortality, particularly for small mammals, passerine birds, and lizards.	Design Features 24 and 25*

*Enforcement of the cat restriction law (Design Feature 25) would be difficult; however, homeowners associations have achieved success with similar issues through enforcement of Covenants, Conditions, and Restrictions (CC&Rs). (In *Nahrstedt v. Lakeside Village Condominium Association*, the California Supreme Court established a new standard for enforcing CC&Rs in common interest developments. The plaintiff brought suit against her condominium association, challenging its pet restriction policy and seeking relief from fines levied against her for keeping her cats in her condominium. The court held that CC&Rs were presumed to be reasonable, and unless a plaintiff could prove them to be unreasonable, CC&Rs would be enforced by the courts. The court defined unreasonable as a 3 part test: (1) being arbitrary, (2) violating a fundamental public policy, or (3) imposing a burden on the association member that substantially outweighed the benefit to the association as a whole. Lakeside Village Condominium Association prevailed in the suit because the plaintiff failed to prove that the pet restriction policy was unreasonable.) The *Nahrstedt v. Lakeside Village Condominium Association* decision indicates that CC&Rs are, in fact, enforceable.

The significance of edge effects (after consideration of Design Features to avoid, minimize, and/or mitigate impacts) can be assessed based on the potential to effect sensitive species and/or compliance with the MSCP Subarea Plan (particularly conditions of coverage). The MSCP Conformance Findings require "The project provides for the creation of significant blocks of habitat to reduce edge effects and maximize the ratio of surface area to the perimeter of conserved habitats". The project has incorporated a number of Design Features, which would result in avoidance and/or minimization of edge effects. However, under the Preferred Plan, the configuration of the open space easement would have a greater amount of edge than under the Reduced Alternatives and would be in closer proximity to development (see Figures 2a1-11, 2b1-11, and 2c1-11). The Preferred Plan's open space easement does not maximize the ratio of surface area to the perimeter of conserved habitats as much as the Reduced Alternative open space easement would. Based on this information, edge effects under the Preferred Plan would be significant, but those under the Reduced Alternatives would not.

CUMULATIVE IMPACTS

Cumulative impacts may be defined as the incremental impact of the proposed project when added to other past, present, and reasonably foreseeable future actions. Cumulative impacts can result from individually minor but collectively significant (cumulatively considerable) actions taking place over time.

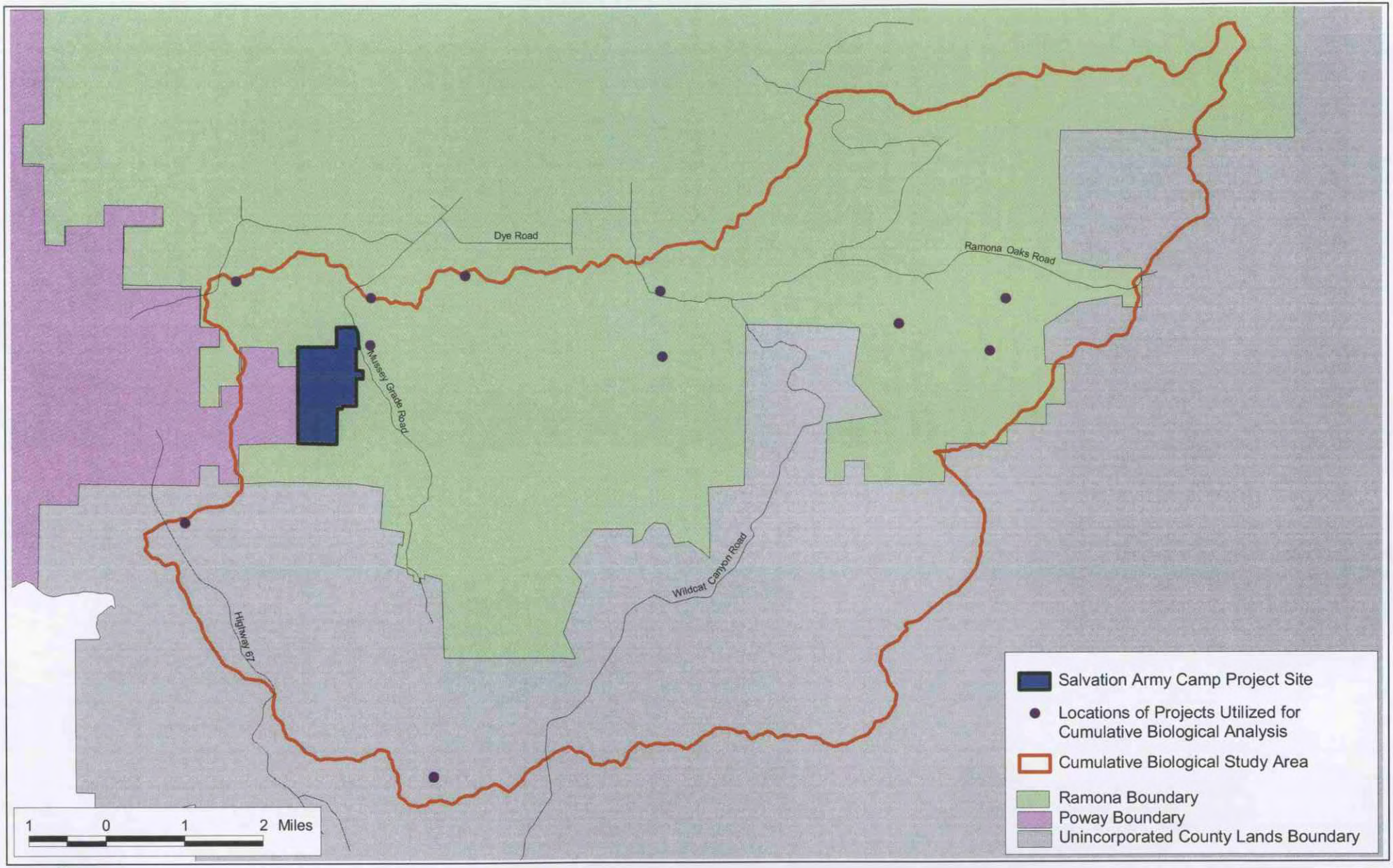
The MSCP is a comprehensive habitat conservation planning program which addresses multiple species habitat needs and the preservation of natural communities for a 900-square mile area in southwestern San Diego County (Ogden et al. 1995). The MSCP addresses the potential impacts of urban growth, loss of natural habitats, and species endangerment and develops a plan to mitigate for the loss of plant and wildlife species and habitat due to direct and indirect impacts of future development of both private and public lands. The MSCP's ultimate goals include: maintaining and enhancing biological diversity in the region and conserving viable populations of endangered, threatened, and key sensitive species and their habitats, thereby preventing local extinction; as well as, minimizing the need for future listings, while enabling economic growth in the region (City of San Diego 1995). The amount of habitat or the population size that is required for conservation was determined by a qualified biologist with knowledge of the species natural history. The determination of risk or preservation for a species was based on knowledge of existing populations and an analysis of alternative preserve scenarios which examined percent of known observations potentially affected, percent of major populations affected, amount of potential habitat affected, and other known risk factors (City of San Diego 1995). While projects within the MSCP that conform to MSCP standards should result in mitigation that reduce cumulative impacts to a level below considerable, the Camp lies on the northeastern edge of the County MSCP Subarea Plan boundary and a number of projects within the vicinity may not be subject to the MSCP. To ensure that cumulative biological impacts are sufficiently addressed in the Cumulative Impact Analysis Area, a project-based analysis has been completed for this project.

PROJECT BASED ANALYSIS

The project-based cumulative analysis includes an assessment of the known and expected future biological impacts (based on vegetation community loss) within the project vicinity. To establish a logical and discrete Cumulative Impact Analysis Area, we looked for a boundary with a biological basis. Since the biological characteristic of a region are largely influenced by geology, hydrology, and topography, it is believed that a boundary dictated by these influences will better serve the biological cumulative analysis than one based upon land use or jurisdictional boundaries. For the purposes of the biological cumulative analysis, the Cumulative Impact Analysis Area has been defined as the San Vicente Basin or Hydrologic Area of the San Diego River Watershed or San Diego Hydrologic Unit. This Hydrologic Area is a "major logical subdivision of a hydrologic unit ... best typified by a major tributary of a stream, a major valley, or a plain along a stream containing one or more ground water basins and having closely related geologic, hydrologic, and topographic characteristics" (California RWQCB 1994).

In identifying cumulative impacts, a list of discretionary projects within the Cumulative Impact Analysis Area was generated (from SANGIS , who received the information from the County) and County files were reviewed by M&A staff to acquire information about project-specific impacts and mitigation. In some instances, impact and mitigation information was not contained within the project files or the County staff could not locate the files. These projects have been excluded from the analysis due to lack of information. In other cases, impacts or mitigation are described textually,

referred to but not quantified, or were simply listed as less than significant; again, these projects are not included within the analysis due to lack of information. Although, our analysis began with a list of over 90 projects, after eliminating Certificates of Compliance, Administrative Permits, Variances, Rezones, Vacations, and projects for which no quantified information was available, we have a limited amount of project-by-project data. All projects within the Cumulative Impact Analysis Area for which some quantified impact or mitigation information was available are included within Table 12 and Figure 6. Project files which were consulted for this cumulative analysis, but lacked sufficient impact and mitigation information for inclusion in Table 12 included the following: Ramona Plaza Site Plan, Ramona Transmissions, Clody-AT&T Wireless Services, Boundary Adjustment No. B01-0212, Dog Kennel Property, Barona Road/ Nextel, Muth Valley Road, Freeman-Bramdi View Lane, Lot 16 of Fernbrook, Skylake Estates, Manley Brushing & Clearing Permit Exemption, Mahogany Ranch, Doshi minor Residential Subdivision TPM Z0669, Meadowood Project, Oak Woodlands Propane Tank-Greystone Homes, Landscape & Irrigation Plans for Fallbrook Auto Care, Federico-Sprint Cell Site, Archer 2nd Residence, James Mowry Building Permit, Whelan Cox/ Sprint PCS, Cingular Wireless/IHDE Telecom, San Diego County Estates Telecommunications, Rainbow Wireless Communication Site (Cox), Golden Eagle West, Zenovic Residence, Dale Lot Split Project, San Diego County Estates, Rancho San Vicente, Windmill Construction Rezoning Project, Chaffin Subdivisions, San Diego County Estates Equestrian Facility, Clover Hill Ranch, Hunt Residential Grading Permit, Barefoot, Robert Hunt 2nd Dwelling Unit, Shade Structure at Ramona Oaks Park, Mariani/Ramona Oaks Park, San Vicente Haciendas Condominium Conversion, San Vicente Ranch Unit 2, 19241, 7614309, 98-0204, 03-051, and RV0025.



Cumulative Biological Study Area and the Locations of Projects Utilized for the Cumulative Biological Analysis

Figure 6

Table 12. Project-based Cumulative Impacts and Mitigation for Habitat Types Impacted by the Salvation Army Camp Project

	Vegetation Community Impacts and Mitigation											
	32500 Diegan Coastal Sage Scrub		**37120 Southern Mixed Chaparral**		**37G00 Coastal Sage-Chaparral Scrub**		**42200 Non-Native Grassland**		**61310 Southern Coast Live Oak Riparian Forest**		**71160 Coast Live Oak Woodland**	
Projects	**Impacts**	**Mitigation**	**Impacts**	**Mitigation**	**Impacts**	**Mitigation**	**Impacts**	**Mitigation**	**Impacts**	**Mitigation**	**Impacts**	**Mitigation**
Ramona Serena GPA	95.07	58.3									3.21	25.79
Rancho Canada									0.22	0.07	0.16	0.00
Rainbird Road	1.24	1.24										
KCBQ Broadcast Facilities			9.55	9.55	0.84	1.26	2.63	1.32			1.74	3.48
Ranganathan TPM			11.2	11.3							NQ	NQ
Reagan Open Space Easement Vacation			1.0	1.0								
Wildcat Canyon Road Enhancement	2.5	4.45	6.8	9.6					1.1	2.9	1.1	2.7
Borysewicz	0.40	0.60	26.37	26.37					0.34	0.68	0.41	0.82
Anastopolous Residence			0.13						0.01			
Preston Single-Family Residence	0.40						4.51					
Nextel Poway Creek Cellular Facility		0.17										

NQ = Not Quantified in County project files

The information provided for the project-by-project analysis may not reflect the ultimate habitat impact: mitigation ratio that is approved by the County. The County will require mitigation for each significant habitat impact that reduces the impact to a level below significant.

Impacts to vegetation communities form the primary basis for this cumulative biological impact analysis. Since species losses are largely due to habitat loss, it is expected that significant impacts to sensitive species would occur in conjunction with habitat loss and would be mitigated through habitat-based mitigation. Losses of vegetation communities, which are individually significant (on a project level) are also considered cumulatively considerable herein, as biological impacts are cumulative by nature and there has been a substantial decline in native habitats throughout the Southern California region.

Therefore, all impacts to Southern Mixed Chaparral, Diegan Coastal Sage Scrub, Coastal Sage-Chaparral Scrub, Non-Native Grasslands, Southern Coast Live Oak Riparian Forest, and Coast Live Oak Woodlands would be considered cumulatively considerable and require mitigation.

Impacts to Disturbed habitat, Non-Native Woodlands, or Urban/Developed lands are not considered individually significant, nor are they considered cumulatively considerable. These communities do not typically provide habitat for native species and have extremely limited biological value.

MITIGATION

HABITAT-BASED MITIGATION

The mitigation recommendations stated herein are intended to establish standards for application at a later date. If project design undergoes a change, which alters the impact analysis contained herein, additional mitigation measures should be developed to further mitigate significant impacts. In the event that additional species or habitats are listed as sensitive prior to project approval, alterations in the aforementioned significance determinations should be made in accordance with these changes.

Avoidance of impacts to sensitive biological resources is required whenever feasible. The site plan has been redesigned to avoid impacts to sensitive biological resources including wetlands, wetland buffers, oak woodlands, and Tier I habitats to the extent practicable. The Reduced Alternative Plans further reduce impacts through avoidance to the extent feasible. These plans minimize impacts to sensitive habitats and avoid impacts to the on-site wildlife corridor. The current plans are biologically superior to those previously considered for development of the site; however, the proposed development will still require mitigation for impacts to habitats and sensitive species.

All habitat-based mitigation must comply with the BMO. According to the BMO: "Any mitigation land occurring outside of BRCAs must demonstrate reasonable connectivity to extant open space patches and ability to sustain viable wildlife populations. Mitigation lands outside the BRCAs must provide in-kind or higher tier habitat values" (County of San Diego 1996). Mitigation that occurs within a BRCA (all on-site mitigation) will be subject to the reduced mitigation ratio provided in the BMO.

Tables 13a-13c indicate the required BMO mitigation by vegetation community for each of the project alternatives. Following the tables is a discussion of specifically what is proposed (by vegetation community and acreage) to mitigate habitat impacts. Following the vegetation community mitigation discussion is Table 14, which addresses jurisdictional wetland and Non-Wetland Waters/Streambed impacts and mitigation. (Mitigation for wetland impacts takes into account overlapping jurisdictions.)

Table 13a. Impacts to On-Site Vegetation Communities Under the Preferred Plan, Applicable Mitigation Ratios, and Proposed Mitigation[1]

Vegetation Communities	Existing On-site Acreage	Impacts under Preferred Plan (acres)[1]	Ratio	Required BMO Mitigation Acreage
Tier I				
Southern Coast Live Oak Riparian Forest	33.63	2.00[2]	2:1	4.00[2]
Southern Willow Scrub	0.73	0.00	2:1	0.00
Mule Fat Scrub	0.02	0.00	2:1	0.00
Emergent Wetland	0.03	0.00	2:1	0.00
Coast Live Oak Woodland	20.34	7.29[2]	2:1	14.58[2]
Mafic Southern Mixed Chaparral	6.48	0.00	2:1	0.00
Tier II				
Diegan Coastal Sage Scrub	16.43	13.12	1.5:1	19.68
Coastal Sage-Chaparral Scrub	46.23	9.26	1.5:1	13.89
Tier III				
Southern Mixed Chaparral	402.55	37.36	1:1	37.36
Non-Native Grasslands	22.83	12.45[3]	0.5:1	6.22[3]
Tier IV				
Non-Native Woodland	4.39	1.64	N/A	N/A
Disturbed	16.58	9.52	N/A	N/A
Urban/Developed	7.76	4.73	N/A	N/A
Totals	578.00	97.37		95.73

[1] Impacts as calculated in previous versions of this report and not reflective of the 2007 Fire Protection Plan requirements are shaded to indicate that the Preferred Plan is not an approvable project

[2] Includes impacts and mitigation for oak impacts within 25-foot buffer

[3] Includes impacts and mitigation from wetland creation site

Within the previous version of the biological report, impacts for Alternative Plan II were included within a Table 13c. These impacts were the same as Alternative Plan I with the exception of Southern Mixed Chaparral impacts, which were slightly lower (by a total of 0.97 acre) for Alternative Plan II. With the application of the 2007 Fire Protection Plan, Southern Mixed Chaparral impacts for both alternatives (I and II) increased and are now comparable; thus, impacts for both Alternatives are included within the Table 13b on the following page.

Table 13b. Impacts to On-Site Vegetation Communities Under Reduced Alternatives I and II including impacts from the 2007 Fire Protection Plan, Applicable Mitigation Ratios, and Proposed Mitigation

Vegetation Communities	Existing On-site Acreage	Impacts Alternative Plan I or II (acres)	Ratio	Required BMO Mitigation Acreage
Tier I				
Southern Coast Live Oak Riparian Forest	33.63	1.36[1]	2:1	2.72[1]
Southern Willow Scrub	0.73	0.00	2:1	0.00
Mule Fat Scrub	0.02	0.00	2:1	0.00
Emergent Wetland	0.03	0.00	2:1	0.00
Coast Live Oak Woodland	20.34	7.96[1]	2:1	15.92[1]
Mafic Southern Mixed Chaparral	6.48	0.00	2:1	0.00
Tier II				
Diegan Coastal Sage Scrub	16.43	12.29	1.5:1	18.44
Coastal Sage-Chaparral Scrub	46.23	8.18	1.5:1	12.27
Tier III				
Southern Mixed Chaparral	402.55	36.73	1:1	36.73
Non-Native Grasslands	22.83	12.41[2]	0.5:1	6.21[2]
Tier IV				
Non-Native Woodland	4.39	1.63	N/A	N/A
Disturbed	16.58	9.37	N/A	N/A
Urban/Developed	7.76	4.72	N/A	N/A
Totals	578.00	94.65		92.29

[1]Includes impacts and mitigation for oak impacts within 25-foot buffer
[2] Includes impacts and mitigation from wetland creation site

In accordance with the BMO, impacts to on-site oak woodlands must be mitigated at a 2:1 ratio as the mitigation site (on-site open space) meets the criteria for a BRCA. The importance of oak habitats to wildlife is underscored by the fact that at least 60 species of mammals (Barrett 1980) and 110 species of birds (Vener 1980) are known to utilize oak woodlands in California. Oak woodlands vary in terms of species composition, density, understory, and regeneration capacity. Recent evidence suggests that several species of oaks, including Engelmann Oak are not reproducing well in portions of their range (Giusti and Tinnin 1993). The amount of oak regeneration is very site-specific and may affect the value of impacted or preserved oak woodlands. When considering potential oak mitigation sites the local and regional context of the site as well as site-specific characteristics should be taken into consideration. Preserve lands should be well buffered from

existing or proposed development and should be at least in part contiguous with native vegetation communities. Also, oak woodlands must be large enough to regenerate. Preservation of high quality non-impacted oak woodlands in a dedicated open space easement on-site is proposed as mitigation. These woodlands are expected to be large enough to regenerate and maintain their current value.

Preservation and dedication of Tier II and/or Tier I habitats is proposed as mitigation for Diegan Coastal Sage Scrub and Coastal Sage-Chaparral Scrub (Tier II) impacts, which is in accordance with the BMO.

Impacts to Tier III habitats must be mitigated at a 1:1 ratio, as the mitigation site meets the criteria for a BRCA, except for Non-Native Grasslands, which are mitigated at a 0.5:1 ratio. The proposed (revised) open space easement includes more than enough Tier III lands to ensure adequate mitigation. The open space easement would contain only 0.81 acre of Non-Native Grasslands for mitigation; thus, the additional required grassland mitigation would consist of Southern Mixed Chaparral, which is of equal tier value and is allowable per the BMO.

In addition, impacts to Engelmann Oaks (Group D) would be mitigated on-site through preservation of oak woodlands. This approach complies with BMO direction that impacts to species in Groups C and D (Engelmann Oak is Group D) shall be protected using habitat-based (in this case oak woodland) mitigation.

JURISDICTIONAL WETLAND MITIGATION

According to the BMO, mitigation for wetlands must be in-kind at a 2:1 or 3:1 ratio depending upon the location of the impacts and mitigation relative to their BRCA status. Impacts to County jurisdictional wetlands, such as those on-site, that are drainages without hydrophytic vegetation or hydric soils require mitigation at a 2:1 ratio. Mitigation requirements for jurisdictional wetlands and Non-Wetland Waters are provided in Table 14, below.

Table 14. County Jurisdictional Wetland Impacts and Proposed Mitigation, Reduced Alternative Plan I and II Impacts and Mitigation are based on Updated 2007 RPO Jurisdictional Assessment

County Jurisdictional Wetlands	Preferred Plan Impacts[1]	Reduced Alternative I or II Impacts	Ratios	Mitigation
Southern Willow Scrub	0.00	0.00	3:1	No on-site creation required
Mule Fat Scrub	0.00	0.00	3:1	No on-site creation required
Emergent Wetland	0.00	0.00	3:1	No on-site creation required
Southern Coast Live Oak Riparian Forest	0.05	0.00	1:1 creation	0.05 acre on-site creation for the Preferred Plan No on-site creation required for the Reduced Alternatives
County Jurisdictional Drainages/Non-Wetland Waters/Streambed	0.17	0.03	2:1	0.34 on-site creation under the Preferred Plan 0.06 under either Alternative Plan
County Jurisdictional Wetlands Lumped/ Total	0.22	0.03		0.39 acre of on-site wetland creation for the Preferred Site Plan 0.06 acre of on-site wetland creation for the Reduced Alternative Plans

[1] Impacts as calculated in previous versions of this report and not reflective of the 2007 Fire Protection Plan requirements are shaded to indicate that the Preferred Plan is not an approvable project

The proposed RPO wetland mitigation, including wetland creation would reduce impacts to a level below significance.

Impacts to CDFG jurisdictional wetlands and Streambeds and ACOE jurisdictional wetlands and Non-Wetland Waters would also require mitigation which ensures no net loss of wetland functions and values. Under the Reduced Alternatives there would be only 0.13 acre of impacts to ACOE jurisdictional Non-Wetland Waters, 1.36 acres of CDFG jurisdictional Southern Coast Live Oak Riparian Forest, and 0.15 acre of Streambeds (totaling 0.13 acre of ACOE impacts and 1.51 acres of CDFG jurisdictional impacts). Wetland mitigation imposed by the Resource Agencies for CDFG and/or ACOE jurisdictional impacts would be tied to subsequent permits issued by those agencies.

On-site creation of wetland habitat is proposed to satisfy the County wetland mitigation requirements detailed above. Creation would occur in the northern portion of the project site within Non-Native Grassland habitat adjacent to riparian areas associated with the West Fork of San Vicente Creek. The creation site lies within low lying areas adjacent to the riparian corridor at the northern portion of the project site and would connect into existing wetlands. Proposed wetland mitigation within this wildlife corridor area would not preclude conformance with the BMO or negatively impact MSCP findings for the project (D. Dickman pers. com). The proposed wetland mitigation actions within this wetland buffer area would be allowable under the RPO, as permitted uses in wetlands and wetland buffers include "wetland restoration projects where the primary function is restoration of the habitat" (County of San Diego 2007).

The proposed mitigation site is located in a lower-lying area and consists completely of non-wetland indicator species, such as Milk-thistle and Radish; it appears to have more mesic conditions but the

wetland delineation did not identify this area as a wetland. Approximately 0.47 acre of grassland habitat is available for creation of wetland habitats. The creation site lies immediately adjacent to Southern Coast Live Oak Riparian Forest and it is anticipated that some wetland creation activities may occur within the dripline of these oaks. However, this has not been called out as an impact as revegetation of a non-native vegetation area with native species is not expected to impact the existing oaks and will likely provide a long-term benefit.

Based on the analysis of wetland impacts and required mitigation, it may be very difficult to achieve on-site mitigation success under the Preferred Site Plan. The total mitigation acreage required is 0.39 acre and the available area is 0.47 acre. The expected staging area would occupy 900 square feet (0.02 acre), on the eastern side of the identified wetland mitigation area.

The Reduced Alternatives are highly preferable as the available mitigation site is expected to provide sufficient area for a well designed mitigation site, including a 900 square foot staging area, with good potential to achieve success criteria.

A conceptual wetland revegetation plan has been prepared for the site and provided to the County under a separate cover. It is recommended that all the wetland mitigation be completed within Phase I of project development to mitigate adequately for unavoidable temporal losses of habitat. Prior to grading or clearing, the applicant will need to show that all required state and federal wetland permits have been obtained. A list of recommended restoration materials is included below (Table 15), and is addressed more fully in the Conceptual Revegetation Plan. Species with high success potential, based on existing habitat characteristics and flora have been selected.

Table 15. Recommended Wetland Mitigation Site Plant Materials, Unit Size, and Density

Species	**Unit Size/Type**	**Density**
Arroyo Willow (*Salix lasiolepis*)	1 gallon	8 foot centers
Sandbar Willow (*Salix exigua*)	1 gallon	7 foot centers
Mule Fat (*Baccharis salicifolia*)	1 gallon	7 foot centers
Douglas Mugwort (*Artemisia douglasiana*)	Liner	3 foot centers
California Blackberry (*Rubus ursinus*)	1 gallon	5 foot centers
San Diego Sagewort (*Artemisia palmeri*)	Liner	3 foot centers
San Diego Sedge (*Carex spissa*)	1 gallon	5 foot centers
Willow Herb (*Epilobium cilatum*)	Liner	3 foot centers
Western Sycamore (*Platanus racemosa*)	15 gallon	30 foot centers
Fremont Cottonwood (*Populus fremontii*)	5 gallon	15 foot centers
Coast Live Oak (*Quercus agrifolia*)	15 gallon	15 foot centers
Engelmann Oak (*Quercus engelmannii*)	5 gallon	15 foot centers
Skunkbrush (*Rhus trilobata*)	1 gallon	5 foot centers
California Rose (*Rosa californica*)	1 gallon	5 foot centers
Blue Elderberry (*Sambucus mexicana*)	1 gallon	6 foot centers
California Goldenrod (*Solidago californica*)	Liner	3 foot centers
Fendlers Meadow-rue (*Thalictrum fendleri var. polycarpum*)	1 gallon	3 foot centers
Poison Oak (*Toxicodendron diversilobum*)	1 gallon	3 foot centers

This wetland mitigation analysis does not specifically address mitigation and/or permit requirements, which may be imposed by the resource agencies. Typically, such requirements are established through the permitting process, and are typically site specific and in some instances, negotiable.

ADDITIONAL MITIGATION REQUIREMENTS

In addition to the ordinance required, habitat- or species-based mitigation, CEQA compliance may necessitate mitigation measures, which are unique to the project due to the project's size, location, function, or existing conditions. The discussion below details mitigation requirements or recommendations based on project specific elements or conditions.

Education Center Recommendations to Minimize Impacts to Native Vegetation Communities

County staff expressed concerns regarding impacts from the educational activities focusing on native habitats. Direct and indirect impacts to native habitats from environmental education activities are expected to be minimal or undetectable and the benefits of such activities are expected to outweigh impacts. According to information provided by the Salvation Army staff, the proposed Education Center activities will include day hikes along existing trails, classroom (indoor) activities that expose children to environmental education topics, and use indoor (non-live) educational nature displays. No night hikes are proposed and no collection of native plants or animals is proposed. Environmental education programs frequently use a number of activities and games to focus attention on ecological processes or habitats without impacting the actual habitat or subject area. Hikes teach students to understand the local ecosystem and/or identify plants and animals without impacts, aside from the area lost to the trail, which in this case, already exists. Based on review of the project site, the Salvation Army Camp staff maintains their trails in an excellent manner. No evidence of trash or

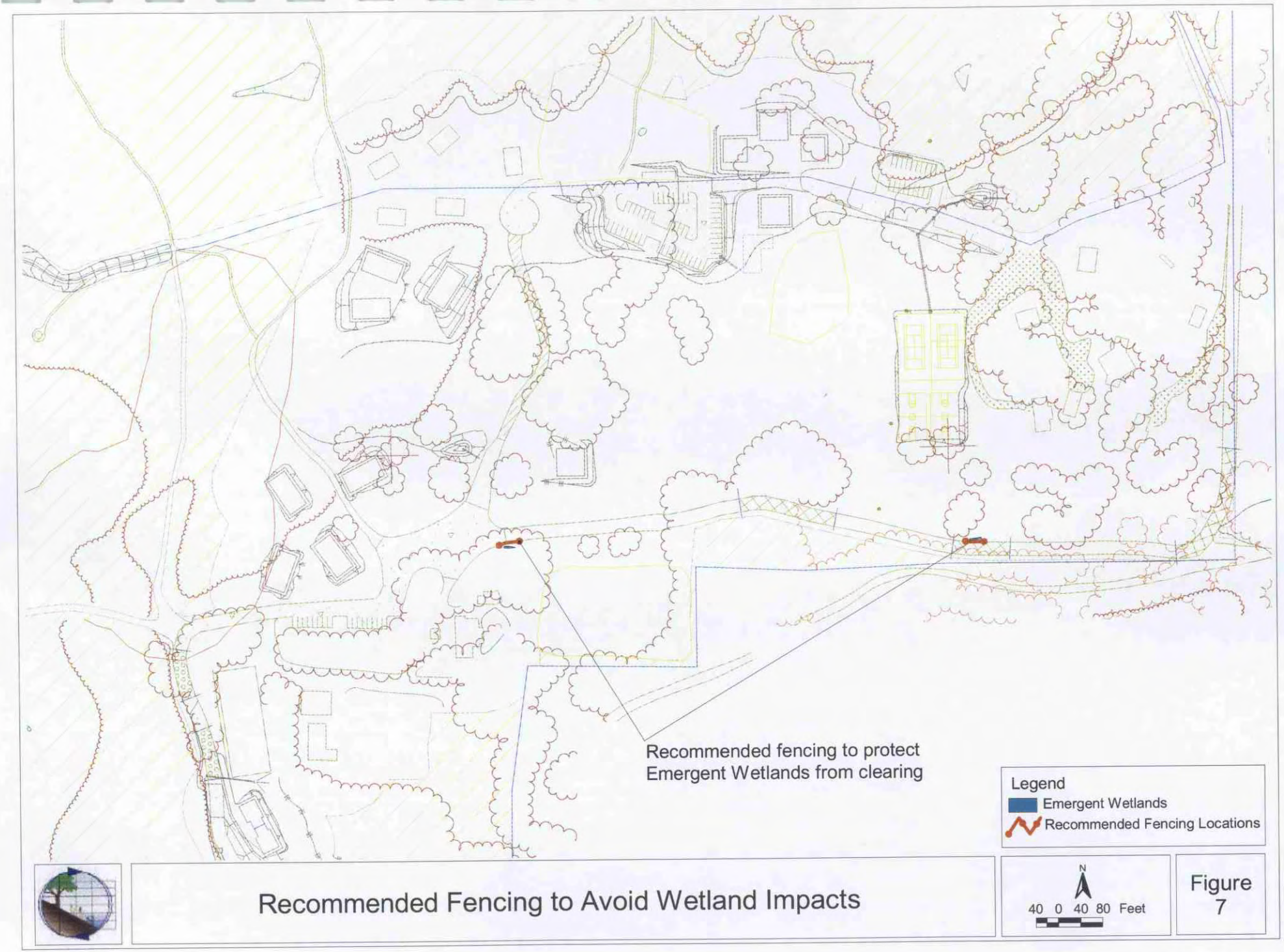
erosion control issues was noted during any of the site visits and trails (with the exception of the cross trail) are typically only wide enough to accommodate single track hikes.

To help achieve a better understanding and appreciation of the native environments and prevent human intrusion, it is recommended that educational placards line the edge of the native habitats in the vicinity of the education center. These signs should include information about the native habitats, expected species, sensitive species, ecological processes, and/or the importance of minimizing edge. It is also recommended that all groups be provided with an initial site orientation that delineates the areas of acceptable use (as considered impacted in this document) from native habitats; familiarizes them with the locations of approved, existing trails for hiking; and emphasizes the importance of ecologically responsible behavior on-site. If implemented, this measure should help to contain indirect human effects to impacted areas appropriately mitigated through the discretionary process for this project.

Protection of Wetlands from Construction and Fire Clearing Impacts

As discussed earlier, Emergent Wetland occurs in 2 locations within the Preferred or Reduced Alternative Plans' development bubble. The Emergent Wetland areas are not within the direct construction footprint, but lie within 10 feet of roadways, thus they fall within roadway fire clearing areas. However, wetland areas do not require fire clearing. Thus, to prevent unnecessary temporary impacts, fencing will be erected to delineate the portions of this community that face the road (Design Feature 22). Temporary construction fencing and monitoring shall be maintained throughout the construction period to prevent inadvertent impacts.

In addition, Permanent split-rail fencing shall be installed and maintained following construction (Design Feature 22). The locations of the fencing areas are shown on Figure 7. The fencing will delineate the boundary of these environmentally sensitive areas and will include signs that mark these areas as "sensitive areas that do not require and shall not be subject to clearing or trampling of any sort".



Recommended Fencing to Avoid Wetland Impacts

Figure 7

Biological Open Space Easement

This report proposes inclusion of an on-site "Dedicated" biological open space easement as mitigation for impacts under either the Proposed or Reduced Alternative Plans. The easements, which differ in configuration for the Preferred and Reduced Alternative Plans, are shown on the Biological Resources Maps; however, only the Reduced Alternative Plans are current and approvable. They have been designed to achieve the necessary habitat-based mitigation for the project and, in the case of the Reduced Alternatives Plans' easement, protect the on-site corridor and minimize edge effects. In addition, it is important that the on-site open space easements be biologically connected to one another and to off-site preserve land. It is not necessary that all the undeveloped land within the project area be placed into an open space easement to achieve this connectivity, but there can be no preclusion of connectivity due to proposed or existing development or disturbance. The open space easement designed for the Preferred Plan is located to the north and the west of proposed and existing development and connects with off-site preserve lands to the west. Similarly, the open space designed for implementation under either Reduced Alternative Plan provides for uninterrupted native habitats throughout the western and northern portions of the project that connect to off-site preserve lands and undeveloped lands.

Both on-site open space easements contain trails that are not expected to receive heavy use and would not conflict with the goals of the open space easement. The easements contain more acreage than is required to mitigate project impacts, as it was necessary to achieve connectivity, preservation of a variety of on-site communities, and minimize the amount of open space edge. The additional, unused acreage will be credited to the Salvation Army Camp for mitigation use at a later time. To maintain credit for the excess mitigation acreage, the open space easements must be properly maintained, managed, and protected. The total amount of open space acreage, the total required for current project mitigation, and the additional "unused" open space acreage are quantified in Tables 16a, 16b, and 16c.

Table 16a. Preferred Plan Habitat-based Mitigation and Open Space Easement Constituents[1]

Habitat Tier (I-IV)	Vegetation Communities	Holland Code	Required Mitigation (acres)[1]	Open Space Easement (acres)
I	Southern Willow Scrub	63320	0.00	0.67
I	Emergent Wetland		0.00	0.01
I	Southern Coast Live Oak Riparian Forest	61310	4.00	14.59
I	Coast Live Oak Woodland	71160	14.58	4.00
	Oak Woodlands Combined		*18.58*	*18.59*
	Tier I Habitats Combined		**18.58**	**19.27**
I	Mafic Southern Mixed Chaparral	37122	0.00	6.46
II	Diegan Coastal Sage Scrub	32500	19.68	0.05
II	Coastal Sage-Chaparral Scrub	37G00	13.89	28.85
	Scrub and Tier I Chaparral Combined		**33.57**	**35.36**
III	Southern Mixed Chaparral	37120	37.36	223.19
III	Non-Native Grasslands	42200	6.23	0.23
	Tier III Habitats Combined		**43.53**	**223.42**
IV	Disturbed	11300	0.00	0.72
IV	Urban/Developed	12000	0.00	0.03
	Totals		**95.74**	**278.80**

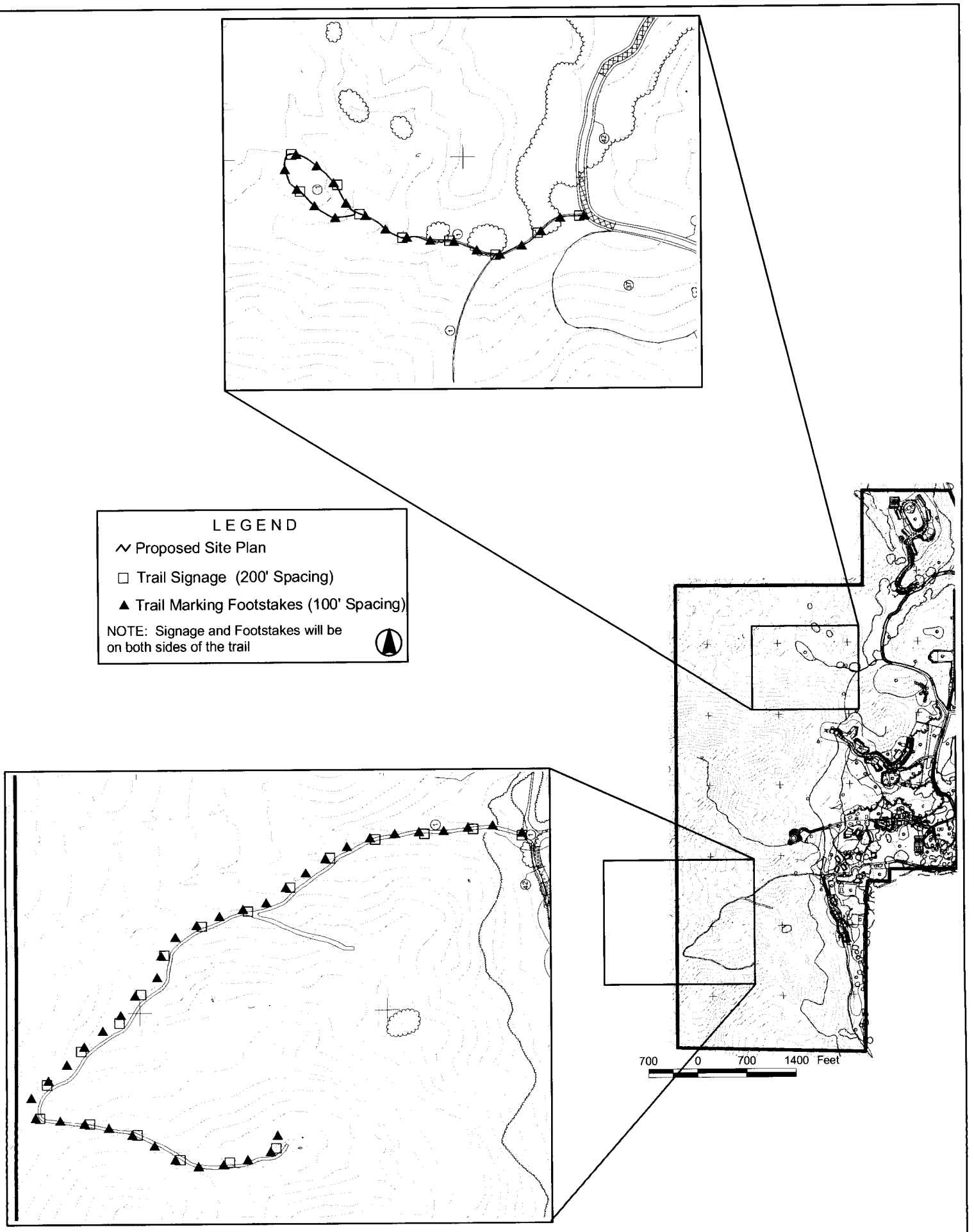
[1] Mitigation requirements as calculated in previous versions of this report and not reflective of the 2007 Fire Protection Plan requirements are shaded to indicate that the Preferred Plan is not an approvable project

Table 16b. Alternative I or II Habitat-based Mitigation and Open Space Easement Constituents

Habitat Tier (I-IV)	Vegetation Communities	Holland Code	Required Mitigation (acres)	Open Space Easement (acres)
I	Southern Willow Scrub	63320	0.00	0.74
I	Mule Fat Scrub	63310	0.00	0.02
I	Emergent Wetland	52440	0.00	0.01
I	Southern Coast Live Oak Riparian Forest	61310	2.72	27.36
I	Coast Live Oak Woodland	71160	15.92	3.65
	Oak Woodlands Combined		*18.64*	*31.01*
	Tier I Habitats Combined		**18.64**	**31.78**
I	Mafic Southern Mixed Chaparral	37122	0.00	6.42
II	Diegan Coastal Sage Scrub	32500	18.44	4.60
II	Coastal Sage-Chaparral Scrub	37G00	13.20	30.17
	Scrub and Tier I Chaparral Combined		**31.64**	**41.19**
III	Southern Mixed Chaparral	37120	36.73	318.30
III	Non-Native Grasslands	42200	6.21	0.81
	Tier III Habitats Combined		**42.94**	**319.11**
IV	Non-Native Woodland	11000	0.00	0.01
IV	Disturbed	11300	0.00	3.31
IV	Urban/Developed	12000	0.00	0.17
	Tier III Habitats Combined		**0.00**	**3.49**
	Totals		**93.22**	**395.57**

If the proposed open space easement is to function properly as mitigation, it will need not only to be preserved but also managed in perpetuity. To assume that vegetation communities are static systems would be faulted. Temporal vegetation community shifts may alter the suitability of areas for some species over time. The level of disturbance within an area may change (including fire frequency) and micro-habitat alterations initiated by resident species may cease if a local or regional corridor has limited capacity to support resident populations. Taking these things, as well as edge effects, into consideration, the proposed open space easements should be managed to contribute to the goals of the MSCP and maximize diversity and abundance where appropriate. A Habitat Management Plan (HMP) must be prepared and submitted to the County prior to grading, clearing, or use/reliance on the Use Permit (Design Feature 2). A Habitat Manager must be selected and named within the HMP and is subject to approval by the County. The ownership of the land may not change. An easement will be dedicated to the County and the land within the easement will be managed by an appropriate habitat manager, pursuant to an approved HMP (D. Dickman 2002).

The Reduced Alternative easement preserves the entire length of the on-site corridor, providing connectivity through the project site from the proposed and existing open space areas west of the project site to the wildlife underpass at Mussey Grade Road. Both open space easements contain all of the Group A and B sensitive plant species populations on-site and on-site Mafic Southern Mixed Chaparral (Tier I habitat). Specific Design Features to protect sensitive plant species that occur along the open space trail routes, to limit human intrusion into native habitats, and to prevent disturbance of the Golden Eagle nest site have been incorporated into the project. The footstakes and signage described in the Design Features should be installed in accordance with Figure 8. The signs will delineate the area beyond the footstakes as sensitive and will, in some manner, ask trail user to restrict their activities to the marked trail to support the continued presence of diverse and sensitive flora and fauna. The Salvation Army Camp or open space management entity will be responsible for maintaining the signs and footstakes and enforcing the policy.



Salvation Army Camp

Trail Impact Mitigation Map

Melissa A. Booker
County Certified Biologist
Merkel & Associates, Inc.
(858)560-5465

Figure 8

CUMULATIVE IMPACT MITIGATION

The project's proposed impacts to native habitats are considered cumulatively considerable. Project specific mitigation requirements (for this project and others in the region) are directly related to cumulative losses in the region and mitigation ratios have been established, not based upon project-specific analyses alone, but on regional biological maintenance goals. Therefore, it is expected that compliance with the established habitat-based (in-kind) mitigation ratios within the region will sufficiently mitigate cumulative losses to a level below considerable. This project's fair share contribution to mitigate cumulative losses would be achieved through project-specific mitigation, as outlined in the previous text and tables.

Where habitat-based mitigation complies with the required ratios, but is out-of-kind, it is necessary to demonstrate that the out-of-kind habitat-based mitigation would not prevent achievement of regional biological maintenance goals or result in cumulatively considerable impacts to species associated with the impacted habitat that would not be adequately mitigated through out-of-kind mitigation. Therefore, the following discussion addresses the project's proposed out-of-kind mitigation and provides the biological basis for its acceptability on a cumulative analysis level.

The project proposes out-of-kind mitigation for Non-Native Grasslands, Coastal Sage-Chaparral Scrub, Diegan Coastal Sage Scrub, and Coast Live Oak Woodland. In the case of Non-Native Grasslands, the on-site areas mapped as grasslands, are of very limited biological value. They occur within areas of previous disturbance and are mowed on a regular basis. These areas do not show evidence of diverse or abundant small mammal populations, nesting avian species, or raptor foraging. Furthermore, although grasslands are important within the Ramona region, the project's grasslands are isolated from Ramona's high quality grasslands, which support numerous raptors and the Stephen's Kangaroo Rat, unlike the project area. The project proposes to mitigate impacts to grasslands through preservation of on-site chaparral (and small area of Non-Native Grasslands). Since the biological value of the on-site chaparral is superior to the on-site grasslands, this mitigation is biologically appropriate. As stated, the grasslands do not support a suite of grassland-associated species or any sensitive species and the on-site chaparral is expected to provide more potential for raptor foraging (particularly for Golden Eagle).

Impacts to Diegan Coastal Sage Scrub would be mitigated in part with in-kind mitigation, but a portion of the mitigation would be out-of-kind, through preservation of Mafic Southern Mixed and Chaparral Coastal Sage-Chaparral Scrub. There are on-site areas of sage scrub, which have not been identified for preservation within the open space easement, due to their location adjacent to proposed development or their isolation through existing disturbance. Instead, preservation of Mafic Southern Mixed Chaparral is proposed as mitigation, due to its similar biological values and its sensitive nature. The on-site Mafic Southern Mixed Chaparral supports several sensitive plants species and is, in comparison to Southern Mixed Chaparral or Chamise Chaparral, a relatively open chaparral community with similar biological values and functions to Coastal Sage-Chaparral Scrub. The project site's sage scrub does not support sage scrub associates, such as California Gnatcatcher and Cactus Wren, and although Orange-throated Whiptail was detected on-site, the population appears to be small. Those species utilizing sage scrub on-site are all expected to also utilize chaparral.

Project impacts to Coast Live Oak Woodland would be mitigated through preservation of on-site Southern Coast Live Oak Riparian Forest. Since the on-site Coast Live Oak Woodlands proposed for impacts are generally isolated within the Camp's existing use areas and are surrounded by the mowed grasslands, they have lower biological value than the site's Southern Coast Live Oak Riparian Forest.

The riparian forest habitat is expected to support the greatest diversity and abundance of wildlife species on-site and is a local corridor constituent. There are no known species associated with Coast Live Oak Woodland that would not benefit from the preservation of the riparian forest and due to the riparian forest's location within the local corridor, a variety of species that are not specifically associated with this habitat may still benefit from its preservation, as it provides an avenue (cover) for local movements.

As outlined above, the out-of-kind mitigation proposed for the project is expected to provide an equal or greater biological benefit (to the suite of species present on-site) than in-kind mitigation would. Preservation of habitats within the local corridor that support the same suites of species (as those impacted) and have comparable functions and values to those impacted is expected to provide a fair share contribution to the mitigation of cumulatively considerable impacts.

Finally, the proposed project impacts and mitigation are not expected to preclude successful regional Coastal Sage Scrub planning efforts within the Cumulative Impact Analysis Area under the Southern California Coastal Sage Scrub NCCP Process Guidelines.

RPO, MSCP, AND BMO CONFORMANCE

The project's consistency with applicable County policies and ordinances has been evaluated here under the assumption that the recommended avoidance, minimization, and mitigation measures contained herein will be incorporated into the project. If the project ultimately does not include these measures, the project's consistency with the MSCP, BMO, and RPO may be altered. County staff makes the final determination regarding consistency and compliance based on information provided in this report and the project EIR. County MSCP findings have not been reiterated here to avoid the implication that findings were made herein. Therefore, MSCP, RPO, and BMO compliance is only discussed where County discretion does not play a substantial role in the compliance determination.

The RPO includes restrictions on development within wetlands; however, to avoid triggering an exemption from the RPO some wetland impacts may be allowed. These impacts must be minimized but are allowable to permit use of the property. Since what is allowable is a discretionary decision by the County staff it is discussed in their findings and the EIR. From a biological perspective, efforts have been made to reduce and minimize wetland impacts, particularly under the Reduced Alternative Plans.

Within the Metro-Lakeside-Jamul Segment take of covered species is authorized based upon a project's satisfaction of the requirements of the BMO and conformance with the Subarea Plan. No preserve boundaries have been developed for the Metro-Lakeside Jamul Segment. In an effort to encourage mitigation that meets the anticipated conservation levels, the County has developed mitigation ratios with reduced requirements for projects that contribute to meeting the levels. The resource agencies developed a map (MSCP Figure 1), which depicts areas that are pre-approved as meeting the County's Subarea Plan conservation goals. BRCA lands are defined by the criteria set forth in Article IV of the BMO. Having the designation of Pre-approved Mitigation Area is just one of the criteria that results in a BRCA designation. It is the BRCA status that determines the mitigation ratios for a project. A reduced mitigation requirement is reflected in the BMO mitigation table, under mitigation within a BRCA. Since mitigation would occur on-site (within a BRCA), it qualifies for the BMO reduced mitigation ratios.

Project impacts may not preclude attainment of the goals set forth in Tables 1-2, 4-2, and 4-3 of the MSCP. It is believed that the proposed project complies with these MSCP consistency requirements as it meets the BMO mitigation requirements for species and habitats. Specifically, the habitat-based mitigation recommended within this document would result in project compliance with the BMO and MSCP for impacts to vegetation communities and the following covered species: San Diego Horned Lizard, Orange-throated Whiptail, Southern California Rufous-crowned Sparrow, and Mountain Lion. Additional conditions of coverage apply for Cooper's Hawk, Golden Eagle, and some covered plant species. The project should include an impact avoidance area of 300 feet from any Cooper's Hawk nest site and 4,000 feet from a Golden Eagle nest site. The project would achieve these goals based on the Preferred Plan or Reduced Alternative Plans impact analyses and the known nest site data.

Narrow endemic plants known from Metro-Lakeside Jamul Segment include San Diego Thornmint, San Diego Ambrosia (*Ambrosia pumila*), Encinitas Baccharis, Lakeside Lilac, Variegated Dudleya (*Dudleya variegata*), Palmer's Ericamera (*Ericameria palmeri* ssp. *palmeri*), Heart-leaved Pitcher Sage, and Dehesa Bear Grass (*Nolina interrata*). None of these narrow endemics would be impacted by the proposed project. Also, the project would not impact any critical populations of covered species within the vicinity, including the Orcutt's Brodiaea population north of San Vicente Reservoir, Felt-leaved Monardella at Iron Mountain, and Narrow-leaved Nightshade (*Solanum tenuilobatum*) in Fernbrook. The project is, therefore, in compliance with the MSCP regarding covered plant species.

Rare, narrow endemic animal species known from the project region include the Golden Eagle and Arroyo Toad. Impacts to the toad are not anticipated, as suitable habitat does not occur on-site. As stated previously, the project (either plan) complies with conditions of coverage for the Golden Eagle. The Quino Checkerspot Butterfly, a rare, narrow endemic, and federally endangered species, is known from the region; however, focused surveys were completed and the findings were negative.

Information relevant to BMO Attachment H "for findings that must be made regarding linkages and corridors" was provided previously under the wildlife corridor discussion.

The BMO also requires that impacts to land determined to be a BRCA be avoided to the maximum extent practicable through application of project design (impact-avoidance) criteria. The criteria include clustering and siting development within areas that minimize impacts. The Preferred Plan does not comply with these criteria as the location of the retreat center under this alternative would result in wetland, corridor, and habitat impacts avoided under the alternatives, as well as increased edge effects. The alternatives both appear to comply with the BMO design criteria.

PREPARER'S QUALIFICATIONS

Ms. Melissa Booker, County Approved Biologist, Senior Biologist, Merkel & Associates, Inc.

Ms. Booker has 16 years of professional biological experience and 14 years of experience in southern California. She is a Wildlife Society Certified Professional Wildlife Biologist. She has extensive expertise in endangered species surveying, monitoring, and recovery; ornithology; and urban wildlife issues. She authored numerous biological technical reports, most for the purposes of CEQA documentation. She has also served as an expert witness in federal court (in her capacity as a wildlife biologist). Her broad range of experience includes threatened and endangered faunal species surveys and monitoring, avian nest and winter monitoring, land and wildlife management plan preparation, assessment of potential significant impacts to biological resources under CEQA, and design or assessment of mitigation measures to ensure appropriate impact reduction under CEQA.

LITERATURE CITED

American Ornithologists' Union. 1998. Check-List of North American Birds. 7th edition. American Ornithologists' Union, Washington D.C.

American Ornithologists' Union. 2005. Forty-sixth Supplement to the American Ornithologists' Union *Check-list of North American Birds*. Auk 122(3): 1026-1031.

Barrett, R. H. 1980. Mammals of California oak habitats: management implications. Pages 275-291 *in* T.R. Plumb, tech. coord. Ecology, management, and utilization of California Oaks. U.S. Dept. Agric., For. Serv. (Berkeley, California), Gen. Tech. Rep. PSW-44.

Beier, P. 1995. Dispersal of Juvenile Cougars in Fragmented Habitat. Journal of Wildlife Management 59(2): 228-237.

Belovsky, G. E., J. A. Bissonette, R. D. Dueser, T. C. Edwards Jr., C. M. Lueke, M. E Ritchie, J. B. Slade, and F. H. Wagner. 1994. Management of Small Populations: Concepts Affecting The Recovery of Endangered Species.

Bittner, D. 2001. Salvation Army Expansion: Effects on Golden Eagles. Prep for: Merkel & Associates, Inc. 7 pp.

Bowman, R. H., R. E. Bishop, R. W. Griffin, and M. L. Jones. 1973. Soil survey, San Diego area, California. U.S. Department of Agriculture.

Bricken, Gorden. 2002. Third revised environmental noise analysis, Salvation Army, Divisional Camp and Retreat. County of San Diego: 1-39

Brown, John W. and Katherine Bash. 2000. The lepidoptera of Marine Corps Air Station Miramar: Calculating faunal similarity among sampling sites and estimating total species richness. Journal of Research on the Lepidoptera 36:45-78.

Buchanan, B. W. 1993. Effects of Enhanced Lighting on the Behaviour of Nocturnal Frogs. Animal Behaviour 45(5):893-89.

California Department of Fish and Game. 2000. Guidelines for Assessing the Effects of Proposed Projects on Rare, Threatened, and Endangered Plants and Natural Communities. Revised May 8, 2000. 2 pp.

California Department of Fish and Game. undated. Fish and Game Code. http://www.leginfo.ca.gov/cgi-bin/calawquery?codesection=fgc

California Department of Fish and Game, Natural Diversity Database. 2003. RareFind Version 3.0.3. 2006 data.

California Department of Fish and Game, Natural Diversity Database. January 2001a. State and Federally Listed Endangered, Threatened and Rare Plants of California. 16 pp.

California Department of Fish and Game, Natural Diversity Database. January 2001b. Special Vascular Plants, Bryophytes, and Lichens List. Biannual publication, Mimeo. 150 pp.

California Department of Fish and Game, Natural Diversity Database. January 2001c. State and Federally Listed Endangered and Threatened Animals of California. 10 pp.

California Department of Fish and Game, Wildlife and Habitat Data Analysis Branch, California Natural Diversity Data Base. 2001d. Special Animals. 46 pp.

California Exotic Pest Plant Council (CalEPPC). 1999. The CalEPPC List: Exotic Pest Plants of Greatest Ecological Concern in California. Cal EPPC, San Juan Capistrano, California. 11 pp.

California Native Plant Society (CNPS). 1996. Policy in Invasive Exotic Plants. http://www.cnps.org/archives/exotics.htm

California Oak Foundation. Undated. Oak Tree Care. http://www.californiaoaks.org/html/oak_tree_care.html

Casterline, M Fegraus E, Fujioka E, Hagan L, Mangiardi C, Riley M, Tiwari H. 2003. Wildlife Corridor Design and Implementation in Southern Ventura County, California [Internet]. University of California Santa Barbara. Available from: www.bren.ucsb.edu/research/2003Group_Projects/links/Final/links_brief.pdf

City of San Diego. 1998 (1999, 2000). Significance Determination Guidelines Under The California Environmental Quality Act. Prep by Planning and Development Review, Land Development Review Division, Environmental Analysis Section. October 1998, Revised June 1999, Revised November 2000.

County of San Diego. 2007. The Resource Protection Ordinance [Internet]. 18 pp. Available from: http://www.sdcounty.ca.gov/dplu/Resource/docs/3~pdf/res_prot_ord.pdf.

County of San Diego. 1997. County of San Diego Multiple Species Conservation Program Subarea Plan. Prep. in conjunction with U. S. Fish and Wildlife Service and California Department of Fish and Game. Adopted October 22, 1997.

County of San Diego, Board of Supervisors. 1991. The Resource Protection Ordinance. October 10.

County of San Diego, Board of Supervisors. 1996. Biological Mitigation Ordinance. April 24.

County of San Diego, Department of Planning and Land Use. 1992. Hearing on: Allen Jaffe, Luelf Ranch Specific Plan SP 89-002, Zone Reclassification R91-002, Tentative Map TM 4862RPL^3, Ramona Area. Date Issued July 9, 1992.

County of San Diego, Department of Planning and Land Use. 1997. Hearing on: Edward Borysewicz, Tentative map (TM) 5015RPL^3; A70 Limited Agriculture Use Regulation, Ramona Community Plan Area. Environmental Analysis Form Log No. 92-14-13.

County of San Diego, Department of Planning and Land Use. 1999a. Initial Study Form TPM 20401, Log No. 98-09-016 RCDK Realty II.

County of San Diego, Department of Planning and Land Use. 1999b. Initial Study Form P66-008; Log No. 99-09-004; Velocity Paintball Park Major Use Permit.

County of San Diego, Department of Planning and Land Use. 2000. Initial Study Form TPM 20496/00-09-005/Quisenberry Tentative Parcel Map.

County of San Diego, Department of Planning and Land Use. 2000. County of San Diego Sensitive Species Matrix.

County of San Diego, Department of Planning and Land Use. 2001. San Diego County Sensitive Plant List. March 2001

County of San Diego, Department of Planning and Land Use. Undated pages. Environmental Analysis Form P99-008, Log No. 99-09-04. Pp. 9-11.

Crother, B. I. (ed.). 2001. Scientific and Standard English Names of Amphibians and Reptiles of North America North of Mexico, with Comments Regarding Confidence in Our Understanding. SSAR Herpetological Circular 29.iii +82 pp.

Crother, B.I., J. Boundy, J. A. Campbell, K. De Quieroz, D. Frost, D. M. Green, R. Highton, J. B. Iverson, R. W. Mcdiarmid, P. A. Meylan, T. W. Reeder, M. E. Seidel, J. W. Sites Jr., S. G. Tilley, and D. B. Wake. 2003. Scientific and Standard English Names of Amphibians and Reptiles of North America North of Mexico: Update. Herpetological Review, 2003, 34(3), 196–203.

Crooks, K.R. 1998. Tabby Go Home: House Cat and Coyote Interactions in Southern California Habitat Remnants. http://www.ncal.verio.com/~nsn/tabby/html.

Crooks, K.R. and M.E. Soule. 2000. Mesopredator Release and Bird Extinctions in a Fragmented System. The Wildlife Society Western Section 2000 Annual Conference.

Delgadillo, S. 2002. RE: Fire Review of the Salvation Army Camp and Retreat P70-37.9W2RPL. Prep for Mr. J. Farace. May 7, 2002.

DeSimone, P. and D. Silver. 1995. The Natural Community Conservation Plan: Can it Protect Coastal Sage Scrub? Fremontia 23(4):32-36.

Dickman, D. 2000. Comments made on the biological section of the draft EIR dated June 19, 2000 and the Biological Report dated June 2, 2000. 6-14 pp.

Dickman, D. 2001. Comments made on the biological section of the second iteration draft EIR and the Biological Report. October 8, 2001. 13-24 pp.

Dickman, D. 2001. Personal Communication Re: BMO and MSCP wildlife corridor compliance. Department of Planning and Land Use.

Dudek & Associates. 2000. Western Riverside County MSHCP Revised Species Accounts. http://ecoregion.ucr.edu/dudek/

Environmental Laboratory. 1987. "Corps of Engineers Wetlands Delineation Manual," Technical Report Y-87-1, US Army Engineer Waterways Experimental Station, Vicksburg, MS. 117 pp.

Erlich, Paul R., David S. Dobkin, and Darryl Wheye. 1988. The Birder's Handbook: A Field Guide to the Natural History of North American Birds. Simon and Schuster, Inc., New York, New York. 785 pp.

Federal Register November 13, 1986 with Parts 320 - 329 as modified November 22, 1991 and August 25, 1993; Part 330 as modified on December 13, 1996; Parts 320, 326, and 331 as modified March 9, 1999; Part 323 as modified May 10, 1999. Regulatory Program of the US Army Corps of Engineers Section 404 Of The Clean Water Act (As Contained Within The Code Of Federal Regulations). Jan 1994. June 30, 1948, ch. 758, title IV, Sec. 404, as added Oct. 18, 1972, Pub. L. 92-500, Sec. 2, 86 Stat. 884; amended Dec. 27, 1977, Pub. L. 95-217, Sec. 67(a), (b), 91 Stat. 1600; Feb. 4, 1987, Pub. L. 100-4, title III, Sec. 313(d), 101 Stat. 45

Fish and Wildlife Service. 1998. Draft recovery plan for the least Bell's vireo. U.S. Fish and Wildlife Service, Portland, OR. 139pp.

Forman, Richard T.T. and Robert Deblinger. 2000. The ecological road-effect zone of a Massachusetts (U.S.A.) suburban highway. Conservation Biology 14: 36-46.

Frank, K. D. 1988. Impact of Outdoor Lighting on Moths: An Assessment. Journal of the Lepidopterists' Society 42(2):63-93.

Giusti, G. A. and P. J. Tinnin (eds.). 1993. A Planner's Guide to Oak Woodlands. Publ. Of the Integrated Hardwood Range Management Program, Department of Forestry and Resource Management, University of California, Berkeley. 104 pp.

Hartley D, Aplet GH. 2001. Modeling Wildlife Habitat Corridors in the Greater Grand Staircase-Escalante Ecosystem. Proceedings of the Fifth Biennial Conference of Research on the Colorado Plateau. U.S. Geological Survey/FRESC Report Series USGSFRESC/COPL/2001/24.

Hickman, James C., ed. 1993. The Jepson Manual, Higher Plants of California. University of California Press, Berkeley. 1400 pp.

Holland, Robert F. 1986. Preliminary Descriptions of the Terrestrial Natural Communities of California. California Department of Fish and Game.

Jennings, M. R. and M. P. Hayes. 1994. Amphibian and Reptile Species of Special Concern in California. Final Report Submitted to the California Department of Fish and Game Inland Fisheries Division. 255 pp.

Johnson, S. G. 1995. Living Among the Oaks; A Management Guide for Landowners. Publ. Of the Integrated Hardwood Range Management Program, Department of Forestry and Resource Management, University of California, Berkeley. 8 pp.

Johnson, S. G and S. S. Gustafson Eds. 2000. Oak Tree Care. http://www.californiaoaks.org/html/oak_tree_care.html

Johnson, M. 2002. Personal communication Re: Oak impacts from waterline installation. BRG Consulting

Klauber, L. Undated. Unpublished field notes.

Linscott, Law & Greenspan Engineers. 2001. Traffic impact analysis, Salvation Army, Sierra Del Mar Divisional Camp, Ramona, California: 1-27.

Marzluff, J. M., S. T. Knick, M. S. Vekasy, L. S. Schuek, and T.J. Zarriello. 1997. Journal of Raptor Research; Spacial Use and Habitat Selection of Golden Eagles in Southwestern Idaho. Auk, Vol.114, No.4: 673-687 pp.

Merkel & Associates. 1999. Report of the Biological Resources for the Monte Vista Ranch. Prep. For David Evans and Associates and Victex, Inc.

Merkel & Associates. 2001. Borysewicz Subdivision Biological Report. Prep. For Edward Borysewicz. 43 pp.

Munsell Color. 2000. Munsell Soil Color Charts. Kollmorgen Corporation, Baltimore, MD.

National Geographic Society. 1999. Field Guide to the Birds of North America, Third Ed.. National Geographic Society, Washington, D.C.. 480 pp.

Noss, R. January 31, 2002. The Ecological Effects of Roads or The Road to Destruction. Wildland Center for Preventing Roads. http://www.wildlandscpr.org/WCPR/ecoleffectsraods.html

Oberbauer, T. 1996. Terrestrial Vegetation Communities in San Diego County Based on Holland's Descriptions. 7 pp.

Oberbauer, T. 2000. County of San Diego Sensitive Species Matrix. Provided as an attachment to Brett Soloman's November 6, 2000 letter to Merkel & Associates. 4 pp.

Ogden Environmental and Energy Services Co., Inc., The Rick Alexander Company, Onaka Planning & Economics, Douglas Ford & Associates, Sycamore Associates, SourcePoint, and CESAR. 1995. Multiple Species Conservation Program (MSCP) Volumes I, II, and III. Prep for: City of San Diego.

Ogden Environmental & Energy Services Co., Inc. 1996a. Poway Subarea HCP/NCCP Volume 1: Plan. Prepared for The City of Poway.

Ogden Environmental & Energy Services Co., Inc. 1996b. Biological Monitoring Plan for the Multiple Species Conservation Program. Prep. for: City of San Diego, California Department of Fish and Game, and U.S. Fish and Wildlife Service. (Revised April 1996).

Opler, P.A. and A. B. Wright. 1999. A Field Guide to Western Butterflies 2nd Ed.. Houghton Mifflin Company, Boston and New York. 540 pp.

Pacific Southwest Biological Services, Inc. 1993a. Biological Assessment of the Proposed 500 MW Boulder Valley Pumped Storage Project, San Diego, California. May 1993. 50 pp.

Pacific Southwest Biological Services, Inc. 1993b. San Diego County Water Authority Emergency Water Storage Project Biological Resource Assessment. Reservoir Sites Volume 1. September 1993.

Peck, Sheila. 1993. Landscape Conservation Planning: Preserving Ecosystems in Open Space Networks. Integrated Hardwood Range Management Program, University of California Cooperative Extension, Department of Environmental Science, Policy and Management; Berkeley, California. 72 pp.

Reiser, Craig H. Rare Plants of San Diego County. 1996. Aquafir Press. 196 pp.

Rochester C., Hathaway S., Brown C., Krista P., and R. Fisher. 2001. Herpetofaunal Monitoring in MSCP Region of San Diego. Prepared For: Keith Greer, City of San Diego. 91 pp.

Russell, G. 2001. Re: Salvation Army Camp and Retreat EIR; MUP 70-379W2; ER98-14-023; SCH 2000031058; Results of On-site Biology Meeting. 9 pp.

Rydell, J. and H. J. Baagoe. 1996. Street Lamps Increase Bat Predation on Moths. Entomologisk Tidskrift 117(4):129-135.

San Diego County Board of Supervisors. 1995. Part XIV Ramona Community Plan; San Diego County General Plan; Adopted October 5, 1978 GPA 78-02 Amended January 11, 1995 GPA 95-01. 129 pp.

Scheidt, V. N. 1996. A Biological Resources Survey Report for the Mahogany Ranch Project; TM 5080, EAD LOG #95-14-23; County of San Diego.

Scheidt, V. N. 1997. A Biological Resources Survey Report for the Borysewicz Lot Split Project. 33 pp.

Scheidt, V. N. 1999. Letter RE: Results of an updated biological resources study – the Velocity Paintball project site, P99-008, WN5394, in Ramona, California. Prep for Messrs. Art Rizzi and Darryl Hazlitt.

California Native Plant Society (CNPS). 2001. Inventory of rare and endangered plants of California. Sixth edition. Rare Plant Scientific Advisory Committee. David P. Tibor, convening editor. Sacramento, California. X+388 pp.

Sogge, M. K., Marshall, R. M., Sferra, S. J., and T. J. Tibbitts. 1997. A Southwestern Willow Flycatcher Natural History Summary and Survey Protocol. Technical Report NPS/NAUCPRS/NRTR-97/12. 37 pp.

Solomon, B. 2001. Re:Salvation Army Camp; MUP ; Revisions To County Comment Letter Dated November 16, 2001 (Draft). December 5, 2001. 6 pp.

Stokes, D. 2000. Bats of San Diego County, San Diego Natural History Museum Mammals class handout. 3 pp.

Stokes, D. 2002. Personal communication Re: Bat species status at the Salvation Army Camp Site and evaluation of impacts. USGS.

Stokes, D.C., Brehme, C. S., and R. N. Fisher. 2003. Bat Inventory of the San Diego County Multiple Species Conservation Program Area. Prep For: County of San Diego and California Department of Fish and Game. U.S. Geological Survey Western Ecological Research Center, San Diego Field Station. 17 pp.

Svensson, A. M. and J. Rydell. 1998. Mercury Vapour Lamps Interfere with the Bat Defence of Tympanate Moths. Animal Behaviour 55(1):223-226.

Tigas, Lourraine. 2000. Use of Fragmented Habitat by Coyotes and Bobcats in Southern California. The Wildlife Society Western Section 2000 Annual Conference.

Trombulak, S. C. and C. A. Frissell. 2000. Review of Ecological Effects of Roads on Terrestrial and Aquatic Communites. Conservation Biology Volume 14: 18-30

United States Department of the Interior, Fish and Wildlife Service. 2000. Year 2000 Survey Protocol for the Endangered Quino Checkerspot Butterfly (*Euphydryas editha quino*). January, 2000. USFWS, Carlsbad, California. 9 pp

Unitt, P. 1984. The Birds of San Diego County. San Diego Society National History Memoir No. 13.

Unitt, P., Project Manager and Author. 2004. San Diego County Bird Atlas. No. 30 Proceedings of the San Diego Society of Natural History. San Diego Natural History Museum and Ibis Publishing Company.

Upgren, A. R. 1996. Night Blindness: Light Pollution is Changing Astronomy, the Environment, and our Experience of Nature. Natural Resources Defense Council.

U.S. Fish and Wildlife Service. 1988. National List of Plant Species that Occur in Wetlands: California (Region 0). Biological Report 88(26.10). May 1988.

U.S. Fish and Wildlife Service. 1997. Coastal California Gnatcatcher (*Polioptila californica californica*) Presence/Absence Survey Guidelines, February 28, 1997. 5 pp.

U.S. Fish and Wildlife Service. 1997. Endangered and Threatened Wildlife and Plants: Determination of Endangered Status for the Laguna Mountains Skipper and Quino Checkerspot Butterfly. 50 CFR Part 17. FR Vol. 62 No. 11. 2313-2322 pp.

U.S. Fish and Wildlife Service. 1999. Arroyo southwestern toad (*Bufo microscaphus californicus*) recovery plan. U.S. Fish and Wildlife Service, Portland Oregan. Vi+119 pp.

U.S. Fish and Wildlife Service. 1999. Title 50-Wildlife and Fisheries; Part 17-Endangered and Threatened Wildlife and Plants. http://endangered.fws.gov/50cfr_animals.pdf and http://endangered.fws.gov/50cfr_plants.pdf.

Vener, J. 1980. Birds of California Oak habitats: Management implications. Pages 246-264 *in* T.R. Plumb. tech. coord. Ecology, management, and utilization of California oaks, U.S. Dept. Agric., For. Serv. (Berkeley, California), Gen Tech. Rep. PSW-44.

Wehr, T. A. 1997. Melatonin and Seasonal Rhythms. Journal of Biological Rhythms 12(6):518-527.

Walker R, Craighead L. Least-Cost-Path Corridor Analysis Analyzing Wildlife Movement Corridors in Montana Using GIS [Internet]. 1997 ESRI User's conference proceedings. Available from: http://gis.esri.com/library/userconf/proc97/proc97/to150/pap116/p116.htm.

Wildlife Research Institute. 2001. Salvation Army Expansion: Effects on Golden Eagles,Mussey Grade Road, Ramona, California. Prep for: Merkel & Associates, Inc. 7 pp with maps.

Wilson, D. E. and D. M. Reeder, editors. 1993. Mammal species of the world. Smithsonian Institution Press. 1206 pp.

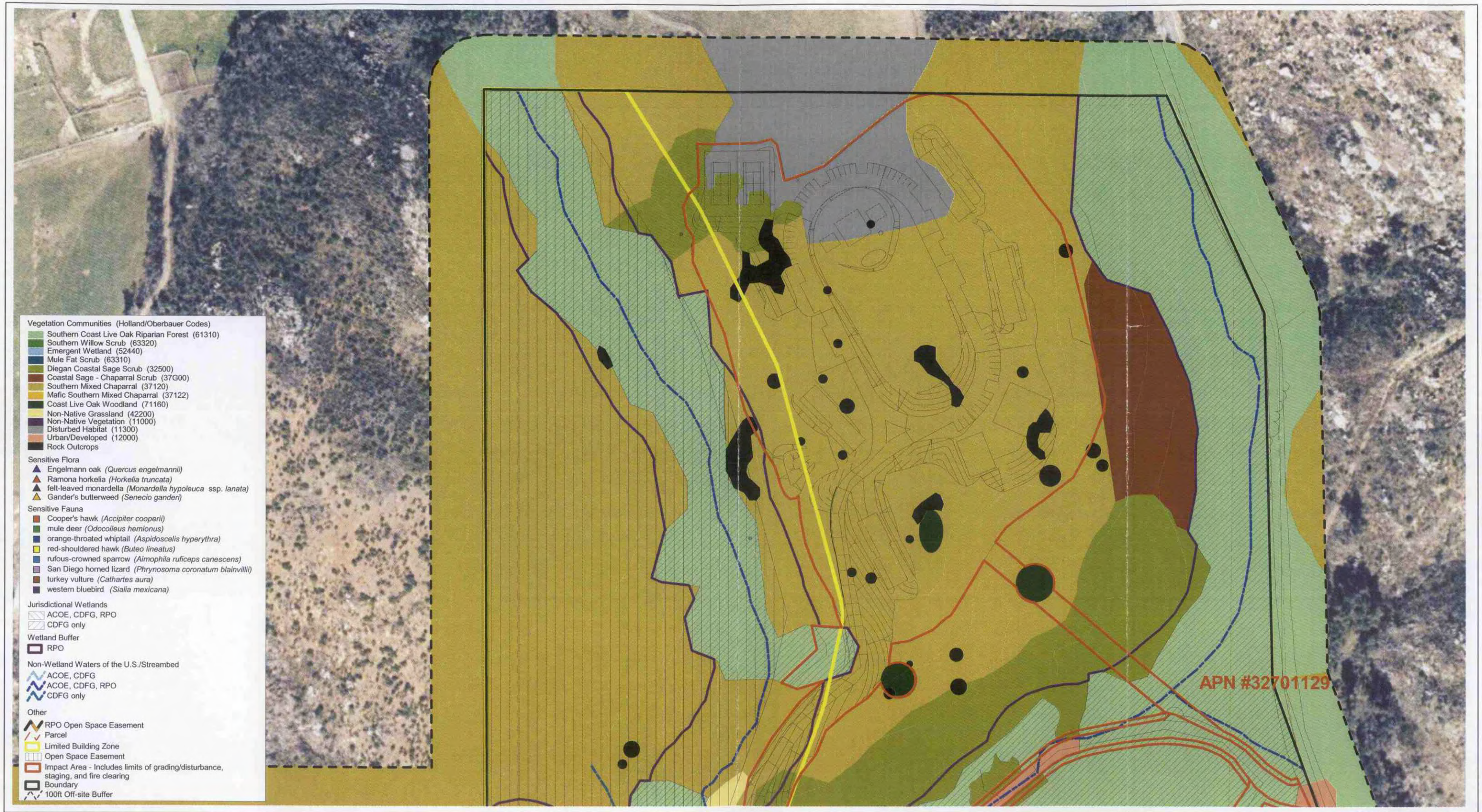
Zeiner, D.C., W.F. Laudenslayer Jr., and K.E. Mayer Ed.. 1988. California's Wildlife, Volume I Amphibians and Reptiles. State of California The Resources Agency Department of Fish and Game Sacramento, California. May 1988. 272 pp.

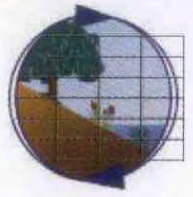
Sheet 1
Sheet 2
Sheet 3
Sheet 4
Sheet 5
Sheet 6
Sheet 7
Sheet 8
Sheet 9
Sheet 10
Sheet 11

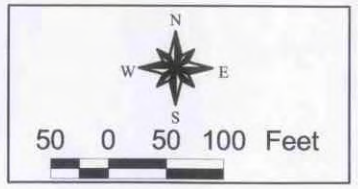
Map Sheet
Project Site
500 0 500 Feet

Locator Map

Salvation Army Divisional Camp and Retreat



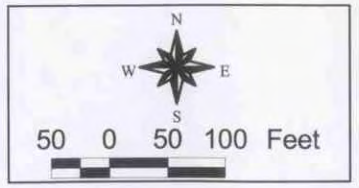




Biological Resources Map

Salvation Army Divisional Camp and Retreat Proposed Plan

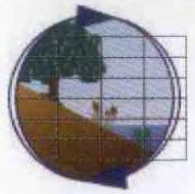
Figure 2a
Sheet 1



Biological Resources Map

Salvation Army Divisional Camp and Retreat Proposed Plan

Figure 2a
Sheet 2

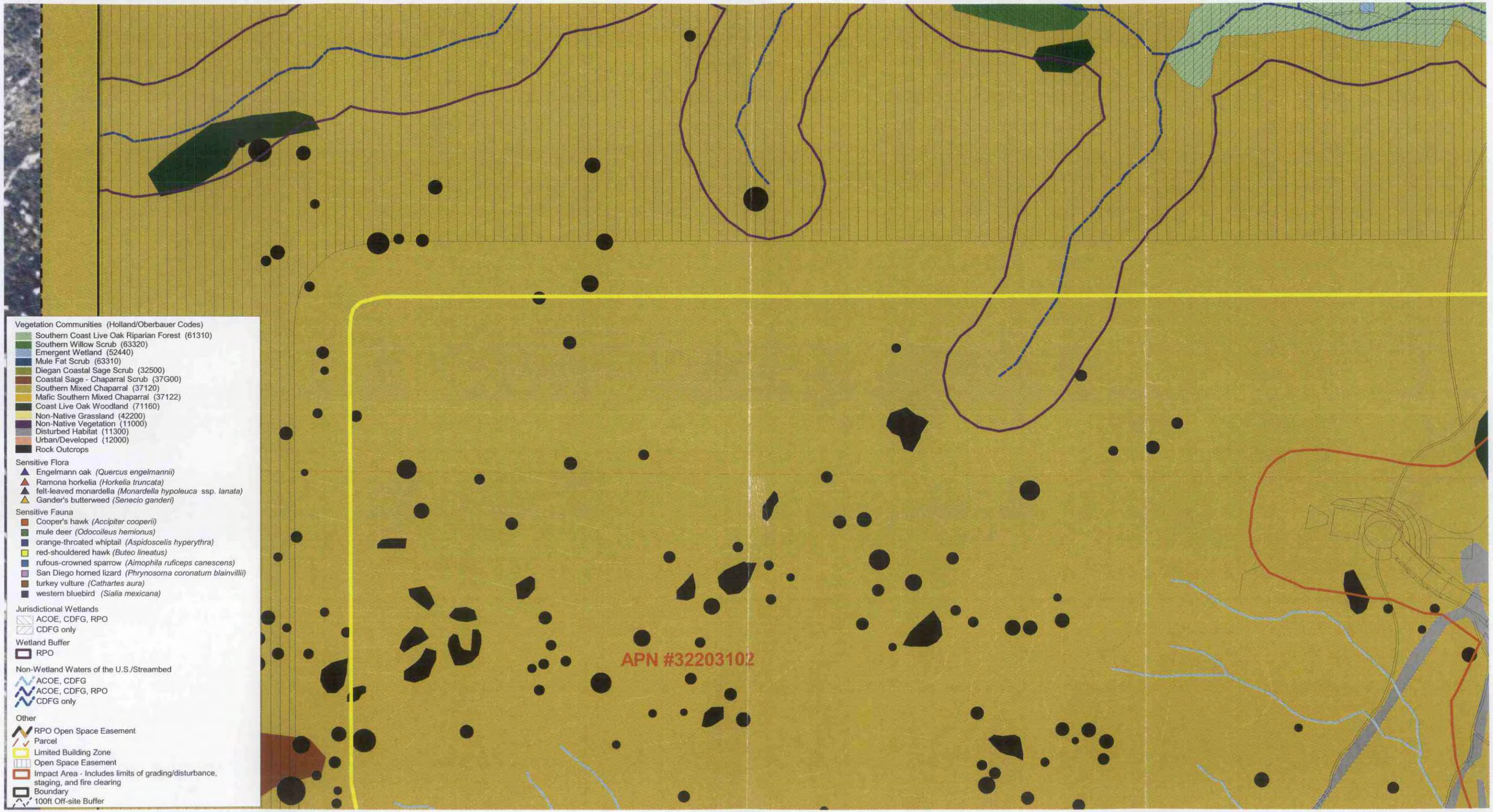


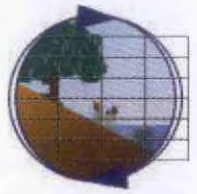
50 0 50 100 Feet

Biological Resources Map

Salvation Army Divisional Camp and Retreat Proposed Plan

Figure 2a
Sheet 3





50 0 50 100 Feet

Biological Resources Map

Salvation Army Divisional Camp and Retreat Proposed Plan

Figure 2a
Sheet 4

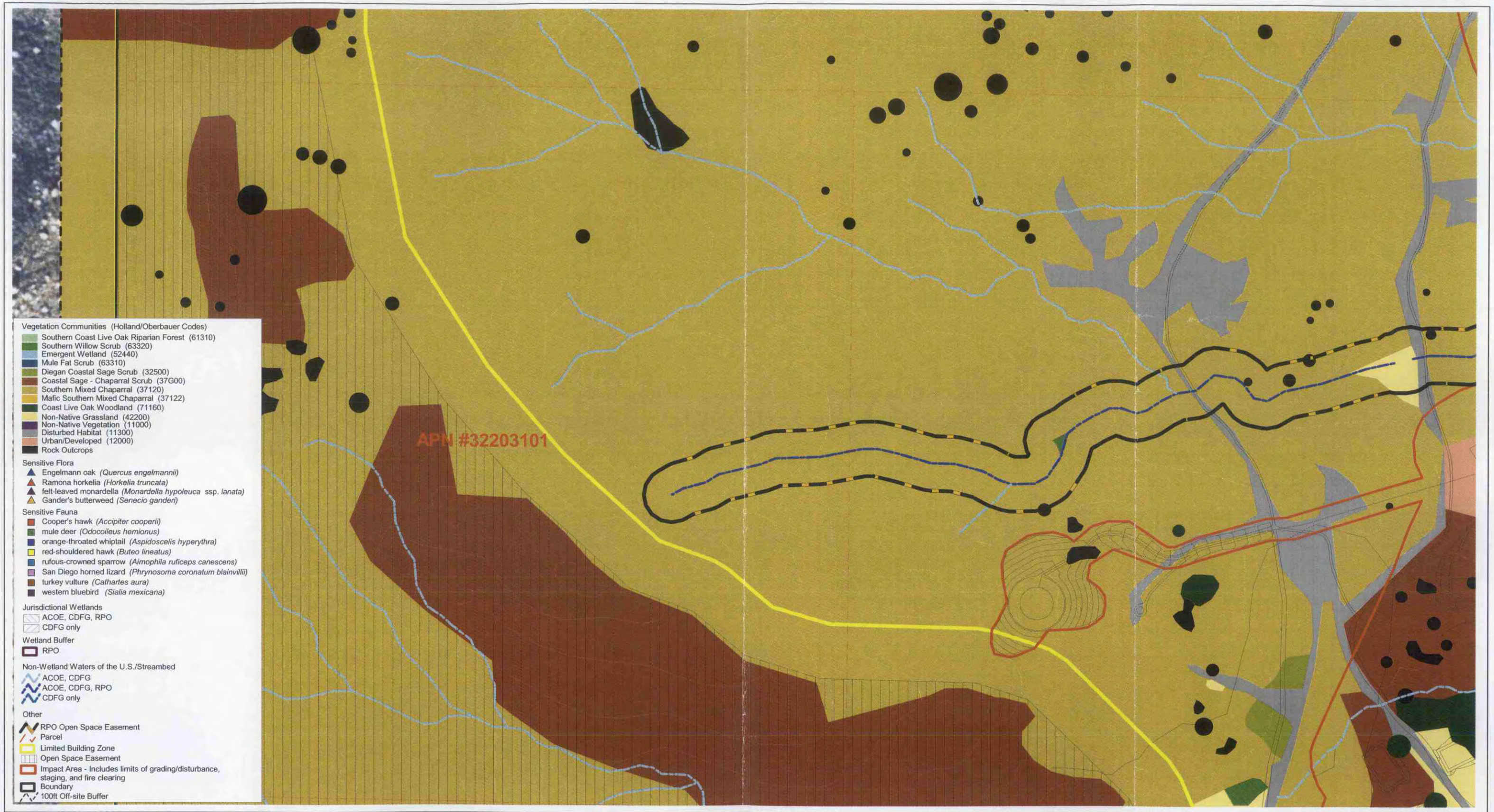
Merkel & Associates, Inc.

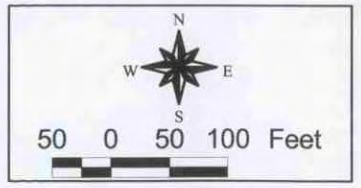
N
W E
S
50 0 50 100 Feet

Biological Resources Map

Salvation Army Divisional Camp and Retreat Proposed Plan

Figure 2a
Sheet 5

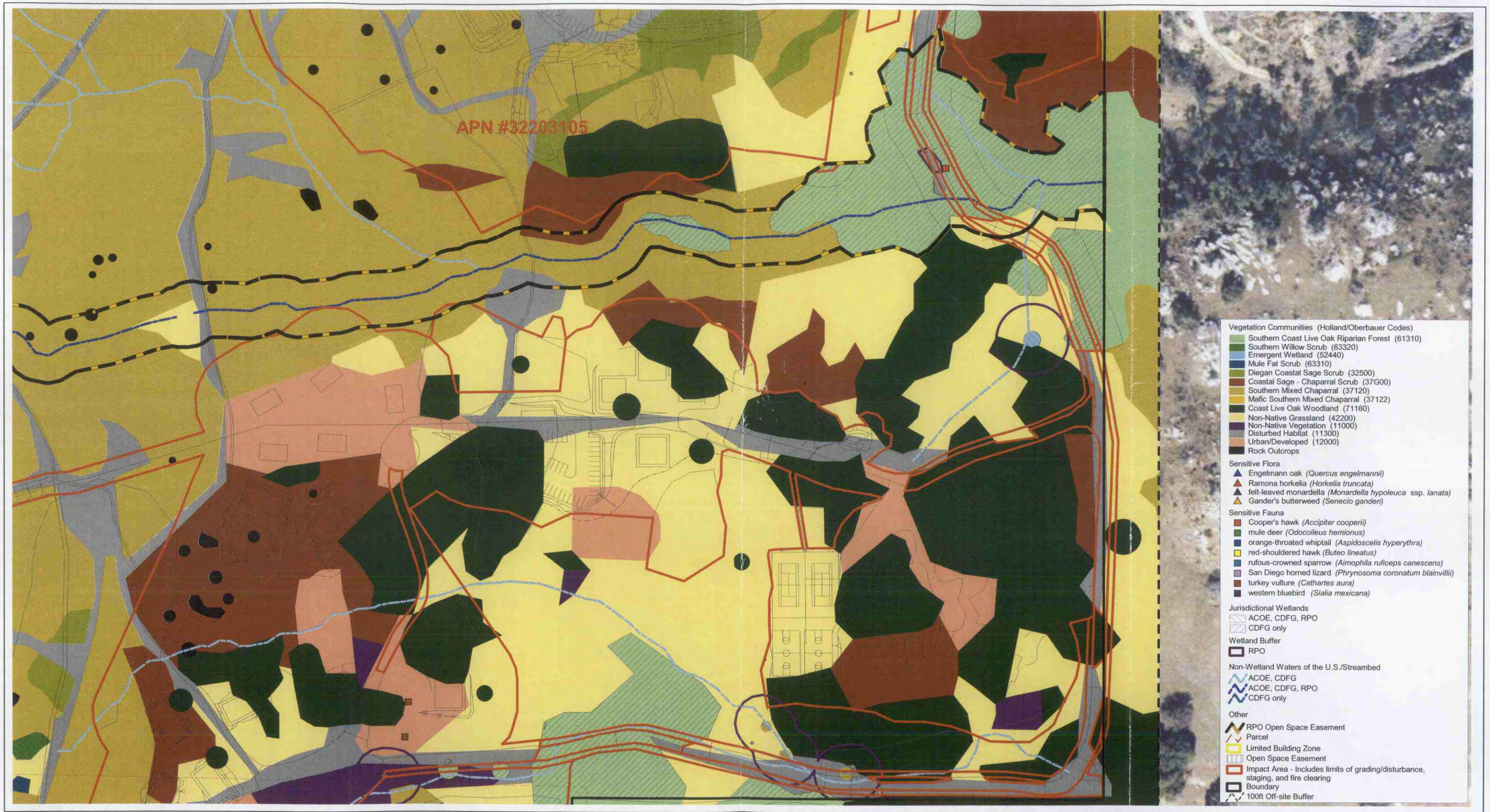


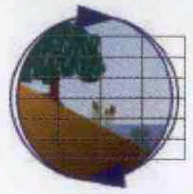


Biological Resources Map

Salvation Army Divisional Camp and Retreat Proposed Plan

Figure 2a
Sheet 6





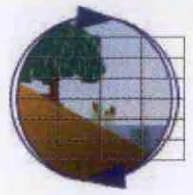
N W E S

50 0 50 100 Feet

Biological Resources Map

Salvation Army Divisional Camp and Retreat Proposed Plan

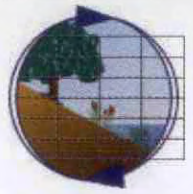
Figure 2a
Sheet 7



N
W E
S
50 0 50 100 Feet

Biological Resources Map
Salvation Army Divisional Camp and Retreat Proposed Plan

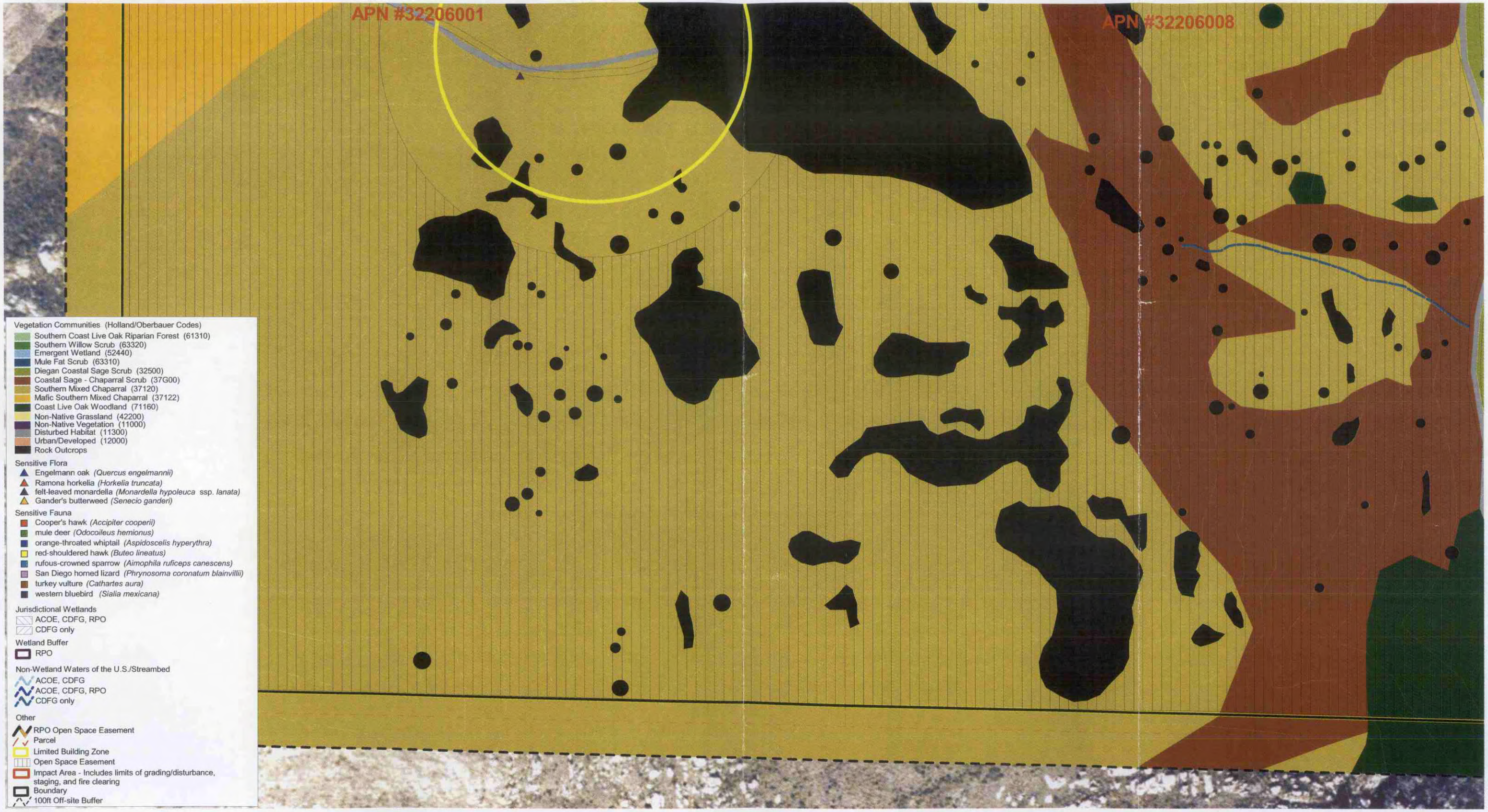
Figure 2a
Sheet 8

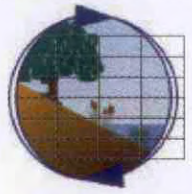


Biological Resources Map

Salvation Army Divisional Camp and Retreat Proposed Plan

Figure 2a
Sheet 9



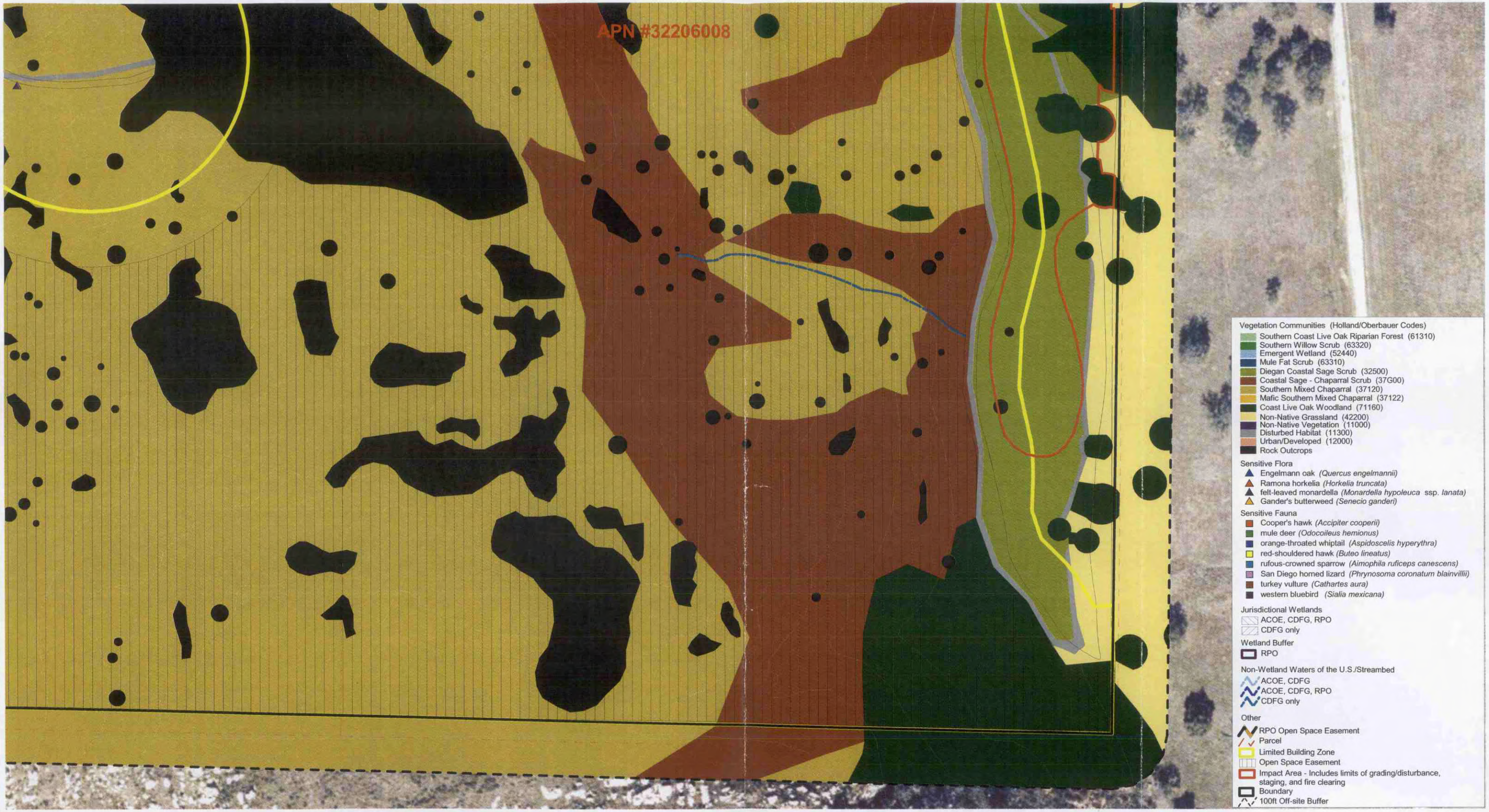


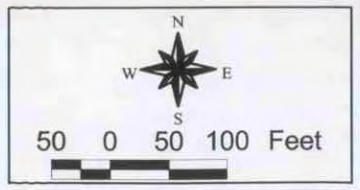
50 0 50 100 Feet

Biological Resources Map

Salvation Army Divisional Camp and Retreat Proposed Plan

Figure 2a
Sheet 10

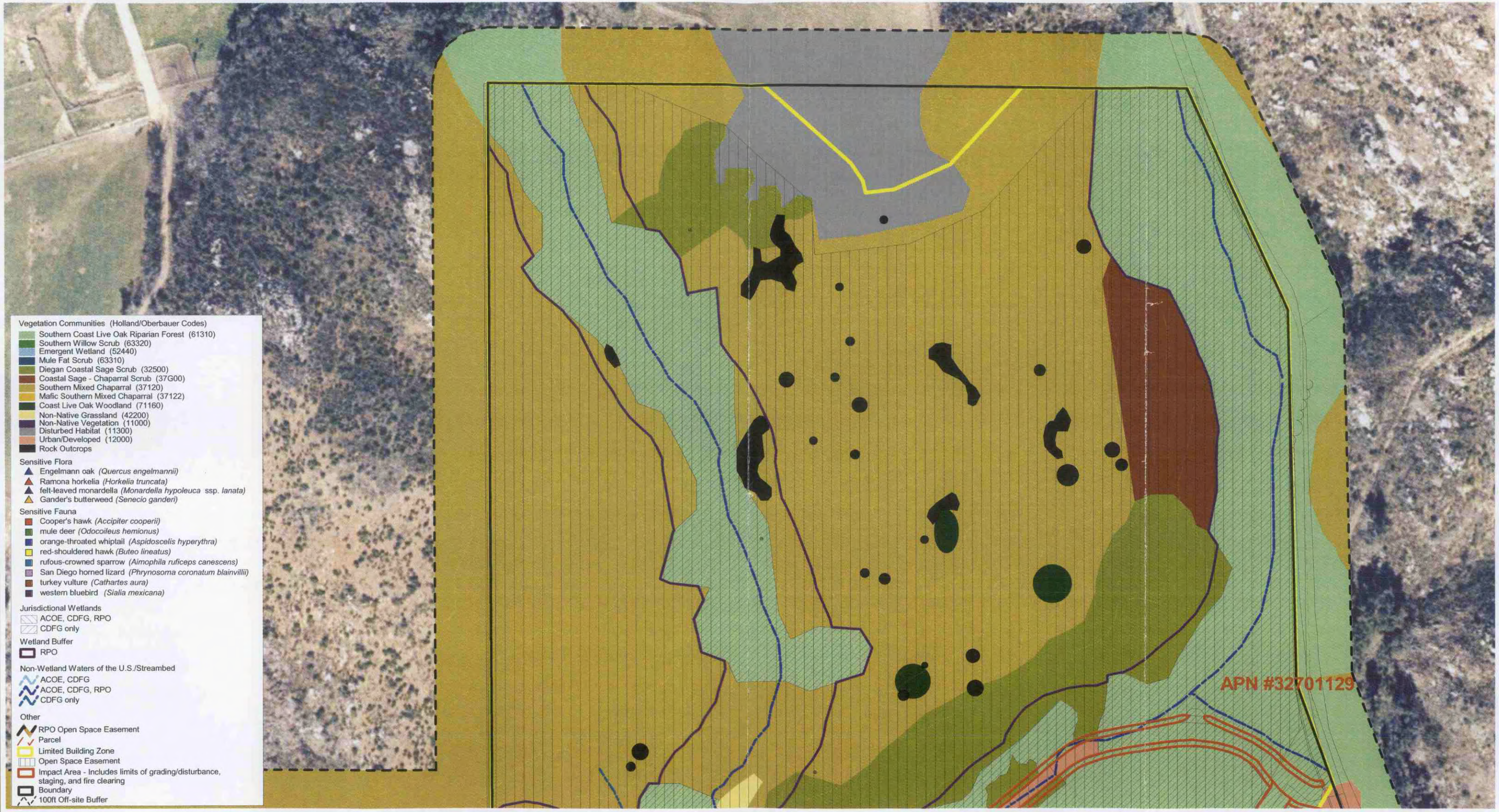


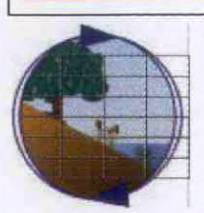


Biological Resources Map

Salvation Army Divisional Camp and Retreat Proposed Plan

Figure 2a
Sheet 11

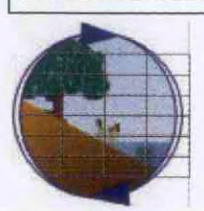


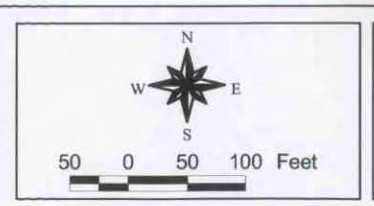


N
W E
S
50 0 50 100 Feet

Biological Resources Map
Salvation Army Divisional Camp and Retreat Alternative 1

Figure 2b
Sheet 1

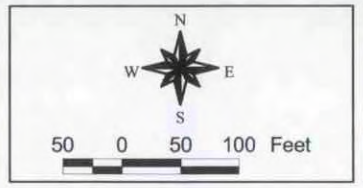




Biological Resources Map

Salvation Army Divisional Camp and Retreat Alternative 1

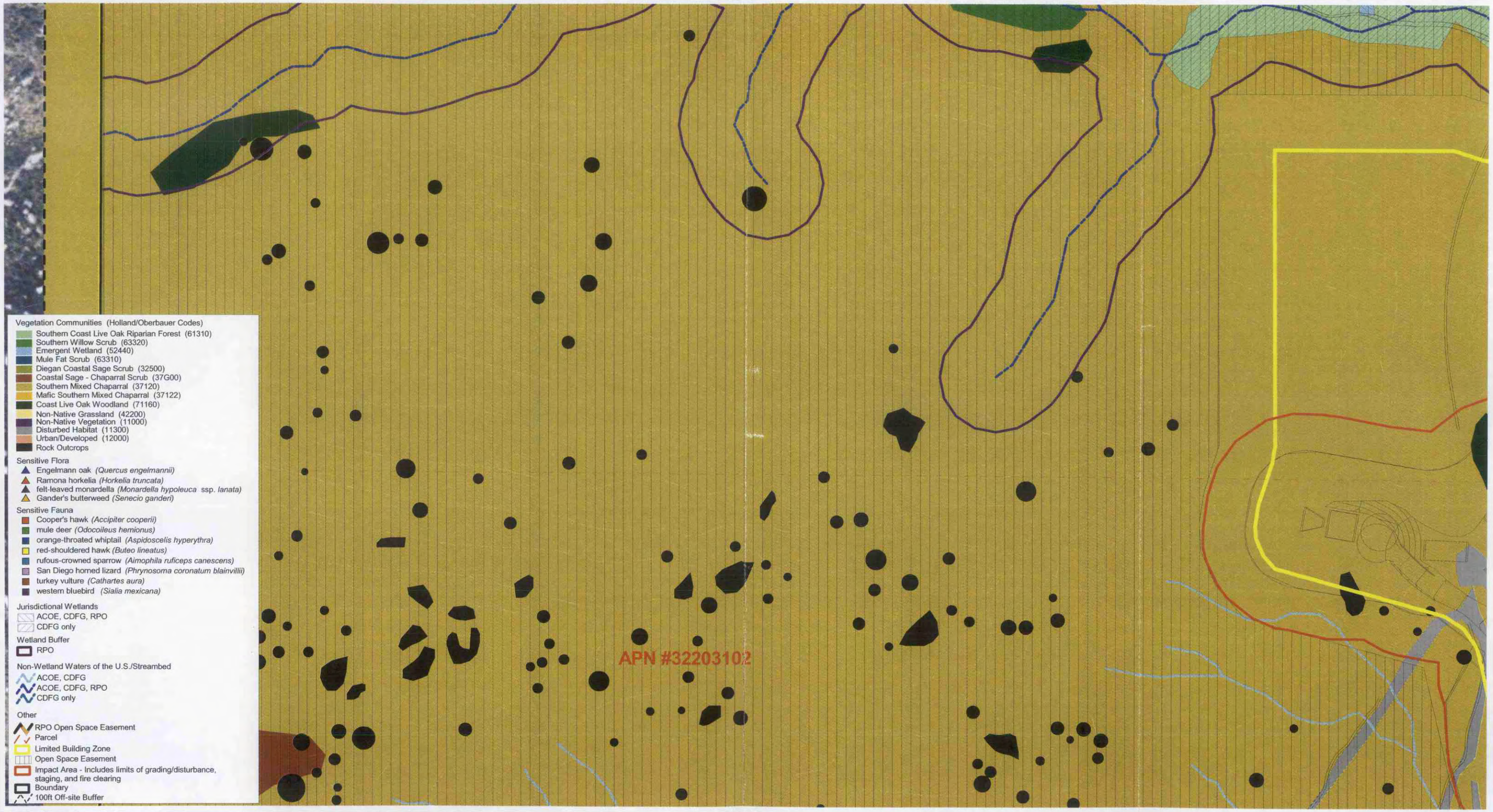
Figure 2b
Sheet 2

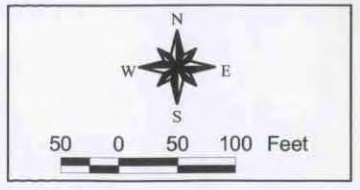


Biological Resources Map

Salvation Army Divisional Camp and Retreat Alternative 1

Figure 2b
Sheet 3

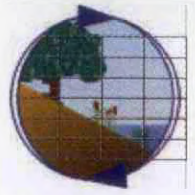


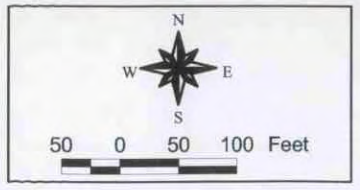


Biological Resources Map

Salvation Army Divisional Camp and Retreat Alternative 1

Figure 2b
Sheet 4

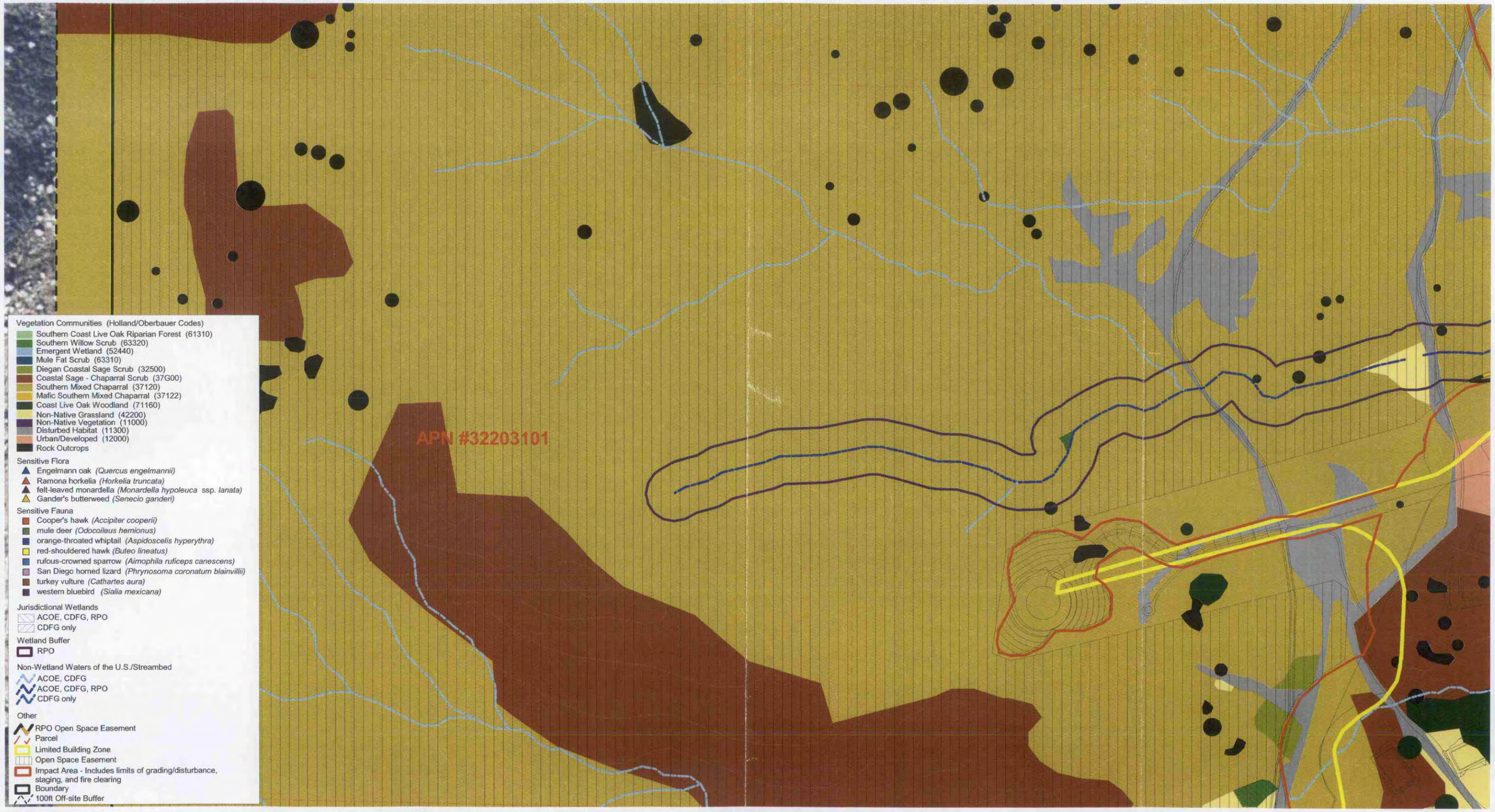


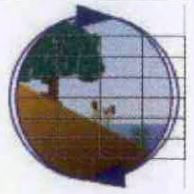


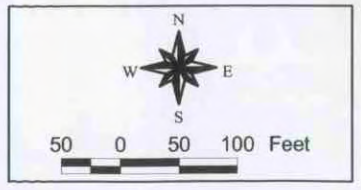
Biological Resources Map

Salvation Army Divisional Camp and Retreat Alternative 1

Figure 2b
Sheet 5



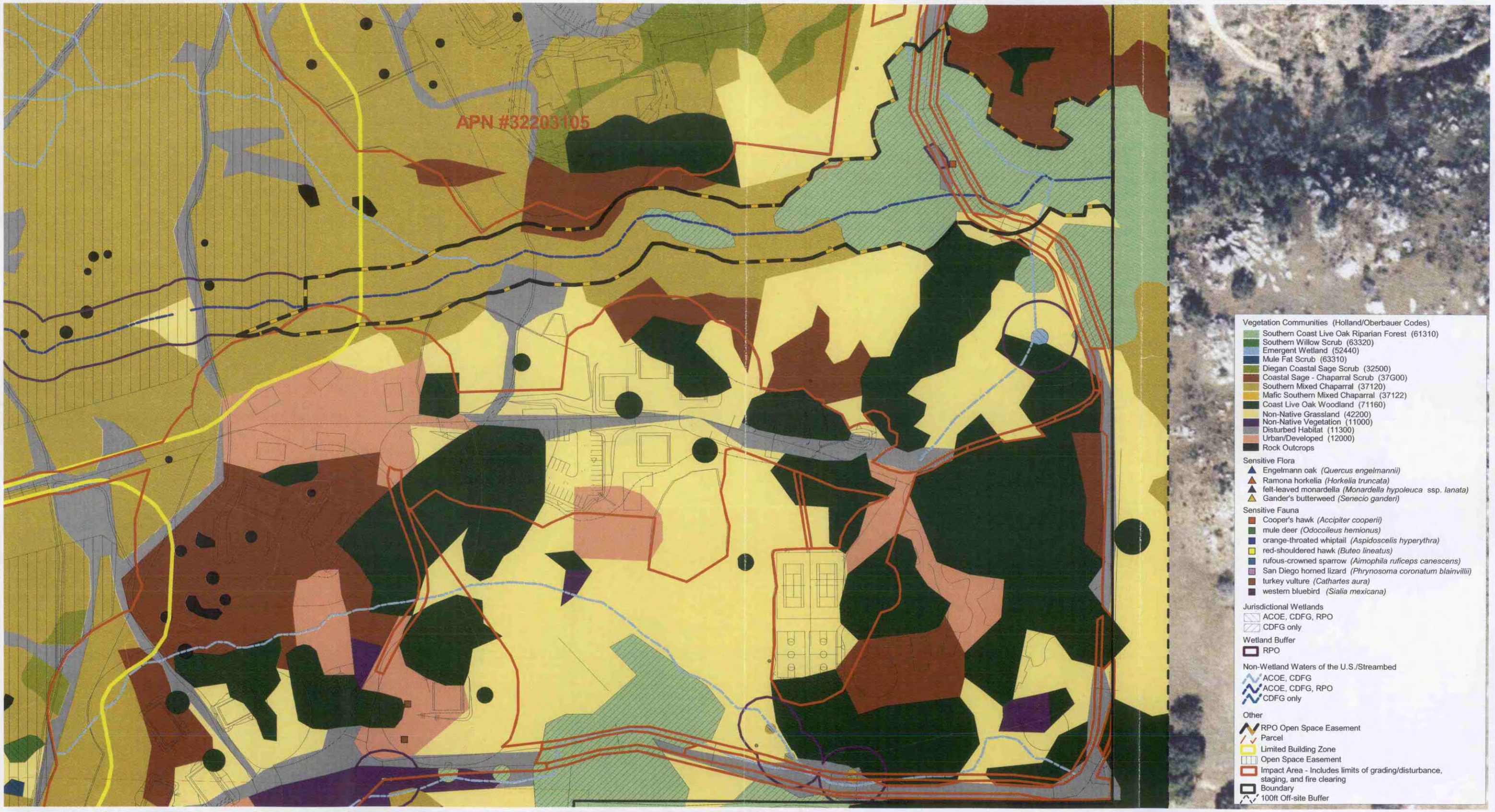


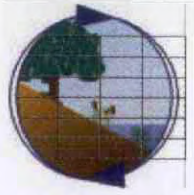


Biological Resources Map

Salvation Army Divisional Camp and Retreat Alternative 1

Figure 2b
Sheet 6



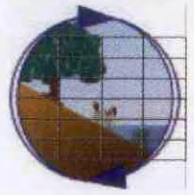


N
W E
S
50 0 50 100 Feet

Biological Resources Map

Salvation Army Divisional Camp and Retreat Alternative 1

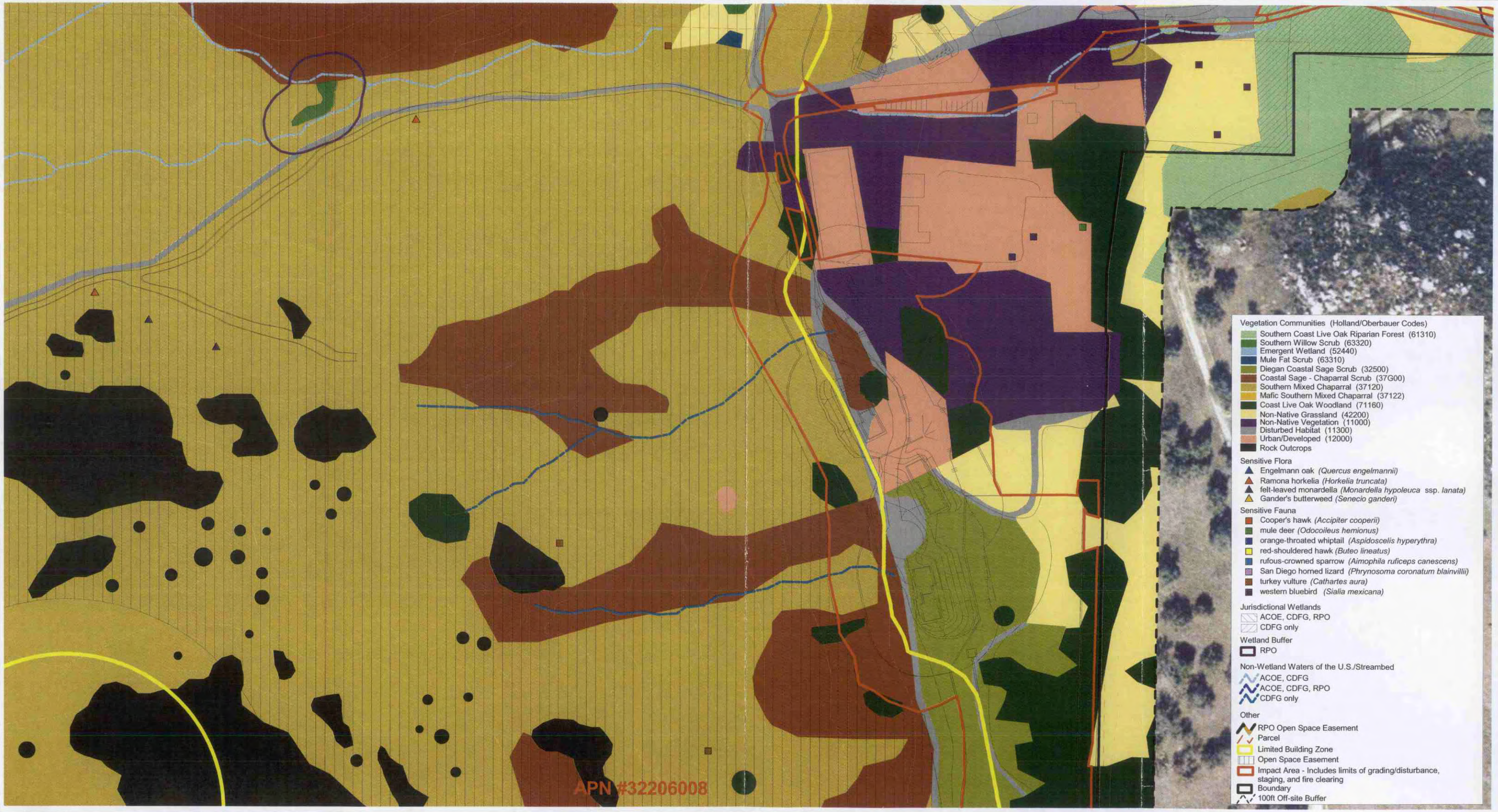
Figure 2b
Sheet 7



N
W E
S
50 0 50 100 Feet

Biological Resources Map
Salvation Army Divisional Camp and Retreat Alternative 1

Figure 2b
Sheet 8

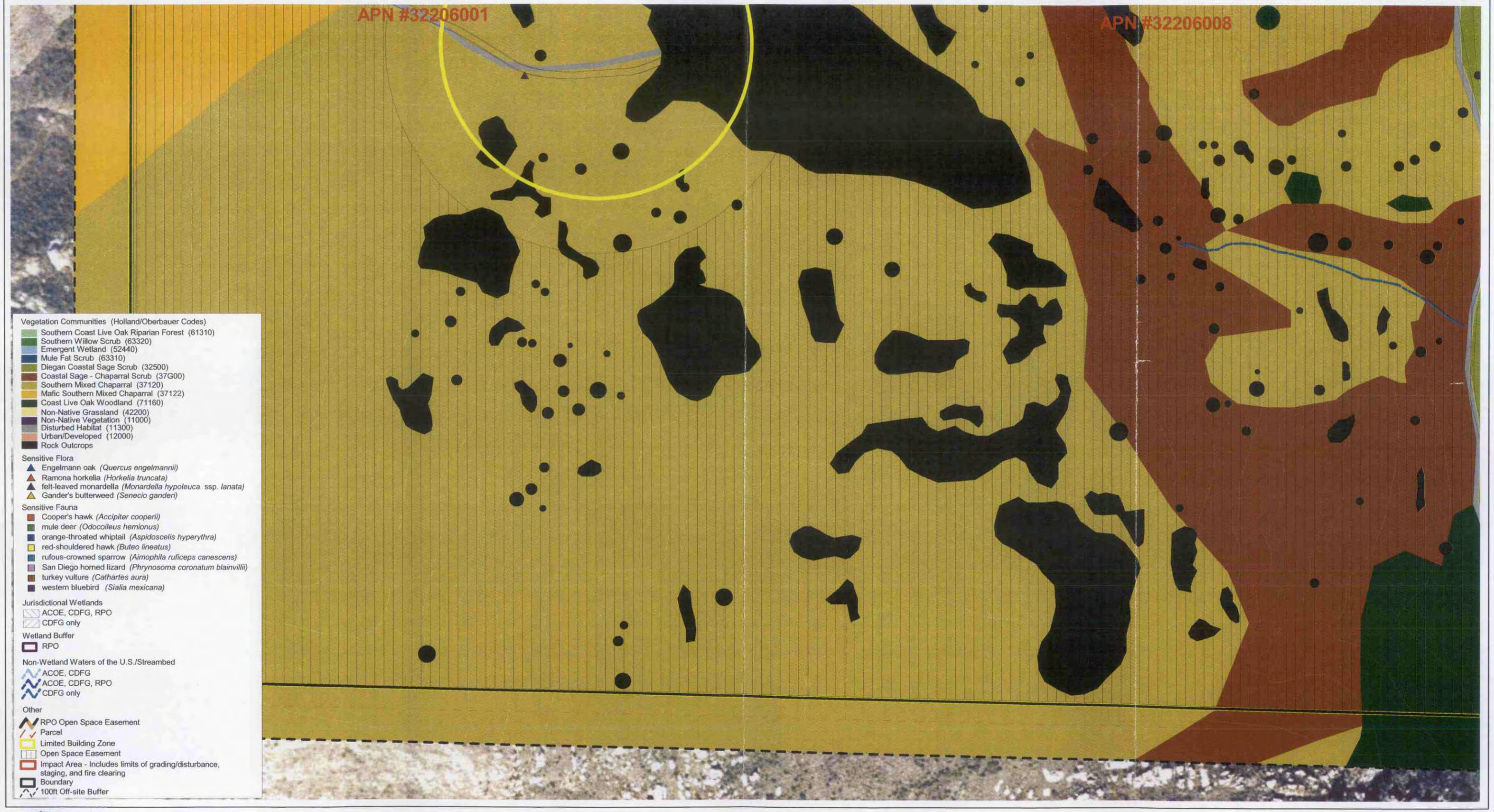


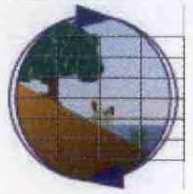
N
W E
S
50 0 50 100 Feet

Biological Resources Map

Salvation Army Divisional Camp and Retreat Alternative 1

Figure 2b
Sheet 9



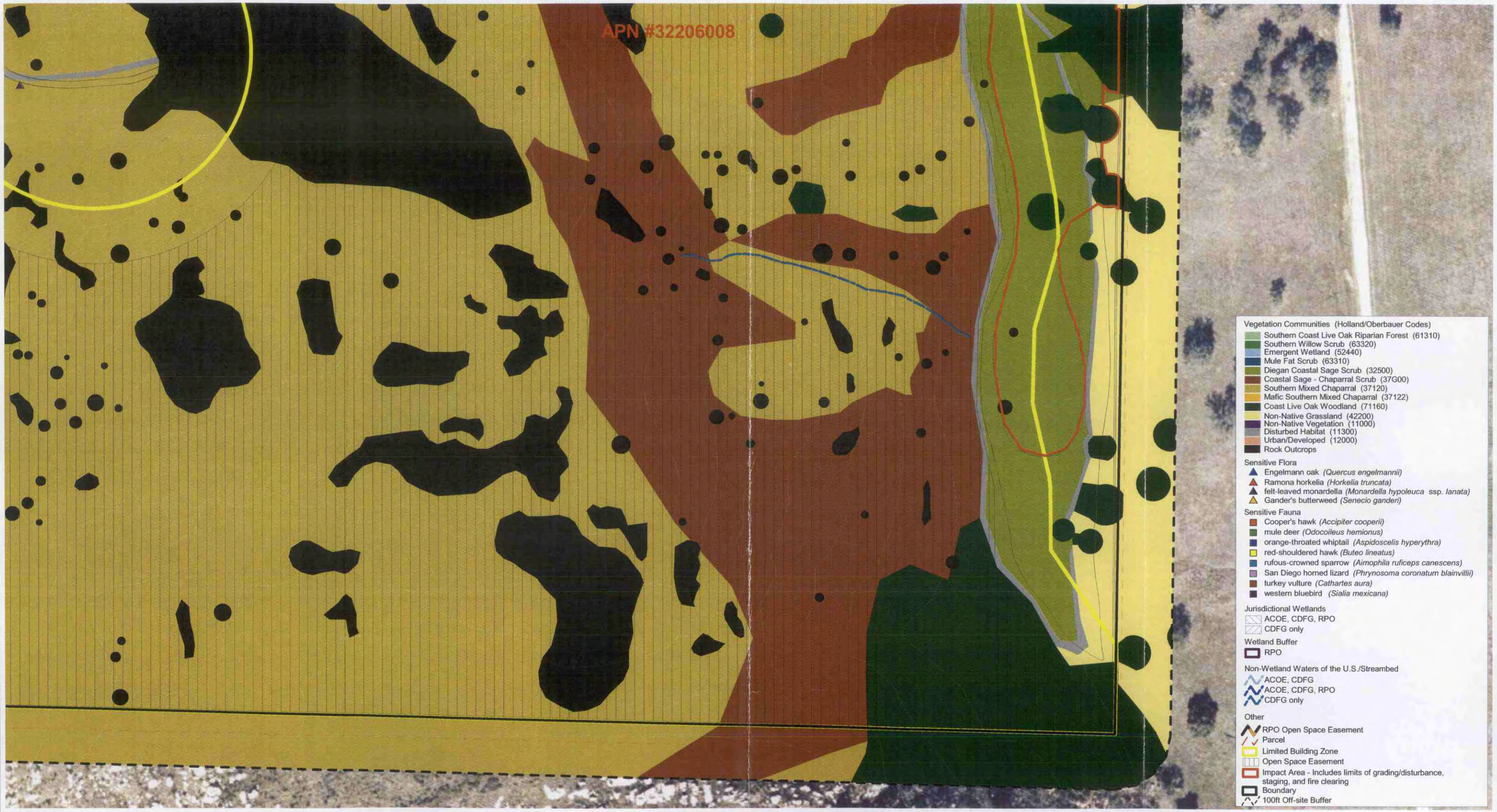


N
W E
S
50 0 50 100 Feet

Biological Resources Map

Salvation Army Divisional Camp and Retreat Alternative 1

Figure 2b
Sheet 10

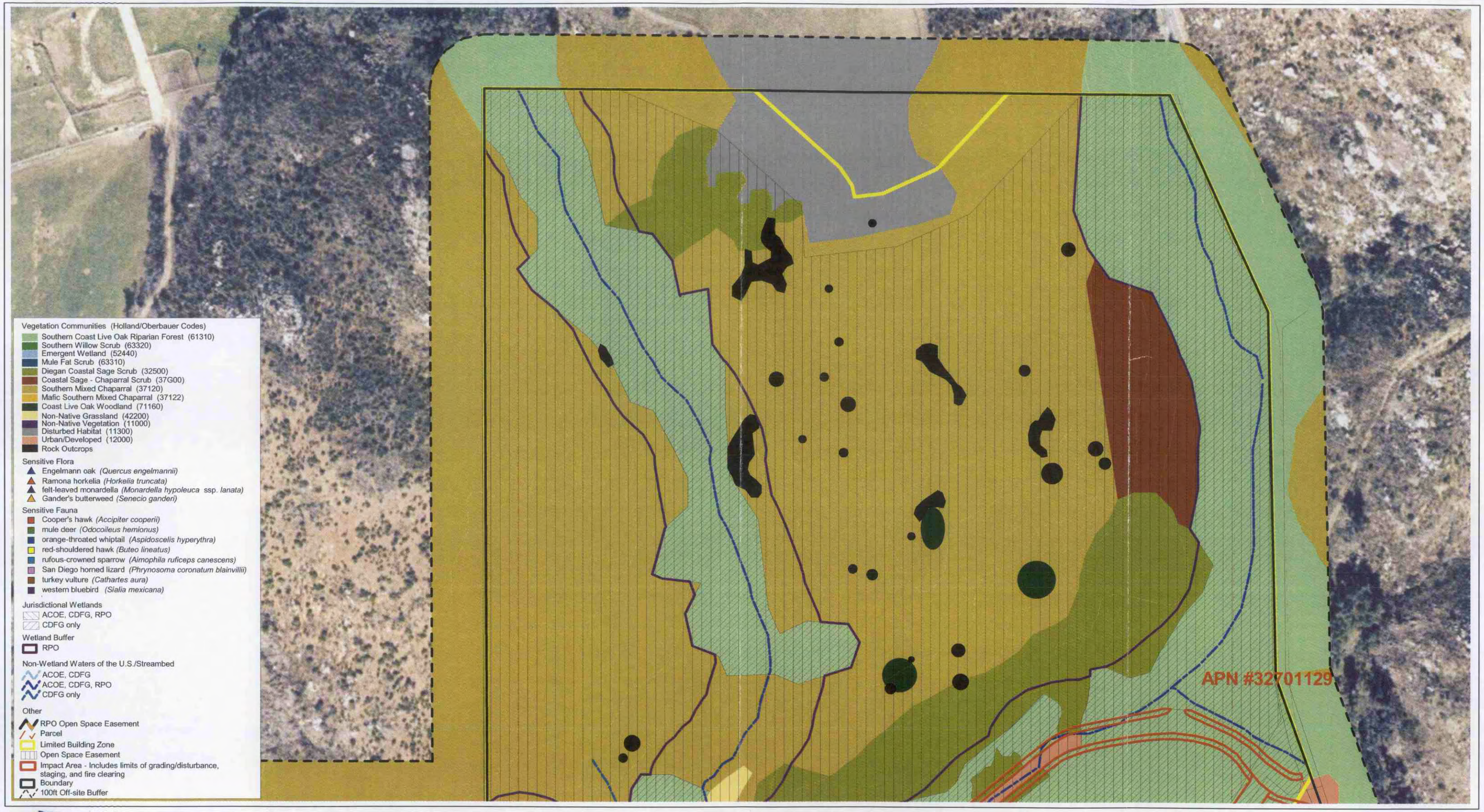


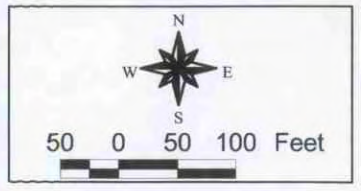
N
W E
S
50 0 50 100 Feet

Biological Resources Map

Salvation Army Divisional Camp and Retreat Alternative 1

Figure 2b
Sheet 11

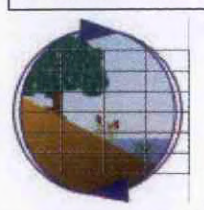


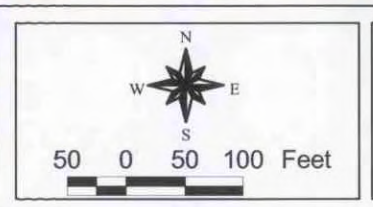


Biological Resources Map

Salvation Army Divisional Camp and Retreat Alternative 2

Figure 2c
Sheet 1

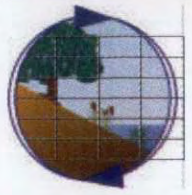




Biological Resources Map

Salvation Army Divisional Camp and Retreat Alternative 2

Figure 2c
Sheet 2

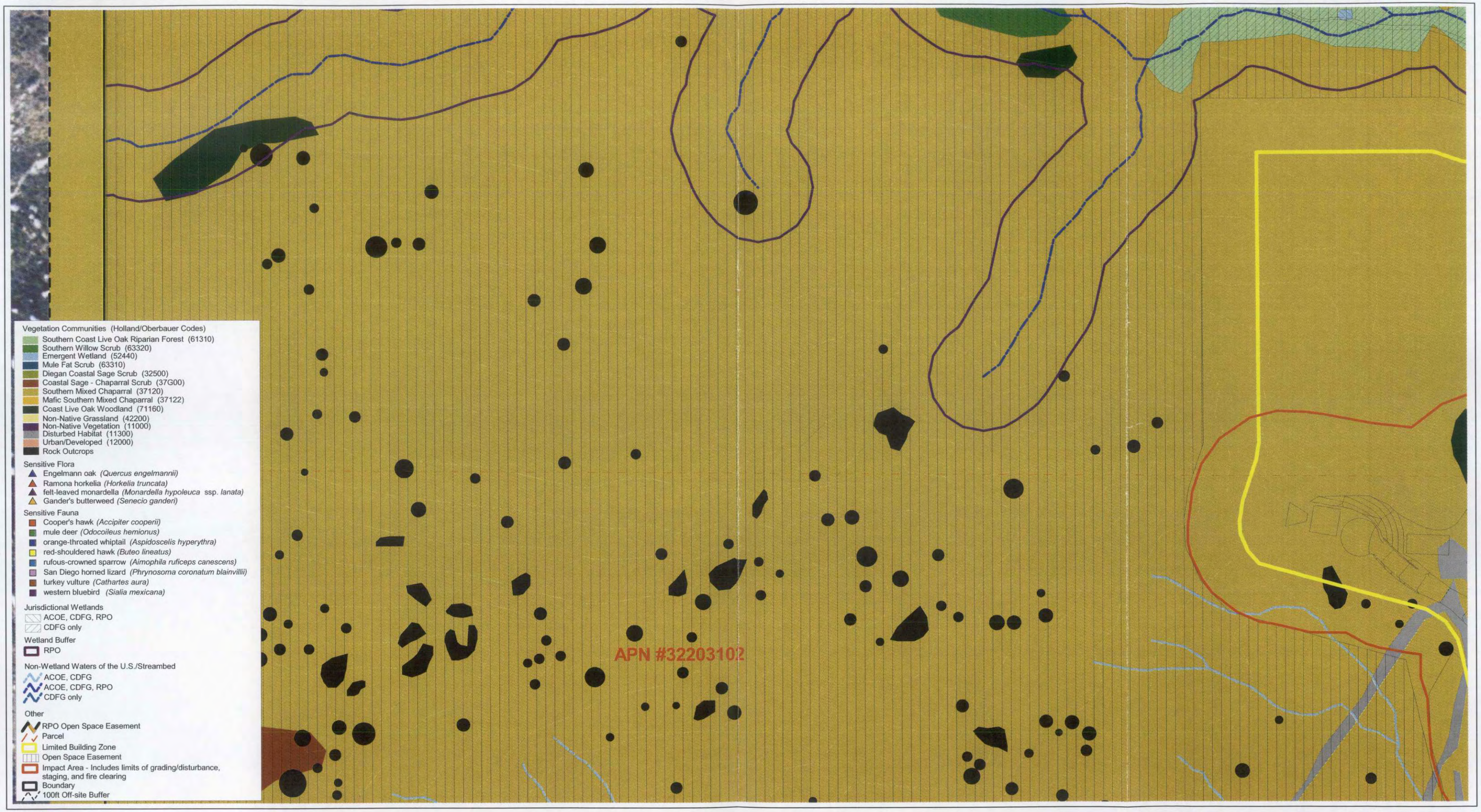


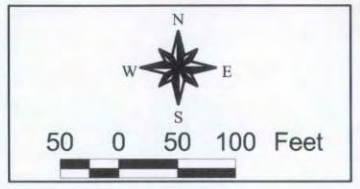
N
W E
S
50 0 50 100 Feet

Biological Resources Map

Salvation Army Divisional Camp and Retreat Alternative 2

Figure 2c
Sheet 3





Biological Resources Map

Salvation Army Divisional Camp and Retreat Alternative 2

Figure 2c
Sheet 4

APN #32701049

Vegetation Communities (Holland/Oberbauer Codes)
- Southern Coast Live Oak Riparian Forest (61310)
- Southern Willow Scrub (63320)
- Emergent Wetland (52440)
- Mule Fat Scrub (63310)
- Diegan Coastal Sage Scrub (32500)
- Coastal Sage - Chaparral Scrub (37G00)
- Southern Mixed Chaparral (37120)
- Mafic Southern Mixed Chaparral (37122)
- Coast Live Oak Woodland (71160)
- Non-Native Grassland (42200)
- Non-Native Vegetation (11000)
- Disturbed Habitat (11300)
- Urban/Developed (12000)
- Rock Outcrops

Sensitive Flora
- Engelmann oak *(Quercus engelmannii)*
- Ramona horkelia *(Horkelia truncata)*
- felt-leaved monardella *(Monardella hypoleuca* ssp. *lanata)*
- Gander's butterweed *(Senecio ganderi)*

Sensitive Fauna
- Cooper's hawk *(Accipiter cooperii)*
- mule deer *(Odocoileus hemionus)*
- orange-throated whiptail *(Aspidoscelis hyperythra)*
- red-shouldered hawk *(Buteo lineatus)*
- rufous-crowned sparrow *(Aimophila ruficeps canescens)*
- San Diego horned lizard *(Phrynosoma coronatum blainvillii)*
- turkey vulture *(Cathartes aura)*
- western bluebird *(Sialia mexicana)*

Jurisdictional Wetlands
- ACOE, CDFG, RPO
- CDFG only

Wetland Buffer
- RPO

Non-Wetland Waters of the U.S./Streambed
- ACOE, CDFG
- ACOE, CDFG, RPO
- CDFG only

Other
- RPO Open Space Easement
- Parcel
- Limited Building Zone
- Open Space Easement
- Impact Area - Includes limits of grading/disturbance, staging, and fire clearing
- Boundary
- 100ft Off-site Buffer

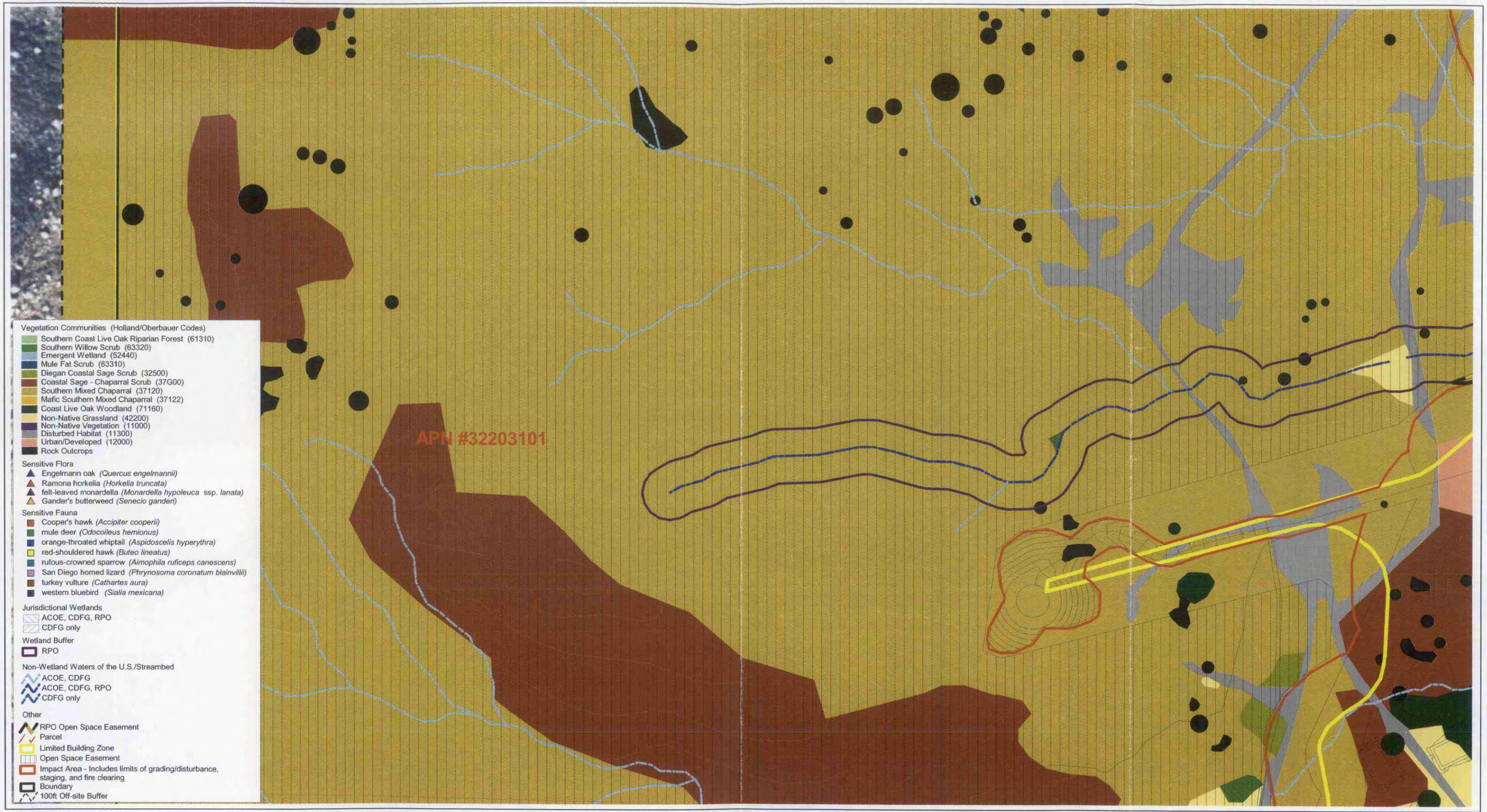
N W E S

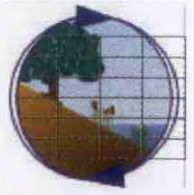
50 0 50 100 Feet

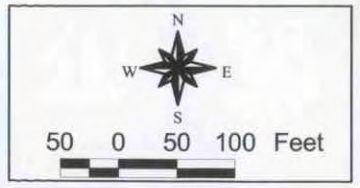
Biological Resources Map

Salvation Army Divisional Camp and Retreat Alternative 2

Figure 2c
Sheet 5



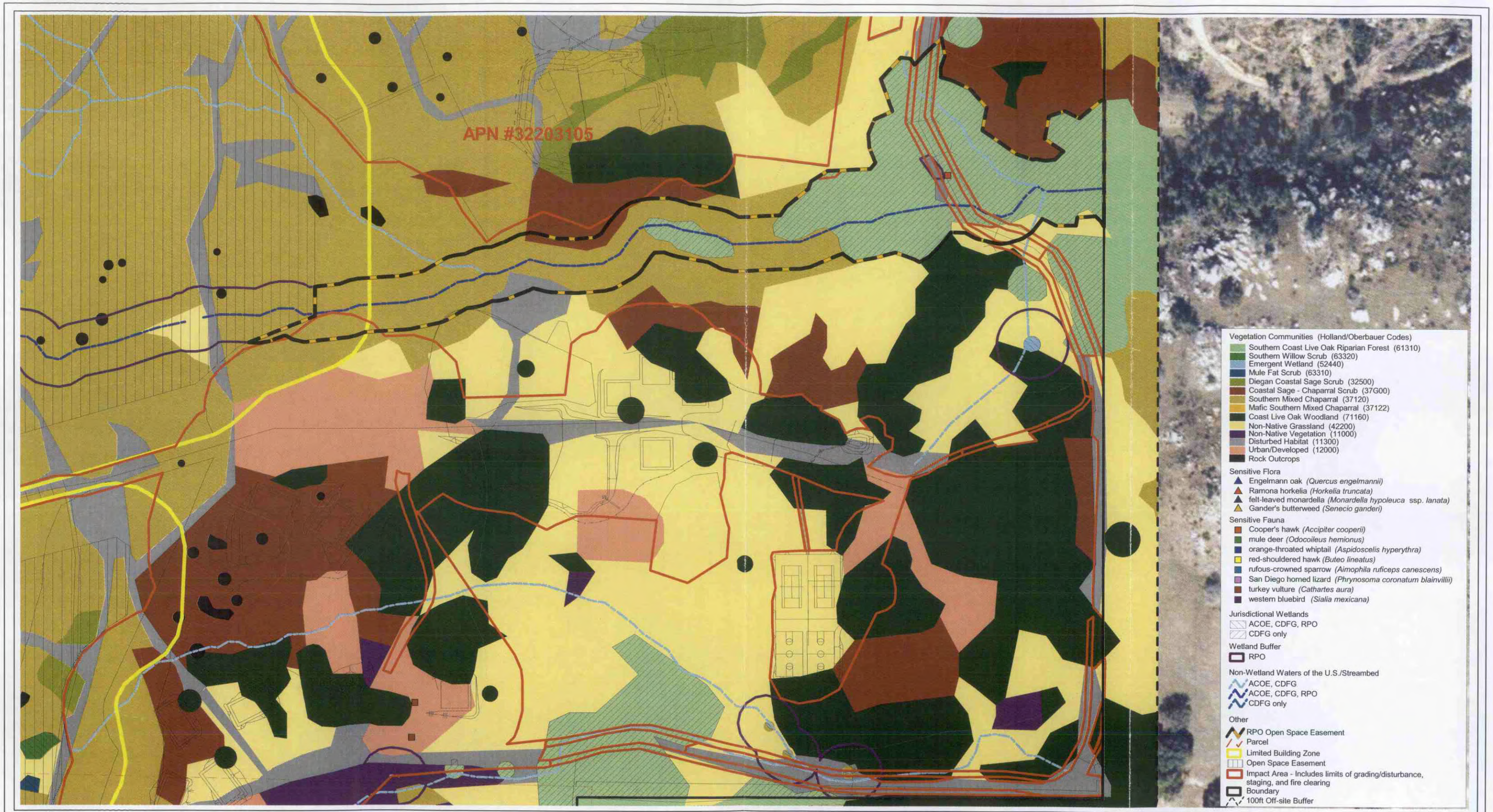




Biological Resources Map

Salvation Army Divisional Camp and Retreat Alternative 2

Figure 2c
Sheet 6

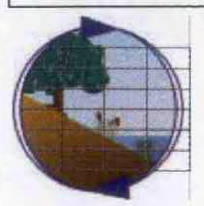


N
W E
S
50 0 50 100 Feet

Biological Resources Map

Salvation Army Divisional Camp and Retreat Alternative 2

Figure 2c
Sheet 7

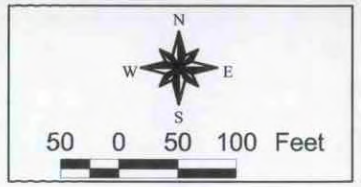


N
W E
S
50 0 50 100 Feet

Biological Resources Map

Salvation Army Divisional Camp and Retreat Alternative 2

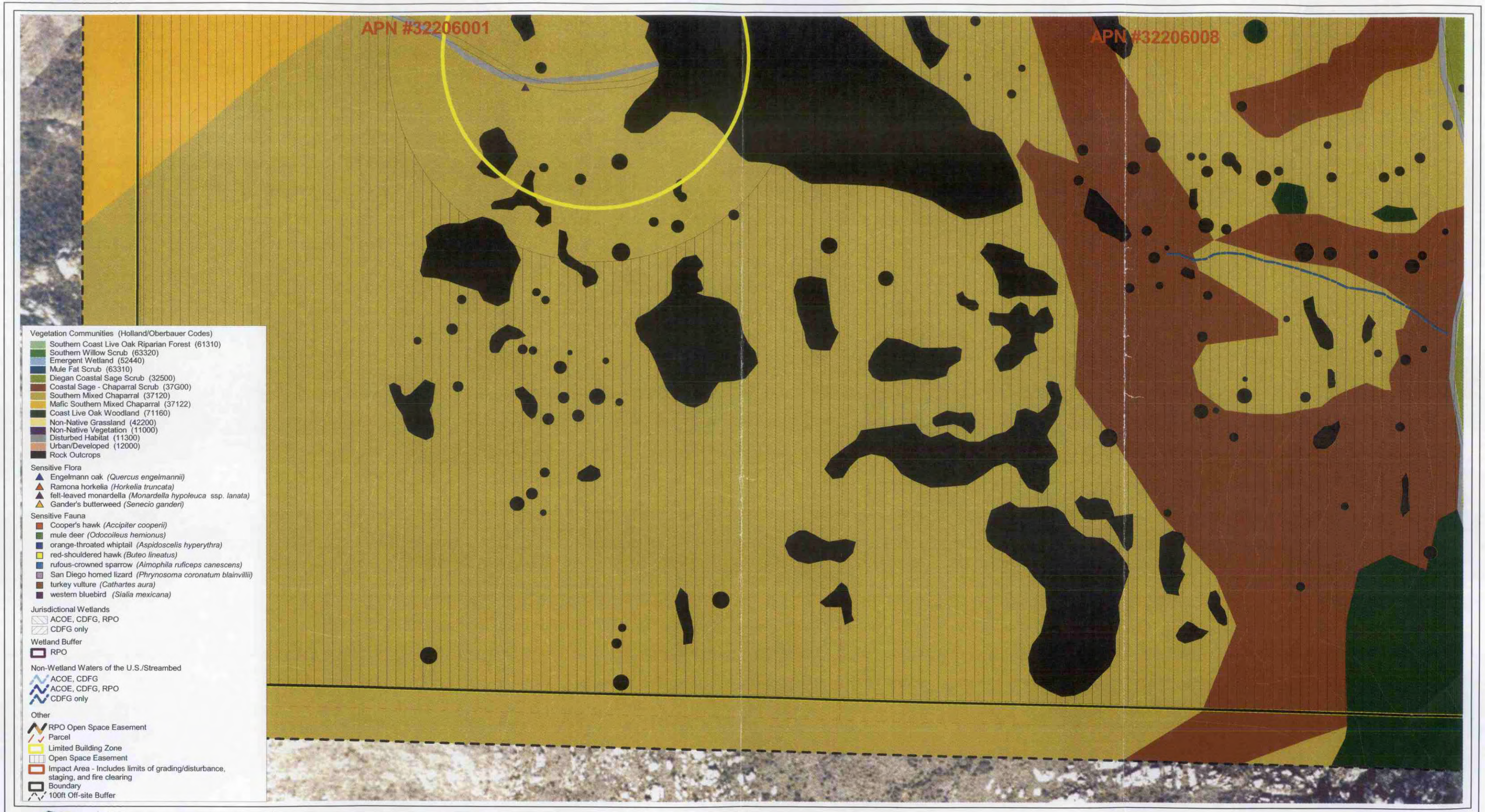
Figure 2c
Sheet 8

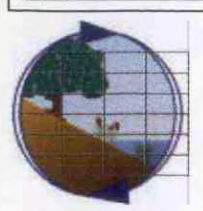


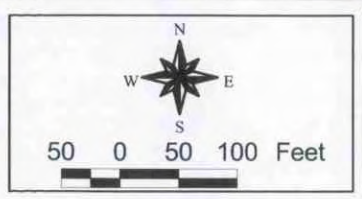
Biological Resources Map

Salvation Army Divisional Camp and Retreat Alternative 2

Figure 2c
Sheet 9



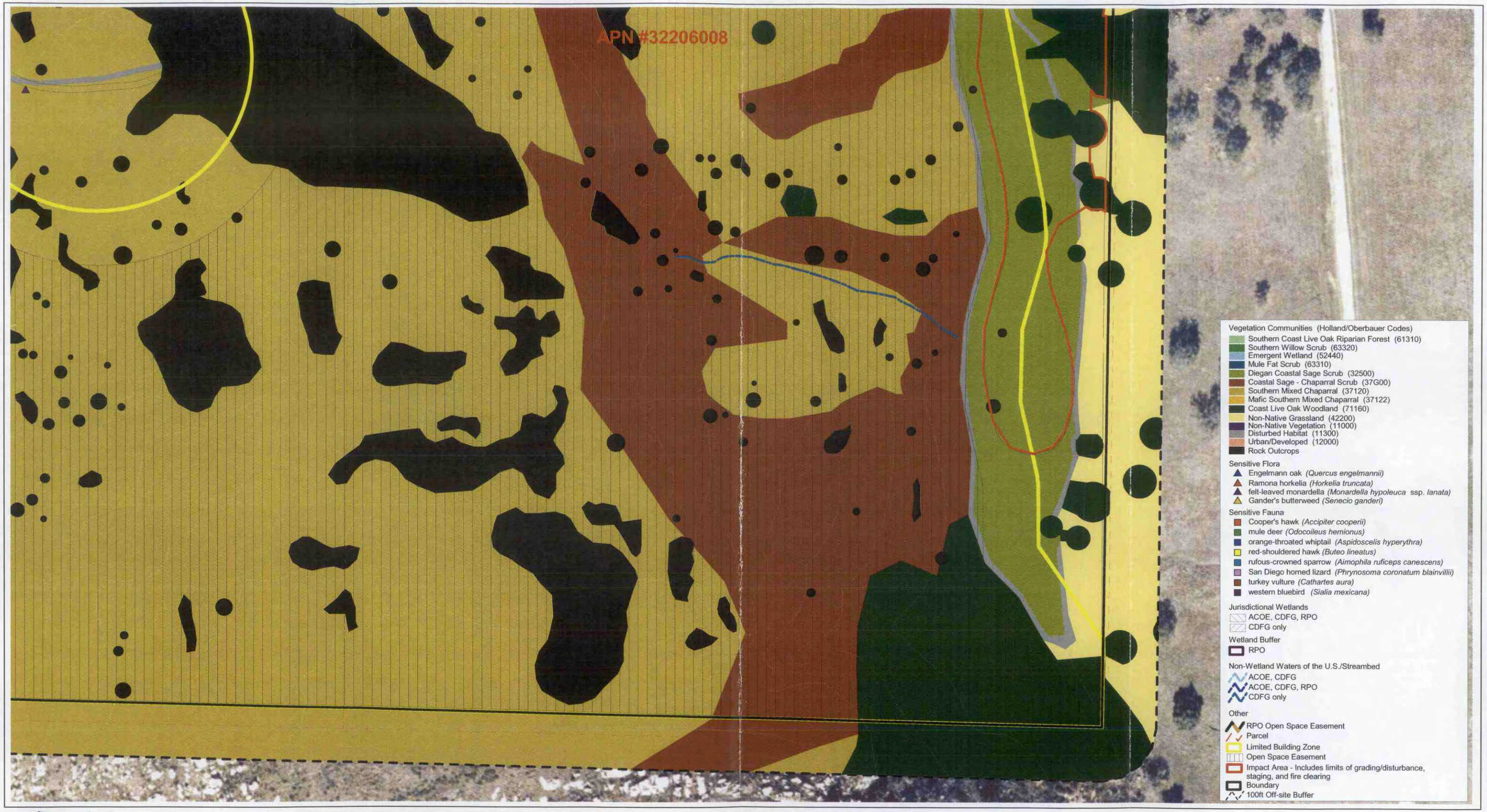


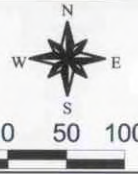


Biological Resources Map

Salvation Army Divisional Camp and Retreat Alternative 2

Figure 2c
Sheet 10





50 0 50 100 Feet

Biological Resources Map

Salvation Army Divisional Camp and Retreat Alternative 2

Figure 2c
Sheet 11

APPENDIX 1. BUTTERFLY SPECIES OBSERVED

Common Name	Scientific Name

BUTTERFLIES

Papilionidae (Swallowtail Butterflies)

Pale Swallowtail	*Papilio eurymedon*
Western Tiger Swallowtail	*Papilio rutulus*

Pieridae (White, Orange-tip, and Sulfur Butterflies)

Sara Orangetip	*Anthocharis sara*

Nymphalidae (Brush-footed Butterflies)

California Ringlet	*Coenonympha californica*
Mourning Cloak	*Nymphalis antiopa*
West Coast Lady	*Vanessa anabella*
Painted Lady	*Vanessa cardui*
Lorquin's Admiral	*Basilarchia lorquini*

Lycaenidae (Hairstreak, Copper, and Blue Butterflies)

Perplexing Hairstreak	*Callophrys perplexa*
Southern Blue	*Glaucopsyche lygdamus australis*
Sonoran Blue	*Philotes sonorensis*
Acmon Blue	*Icaricia acmon*
Brown Elfin	*Incisalia augustinus*

Hesperidae (Skipper Butterflies)

Funereal Duskywing	*Erynnis zarucco funeralis*
Mournful Duskywing	*Erynnis tristis*

Riodinidae (Metalmarks)

Behr's Metalmark	*Apodemia mormo virgulti*

Appendix 2

Faunal Checklist of Species Observed*

APPENDIX 2. FAUNAL CHECKLIST OF SPECIES OBSERVED*

Habitat Types:

A = Agricultural Field/Disturbed
D = Diegan Coastal Sage Scrub
R = Riparian Scrub
W = Non-Native Woodland
C = Southern Mixed Chaparral
O = Oak Woodlands
N = Non-Native Grassland
F = Fly Over

Abundance Codes:

A = Abundant: Almost always encountered in moderate to large numbers in suitable habitat and the indicated season.

C = Common: Usually encountered in proper habitat at the given season.

U = Uncommon: Infrequently detected in suitable habitat. May occur in small numbers or only locally in the given season.

R = Rare: Applies to species which are found in very low numbers.

Status Codes: (Birds Only)

M = Migrant: Uses the site for brief periods of time, primarily during the spring and fall months.

R = Year-round resident: Probable breeder on-site or in the vicinity.

S = Spring/summer resident: Probable breeder on-site or in the vicinity.

T = Transient: Uses site regularly but unlikely to breed on-site.

W = Winter visitor: Does not breed locally.

* List includes only those species detcted by Merkel & Associates biologists. Species detected by subconsulants are addressed within their specific reports for Golden Eagle and Stephen's Kangaroo Rat trapping (see attcahed) and have not been included here as M&A biologists were not the observers.

Common Name	Scientific Name	Habitat	Abundance	Status
BUTTERFLIES				
Papilionidae (Swallowtails)				
Pale Swallowtail	*Papilio eurymedon*	O	C	
Western Tiger Swallowtail	*Papilio rutulus*	O	C	
Pieridae (Whites and Sulfurs)				
Felder's Orangetip	*Anthocharis cethura*	D,C,A,N	U	
Pacific (=Sara) Orangetip	*Anthocharis sara*	D,C,A,N	C	
Lycaenidae (Gossamer-wing Butterflies)				
Perplexing Hairstreak	*Callophrys perplexa*	D,C	C	
Silvery (=Southern) Blue	*Glaucopsyche lygdamus*	D	C	
Gray Hairstreak	*Strymon melinus*	C	U	
Riodinidae (Metalmarks)				
Behr's Metalmark	*Apodemia virgulti*	D,C	C	
Nymphalidae (Brush-footed Butterflies)				
Gabb's Checkerspot	*Chlosyne gabbii*	D,C	C	
California Sister	*Adelpha bredowii*	O	U	
California Ringlet	*Coenonympha californica*	A,C	C	
Mourning Cloak	*Nymphalis antiopa*	O	U	
West Coast Lady	*Vanessa anabella*	A,C,N	C	
Lorquin's Admiral	*Limenitis lorquini*	O	U	
Hesperiidae (Skippers)				
Funereal Duskywing	*Erynnis funeralis*	D,C	C	
REPTILES				
Phrynosomatidae				
Granite Spiny Lizard	*Sceloporus orcutti*	C	U	
Western Fence Lizard	*Sceloporus occidentalis*	A,D,C	C	
Side-blotched Lizard	*Uta stansburiana*	A,D,C	C	
San Diego Horned Lizard	*Phrynosoma coronatum blainvillii*	D,C	U	
Colubridae (Colubrids)				
California Striped Racer	*Masticophis lateralis lateralis*	C	U	
BIRDS				
Cathartidae (American Vultures)				
Turkey Vulture	*Cathartes aura*	F	U	R/T?

Common Name	Scientific Name	Habitat	Abundance	Status
Accipitridae (Hawks, Old World Vultures, and Harriers)				
Cooper's Hawk	*Accipiter cooperii*	O	U	R
Red-shouldered Hawk	*Buteo lineatus*	O	C	R
Red-tailed Hawk	*Buteo jamaicensis*	F	C	R
Falconidae (Caracaras and Falcons)				
American Kestrel	*Falco sparverius*	A,N	C	R
Phasianidae (Quails, Pheasants, and Relatives)				
California Quail	*Callipepla californica*	A,D,C,N	C	R
Columbidae (Pigeons and Doves)				
Mourning Dove	*Zenaida macroura*	A,D,C,O	C	R
Tytonidae (Barn Owls)				
Barn Owl	*Tyto alba*	O	R	R
Strigidae (Typical Owls)				
Western Screech-Owl	*Otus kennicottii*	O	U	R
Trochilidae (Hummingbirds)				
Anna's Hummingbird	*Calypte anna*	A,D,C,W	C	R
Costa's Hummingbird	*Calypte costae*	C	U	M
Rufous Hummingbird	*Selasphorus rufus*	C	U	M
Allen's Hummingbird	*Selasphorus sasin*	C	U	M
Picidae (Woodpeckers and Wrynecks)				
Acorn Woodpecker	*Melanerpes formicivorous*	O	C	R
Nuttall's Woodpecker	*Picoides nuttallii*	O,R,W	U	R
Northern Flicker	*Colaptes auratus*	O	C	R
Tyrannidae (Tyrant Flycatchers)				
Pacific-slope Flycatcher	*Empidonax difficilis*	O	C	S
Black Phoebe	*Sayornis nigricans*	O,A,N	C	R
Ash-throated Flycatcher	*Myiarchus cinerascens*	A,N	U	S
Western Kingbird	*Tyrannus verticalis*	A,N	C	S
Corvidae (Jays, Magpies, and Crows)				
Western Scrub-Jay	*Aphelocoma californica*	D,C	A	R
American Crow	*Corvus brachyrhynchos*	A,O	C	R
Common Raven	*Corvus corax*	A,O	C	R
Paridae (Chickadees and Titmice)				
Oak Titmouse	*Parus inornatus*	O	C	R

Common Name	Scientific Name	Habitat	Abundance	Status
Aegithalidae (Bushtit)				
Bushtit	*Psaltriparus minimus*	D,C	C	R
Troglodytidae (Wrens)				
Canyon Wren	*Catherpes mexicanus*	C	U	R
Bewick's Wren	*Thryomanes bewickii*	D	C	R
House Wren	*Troglodytes aedon*	O	C	R
Muscicapidae (Old World Warblers, Gnatcatchers, Kinglets, Thrushes, Bluebirds, and Wrentit)				
Western Bluebird	*Sialia mexicana*	N	C	R
Hermit Thrush	*Catharus guttatus*	C	U	W
Wrentit	*Chamea fasciniata*	C	C	R
American Robin	*Turdus migratorius*	N,W	R	M
Mimidae (Mockingbirds and Thrashers)				
California Thrasher	*Toxostoma redivivum*	C	U	R
Ptilogonatidae (Silky Flycatchers)				
Phainopepla	*Phainopepla nitens*	O	C	S
Sturnidae (Starlings)				
European Starling	*Sturnus vulgaris*	A,O	C	R
Vireonidae (Typical Vireos)				
Warbling Vireo	*Vireo gilvus*	O	U	M/S?
Emberizidae (Warblers, Sparrows, Blackbirds and Relatives)				
Orange -crowned Warbler	*Vermivora celata*	O	U	S
Nashville Warbler	*Vermivora ruficapilla*	O	U	M
Common Yellowthroat	*Geothlypis trichas*	O,R	C	R
Wilson's Warbler	*Wilsonia pusilla*	O,R	U	M/S
Black-headed Grosbeak	*Pheucticus melanocephalus*	O	U	S
Lazuli Bunting	*Passerina amoena*	C,N	U	S
Spotted Towhee	*Pipilo maculatus*	D,C,O	A	R
California Towhee	*Pipilo crissalis*	D,C	A	R
So. Cal. Rufous-crowned Sparrow	*Aimophila ruficeps canescens*	C	U	R
Lark Sparrow	*Chondestes grammacus*	O	U	R
Song Sparrow	*Melospiza melodia*	O,R	C	R
Fox Sparrow	*Passerella iliaca*	C	C	W
Dark-eyed Junco	*Junco hyemalis*	O,N,W	U	W
Fringillidae (Finches)				
House Finch	*Carpodacus mexicanus*	A,W,C,D	A	R
Lesser Goldfinch	*Carduelis psaltria*	A,W,C	A	R

Common Name	Scientific Name	Habitat	Abundance	Status
Psittacidae (Parakeets)				
Green Parakeet	*Aratinga holochbra*	F	R	?
MAMMALS				
Leporidae (Rabbits and Hares)				
Desert Cottontail	*Sylvilagus audubonii*	D,C,N	C	
Sciuridae (Squirrels, Chipmunks, and Marmots)				
California Ground Squirrel	*Spermophilus beecheyi*	A,N	A	
Geomyidae (Pocket Gophers)				
Botta's Pocket Gopher	*Thomomys bottae*	D,A,N	C	
Muridae (Rats, mice, and voles)				
Dusky-footed Woodrat	*Neotoma fuscipes*	C,O	C	
Canidae (Foxes, Wolves, and Relatives)				
Coyote	*Canis latrans*	D,C,O	C	
Gray Fox	*Urocyon cinereoargenteus*	O	U	
Felidae (Cats)				
Bobcat	*Felis rufus*	O,N	C	
Cervidae (Deer, Elk, and Relatives)				
Mule Deer	*Odocoileus hemionus*	C,O	C	

Appendix 3

Plant and Animal Sensitivity Guidelines

APPENDIX 3. Plant and Animal Sensitivity Guidelines

Listings by USFWS and CDFG carry regulatory authority (except FSC), while other listings herein are generally advisory in nature and serve to monitor and inform.

FEDERALLY LISTED AND CANDIDATE SPECIES

FE	Federal Endangered Species	Listed as Endangered by the federal government under the Endangered Species Act of 1973. Taxa that are in danger of becoming extinct throughout all or a significant portion of their range.
FT	Federal Threatened Species	Listed as Threatened by the federal government under the Endangered Species Act of 1973. Taxa which are likely to become endangered in the foreseeable future in the absence of special protection.
FSC	Former Federal Special Concern Species	The USFWS no longer maintains this list. It previously applied to taxa for which information may exist to possibly support listing, but for which substantial biological information is lacking to support a proposed rule. It is currently a "term-of-art" applied to taxa whose conservation status may be of concern to the USFWS, but have no official federal status. It is provided in this document for information purposes only.
FPE	Federal Proposed Endangered	Taxa which have been officially proposed for federal endangered status, but the biological information to make such a determination is currently under review.
FPT	Federal Proposed Threatened	Taxa which have been officially proposed for federal endangered status, but the biological information to make such a determination is currently under review.

CALIFORNIA LISTED AND CANDIDATE SPECIES

SE	California (state) Endangered Species	A native California taxa which is in serious danger of becoming extinct throughout all or a significant portion of its range (Fish & Game Code 2062).
ST	California (state) Threatened Species	A native California taxa which, although not presently threatened with extinction, is likely to become an endangered species in the foreseeable future in the absence of special protection and management efforts (Fish & Game Code 2067).
Fully Protected		Taxa which fall under special protection within the Fish & Game Codes (3511-birds, 4700-mammals, 5050-

		reptiles and amphibians, 5515-fish). Fully protected and protected species may not be taken or possessed without a permit from CDFG.
CSC	CDFG Species of Special Concern	Taxa for which sufficient information exists which warrants concern over that species status and may warrant future listing as threatened or endangered. CDFG designates species as CSC because of declining population levels, limited ranges, and/or continuing threats which have made them vulnerable to extinction. Protective status falls under State Government Code 66474.
SA	California Special Animals	Term refers to all taxa the CNDDB is interested in tracking regardless of status or legal protection.

Taxa listed as Special Animals fall into one or more of the following categories:

- Officially listed or proposed for listing under the state or federal ESA.
- State or federal candidate for possible listing
- Taxa which meet the criteria for listing, even if not currently included on any list, as described in Section 15380 of the CEQA Guidelines
- Taxa considered by CDFG to be a CSC
- Taxa that are biologically rare, very restricted in distribution, declining throughout their range, or have a critical, vulnerable stage in their life cycle that warrants monitoring
- Populations in California that may be on the periphery of a taxon's range, but are threatened with extirpation in California
- Taxa closely associated with a habitat that is declining in California at an alarming rate (*e.g.*, wetlands, riparian, old growth forests, desert aquatic systems, native grasslands, vernal pools, etc.)
- Taxa designated as a special status, sensitive, or declining species by other state or federal agencies, or non-governmental organization (NGO)

CALIFORNIA NATIVE PLANT SOCIETY

List 1B:	Plants rare, threatened, or endangered in California or elsewhere
List 2:	Plants rare or endangered in California, but more common elsewhere.
List 3:	Plants about which more information is needed.
List 4:	Plants of limited distribution.

A "?" under Rarity/Endangerment/Distribution is given when information to allocate a code is incomplete.

Appendix 4

Local Sensitive Plant Species Presence and Status

Appendix 4. Local sensitive plant species presence and status

Scientific Name	Common Name	Habitat*	Federal Status	State Status	CNPS	MSCP Status	Site Status	Probability of Occurrence/ Reason for Absence
Acanthomintha ilicifolia	San Diego Thorn-mint	Chprl, CoScr, VFGrs, VnPls/clay	FT	SE	1B	NE Covered	Present locally, absent on-site	Low to none, lack of suitable clay soils
Baccharis vanessae	Encinitas Baccharis	Chprl (sandstone)	FT	SE	1B	NE Covered	Present locally, absent on-site	Low to none, species absent despite botanical surveys
Brodiaea orcuttii	Orcutt's Brodiaea	CCFrs, Chprl, CmWld, Medws, VFGrs, VnPls/clay	None	None	1B	Covered	Present locally, absent on-site	Low to none, species absent despite botanical surveys in appropriate habitat
Ceanothus cyaneus	Lakeside Lilac	CCFrs, Chprl	None	None	1B	NE Covered	Present locally, absent on-site	Optimal soil type (acid igenous) absent from site
Chamaebatia australis	Southern Mountain Misery	Chprl	None	None	4	None	Present locally, absent on-site	Low, species grows in thickets and is not difficult to locate but was not recorded on-site
Chorizanthe leptotheca	Peninsular Spineflower	Chprl, oftentimes on steep slopes	None	None	4	None	Present locally, absent on-site	Low, lack of open loamy areas within chaparral
Clarkia delicata	Delicate Clarkia	Chprl, CmWld	None	None	1B	None	Present locally, absent on-site	Low, limited grasslands on-site are disturbed
Harpagonella palmeri	Palmer's Grappling Hook	Chprl, CoScr, VFGrs/clay	None	None	4	None	Present locally, absent on-site	Low to none, lack of suitable clay soils
Horkelia truncata	Ramona Horkelia	Chprl, CmWld/ clay	None	None	1B	None	Present on-site	N/A
Lepechinia cardiophylla	Heart-leaved Pitcher Sage	CCFrs, Chprl, CmWld	None	None	1B	NE Covered	Present locally, absent on-site	Low, species absent despite botanical surveys
Machaeranthera juncea	Rush-like Bristleweed	Chprl, CoScr	None	None	4	None	Present locally, absent on-site	Low, species absent despite botanical surveys and wetland delineation
Monardella hypoleuca lanata	Felt-leaved Monardella	Chprl, CmWld	None	None	1B	Covered	Present on-site	N/A
Polygala cornuta ssp. *fishiae*	Fish's Milkwort	Chprl, CmWld, RpWld	None	None	4	None	Rare in region, absent on-site	Low to none, generally rare in region, even in suitable habitat
Quercus engelmannii	Engelmann Oak	Chprl, CmWld, RpWld, VFGrs	None	None	4	None	Present on-site	N/A
Satureja chandleri	San Miguel Savory	Chprl, CmWld, CoScr, RpWld, VFGrs	None	None	1B	Covered	Present locally, absent on-site	Low, species absent despite botanical surveys
Selaginella cinerascens	Ashy Spike-moss	Chprl, CoScr	None	None	None	None	Present on-site	N/A
Senecio ganderi	Gander's Butterweed	Chprl (burned areas, gabbroic outcrops)	None	Rare	1B	Covered	Present on-site	N/A
Tetracoccus dioicus	Parry's Tetracoccus	Chprl, CoScr	None	None	1B	Covered	Rare in region, absent on-site	Low, species absent despite botanical surveys

FT = Federally Threatened, SE = California ESA Endangered, NE = MSCP Narrow Endemic Species

*Habitat codes are synonymous to those used in the California Native Plant Society's Inventory of Rare and Endangered Vascular Plants of California (Skinner and Pavlik 1994). CCFrs = closed-cone conifer forest, Chprl = chaparral, CoScr = coastal scrub, CmWld = cismontane woodland, Medws = meadows and seeps, RpWld = riparian woodland, VFGrs = valley and foothill grassland, VnPls = vernal pools. For habitat characterization see Skinner and Pavlik 1994.

Appendix 5

Sensitive Vertebrate Species Observed or Potentially Present at the Salvation Army Camp Site

Appendix 5. Local sensitive faunal species presence and status

Common Name	Scientific Name	Habitat	Federal Status	State Status	CDFG Status	MSCP Status	On-site Status	Probability of Occurrence/Reason for Absence
Quino Checkerspot Butterfly	*Euphydryas editha quino*	Open grassland and openings within shrub habitats that support Dwarf Plantain (*Plantago erecta*)	FE	None	SA	NE	Absent	Results of 2001 focused surveys were negative
Hermes Copper	*Lycaena hermes*	Openings in chaparral, associated with the larval host plant Spiny Redberry (*Rhamnus crocea*), adults feed on nectar from Flat-top Buckwheat	FSC	None	SA	None	Absent/ Not expected	Low to none, due to absence of host plant
Harbison's Dun Skipper	*Euphyes vestris harbisoni*	Riparian oak woodland in a matrix of chaparral with moist conditions that support its host plant San Diego Sedge (*Carex spissa*)	FSC	None	SA	None	Potentially present	Moderate; this species was not detected during lepidoptera surveys on-site and CNDDB does not report this species from the immediate area but the host plant does occur on-site
Large-blotched Salamander	*Ensatina klauberi*	Oak woodlands, mixed chaparral, and mixed coniferous forests with an abundance of surface litter	FSC	None	CSC	None	Absent/ Not expected	Low to none; not known from the immediate region; site has woodlands, but it is outside of this salamander's normal range
Arroyo Toad	*Bufo californicus*	Shallow pools, open sand, and gravel flood terraces of intermittent to perennial streams; may also occupy adjacent upland communities within 1.2 km	FE	None	CSC, Protected	NE, Covered	Absent	Lack of suitable habitat (see subsequent textual discussion)
Western Spadefoot	*Spea hammondii*	Prefers sandy or gravelly soil in grasslands, sage scrub, open chaparral, and pine-oak woodlands; grasslands with shallow temporary pools are optimal	FSC	None	CSC, Protected	None	Potentially present	Moderate; known from the region, but lack of breeding habitat limits potential
California Red-legged Frog	*Rana aurora draytonii*	Quiet permanent stream pools, marshes, and ponds	FT	None	CSC, Protected	NE, Covered	Absent	Requires permanent or nearly permanent water with emergent vegetation, which is absent
San Diego Banded Gecko	*Coleonyx variegatus abbotti*	Areas of rock outcrop within sage scrub and chaparral	FSC	None	SA	None	Potentially present	Good; due to the presence of undisturbed rock outcrops within sage scrub and chaparral
Silvery Legless Lizard	*Anniella pulchra pulchra*	Shows a preference for areas of leaf litter and loose soil along washes, beach sand dunes, open scrub and woodland, and sandy benches along alluvial fans.	FSC	None	CSC	None	Potentially present	Good
San Diego Horned Lizard	*Phrynosoma coronatum blainvillii*	Chaparral, sage scrub, oak woodlands, and grasslands; sometimes occurs along seldom used dirt roads where native ant species are prevalent	FSC	None	CSC, Protected	Covered	Present	N/A

Common Name	Scientific Name	Habitat	Federal Status	State Status	CDFG Status	MSCP Status	On-site Status	Probability of Occurrence/Reason for Absence
Coronado Skink	*Eumeces skiltonianus interparietalis*	Variety of habitats including grasslands, sage scrub, and various woodlands including oak, pine, juniper, and riparian	FSC	None	CSC	None	Expected	Excellent
Orange-throated Whiptail	*Aspidoscelis (=Cnemidophorus) hyperythra beldingi*	Sage scrub (and chaparral), prefers sandy areas with patches of brush and rocks; may be associated with buckwheat and Black Sage	FSC	None	CSC, Protected	Covered	Present	N/A
Coastal Western Whiptail*	*Aspidoscelis (=Cnemidophorus) tigris stejnegeri*	Coastal Sage Scrub, chaparral, and grasslands	FSC	None	SA	None	Expected	Excellent; known from the immediate area (CNDDB data), and suitable habitat exists on-site
Coastal Rosy Boa	*Charina (=Lichanura) trivirgata*	Rocky outcrop areas within chaparral and sage scrub	FSC	None	SA	None	Potentially present	Good; Klauber (unpublished data) indicates species presence within Mussey Grade area and suitable habitat exists on-site
San Diego Ringneck Snake	*Diadophis punctatus similis*	Chaparral, forest, and grasslands, most common in moist, rocky areas	None	None	SA	None	Potentially present	Good; Klauber (unpublished data) indicates species presence within Mussey Grade area and suitable habitat exists on-site
Coast Patch-nosed Snake	*Salvadora hexalepis virgultea*	Chaparral and sage scrub; may require mammal burrows or woodrat nests for overwintering	FSC	None	CSC	None	Expected	Excellent; known from the immediate area (CNDDB data, Klauber unpublished data), suitable habitat exists on-site and woodrats occur on-site
Two-striped Garter Snake	*Thamnophis hammondi*	Associated with semi-permanent and permanent bodies of water in a variety of habitats; requires a relatively dense riparian border	None	None	CSC, Protected	None	Potentially present	Moderate; the lack of a persistent water source limits on-site foraging habitat and the understory of the on-site riparian habitats is not typically dense
Northern Red Diamond Rattlesnake	*Crotalus ruber ruber*	Occupies rocky outcrops and areas of heavy brush or rugged terrain in chaparral, sage scrub, or desert scrub on both coastal and desert slopes, usually below 4000 feet	FSC	None	CSC	None	Potentially present	Good; Klauber (unpublished data) indicates species presence within Mussey Grade area and suitable habitat exists on-site
Turkey Vulture	*Cathartes aura*	Open habitats with protected large trees, snags, rock outcrops, or cliffs for nesting	None	None	None	None	Present	N/A
White-tailed Kite	*Elanus leucurus*	Grasslands, agricultural fields, and open habitats with areas of dense deciduous trees for nesting	None	None	SA, Fully Protected	None	Potentially present	Low; potential for sporadic occurrence, low potential for nesting
Golden Eagle	*Aquila chrysaetos*	Nests in cliffs (or trees), found in generally mountainous or hilly terrain	None	None	CSC, Fully Protected	NE (nesting) Covered	Expected	A Golden Eagle nest is located west of the site; the site may be used as foraging habitat.

Common Name	Scientific Name	Habitat	Federal Status	State Status	CDFG Status	MSCP Status	On-site Status	Probability of Occurrence/Reason for Absence
Sharp-shinned Hawk	*Accipiter striatus*	Mixed woodlands near open areas, prefers but not restricted to riparian habitats	None	None	CSC	None	Potentially present in appropriate season	Good; this species is likely a migrant within the on-site non-native and oak woodlands.
Cooper's Hawk	*Accipiter cooperii*	Oak, riparian deciduous or other woodland habitats usually near water	None	None	CSC	Covered	Present	N/A
Red-shouldered Hawk	*Buteo lineatus*	Dense riparian areas with adjacent edges and open areas for hunting	None	None	None	None	Present	N/A
Ferruginous Hawk	*Buteo regalis*	Dry, open habitats, typically grasslands	FSC	None	CSC	Covered	Potentially present in appropriate season	Low; lack of sizable grassland habitat severely limits potential
Loggerhead Shrike	*Lanius ludovicianus*	Found within grassland or open habitats with bare ground and sparse shrub and/or tree cover for nesting and perching	FSC	None	CSC	None	Absent	Likely due to lack of grasslands (surveys would have identified the presence of this species)
Least Bell's Vireo	*Vireo bellii pusillus*	Moist woodlands, typically early successional riparian habitat (details in report text)	FE	SE	SA	NE, Covered	Absent	Lack of structurally suitable riparian habitat, surveys would have identified this conspicuous species by song
California Horned Lark	*Eremophila alpestris actia*	Grasslands, disturbed areas and open habitats with sparse, low vegetation	None	None	CSC	None	Potentially present	Low; very limited habitat exists on-site and this species is not expected to have gone undetected
California Gnatcatcher*	*Polioptila californica*	Various successional stages of sage scrub	FT	None	CSC	Covered	Absent, although previously recorded on-site	Low; isolated patches of relatively low quality sage scrub are the only suitable habitat on-site; adjacent off-site areas of higher quality sage scrub have not supported this species recently
Western Bluebird	*Sialia mexicana*	Open woodlands, farmlands, and orchards	None	None	None	Covered	Present in appropriate season	N/A
Yellow Warbler	*Dendroica petechia*	Riparian woodlands, especially of willows	None	None	CSC	None	Not expected	Low, due to the absence of willow dominated mature riparian woodland
Yellow-breasted Chat	*Icteria virens*	Riparian woodland/scrub with dense undergrowth	None	None	CSC	None	Not expected/ Absent	Low, due to the limited presence of dense riparian undergrowth, but distinctive song unlikely to have gone undetected

Common Name	Scientific Name	Habitat	Federal Status	State Status	CDFG Status	MSCP Status	On-site Status	Probability of Occurrence/Reason for Absence
Southern California Rufous-crowned Sparrow	*Aimophila ruficeps canescens*	Rocky hillsides supporting sparse, low scrub or chaparral, sometimes mixed with grasses	FSC	None	CSC	Covered	Present	N/A
Bell's Sage Sparrow	*Amphispiza belli belli*	Relatively open chaparral (*e.g.* Chamise Chaparral) and sage scrub; Non-fragmented, contiguous areas on relatively flat terrain appear to be preferred	FSC	None	CSC	None	Not expected	Poor; the site provides little suitable habitat due to the lack of flat or mildly sloping terrain with sage scrub or open chaparral.
Grasshopper Sparrow	*Ammodramus savannarum*	Grasslands and pastures	None	None	SA	None	Absent	Lack of suitable habitat, the on-site grasslands are limited and mowed
Tricolored Blackbird	*Agelaius tricolor*	Feeds in grasslands and croplands, breeds near freshwater preferably in marshes or other emergent wetlands	FSC	None	CSC	Covered	Absent	Poor to None; no suitable habitat is located on-site
Yuma Myotis	*Myotis yumanensis*	Utilizes multiple habitats (primarily woodlands and forests) but forages over water	FSC	None	CSC	None	Expected	Excellent; this species is known from the San Vicente Reservoir area and is the 2nd most common bat species in San Diego; suitable habitat exists on-site
Long-eared Myotis	*Myotis evotis*	Uses multiple habitats for roosting (mainly crevices), forages in oak/coniferous forests, may require water	FSC	None	None	None	Potentially present	Insufficient information to determine probability of occurrence
Small-footed Myotis	*Myotis ciliolabrum*	Uses a variety of habitats, prefers open stands in forests/woodlands, brushy habitats, and riparian areas	FSC	None	None	None	Potentially present	Insufficient information to determine probability of occurrence
Townsend's Big-eared Bat	*Corynorhinus townsendii*	Cave rooster, feeds in forest/woodland habitats or along habitat edges within 15 km of roost site	FSC	None	CSC	None	Expected	Strong association with oak woodlands (for foraging) in San Diego County
Pallid Bat	*Antrozous pallidus*	Utilizes open forest and grassland habitats for feeding and multiple habitats for roosting	None	None	CSC	None	Expected	Good; known from San Vicente area
Pocketed Free-tailed Bat	*Nyctinomops femorosaccus*	Cliff rooster, feeds in multiple habitats	None	None	CSC	None	Expected	Good; not necessarily roosting, but foraging, may roost nearby
Big Free-tailed Bat	*Nyctinomops macrotis*	Cliff rooster, prefers rugged, rocky canyons, feeds in multiple habitats including over water	None	None	CSC	None	Potentially present	Insufficient information to determine probability of occurrence
Western Mastiff Bat (see Ca. Mastiff Bat in	*Eumops perotis*	Extensive open areas with abundant roost locations in rock outcrops, (found where oaks and chaparral occur)	FSC	None	CSC	None	Expected	Good; known from San Vicente area, expected to forage on-site

Common Name	Scientific Name	Habitat	Federal Status	State Status	CDFG Status	MSCP Status	On-site Status	Probability of Occurrence/Reason for Absence
report text)								
San Diego Black-tailed Jackrabbit	*Lepus californicus bennettii*	Relatively open chaparral and sage scrub and grasslands	FSC	None	CSC	None	Potentially present	Moderate to good; much of the on-site habitats are too dense, but suitable open sage scrub and grassland exist on-site
Los Angeles Little Pocket Mouse	*Perognathus longimembris brevinasus*	Found in areas of fine sandy ground, (Coastal Sage Scrub)	FSC	None	CSC	None	Absent	Rarely found on rocky sites; outside of expected range; not identified during trapping
Dulzura California/Pacific Pocket Mouse	*Chaetodipus californicus femoralis*	Found in areas of fine sandy ground, (Chaparral/Coastal Sage Scrub)	FSC	None	CSC	None	Absent	Rarely found on rocky sites; not identified during trapping
Northwestern San Diego Pocket Mouse	*Chaetodipus fallax fallax*	Found in Coastal sage scrub	FSC	None	CSC	None	Present	N/A
Stephen's Kangaroo Rat	*Dipodomys stephensi*	Areas of sparse vegetation primarily grasslands, but may occur in sage scrub or disturbed areas	FE	ST	SA	None	Absent	Absence determined through trapping
Southern Grasshopper Mouse	*Onychomys torridus ramona*	Variety of habitats, including grasslands, sage scrub and chaparral, where friable soils occur	FSC	None	CSC	None	Not expected	Low, not identified during trapping
San Diego Desert Woodrat	*Neotoma lepida intermedia*	Chaparral, particularly abundant in areas of rock outcrops	FSC	None	CSC	None	Present	N/A
American Badger	*Taxidea taxus*	Grasslands and open scrub habitats	None	None	SA	Covered	Absent	Lack of suitable habitat; no reports from the area, and no evidence of species presence on-site
Ringtail	*Bassariscus astutus*	Chaparral or forested habitat in close association with rock outcrops and riparian habitat	None	None	Protected	None	Potentially present	Good to Excellent; on-site undisturbed chaparral and oak woodlands in conjunction with rock outcrops provide optimal habitat.
Mountain Lion	*Puma concolor*	Chaparral or woodland habitats with requisite areas of riparian vegetation and interspersions of rock outcrops and irregular terrain where deer are present	None	None	Protected	Covered	Potentially present	Good to Excellent; chaparral, oak woodlands and riparian forest provide suitable habitat and prey species occur in area
Mule Deer	*Odocoileus hemionus*	Chaparral and open forest habitats with abundant edge and interspersed riparian habitat	None	None	None	Covered	Present	N/A

(FSC) = Formerly a Federal Species of Concern. The USFWS no longer maintains this list; however, the former designation has been include for informational purposes. SSC = CDFG Species of Special Concern, SLC = Species of Local Concern. More detailed descriptions of the above categories are found in Appendix 3.

*Species recorded during previous biological survey but not observed during 1999 –2001 surveys.

Appendix 6

Routine Wetland Data Forms and Photo Points

Salvation Army Divisional Camp and Retreat

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site:	Salvation Army Camp	Date:	5/5/00
Applicant/Owner:	Salvation Army	County:	San Diego
Investigator:	VAL, NKJ	State:	CA

Do normal circumstances exist on the site?	☒ Yes	☐ No	Community ID:	NWW
Is the site significantly disturbed (Atypical Situation)?	☐ Yes	☒ No	Transect ID:	DP1
Is the area a potential Problem Area? (If needed, explain on reverse.)	☐ Yes	☒ No	Plot ID:	PP1

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. *Toxicodendron diversilobum*	H	NI	9.		
2. *Bromus diandrus*	H	NI	10.		
3. *Oxalis corniculata*	H	FACU	11.		
4. *Stellaria media*	H	FACU	12.		
5. *Quercus agrifolia*	T	NI	13.		
6.			14.		
7.			15.		
8.			16.		

Percentage of Dominant Species that are OBL, FACW or FAC (excluding FAC-). 0%

Remarks: No hydrophytic vegetation present.

HYDROLOGY

☒ Recorded Data (Described in Remarks):
- ☐ Stream, Lake, or Tide Gauge
- ☒ Aerial Photographs
- ☐ Other

☐ No Recorded Data Available

Field Observations:

Depth of Surface Water:	-	(in.)
Depth to free Water in Pit	-	(in.)
Depth of Saturated Soil:	-	(in.)

Wetland Hydrology Indicators:

Primary Indicators:
- ☐ Inundated
- ☐ Saturated in Upper 12 inches
- ☐ Water Marks
- ☐ Drift Lines
- ☐ Sediment Deposits
- ☒ Drainage Patterns in Wetlands

Secondary Indicators (2 or more required):
- ☐ Oxidized Root Channels in Upper 12 Inches
- ☐ Water-Stained Leaves
- ☐ Local Soil Survey Data
- ☐ FAC-Neutral Test
- ☐ Other (Explain in Remarks)

Remarks: Incised drainage running beneath oaks.
Soil is moist, but not saturated.

SOILS

Map Unit Name
(Series and Phase): Cieneba rocky coarse sandy loam

Drainage Class: Excessively drained

Field Observations
Confirm Mapped Type? ☐ Yes ☒ No

Taxonomy (Subgroup): Typic Xerorthents

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle (Abundance/Contrast)	Texture, Concretions, Structure, etc.
0-4		7.5 YR ¾			loamy sand
4-12		7.5 YR ¾			loamy sand
12-16		7.5 YR ¾			loamy sand

Hydric Soil Indicators:

- ☐ Histosol
- ☐ Histic Epipedon
- ☐ Sulfidic Odor
- ☐ Aquic Moisture Regime
- ☐ Reducing Conditions
- ☐ Gleyed or Low-Chroma Colors
- ☐ Concretions
- ☐ High Organic Content in surface layer in Sandy Soils
- ☐ Organic Streaking in Sandy Soils
- ☐ Listed on Local Hydric Soils List
- ☐ Listed on National Hydric Soils List
- ☐ Other (Explain in Remarks)

Remarks: No hydric soil indicators. Soil was very gravelly.

WETLAND DETERMINATION

Hydrophytic Vegetation Present?	Yes	☐	No	☒
Wetland Hydrology Present?	Yes	☒	No	☐
Hydric Soils Present?	Yes	☐	No	☒

Is this Sampling Point Within a Wetland? Yes ☐ No ☒

Remarks: CDFG jurisdictional Southern Coast Live Oak Riparian Forest. ACOE non-wetland waters of the U.S., which is also County RPO wetland.

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site:	Salvation Army Camp	Date:	5/5/00
Applicant/Owner:	Salvation Army	County:	San Diego
Investigator:	VAL, NKJ	State:	CA

Do normal circumstances exist on the site?	☒ Yes	☐ No	Community ID:	NWW
Is the site significantly disturbed (Atypical Situation)?	☐ Yes	☒ No	Transect ID:	DP2
Is the area a potential Problem Area? (If needed, explain on reverse.)	☐ Yes	☒ No	Plot ID:	PP2

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. *Vinca major*	H	NI	9.		
2. *Galium aparine*	H	FACU	10.		
3. *Oxalis corniculata*	H	FACU	11.		
4. *Quercus agrifolia*	T	NI	12.		
5. *Platanus racemosa*	T	FACW	13.		
6. *Bromus diandrus*	H	NI	14.		
7.			15.		
8.			16.		

Percentage of Dominant Species that are OBL, FACW or FAC (excluding FAC-). 17%

Remarks: Hyprophytic vegetation criteria not met

HYDROLOGY

☒ Recorded Data (Described in Remarks):
- ☐ Stream, Lake, or Tide Gauge
- ☒ Aerial Photographs
- ☐ Other

☐ No Recorded Data Available

Field Observations:

Depth of Surface Water:	-	(in.)
Depth to free Water in Pit	-	(in.)
Depth of Saturated Soil:	-	(in.)

Wetland Hydrology Indicators:

Primary Indicators:
- ☐ Inundated
- ☐ Saturated in Upper 12 inches
- ☐ Water Marks
- ☐ Drift Lines
- ☐ Sediment Deposits
- ☒ Drainage Patterns in Wetlands

Secondary Indicators (2 or more required):
- ☐ Oxidized Root Channels in Upper 12 Inches
- ☐ Water-Stained Leaves
- ☐ Local Soil Survey Data
- ☐ FAC-Neutral Test
- ☐ Other (Explain in Remarks)

Remarks: Soil is moist but not saturated.

SOILS

Map Unit Name
(Series and Phase): Cieneba rocky coarse sandy loam

Drainage Class: excessively drained

Field Observations
Confirm Mapped Type? ☐ Yes ☒ No

Taxonomy (Subgroup): Typic Xerorthents

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle (Abundance/Contrast)	Texture, Concretions, Structure, etc.
0-4		7.5 YR 3/2	7.5 YR 4/6	faint, many, coarse	sandy loam
4/10		7.5 YR 3/4			loamy sand
10-16		10 YR 3/2	7.5 YR 4/4	faint, few, coarse	sandy loam

Hydric Soil Indicators:

- ☐ Histosol
- ☐ Histic Epipedon
- ☐ Sulfidic Odor
- ☐ Aquic Moisture Regime
- ☐ Reducing Conditions
- ☒ Gleyed or Low-Chroma Colors
- ☐ Concretions
- ☒ High Organic Content in surface layer in Sandy Soils
- ☒ Organic Streaking in Sandy Soils
- ☐ Listed on Local Hydric Soils List
- ☐ Listed on National Hydric Soils List
- ☐ Other (Explain in Remarks)

Remarks: Low chroma soil with mottles.

WETLAND DETERMINATION

Hydrophytic Vegetation Present?	Yes	☐	No	☒
Wetland Hydrology Present?	Yes	☒	No	☐
Hydric Soils Present?	Yes	☒	No	☐

Is this Sampling Point Within a Wetland? Yes ☐ No ☒

Remarks: CDFG jurisdictional Southern Coast Live Oak Riparian Forest. ACOE non-wetland waters of the U.S., which is also County RPO wetland.

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site:	Salvation Army Camp	Date:	5/5/00
Applicant/Owner:	Salvation Army	County:	San Diego
Investigator:	VAL, NKJ	State:	CA

Do normal circumstances exist on the site?	☒ Yes	☐ No	Community ID:	NWW
Is the site significantly disturbed (Atypical Situation)?	☐ Yes	☒ No	Transect ID:	DP3
Is the area a potential Problem Area?	☐ Yes	☒ No	Plot ID:	PP3
(If needed, explain on reverse.)				

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. *Raphanus sativus*	H	NI	9.		
2. *Bromus diandrus*	H	NI	10.		
3. *Bromus mollis*	H	FACU	11.		
4. *Ambrosia psilostachys*	H	FAC	12.		
5. *Erodium sp.*	H	NI	13.		
6.			14.		
7.			15.		
8.			16.		

Percentage of Dominant Species that are OBL, FACW or FAC (excluding FAC-). 20%

Remarks: Hydrophytic vegetation criteria not met.

HYDROLOGY

☒ Recorded Data (Described in Remarks):
- ☐ Stream, Lake, or Tide Gauge
- ☒ Aerial Photographs
- ☐ Other

☐ No Recorded Data Available

Field Observations:

Depth of Surface Water:	-	(in.)
Depth to free Water in Pit	-	(in.)
Depth of Saturated Soil:	-	(in.)

Wetland Hydrology Indicators:

Primary Indicators:
- ☐ Inundated
- ☐ Saturated in Upper 12 inches
- ☐ Water Marks
- ☐ Drift Lines
- ☐ Sediment Deposits
- ☒ Drainage Patterns in Wetlands

Secondary Indicators (2 or more required):
- ☐ Oxidized Root Channels in Upper 12 Inches
- ☐ Water-Stained Leaves
- ☐ Local Soil Survey Data
- ☐ FAC-Neutral Test
- ☐ Other (Explain in Remarks)

Remarks: Incised drainage.

SOILS

Map Unit Name
(Series and Phase): Cieneba rocky coarse sandy loam

Drainage Class: excessively drained

Field Observations
Confirm Mapped Type? ☐ Yes ☒ No

Taxonomy (Subgroup): Typic Xerorthents

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle (Abundance/Contrast)	Texture, Concretions, Structure, etc.
0-8		10 YR 4/3			sandy loam

Hydric Soil Indicators:

- ☐ Histosol
- ☐ Histic Epipedon
- ☐ Sulfidic Odor
- ☐ Aquic Moisture Regime
- ☐ Reducing Conditions
- ☐ Gleyed or Low-Chroma Colors
- ☐ Concretions
- ☐ High Organic Content in surface layer in Sandy Soils
- ☐ Organic Streaking in Sandy Soils
- ☐ Listed on Local Hydric Soils List
- ☐ Listed on National Hydric Soils List
- ☐ Other (Explain in Remarks)

Remarks: Could only dig to 8" in depth due to large rocks (cobble).
No hydric soil indicators.

WETLAND DETERMINATION

Hydrophytic Vegetation Present?	Yes	☐	No	☒
Wetland Hydrology Present?	Yes	☒	No	☐
Hydric Soils Present?	Yes	☐	No	☒

Is this Sampling Point Within a Wetland? Yes ☐ No ☒

Remarks: Non-wetland waters of the U.S. (Jurisdictional under ACOE, CDFG, and County).

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site:	Salvation Army Camp	Date:	5/5/00
Applicant/Owner:	Salvation Amry	County:	San Diego
Investigator:	VAL, NKJ	State:	CA

Do normal circumstances exist on the site?	☒ Yes	☐ No	Community ID:	NWW
Is the site significantly disturbed (Atypical Situation)?	☐ Yes	☒ No	Transect ID:	DP4
Is the area a potential Problem Area? (If needed, explain on reverse.)	☐ Yes	☒ No	Plot ID:	PP4

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. *Toxicodendron diversilobum*	H	NI	9.		
2. *Juncus dubius*	H	FACW	10.		
3. *Quercus agrifolia*	T	NI	11.		
4. *Piptatherum miliacium*	H	NI	12.		
5.			13.		
6.			14.		
7.			15.		
8.			16.		

Percentage of Dominant Species that are OBL, FACW or FAC (excluding FAC-). 25%

Remarks: Hydrophytic vegetation criteria not met.

HYDROLOGY

☒ Recorded Data (Described in Remarks):
- ☐ Stream, Lake, or Tide Gauge
- ☒ Aerial Photographs
- ☐ Other

☐ No Recorded Data Available

Field Observations:

Depth of Surface Water:	-	(in.)
Depth to free Water in Pit	-	(in.)
Depth of Saturated Soil:	-	(in.)

Wetland Hydrology Indicators:

Primary Indicators:
- ☐ Inundated
- ☐ Saturated in Upper 12 inches
- ☐ Water Marks
- ☐ Drift Lines
- ☐ Sediment Deposits
- ☒ Drainage Patterns in Wetlands

Secondary Indicators (2 or more required):
- ☐ Oxidized Root Channels in Upper 12 Inches
- ☐ Water-Stained Leaves
- ☐ Local Soil Survey Data
- ☐ FAC-Neutral Test
- ☐ Other (Explain in Remarks)

Remarks: Incised drainage.

SOILS

Map Unit Name
(Series and Phase): Cieneba rocky coarse sandy loam

Drainage Class: excessively drained

Field Observations
Confirm Mapped Type? ☐ Yes ☒ No

Taxonomy (Subgroup): Typic xerorthents

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle (Abundance/Contrast)	Texture, Concretions, Structure, etc.
0-4		10 YR 3/1	10 YR 6/6	faint ,many,course	loam
			7.5 YR 5/8	distinct, few, medium	

Hydric Soil Indicators:

- ☐ Histosol
- ☐ Histic Epipedon
- ☐ Sulfidic Odor
- ☐ Aquic Moisture Regime
- ☐ Reducing Conditions
- ☒ Gleyed or Low-Chroma Colors
- ☐ Concretions
- ☐ High Organic Content in surface layer in Sandy Soils
- ☐ Organic Streaking in Sandy Soils
- ☐ Listed on Local Hydric Soils List
- ☐ Listed on National Hydric Soils List
- ☐ Other (Explain in Remarks)

Remarks: Low chroma soil with mottles. Could dig pit only 4" due to rocks and poison oak.

WETLAND DETERMINATION

Hydrophytic Vegetation Present?	Yes	☐	No	☒
Wetland Hydrology Present?	Yes	☒	No	☐
Hydric Soils Present?	Yes	☒	No	☐

Is this Sampling Point Within a Wetland? Yes ☐ No ☒

Remarks: CDFG jurisdictional Southern Coast Live Oak Riparian Forest. ACOE non-wetland waters of the U.S., which is also County RPO wetland.

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site:	Salvation Army Camp	Date:	5/8/00
Applicant/Owner:	Salvation Army	County:	San Diego
Investigator:	VAL, NKJ	State:	CA

Do normal circumstances exist on the site?	☒ Yes	☐ No	Community ID:	NWW
Is the site significantly disturbed (Atypical Situation)?	☐ Yes	☒ No	Transect ID:	DP5
Is the area a potential Problem Area? (If needed, explain on reverse.)	☐ Yes	☒ No	Plot ID:	PP5

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. *Ambrosia psilostachya*	H	FAC	9.		
2. *Oxalis corniculata*	H	FACU	10.		
3. *Quercus agrifolia*	T	NI	11.		
4. *Juncus dubius*	H	FACW	12.		
5. *Bromus diandrus*	H	NI	13.		
6. *Lolium perenne*	H	FAC	14.		
7. *Bromus hordeaceus*	H	FACU	15.		
8.			16.		

Percentage of Dominant Species that are OBL, FACW or FAC (excluding FAC-). 43%

Remarks: Hydrophytic vegetation criteria was not satisfied.

HYDROLOGY

☒ Recorded Data (Described in Remarks):
- ☐ Stream, Lake, or Tide Gauge
- ☒ Aerial Photographs
- ☐ Other

☐ No Recorded Data Available

Field Observations:

Depth of Surface Water:	-	(in.)
Depth to free Water in Pit	-	(in.)
Depth of Saturated Soil:	-	(in.)

Wetland Hydrology Indicators:

Primary Indicators:
- ☐ Inundated
- ☐ Saturated in Upper 12 inches
- ☐ Water Marks
- ☐ Drift Lines
- ☐ Sediment Deposits
- ☒ Drainage Patterns in Wetlands

Secondary Indicators (2 or more required):
- ☐ Oxidized Root Channels in Upper 12 Inches
- ☐ Water-Stained Leaves
- ☐ Local Soil Survey Data
- ☐ FAC-Neutral Test
- ☐ Other (Explain in Remarks)

Remarks: Wetland hydroology is indicated by drainage patterns.

SOILS

Map Unit Name
(Series and Phase): Cieneba rocky coarse sandy loam

Drainage Class: excessively drained

Field Observations
Confirm Mapped Type? ☐ Yes ☒ No

Taxonomy (Subgroup): Typic Xerorthents

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle (Abundance/Contrast)	Texture, Concretions, Structure, etc.
0-4		7.5 YR 3/4			loamy sand
4-12		7.5 YR 3/4			loamy sand
12-16		7.5 YR 4/6			loamy sand

Hydric Soil Indicators:

- ☐ Histosol
- ☐ Histic Epipedon
- ☐ Sulfidic Odor
- ☐ Aquic Moisture Regime
- ☐ Reducing Conditions
- ☐ Gleyed or Low-Chroma Colors
- ☐ Concretions
- ☐ High Organic Content in surface layer in Sandy Soils
- ☐ Organic Streaking in Sandy Soils
- ☐ Listed on Local Hydric Soils List
- ☐ Listed on National Hydric Soils List
- ☐ Other (Explain in Remarks)

Remarks: No hydric soil indicators. Soil was very gravelly.

WETLAND DETERMINATION

Hydrophytic Vegetation Present?	Yes	☐	No	☒
Wetland Hydrology Present?	Yes	☒	No	☐
Hydric Soils Present?	Yes	☐	No	☒

Is this Sampling Point Within a Wetland? Yes ☐ No ☒

Remarks: Non-wetland Waters of the U.S. (jurisdictional under ACOE, CDFG, and County).

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site:	Salvation Army Camp	Date:	5/12/00
Applicant/Owner:	Salvation Army	County:	San Diego
Investigator:	KLI, AHB, VAL	State:	CA

Do normal circumstances exist on the site?	☐ Yes	☒ No	Community ID:	EW
Is the site significantly disturbed (Atypical Situation)?	☒ Yes	☐ No	Transect ID:	DP6
Is the area a potential Problem Area? (If needed, explain on reverse.)	☐ Yes	☒ No	Plot ID:	PP6

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. *Eleocharis macrostachya*	H	OBL	9.		
2. *Mimulus guttatus*	H	OBL	10.		
3. *Lytherum hyssopifolia*	H	FACW	11.		
4. *Bromus hordeaceus*	H	FACU	12.		
5.			13.		
6.			14.		
7.			15.		
8.			16.		

Percentage of Dominant Species that are OBL, FACW or FAC (excluding FAC-). 75%

Remarks: Emergent wetland vegetation growing in drainage.

HYDROLOGY

☒ Recorded Data (Described in Remarks):
- ☐ Stream, Lake, or Tide Gauge
- ☒ Aerial Photographs
- ☐ Other

☐ No Recorded Data Available

Field Observations:

Depth of Surface Water:	-	(in.)
Depth to free Water in Pit	-	(in.)
Depth of Saturated Soil:	-	(in.)

Wetland Hydrology Indicators:

Primary Indicators:
- ☐ Inundated
- ☐ Saturated in Upper 12 inches
- ☐ Water Marks
- ☐ Drift Lines
- ☐ Sediment Deposits
- ☒ Drainage Patterns in Wetlands

Secondary Indicators (2 or more required):
- ☐ Oxidized Root Channels in Upper 12 Inches
- ☐ Water-Stained Leaves
- ☐ Local Soil Survey Data
- ☐ FAC-Neutral Test
- ☐ Other (Explain in Remarks)

Remarks: Incised channel

SOILS

Map Unit Name
(Series and Phase): Visalia sandy loam

Drainage Class: moderately well-drained

Field Observations
Confirm Mapped Type? ☐ Yes ☒ No

Taxonomy (Subgroup): Pachic Haploxerolls

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle (Abundance/Contrast)	Texture, Concretions, Structure, etc.
0-12		10YR 3/2	5YR 5/6	faint, few, medium	sandy loam

Hydric Soil Indicators:

- ☐ Histosol
- ☐ Histic Epipedon
- ☐ Sulfidic Odor
- ☐ Aquic Moisture Regime
- ☐ Reducing Conditions
- ☒ Gleyed or Low-Chroma Colors
- ☐ Concretions
- ☐ High Organic Content in surface layer in Sandy Soils
- ☐ Organic Streaking in Sandy Soils
- ☐ Listed on Local Hydric Soils List
- ☐ Listed on National Hydric Soils List
- ☐ Other (Explain in Remarks)

Remarks: Soils in drainage could not be assessed due to high abundance of cobble. Couldn't dig pit. Sampled bank soils instead, which had low-chroma colors and mottles.

WETLAND DETERMINATION

Hydrophytic Vegetation Present?	Yes	☒	No	☐
Wetland Hydrology Present?	Yes	☒	No	☐
Hydric Soils Present?	Yes	☒	No	☐

Is this Sampling Point Within a Wetland? Yes ☒ No ☐

Remarks: Emergent Wetlands (jurisdictional under ACOE, CDFG, and County).

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site:	Salvation Army Camp	Date:	5/12/00
Applicant/Owner:	Salvation Army	County:	San Diego
Investigator:	AHB, VAL	State:	CA

Do normal circumstances exist on the site?	☐ Yes	☒ No	Community ID:	NWW
Is the site significantly disturbed (Atypical Situation)?	☒ Yes	☐ No	Transect ID:	DP7
Is the area a potential Problem Area? (If needed, explain on reverse.)	☐ Yes	☒ No	Plot ID:	PP7

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. *Bromus rubens*	H	NI	9.		
2. *Erodium sp.*	H	NI	10.		
3. *Cyrptantha intermedia*	H	NI	11.		
4. *Hirschfeldia incana*	H	NI	12.		
5.			13.		
6.			14.		
7.			15.		
8.			16.		

Percentage of Dominant Species that are OBL, FACW or FAC (excluding FAC-). 0 %

Remarks: Upland vegetation

HYDROLOGY

☒ Recorded Data (Described in Remarks):
- ☐ Stream, Lake, or Tide Gauge
- ☒ Aerial Photographs
- ☐ Other

☐ No Recorded Data Available

Field Observations:

Depth of Surface Water:	-	(in.)
Depth to free Water in Pit	-	(in.)
Depth of Saturated Soil:	-	(in.)

Wetland Hydrology Indicators:

Primary Indicators:
- ☐ Inundated
- ☐ Saturated in Upper 12 inches
- ☐ Water Marks
- ☐ Drift Lines
- ☐ Sediment Deposits
- ☒ Drainage Patterns in Wetlands

Secondary Indicators (2 or more required):
- ☐ Oxidized Root Channels in Upper 12 Inches
- ☐ Water-Stained Leaves
- ☐ Local Soil Survey Data
- ☐ FAC-Neutral Test
- ☐ Other (Explain in Remarks)

Remarks: Data Point is located in a basin that appears to have been filled. There are signs such as drainage patterns and sediment deposits that indicate that water flows into this basin from a four foot wide drainage upstream. The soil is moist but not saturated.

SOILS

Map Unit Name
(Series and Phase): Cieneba rocky coarse sandy loam

Drainage Class: excessively drained

Field Observations
Confirm Mapped Type? ☐ Yes ☒ No

Taxonomy (Subgroup): Typic Xerorthents

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle (Abundance/Contrast)	Texture, Concretions, Structure, etc.
0-4		2.5YR 7/3			sand
4-6		10YR 2/2			loamy sand
6-12		10YR 6/6			sand

Hydric Soil Indicators:

- ☐ Histosol
- ☐ Histic Epipedon
- ☐ Sulfidic Odor
- ☐ Aquic Moisture Regime
- ☐ Reducing Conditions
- ☐ Gleyed or Low-Chroma Colors
- ☐ Concretions
- ☐ High Organic Content in surface layer in Sandy Soils
- ☐ Organic Streaking in Sandy Soils
- ☐ Listed on Local Hydric Soils List
- ☐ Listed on National Hydric Soils List
- ☐ Other (Explain in Remarks)

Remarks: The soils could not be accurately determined because the area was filled Could not dig past 12" because of hard surface.

WETLAND DETERMINATION

Hydrophytic Vegetation Present?	Yes	☐	No	☒
Wetland Hydrology Present?	Yes	☒	No	☐
Hydric Soils Present?	Yes	☐	No	☒

Is this Sampling Point Within a Wetland? Yes ☐ No ☒

Remarks: Atypical situation, soils, hydrology, and maybe vegetation, were altered. Because area was a depression and there were signs that waters flow into the area, it was considered to be Non-wetland Waters of the U.S. (jurisdictional under ACOE, CDFG, and County).

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site:	Salvation Army Camp	Date:	5/12/00
Applicant/Owner:	Salvation Army	County:	San Diego
Investigator:	AHB, VAL	State:	CA

Do normal circumstances exist on the site?	☐ Yes	☒ No	Community ID:	SWS
Is the site significantly disturbed (Atypical Situation)?	☒ Yes	☐ No	Transect ID:	DP8
Is the area a potential Problem Area? (If needed, explain on reverse.)	☐ Yes	☒ No	Plot ID:	PP8

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. *Populus fremontii*	S	FACW	9.		
2. *Salix lucida ssp. lasiandra*	S	OBL	10.		
3. *Baccharis salicifolia*	S	FACW	11.		
4. *Bromus rubens*	H	NI	12.		
5.			13.		
6.			14.		
7.			15.		
8.			16.		

Percentage of Dominant Species that are OBL, FACW or FAC (excluding FAC-). 75%

Remarks: Southern Willow Scrub vegetation

HYDROLOGY

☒ Recorded Data (Described in Remarks):
- ☐ Stream, Lake, or Tide Gauge
- ☒ Aerial Photographs
- ☐ Other

☐ No Recorded Data Available

Field Observations:

Depth of Surface Water:	-	(in.)
Depth to free Water in Pit	-	(in.)
Depth of Saturated Soil:	-	(in.)

Wetland Hydrology Indicators:

Primary Indicators:
- ☐ Inundated
- ☐ Saturated in Upper 12 inches
- ☐ Water Marks
- ☐ Drift Lines
- ☐ Sediment Deposits
- ☒ Drainage Patterns in Wetlands

Secondary Indicators (2 or more required):
- ☐ Oxidized Root Channels in Upper 12 Inches
- ☐ Water-Stained Leaves
- ☐ Local Soil Survey Data
- ☐ FAC-Neutral Test
- ☐ Other (Explain in Remarks)

Remarks: Data Point is on the edge of a basin that appeared to have been filled.

SOILS

Map Unit Name
(Series and Phase): Cieneba rocky coarse sandy loam

Drainage Class: excessively drained

Field Observations
Confirm Mapped Type? ☐ Yes ☒ No

Taxonomy (Subgroup): Typic Xerorthents

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle (Abundance/Contrast)	Texture, Concretions, Structure, etc.
0-12		10YR 3/2	5 YR 5/6	faint, few, medium	sandy loam

Hydric Soil Indicators:

- ☐ Histosol
- ☐ Histic Epipedon
- ☐ Sulfidic Odor
- ☐ Aquic Moisture Regime
- ☐ Reducing Conditions
- ☐ Gleyed or Low-Chroma Colors
- ☐ Concretions
- ☐ High Organic Content in surface layer in Sandy Soils
- ☐ Organic Streaking in Sandy Soils
- ☐ Listed on Local Hydric Soils List
- ☐ Listed on National Hydric Soils List
- ☐ Other (Explain in Remarks)

Remarks: Soils in drainage could not be assessed due to high abundance of cobble. Could not dig pit. Sampled bank soils instead.

WETLAND DETERMINATION

Hydrophytic Vegetation Present?	Yes	☒	No	☐	
Wetland Hydrology Present?	Yes	☒	No	☐	
Hydric Soils Present?	Yes	☐	No	☒	Is this Sampling Point Within a Wetland? Yes ☒ No ☐

Remarks: Atypical situation, soils were altered.
Southern Willow Scrub vegetation (jurisdictional under ACOE, CDFG, and County).

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site:	Salvation Army Camp	Date:	5/12/00
Applicant/Owner:	Salvation Army	County:	San Diego
Investigator:	KLI, VAL, AHB	State:	CA

Do normal circumstances exist on the site?	☒ Yes	☐ No	Community ID:	SWS
Is the site significantly disturbed (Atypical Situation)?	☐ Yes	☒ No	Transect ID:	DP9
Is the area a potential Problem Area? (If needed, explain on reverse.)	☐ Yes	☒ No	Plot ID:	PP9

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. *Salix lucida ssp. lasiandra*	T	OBL	9.		
2. *Platanus racemosa*	T	FACW	10.		
3. *Artemisia douglasiana*	H	FACW	11.		
4.			12.		
5.			13.		
6.			14.		
7.			15.		
8.			16.		

Percentage of Dominant Species that are OBL, FACW or FAC (excluding FAC-). 100%

Remarks: Southern Willow Scrub vegetation

HYDROLOGY

☒ Recorded Data (Described in Remarks):
- ☐ Stream, Lake, or Tide Gauge
- ☒ Aerial Photographs
- ☐ Other

☐ No Recorded Data Available

Field Observations:

Depth of Surface Water:	-	(in.)
Depth to free Water in Pit	-	(in.)
Depth of Saturated Soil:	-	(in.)

Wetland Hydrology Indicators:

Primary Indicators:
- ☐ Inundated
- ☐ Saturated in Upper 12 inches
- ☐ Water Marks
- ☐ Drift Lines
- ☐ Sediment Deposits
- ☒ Drainage Patterns in Wetlands

Secondary Indicators (2 or more required):
- ☐ Oxidized Root Channels in Upper 12 Inches
- ☐ Water-Stained Leaves
- ☐ Local Soil Survey Data
- ☐ FAC-Neutral Test
- ☐ Other (Explain in Remarks)

Remarks: Drainage patterns present.

SOILS

Map Unit Name
(Series and Phase): Cieneba rocky coarse sandy loam

Drainage Class: excessively drained

Field Observations
Confirm Mapped Type? ☐ Yes ☒ No

Taxonomy (Subgroup): Typic Xerorthents

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle (Abundance/Contrast)	Texture, Concretions, Structure, etc.
0-12		10YR 3/1	10YR 6/6	faint, many, coarse	loam

Hydric Soil Indicators:

- ☐ Histosol
- ☐ Histic Epipedon
- ☐ Sulfidic Odor
- ☐ Aquic Moisture Regime
- ☐ Reducing Conditions
- ☐ Gleyed or Low-Chroma Colors
- ☐ Concretions
- ☐ High Organic Content in surface layer in Sandy Soils
- ☐ Organic Streaking in Sandy Soils
- ☐ Listed on Local Hydric Soils List
- ☐ Listed on National Hydric Soils List
- ☐ Other (Explain in Remarks)

Remarks: Low chroma soil with mottles.

WETLAND DETERMINATION

Hydrophytic Vegetation Present?	Yes	☒	No	☐
Wetland Hydrology Present?	Yes	☒	No	☐
Hydric Soils Present?	Yes	☒	No	☐

Is this Sampling Point Within a Wetland? Yes ☒ No ☐

Remarks: Southern Willow Scrub (jurisdictional under ACOE, CDFG, and County).

Approved by HQUSACE 3/92

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site:	Salvation Army Camp	Date:	12/13/00
Applicant/Owner:	Salvation Army	County:	San Diego
Investigator:	VAL, KAA	State:	CA

Do normal circumstances exist on the site?	☒ Yes	☐ No	Community ID:	CLORF (CDFG only)
Is the site significantly disturbed (Atypical Situation)?	☐ Yes	☒ No	Transect ID:	DP10
Is the area a potential Problem Area? (If needed, explain on reverse.)	☐ Yes	☒ No	Plot ID:	PP10

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. *Platanus racemosa*	T	FACW	9.		
2. *Quercus agrifolia*	T	NI	10.		
3. *Artemisia douglasiana*	H	FACW	11.		
4. *Rubus ursinus*	H	FACW	12.		
5.			13.		
6.			14.		
7.			15.		
8.			16.		

Percentage of Dominant Species that are OBL, FACW or FAC (excluding FAC-). 75%

Remarks: Southern Coast Live Oak Riparian Forest vegetation.

HYDROLOGY

☒ Recorded Data (Described in Remarks):
- ☐ Stream, Lake, or Tide Gauge
- ☒ Aerial Photographs
- ☐ Other

☐ No Recorded Data Available

Field Observations:

Depth of Surface Water:	-	(in.)
Depth to free Water in Pit	-	(in.)
Depth of Saturated Soil:	-	(in.)

Wetland Hydrology Indicators:

Primary Indicators:
- ☐ Inundated
- ☐ Saturated in Upper 12 inches
- ☐ Water Marks
- ☐ Drift Lines
- ☐ Sediment Deposits
- ☐ Drainage Patterns in Wetlands

Secondary Indicators (2 or more required):
- ☐ Oxidized Root Channels in Upper 12 Inches
- ☐ Water-Stained Leaves
- ☐ Local Soil Survey Data
- ☒ FAC-Neutral Test
- ☐ Other (Explain in Remarks)

Remarks: Insufficient hydrology indicators outside of bank.

SOILS

Map Unit Name
(Series and Phase): Visalia sandy loam

Drainage Class: Moderately well drained

Field Observations
Confirm Mapped Type? ☐ Yes ☒ No

Taxonomy (Subgroup): Pachic Haploxerolls

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle (Abundance/Contrast)	Texture, Concretions, Structure, etc.
0-16		10YR 3/3	none	none	loam

Hydric Soil Indicators:

- ☐ Histosol
- ☐ Histic Epipedon
- ☐ Sulfidic Odor
- ☐ Aquic Moisture Regime
- ☐ Reducing Conditions
- ☐ Gleyed or Low-Chroma Colors
- ☐ Concretions
- ☐ High Organic Content in surface layer in Sandy Soils
- ☐ Organic Streaking in Sandy Soils
- ☐ Listed on Local Hydric Soils List
- ☐ Listed on National Hydric Soils List
- ☐ Other (Explain in Remarks)

Remarks: No hydric soil indicators.

WETLAND DETERMINATION

Hydrophytic Vegetation Present?	Yes	☒	No	☐
Wetland Hydrology Present?	Yes	☐	No	☒
Hydric Soils Present?	Yes	☐	No	☒

Is this Sampling Point Within a Wetland? Yes ☐ No ☒

Remarks: Southern Coast Live Oak Riparian Forest. Jurisdictional under CDFG as wetlands and Adjacent Riparian. Limits of hydrophytic vegetation also considered County RPO wetlands.

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site:	Salvation Army Camp	Date:	12/13/00
Applicant/Owner:	Salvation Army	County:	San Diego
Investigator:	VAL, KAA	State:	CA

Do normal circumstances exist on the site?	☒ Yes	☐ No	Community ID:	CLORF (CDFG only)
Is the site significantly disturbed (Atypical Situation)?	☐ Yes	☒ No	Transect ID:	DP11
Is the area a potential Problem Area? (If needed, explain on reverse.)	☐ Yes	☒ No	Plot ID:	PP11

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. *Platanus racemosa*	T	FACW	9.		
2. *Quercus agrifolia*	T	NI	10.		
3. *Rumex crispus*	H	FACW	11.		
4.			12.		
5.			13.		
6.			14.		
7.			15.		
8.			16.		

Percentage of Dominant Species that are OBL, FACW or FAC (excluding FAC-). 66%

Remarks: Little vegetation in drainage; however, *Platanus racemosa* and *Quercus agrifolia* trees are rooted in channel. Southern Coast Live Oak Riparian Forest vegetation.

HYDROLOGY

☒ Recorded Data (Described in Remarks):
- ☐ Stream, Lake, or Tide Gauge
- ☒ Aerial Photographs
- ☐ Other

☐ No Recorded Data Available

Field Observations:

Depth of Surface Water:	-	(in.)
Depth to free Water in Pit	-	(in.)
Depth of Saturated Soil:	-	(in.)

Wetland Hydrology Indicators:

Primary Indicators:
- ☐ Inundated
- ☐ Saturated in Upper 12 inches
- ☐ Water Marks
- ☐ Drift Lines
- ☐ Sediment Deposits
- ☒ Drainage Patterns in Wetlands

Secondary Indicators (2 or more required):
- ☐ Oxidized Root Channels in Upper 12 Inches
- ☐ Water-Stained Leaves
- ☐ Local Soil Survey Data
- ☐ FAC-Neutral Test
- ☐ Other (Explain in Remarks)

Remarks: Drainage patterns present.

SOILS

Map Unit Name
(Series and Phase): Visalia sandy loam

Drainage Class: Moderately well drained

Field Observations
Confirm Mapped Type? ☐ Yes ☒ No

Taxonomy (Subgroup): Pachic Haploxerolls

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle (Abundance/Contrast)	Texture, Concretions, Structure, etc.
0-16		7.5YR 3/3	none	none	Sand

Hydric Soil Indicators:

- ☐ Histosol
- ☐ Histic Epipedon
- ☐ Sulfidic Odor
- ☐ Aquic Moisture Regime
- ☐ Reducing Conditions
- ☐ Gleyed or Low-Chroma Colors
- ☐ Concretions
- ☐ High Organic Content in surface layer in Sandy Soils
- ☐ Organic Streaking in Sandy Soils
- ☐ Listed on Local Hydric Soils List
- ☐ Listed on National Hydric Soils List
- ☐ Other (Explain in Remarks)

Remarks: No hydric soil indicators.

WETLAND DETERMINATION

Hydrophytic Vegetation Present?	Yes	☒	No	☐	
Wetland Hydrology Present?	Yes	☒	No	☐	
Hydric Soils Present?	Yes	☐	No	☒	Is this Sampling Point Within a Wetland? Yes ☐ No ☒

Remarks: Southern Coast Live Oak Riparian Forest (jurisdictional under CDFG as wetlands and Adjacent Riparian and limits of hydrophytic vegetation are jurisdictional under County RPO). Also presence of Non-wetland Waters of the U.S.

Photo Point 1. Data Point 1 located in CDFG jurisdictional southern coast live oak riparian forest and ACOE jurisdictional non-wetland waters of the U.S.

Photo Point 2. Data Point 2 located in CDFG jurisdictional southern coast live oak riparian forest and ACOE jurisdictional non-wetland waters of the U.S.

Photo Point 3. Data Point 3 located in non-wetland waters of the U.S.

Photo Point 4. Data Point 4 located in CDFG jurisdictional southern coast live oak riparian forest and ACOE jurisdictional non-wetland waters of the U.S.

Photo Point 5. Data Point 5 located in non-wetland waters of the U.S.

Photo Point 6. Data Point 6 located in emergent wetland vegetation.

Photo Point 7. Data Point 7 located in non-wetland waters of the U.S.-atypical situation.

Photo Point 8. Data Point 8 located in southern willow scrub vegetation-atypical situation.

Photo Point 9. Data Point 9 located in southern willow scrub vegetation.

Photo Point 10. Data Point 10 located above a drainage in southern coast live oak riparian forest vegetation.

Photo Point 11. Data Point 11 located in a drainage beneath southern coast live oak riparian forest vegetation.

Photo Point 12. View of impacted non-wetland waters of the U.S. Portions of two drainages were filled. Area is located just south of Data Point 3.

Photo Point 13. Another view of the impacted non-wetland waters of the U.S.

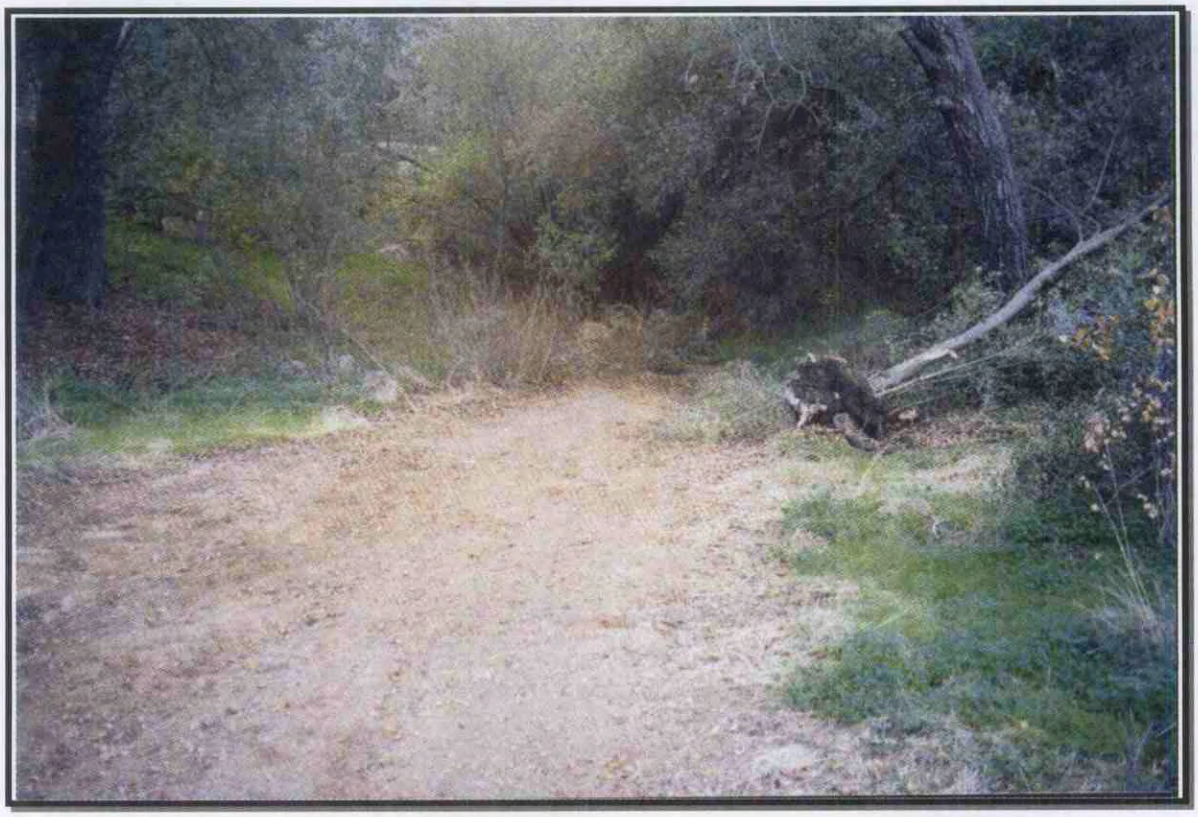


Photo Point 14. The drainage has been filled beneath the southern coast live oak riparian forest. No wetland vegetation appears to have been impacted. The excavated tree shown here is a mission olive tree (*Olea europea*), which is not a wetland-associated species.

Appendix 7

California Natural Diversity Database Forms

California Native Species Field Survey Form

Mail to:
Natural Diversity Database
California Department of Fish and Game
1416 Ninth Street, 12th Floor
Sacramento, CA 95814

For Office Use Only
Source Code _____ Quad Code _____
Elm Code _____ Occ. No. _____
EO Index No. _____ Map Index No. _____

Date of Field Work: 5 (month) - 12 (day) - 2000 (year)

Scientific Name: Senecio ganderi
Common Name: Gander's Ragwort

Species Found? ☒ yes ☐ no _____ If not, why?
Total No. Individuals _____ Subsequent Visit? ☐yes ☐no
Is this an existing NDDB occurrence? _____ Yes, Occ. # ☐no ☐unk.
Collection? NO If yes: _____ Number _____ Museum / Herbarium

Reporter: Hyde Ince / Merkel & Assoc.
Address: 3944 Murphy Canyon Road
Suite C106 San Diego CA 92123
Phone: (858) 560-5465

Plant Information
Phenology: _____ % vegetative _____ % flowering _____ % fruiting
75

Animal Information
Age Structure: _____ # adults _____ # juveniles _____ # unknown
☐ breeding ☐ wintering ☐ burrow site ☐ rookery ☐ nesting ☐ other

Location (please also attach or draw map on back)

County: San Diego Landowner / Mgr.: Salvation Army
Quad Name: San Vicente Elevation: 2,100
T 14S R 1 W 1/4 of NW 1/4 of Section 12 T ____ R ____ ____ 1/4 of ____ 1/4 of Section ____
UTM: Zone: 11 (10, 11) Datum: NAD83 (NAD83,NAD27,WG584, other)
Source: _____ (GPS, map & type, etc.) GPS Accuracy Point: (circle one) ☐<80m ☐<150m ☐<300m
UTM Coordinates _____

Habitat Description *(plant communities, dominants, associates, substrates/soils, aspects/slope)*
Mixed Chaparral with metavolcanic substrate. Dominants include Ceanothus tomentosus, C oligantha, Adenostoma fasciculatum

Other rare species? Horkelia truncata, Monardella hypoleuca ssp. lanata

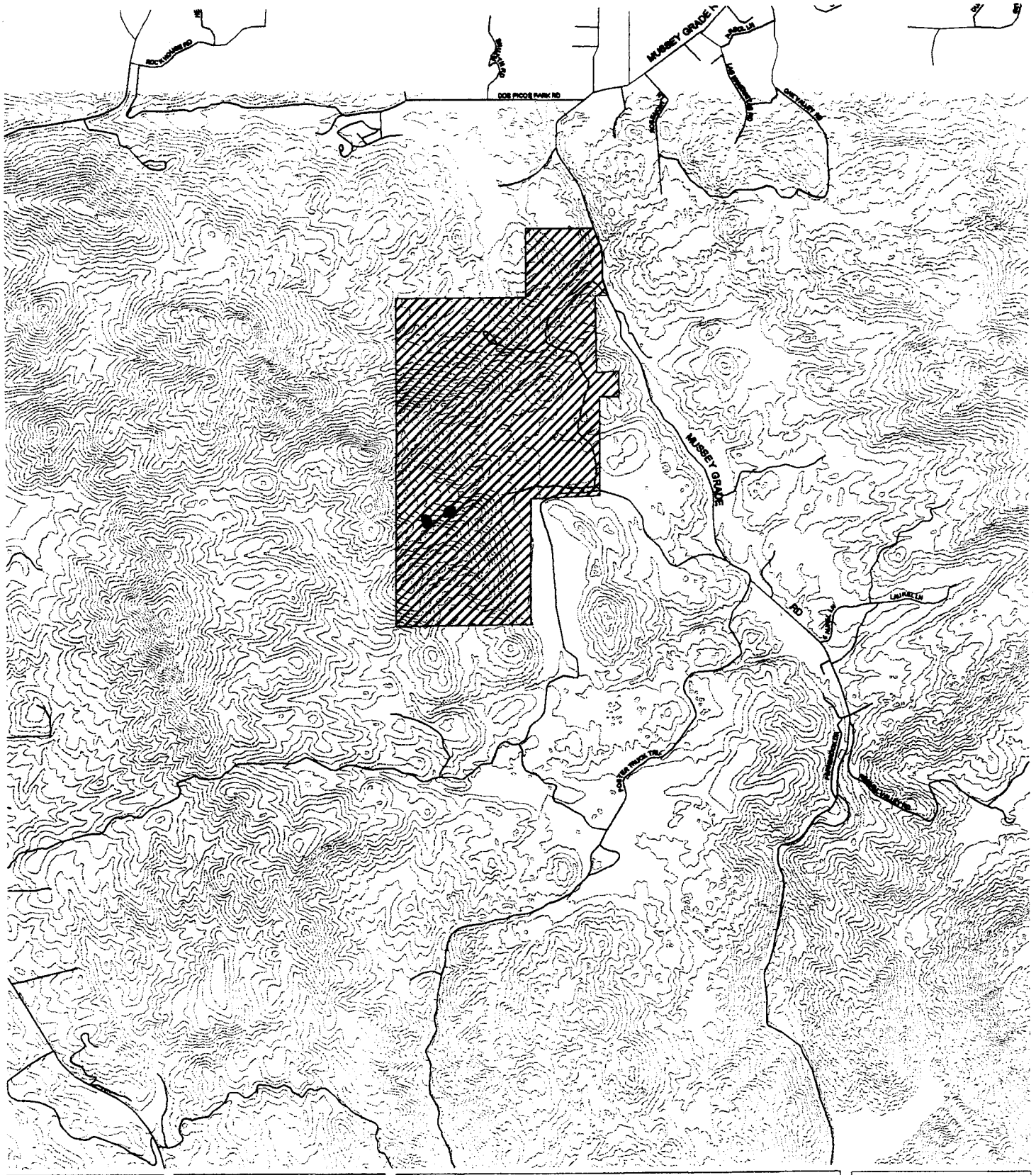
Site Information Overall site quality: ☐Excellent ☒Good ☐Fair ☐Poor
Current / surrounding land use: Undeveloped
Visible disturbances / possible threats: Along existing trail
Comments: Found in shrub understory

Determination: *(check one or more, and fill in blanks)*
☒ Keyed (cite reference): Jepson
☐ Compared with specimen housed at: _____
☐ Compared with photo / drawing in: _____
☐ By another person (name): _____
☐ Other: _____

Photographs: *(check one or more)* NTS

	Slide	Print
Plant / animal	☐	☐
Habitat	☐	☐
Diagnostic feature	☐	☐

May we obtain duplicates at our expense? ☐yes ☐no



Markel & Associates, Inc.

N

500 0 5001000 Feet

Salvation Army Camp
Project Vicinity Map

Source: USGS 7.5' San Vicente, CA. Quadrangle

Figure 1

California Native Species Field Survey Form

Mail to:
Natural Diversity Database
California Department of Fish and Game
1416 Ninth Street, 12th Floor
Sacramento, CA 95814

For Office Use Only
Source Code _____ Quad Code _____
Elm Code _____ Occ. No. _____
EO Index No. _____ Map Index No. _____

Date of Field Work: 5 - 12 - 2000 (month - day - year)

Scientific Name: Horkelia truncata

Common Name: Ramona Horkelia

Species Found? ☒ yes ☐ no _____ If not, why?
Total No. Individuals ~100 Subsequent Visit? ☐yes ☒no
Is this an existing NDDB occurrence? NO Yes, Occ. # ☐no ☐unk.
Collection? NO If yes: _____ Number _____ Museum / Herbarium

Reporter: Kyle Ince / Merkel & ASSOC
Address: 3944 Murphy Canyon Road Suite C106 San Diego, CA 92123
Phone: (858) 560-5465

Plant Information
Phenology: 100 % vegetative _____ % flowering _____ % fruiting

Animal Information
Age Structure: _____ # adults _____ # juveniles _____ # unknown
☐ breeding ☐ wintering ☐ burrow site ☐ rookery ☐ nesting ☐ other

Location (please also attach or draw map on back)

County: San Diego Landowner / Mgr.: Salvation Army
Quad Name: San Vicente Elevation: 2,100'
T 14S R 1 W 1/4 of NW 1/4 of Section 12 T _____ R _____ _____ 1/4 of _____ 1/4 of Section _____
UTM: Zone: 11 (10, 11) Datum: NAD 83 (NAD83,NAD27,WG584, other)
Source: _____ (GPS, map & type, etc.) GPS Accuracy Point: (circle one) ☐<80m ☐<150m ☐<300m
UTM Coordinates _____

Habitat Description *(plant communities, dominants, associates, substrates/soils, aspects/slope)*
Mixed Chaparral with meta volcanic substrate
Dominants include Ceanothus tomentosus, Ceanothus, Adenostoma fasciculatum.

Other rare species? - Senecio ganderi, Monardella hypoleuca ssp. lanata

Site Information Overall site quality: ☐Excellent ☒Good ☐Fair ☐Poor
Current / surrounding land use: - undeveloped
Visible disturbances / possible threats: - Along existing trail
Comments: Found in shrub understory and within trail limits

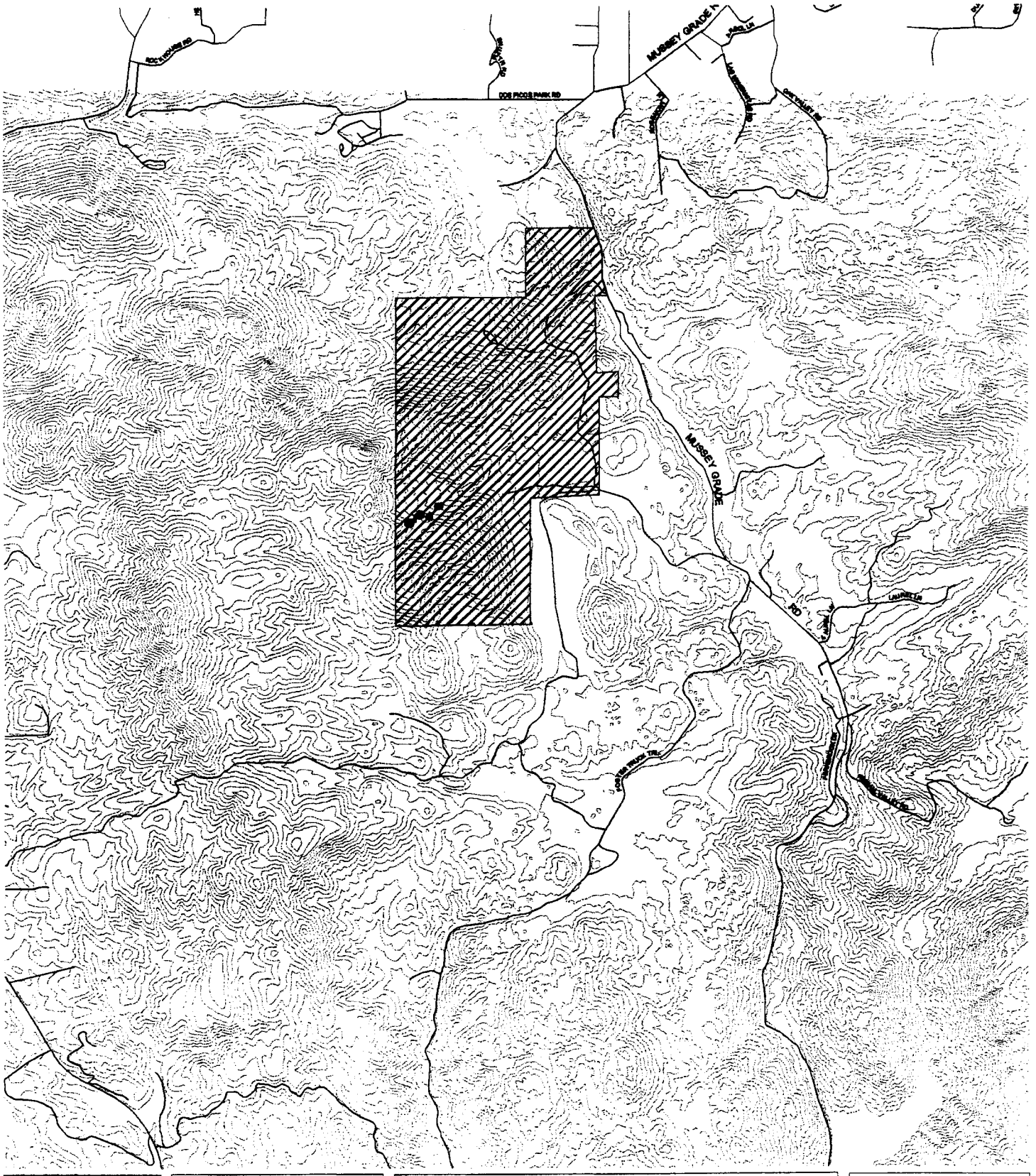
Determination: *(check one or more, and fill in blanks)*
☒ Keyed (cite reference): Jepson
☐ Compared with specimen housed at: _____
☐ Compared with photo / drawing in: _____
☐ By another person (name): _____
☐ Other: _____

Photographs: *(check one or more)*

	Slide	Print
Plant / animal	☐	☐
Habitat	☐	☐
Diagnostic feature	☐	☐

NA

May we obtain duplicates at our expense? ☐yes ☐no



Markel & Associates, Inc.

N

500 0 5001000 Feet

Salvation Army Camp
Project Vicinity Map

Source: USGS 7.5' San Vicente, CA. Quadrangle

Figure 1

California Native Species Field Survey Form

Mail to:
Natural Diversity Database
California Department of Fish and Game
1416 Ninth Street, 12th Floor
Sacramento, CA 95814

Date of Field Work: 5 (month) - 12 (day) - 2000 (year)

For Office Use Only
Source Code _____ Quad Code _____
Elm Code _____ Occ. No. _____
EO Index No. _____ Map Index No. _____

Scientific Name: Monardella hypoleuca ssp. lanata
Common Name: Felt-leaved Monardella

Species Found? ☒ yes ☐ no _____ If not, why?
Total No. Individuals 75 Subsequent Visit? ☐yes ☒no
Is this an existing NDDB occurrence? No _____ Yes, Occ. # ☒no ☐unk.
Collection? If yes: _____ Number _____ Museum / Herbarium

Reporter: Kyle Ince / Merkel & Assoc.
Address: 3944 Murphy Canyon Road
Suite C106 San Diego CA 92123
Phone: (858) 560-5465

Plant Information
Phenology: 100 % vegetative _____ % flowering _____ % fruiting

Animal Information
Age Structure: _____ # adults _____ # juveniles _____ # unknown
☐ breeding ☐ wintering ☐ burrow site ☐ rookery ☐ nesting ☐ other

Location (please also attach or draw map on back)

County: San Diego Landowner / Mgr.: Salvation Army
Quad Name: San Vicente Elevation: 3,100'
T 14S R 1 W 1/4 of NW 1/4 of Section 12 T ____ R ____ ____ 1/4 of ____ 1/4 of Section ____
UTM: Zone: 11 (10, 11) Datum: NAD 83 (NAD83,NAD27,WG584, other)
Source: _____ (GPS, map & type, etc.) GPS Accuracy Point: (circle one) ☐<80m ☐<150m ☐<300m
UTM Coordinates _____

Habitat Description *(plant communities, dominants, associates, substrates/soils, aspects/slope)*
Mixed chaparral with metavolcanic substrate. Dominants include Ceanothus tomentosus, C. oliganthus, Adenostoma fasciculatum

Other rare species? Senecio ganderi, Horkelia truncata

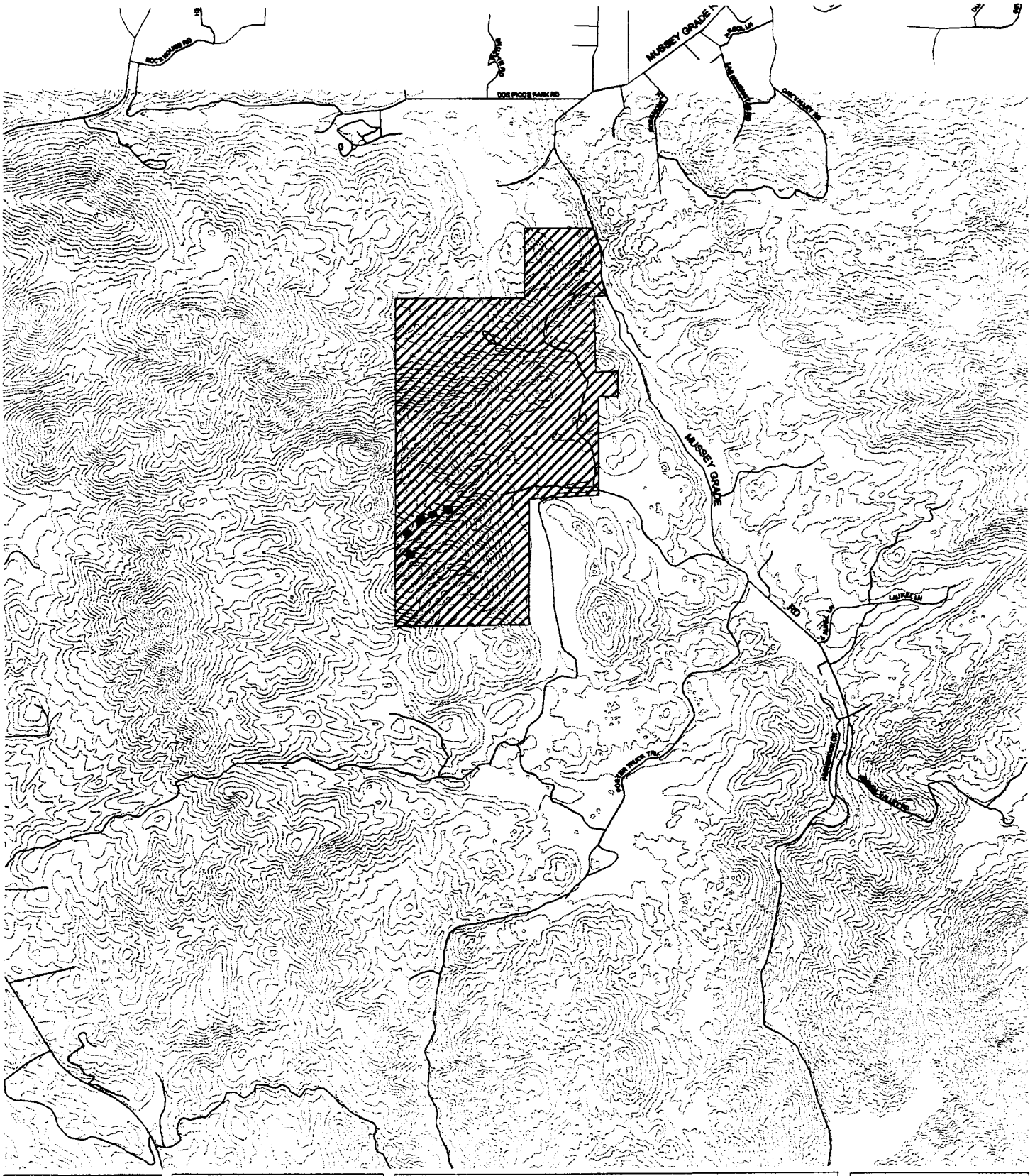
Site Information Overall site quality: ☐Excellent ☒Good ☐Fair ☐Poor
Current / surrounding land use: undeveloped
Visible disturbances / possible threats: Along existing trail
Comments: Found in shrub understory

Determination: *(check one or more, and fill in blanks)*
☒ Keyed (cite reference): Jepson
☐ Compared with specimen housed at: _____
☐ Compared with photo / drawing in: _____
☐ By another person (name): _____
☐ Other: _____

Photographs: *(check one or more)*

	Slide	Print
Plant / animal	N*	☐
Habitat	☐	☐
Diagnostic feature	☐	☐

May we obtain duplicates at our expense? ☐yes ☐no



Markel & Associates, Inc.

N

500 0 5001000 Feet

Salvation Army Camp
Project Vicinity Map

Source: USGS 7.5' San Vicente, CA. Quadrangle

Figure 1

California Native Species Field Survey Form

Mail to:
Natural Diversity Database
California Department of Fish and Game
1416 Ninth Street, 12th Floor
Sacramento, CA 95814

Date of Field Work: 04 - 21 - 1999 (month - day - year)

For Office Use Only
Source Code _____ Quad Code _____
Elm Code _____ Occ. No. _____
EO Index No. _____ Map Index No. _____

Scientific Name: Phrynosoma coronatum blainvillii
Common Name: San Diego Horned Lizard

Species Found? ☑ yes ☐ no _____ If not, why?
Total No. Individuals 2 Subsequent Visit? ☑ yes ☐ no
Is this an existing NDDB occurrence? _____ Yes, Occ. # ☑ no ☐ unk.
Collection? If yes: _____ Number _____ Museum / Herbarium

Reporter: Melissa Booker
Address: 3944 Murphy Cyn Rd Suite C106, San Diego CA 92123
Phone: (858) 560-5465

Plant Information
Phenology: _____ % vegetative _____ % flowering _____ % fruiting

Animal Information
Age Structure: _____ # adults _____ # juveniles _____ # unknown
☐ breeding ☐ wintering ☐ burrow site ☐ rookery ☐ nesting ☐ other

Location (please also attach or draw map on back)

County: San Diego Landowner / Mgr.: Salvation Army
Quad Name: San Vicente Elevation: _____
T 14S R 1 W 1/4 of NW 1/4 of Section 12 T ____ R ____ ____ 1/4 of ____ 1/4 of Section ____
UTM: Zone: 11 (10, 11) Datum: NAD83 (NAD83, NAD27, WG584, other)
Source: _____ (GPS, map & type, etc.) GPS Accuracy Point: (circle one) ☐<80m ☐<150m ☐<300m
UTM Coordinates _____

Habitat Description *(plant communities, dominants, associates, substrates/soils, aspects/slope)*
Southern Mixed Chaparral and Southern Coast Live Oak Riparian Forest with openings resulting from a trail/foot path.

Other rare species?

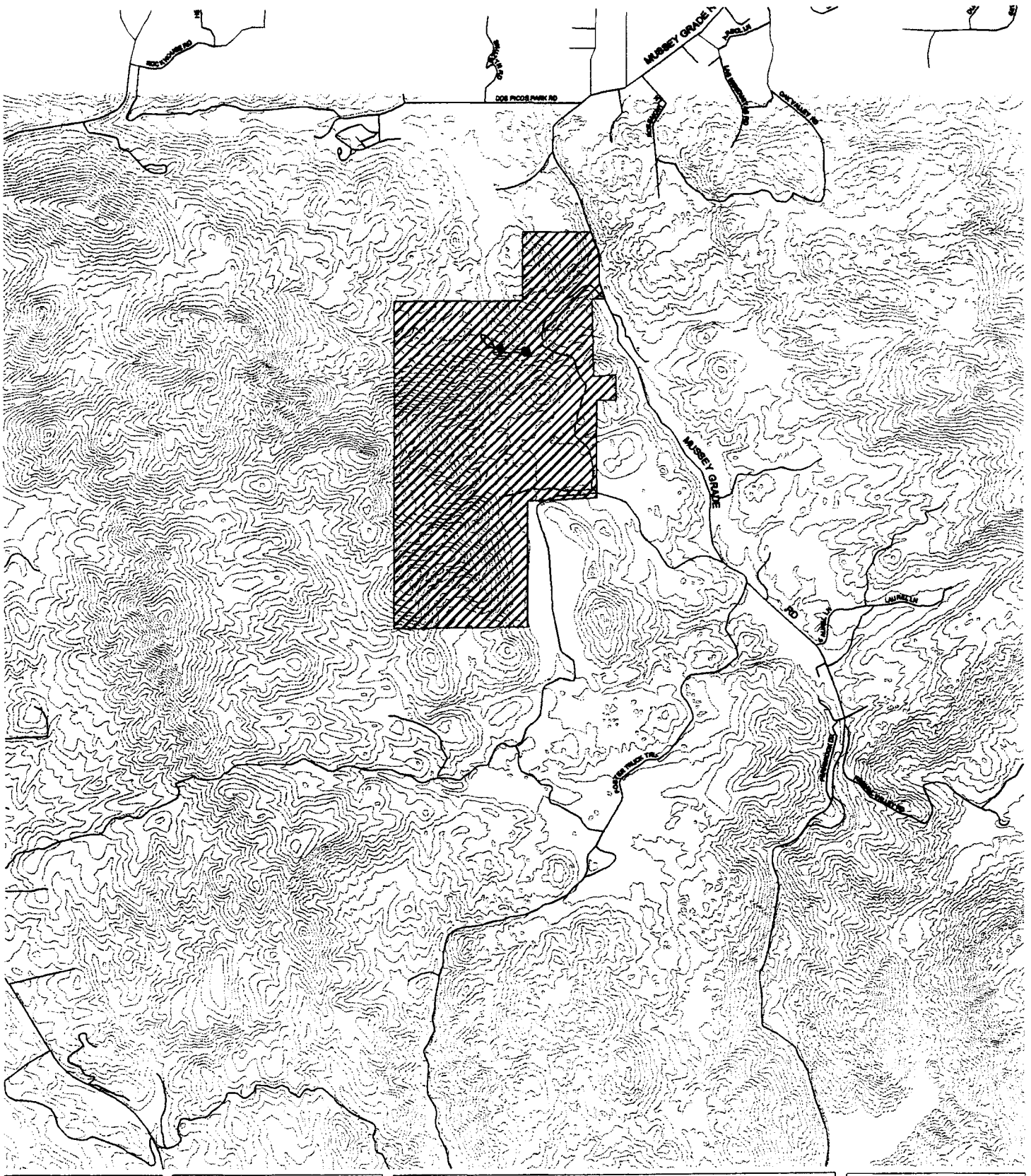
Site Information Overall site quality: ☑ Excellent ☐ Good ☐ Fair ☐ Poor
Current / surrounding land use: Undeveloped + Agriculture (intensive)
Visible disturbances / possible threats: existing trail, (proposed for further development)
Comments:

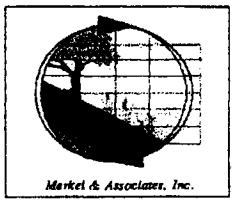
Determination: *(check one or more, and fill in blanks)*
☐ Keyed (cite reference): _____
☐ Compared with specimen housed at: _____
☐ Compared with photo / drawing in: _____
☐ By another person (name): _____
☑ Other: visual

Photographs: *(check one or more)*

	Slide	Print
Plant / animal	☐	☐
Habitat	☐	☑
Diagnostic feature	☐	☐

May we obtain duplicates at our expense? ☑ yes ☐ no





Markel & Associates, Inc.

N

500 0 5001000 Feet

Salvation Army Camp
Project Vicinity Map

Source: USGS 7.5' San Vicente, CA. Quadrangle

Figure 1

California Native Species Field Survey Form

Mail to:
Natural Diversity Database
California Department of Fish and Game
1416 Ninth Street, 12th Floor
Sacramento, CA 95814

For Office Use Only
Source Code _____ Quad Code _____
Elm Code _____ Occ. No. _____
EO Index No. _____ Map Index No. _____

Date of Field Work: 05 - 25 - 1999 (month / day / year)

Scientific Name: Accipiter cooperii

Common Name: Cooper's Hawk

Species Found? ☑ yes ☐ no _____ If not, why?
Total No. Individuals 1 Subsequent Visit? ☑ yes ☐ no
Is this an existing NDDB occurrence? _____ Yes, Occ. # ☑ no ☐ unk.
Collection? If yes: _____ Number _____ Museum / Herbarium

Reporter: Melissa Booker
Address: 3944 Murphy Cyn Rd Suite C106
San Diego, CA 92123
Phone: (858) 560-5465

Plant Information
Phenology: _____ % vegetative _____ % flowering _____ % fruiting

Animal Information
Age Structure: 1 # adults _____ # juveniles _____ # unknown
☐ breeding ☐ wintering ☐ burrow site ☐ rookery ☐ nesting ☐ other

Location (please also attach or draw map on back)

County: San Diego Landowner / Mgr.: Salvation Army
Quad Name: San Vicente Elevation: _____
T 14S R 1 W 1/4 of NW 1/4 of Section 12 T ____ R ____ ____ 1/4 of ____ 1/4 of Section ____
UTM: Zone: 11 (10, 11) Datum: NAD 83 (NAD83,NAD27,WG584, other)
Source: _____ (GPS, map & type, etc.) GPS Accuracy Point: (circle one) ☐<80m ☐<150m ☐<300m
UTM Coordinates _____

Habitat Description *(plant communities, dominants, associates, substrates/soils, aspects/slope)*
Southern Coast Live Oak Riparian Woodland

Other rare species?

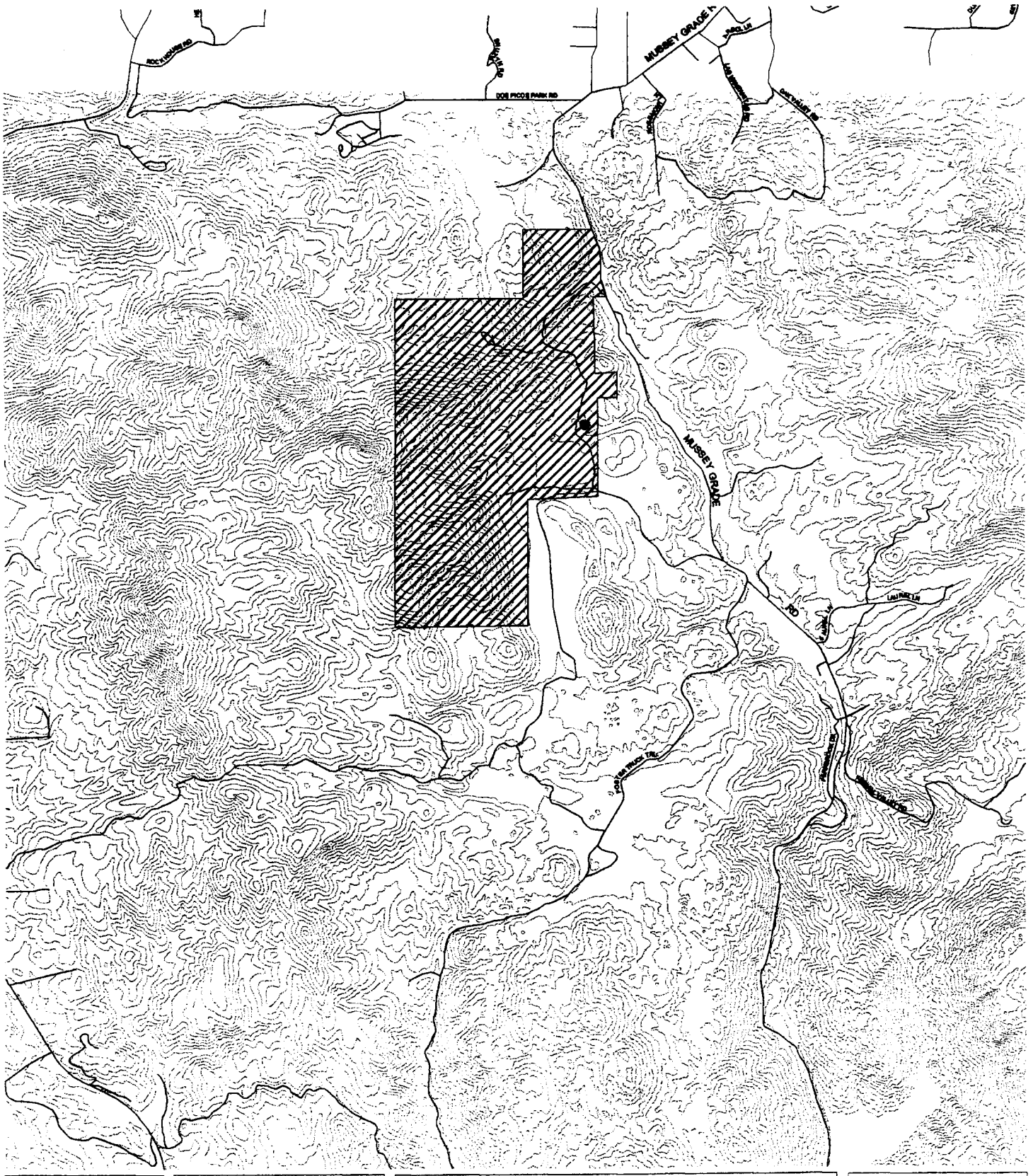
Site Information Overall site quality: ☐ Excellent ☑ Good ☐ Fair ☐ Poor
Current / surrounding land use: undeveloped + partialy developed for Campsite
Visible disturbances / possible threats: pending development
Comments: nest previously recorded here, likely breeding habitat

Determination: *(check one or more, and fill in blanks)*
☐ Keyed (cite reference): _____
☐ Compared with specimen housed at: _____
☐ Compared with photo / drawing in: _____
☐ By another person (name): _____
☑ Other: visual

Photographs: *(check one or more)*

	Slide	Print
Plant / animal	☐	☐
Habitat	☐	☐
Diagnostic feature	☐	☐

May we obtain duplicates at our expense? ☐ yes ☐ no



Markel & Associates, Inc.

N

500 0 5001000 Feet

Salvation Army Camp
Project Vicinity Map

Source: USGS 7.5' San Vicente, CA. Quadrangle

Figure 1

Appendix 8

CalEPPC List of Exotic Pest Plants of Greatest Ecological Concern

The CalEPPC List:

Exotic Pest Plants of Greatest Ecological Concern in California

October, 1999

The CalEPPC list is based on information submitted by our members and by land managers, botanists and researchers throughout the state, and on published sources. The list highlights non-native plants that are serious problems **in wildlands** (natural areas that support native ecosystems, including national, state and local parks, ecological reserves, wildlife areas, national forests, BLM lands, etc.).

List categories include:

List A: Most Invasive Wildland Pest Plants; documented as aggressive invaders that displace natives and disrupt natural habitats. Includes two sub-lists; List A-1: Widespread pests that are invasive in more than 3 Jepson regions (see page 3), and List A-2: Regional pests invasive in 3 or fewer Jepson regions.

List B: Wildland Pest Plants of Lesser Invasiveness; invasive pest plants that spread less rapidly and cause a lesser degree of habitat disruption; may be widespread or regional.

Red Alert: Pest plants with potential to spread explosively; infestations currently small or localized. If found, alert CalEPPC, County Agricultural Commissioner or California Department of Food and Agriculture.

Need More Information: Plants for which current information does not adequately describe nature of threat to wildlands, distribution or invasiveness. Further information is requested from knowledgeable observers.

Annual Grasses: New in this edition; a preliminary list of annual grasses, abundant and widespread in California, that pose significant threats to wildlands. Information is requested to support further definition of this category in next List edition.

Considered But Not Listed: Plants that, after review of status, do not appear to pose a significant threat to wildlands.

Plants that fall into the following categories are not included in the List:

- Plants found mainly or solely in disturbed areas, such as roadsides and agricultural fields.
- Plants that are established only sparingly, with minimal impact on natural habitats.

1999 List Review Committee:

Dr. Lars W.J. Anderson, Research Leader
U.S. Dept.of Agriculture-ARS
Aquatic Weed Research Lab.

Dr. Joe DiTomaso, Extension Weed Ecologist
Weed Science Program
Department of Vegetable Crops
University of California, Davis

Dr. G. Fred Hrusa, Senior Plant Systematist
Plant Pest Diagnostics Center
California Department of Food & Agriculture

Dr. Marcel Rejmánek, Professor of Plant Ecology
Section of Evolution and Ecology
University of California, Davis

CalEPPC List Committee:

Ann Howald, Instructor
Santa Rosa Junior College

Dr. John Randall, Invasive Weed Specialist
The Nature Conservancy

Jake Sigg, President
California Native Plant Society

Ellie Wagner, Botanist
California Dept. of Transportation

Peter Warner, Restoration Coordinator
Golden Gate National Parks Association

The CalEPPC list is updated regularly. Please use the form provided to send comments, suggestions or new information to: **Peter Warner, 555 Magnolia Avenue, Petaluma, CA, 94952-2080**, or via email at **peterjwarner@earthlink.net**

Thanks to all those who submitted comments for the 1999 list.

The California Exotic Pest Plant Council

List A-1: Most Invasive Wildland Pest Plants; Widespread

Latin Name[1]	Common Name	Habitats of Concern and Other Comments	Distribution[2]
Ammophila arenaria	European beach grass	Coastal dunes	SCo,CCo,NCo
Arundo donax	giant reed, arundo	Riparian areas	cSNF,CCo,SCo,SnGb,D,GV
Bromus tectorum	cheat grass, downy brome	Sagebrush, pinyon-juniper, other desert communities; increases fire frequency	GB,D
Carpobrotus edulis	iceplant, sea fig	Many coastal communities, esp. dunes	SCo,CCo,NCo,SnFrB
Centaurea solstitialis[C]	yellow starthistle	Grasslands	CA-FP (uncommon in SoCal)
Cortaderia jubata	Andean pampas grass, jubatagrass	Horticultural; many coastal habitats, esp. disturbed or exposed sites incl. logged areas	NCo,NCoRO,SnFrB, CCo,WTR,SCo
Cortaderia selloana	pampas grass	Horticultural; coastal dunes, coastal scrub, Monterey pine forest, riparian, grasslands; wetlands in ScV; also on serpentine	SnFrB,SCo,CCo,ScV
Cynara cardunculus[B]	artichoke thistle	Coastal grasslands	CA-FP, esp. CCo,SCo
Cytisus scoparius[C]	Scotch broom	Horticultural; coastal scrub, oak woodlands, Sierra foothills	NW,CaRF,SNF,GV, SCo,CW
Eucalyptus globulus	Tasmanian blue gum	Riparian areas, grasslands, moist slopes	NCoRO,GV,SnFrB, CCo,SCoRO,SCo,nChI
Foeniculum vulgare	wild fennel	Grasslands; esp. SoCal, Channel Is.; the cultivated garden herb is not invasive	CA-FP
Genista monspessulana[C]	French broom	Horticultural; coastal scrub, oak woodlands, grasslands	NCoRO,NCoRI,SnFrB, CCo,SCoRO,sChI,WTR,PR
Lepidium latifolium[B]	perennial pepperweed, tall whitetop	Coastal, inland marshes, riparian areas, wetlands, grasslands; potential to invade montane wetlands	CA (except KR,D)
Myriophyllum spicatum	Eurasian watermilfoil	Horticultural; lakes, ponds, streams, aquaculture	SnFrB,SnJV,SNH(?); prob. CA
Pennisetum setaceum	fountain grass	Horticultural; grasslands, dunes, desert canyons; roadsides	Deltaic GV,CCo,SCo, SnFrB
Rubus discolor	Himalayan blackberry	Riparian areas, marshes, oak woodlands	CA-FP
Senecio mikanioides (=*Delairea odorata*)	Cape ivy, German ivy	Coastal, riparian areas, also SoCal (south side San Gabriel Mtns.)	SCo,CCo,NCo,SnFrB,SW
Taeniatherum caput-medusae[C]	medusa-head	Grasslands, particularly alkaline and poorly drained areas	NCoR,CaR,SNF,GV,SCo
Tamarix chinensis, T. gallica, T. parviflora & T. ramosissima	tamarisk, salt cedar	Desert washes, riparian areas, seeps and springs	SCo,D,SnFrB,GV,sNCoR, sSNF,Teh,SCoRI,SNE, WTR
Ulex europaeus[B]	gorse	North, central coastal scrub, grasslands	NCo,NCoRO,CaRF, n&cSNF,SnFrB,CCo

[1]Noxious Weed Ratings

F: Federal Noxious Weed, as designated by the USDA; targeted for federally-funded prevention, eradication or containment efforts.

A: CA Dept. of Food & Agriculture, on "A" list of Noxious Weeds; agency policies call for eradication, containment or entry refusal.

B: CA Dept. of Food & Agriculture, on "B" list of Noxious Weeds; includes species that are more widespread, and therefore more difficult to contain; agency allows county Agricultural Commissioners to decide if local eradication or containment is warranted.

C: CA Dept. of Food & Agriculture, on "C" list of Noxious Weeds; includes weeds that are so widespread that the agency does not endorse state or county-funded eradication or containment efforts except in nurseries or seed lots.

Q: CA Dept. of Food & Agriculture's designation for temporary "A" rating pending determination of a permanent rating.

For most species nomenclature follows *The Jepson Manual: Higher Plants of California* (Hickman, J., Ed., 1993).

Exotic Pest Plants of Greatest Ecological Concern in California

List A-2: Most Invasive Wildland Pest Plants; Regional

Latin Name[1]	Common Name	Habitats of Concern and Other Comments	Distribution[2]
Ailanthus altissima	tree of heaven	Riparian areas, grasslands, oak woodlands, esp. GV, SCo	CA-FP
Atriplex semibaccata	Australian saltbush	SoCal, coastal grasslands, scrub, "high marsh" of coastal salt marshes	CA (except CaR,c&sSN)
Brassica tournefortii	Moroccan or African mustard	Washes, alkaline flats, disturbed areas in Sonoran Desert	SW,D
Bromus madritensis ssp. *rubens*	red brome	Widespread; contributing to SoCal scrub, desert scrub type conversions; increases fire frequency	CA
Cardaria draba[B]	white-top, hoary cress	Riparian areas, marshes of central coast; also ag. lands, disturbed areas	Problem only in CCo
Conicosia pugioniformis	narrow-leaved iceplant, roundleaf iceplant	Coastal dunes, sandy soils near coast; best documented in San Luis Obispo and Santa Barbara cos.	CCo
Cotoneaster pannosus, C. lacteus	cotoneaster	Horticultural; many coastal communities; esp. North Coast, Big Sur; related species also invasive	CCo,SnFrB,NW
Cytisus striatus	striated broom	Often confused with C. scoparius; coastal scrub, grassland	SnFrB,CCo,SCo,PR
Egeria densa	Brazilian waterweed	Streams, ponds, sloughs, lakes; Sacramento-San Joaquin Delta	n&sSNF,SnJV,SnFrB, SnJt,SNE
Ehrharta calycina	veldt grass	Sandy soils, esp. dunes; rapidly spreading on central coast	CCo,SCoRO,WTR
Eichhornia crassipes	water hyacinth	Horticultural; established in natural waterways, esp. troublesome in Sacramento-San Joaquin Delta	GV,SnFrB,SCo,PR
Elaeagnus angustifolia	Russian olive	Horticultural; interior riparian areas	SnJV,SnFrB,SNE,DMoj
Euphorbia esula[A]	leafy spurge	Rangelands in far no. CA, also reported from Los Angeles Co.	eKR,NCo,CaR,MP,SCo
Ficus carica	edible fig	Horticultural; Central Valley, foothill, South Coast and Channel Is. riparian woodlands	nSNF,GV,SnFrB,SCo
Lupinus arboreus	bush lupine	Native to SCo, CCo; invasive only in North Coast dunes	SCo,CCo,NCo
Mentha pulegium	pennyroyal	Santa Rosa Plain (Sonoma Co.) and Central Valley vernal pools; wetlands elsewhere	NW,GV,CW,SCo
Myoporum laetum	myoporum	Horticultural; coastal riparian areas in SCo	SCo,CCo
Saponaria officinalis	bouncing bet	Horticultural; meadows, riparian habitat in SNE, esp. Mono Basin	NW,CaRH,nSNF,SnFrB, SCoRO,SCo,PR,MP,SNE, GV
Spartina alterniflora	Atlantic or smooth cordgrass	S.F. Bay salt marshes; populations in Humboldt Bay believed extirpated	CCo(shores of S.F. Bay)

[2]Distribution by geographic subdivisions per the Jepson Manual

CA=California
CA-FP=California Floristic Province
CaR=Cascade Ranges
CaRF=Cascade Range Foothills
CCo=Central Coast
ChI=Channel Islands
CW=Central Western CA
D=Deserts
DMoj=Mojave Desert
DSon=Sonoran Desert
GB=Great Basin
GV=Great Valley
KR=Klamath Ranges
MP=Modoc Plateau
NCo=North Coast
NCoRI=Inner NCo Ranges
NCoRO=Outer NCo Ranges
NW=Northwestern CA
PR=Peninsular Ranges
SCo=South Coast
SCoRI=Inner SCo Ranges
SCoRO=Outer SCo Ranges
ScV=Sacramento Valley
SnJV=San Joaquin Valley
SN=Sierra Nevada
SNE=East of SN
SNF=SN Foothills
SNH=High SN
SnFrB=San Francisco Bay Area
SnGb=San Gabriel Mtns
SW=Southwestern CA
Teh=Tehachapi Mtns
WTR=Western Transverse Ranges

The California Exotic Pest Plant Council

List B: Wildland Pest Plants of Lesser Invasiveness

Latin Name[1]	Common Name	Habitats of Concern and Other Comments	Distribution[2]
Ageratina adenophora[F]	eupatory	Horticultural; coastal canyons, coastal scrub, slopes, Marin to San Diego Co; San Gabriel Mtns.	CCo,SnFrB,SCo,SCoRO
Bassia hyssopifolia	bassia	Alkaline habitats	CA (except NW,SNH)
Bellardia trixago	bellardia	Grasslands, on serpentine, where a threat to rare natives	NCoRO,CCo,SnFrB
Brassica nigra	black mustard	Coastal communities, esp. fog-belt grasslands; disturbed areas	CA-FP
Cardaria chalepensis[B]	lens-podded white-top	Wetlands of Central Valley	CA
Carduus pycnocephalus[C]	Italian thistle	Grasslands, shrublands, oak woodlands	sNCo,sNCoR,SNF,CW, SCo,ScV
Centaurea calcitrapa[B]	purple starthistle	Grasslands	NW,sCaRF,SNF,GV,CW,SW
Centaurea melitensis	tocalote, Malta starthistle	Widespread; sometimes misidentified as C. solstitialis; perhaps a more serious invader than currently recognized	CA-FP,D
Cirsium arvense[B]	Canada thistle	Especially troublesome in riparian areas	CA-FP
Cirsium vulgare	bull thistle	Riparian areas, marshes, meadows	CA-FP,GB
Conium maculatum	poison hemlock	Mainly disturbed areas but may invade wildlands; known to poison wildlife; early expanding stage in many areas, esp. San Diego Co. riparian, oak understory	CA-FP
Crataegus monogyna	hawthorn	Horticultural; recent invader, colonizing healthy native forest around Crystal Springs reservoir on S.F. peninsula	SnFrB,CCo,NCo,NCoR
Ehrharta erecta	veldt grass	Wetlands, moist wildlands; common in urban areas; potential to spread rapidly in coastal, riparian, grassland habitats	SnFrB,CCo,SCo
Erechtites glomerata, E. minima	Australian fireweed	Coastal woodlands, scrub, NW forests, esp. redwoods	NCo,NCoRO,CCo,SnFrB, SCoRO
Festuca arundinacea	tall fescue	Horticultural (turf grass); coastal scrub, grasslands in NCo, CCo	CA-FP
Hedera helix	English ivy	Horticultural; invasive in coastal forests, riparian areas	CA-FP
Holcus lanatus	velvet grass	Coastal grasslands, wetlands in No. CA	CA exc. DSon
Hypericum perforatum[C]	Klamathweed, St. John's wort	Redwood forests, meadows, woodlands; invasion may occur due to lag in control by established biocontrol agents	NW,CaRH,n&cSN,ScV, CCo,SnFrB,PR
Ilex aquifolium	English holly	Horticultural; coastal forests, riparian areas	NCoRO,SnFrB,CCo
Iris pseudacorus	yellow water iris, yellow flag	Horticultural; riparian, wetland areas, esp. San Diego, Los Angeles cos.	SnFrB,CCo,sSnJV,SCo
Leucanthemum vulgare	ox-eye daisy	Horticultural; invades grassland, coastal scrub	KR,NCoRO,n&cSNH, SnFrB,WTR,PR
Mesembryanthemum crystallinum	crystalline iceplant	Coastal bluffs, dunes, scrub, grasslands; concentrates salt in soil	NCo,CCo,SCo,ChI
Myriophyllum aquaticum	parrot's feather	Horticultural; streams, lakes, ponds	NCo,CaRF,CW,SCo
Olea europaea	olive	Horticultural and agricultural; reported as invasive in riparian habitats in Santa Barbara, San Diego	NCoR,NCoRO,CCo, SnFrB,SCoRO,SCo
Phalaris aquatica	Harding grass	Coastal sites, esp. moist soils	NW,cSNF,CCo,SCo
Potamogeton crispus	curlyleaf pondweed	Scattered distribution in ponds, lakes, streams	NCoR,GV,CCo,SnFrB, SCo,ChI,SnGb,SnBr,DMoj
Ricinus communis	castor bean	SoCal coastal riparian habitats	GV,SCo,CCo
Robinia pseudoacacia	black locust	Horticultural; riparian areas, canyons; native to eastern U.S.	CA-FP,GB
Schinus molle	Peruvian pepper tree	Horticultural; invasive in riparian habitats in San Diego, Santa Cruz Is.	SNF,GV,CW,SW,Teh

List B: Continued

Latin Name[1]	Common Name	Habitats of Concern and Other Comments	Distribution[2]
Schinus terebinthifolius	Brazilian pepper	Horticultural; riparian areas	sSCo
Senecio jacobaea[B]	tansy ragwort	Grasslands; biocontrol agents established	NCo,wKR,s&wCaR, nSNF, nScV,SW
Spartium junceum	Spanish broom	Coastal scrub, grassland, wetlands, oak woodland, NW forests, esp. redwoods; also roadcuts	NCoRO,ScV,SnFrB, SCoRO,SCo,sChl,WTR
Verbascum thapsus	woolly or common mullein	SNE meadows, sagebrush, pinyon-juniper woodlands; shores of Boggs Lake (Lake Co.)	CA
Vinca major	periwinkle	Horticultural; riparian, oak woodland, other coastal habitats	NCoRO,SnFrB, CCo, sSCoRO,SCo

Red Alert: Species with potential to spread explosively; infestations currently restricted

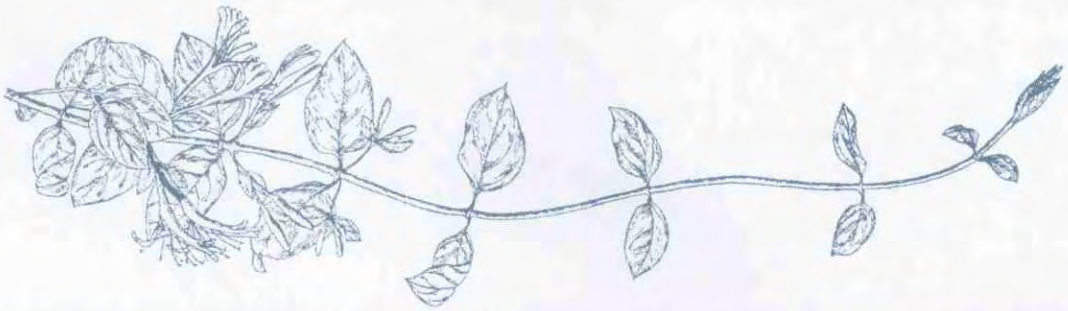
Latin Name[1]	Common Name	Habitats of Concern and Other Comments	Distribution[2]
Alhagi pseudalhagi[A]	camel thorn	Noxious weed of arid areas; most infestations in California have been eradicated	GV,sSNE,D
Arctotheca calendula[A]	Capeweed	Seed-producing types are the problem; most are vegetative only	NCo,SnFrB,CCo
Centaurea maculosa[A]	spotted knapweed	Riparian, grassland, wet meadows, forest habitats; contact CA Food & Ag if new occurrences found	CaR,SN,nScV,nCW,MP, nSNE,sPR,NW
Crupina vulgaris[F,A]	bearded creeper, common crupina	Aggressively moving into wildlands, esp. grassland habitats	NCoR (Sonoma Co.),MP
Halogeton glomeratus[A]	halogeton	Noxious weed of Great Basin rangelands; report locations to CA Food & Ag; goal is exclusion from CA	GB
Helichrysum petiolare	licorice plant	North coastal scrub; one population on Mt. Tamalpais, w. Marin Co.	Not in Jepson
Hydrilla verticillata[F,A]	hydrilla	Noxious water weed; report locations to CA Food & Ag; eradication program in place; found in Clear Lake (Lake Co.) in 1994	NCoRI,n&cSNF,ScV,SCo,D
Lythrum salicaria[B]	purple loosestrife	Horticultural; noxious weed of wetlands, riparian areas	sNCo,NCoRO,nSNF,ScV, SnFrB,nwMP
Ononis alopecuroides[Q]	foxtail restharrow	Eradication efforts underway in San Luis Obispo Co.; to be looked for elsewhere in CA	CCo; not in Jepson
Retama monosperma	bridal broom	First noted at Fallbrook Naval Weapons Station, San Diego Co; could rival other invasive brooms	San Diego Co.; not in Jepson
Salvinia molesta[F]	giant waterfern	Ponds, lakes, reservoirs, canals	Napa, Sonoma cos., lower Colorado River; not in Jepson
Sapium sebiferum	Chinese tallow tree	Horticultural; riparian, wetland habitats, open areas and understory	ScV,SnFrB; not in Jepson
Sesbania punicea	scarlet wisteria tree	Horticultural; riparian areas; American River Parkway, Sacramento Co., Suisun Marsh, San Joaquin River Parkway	ScV,SnJV; not in Jepson
Spartina anglica	cord grass	Scattered in S.F. Bay	Not in Jepson
Spartina densiflora	dense-flowered cord grass	Scattered in S.F. Bay, Humboldt Bay salt marshes	CCo,NCo
Spartina patens	salt-meadow cord grass	One site in S.F. Bay, also Siuslaw Estuary, OR and Puget Sound, WA	CCo

Need More Information

Latin Name[1]	Common Name	Habitats of Concern and Other Comments	Distribution[2]
Acacia dealbata	silver wattle	Aggressive in natural areas?	SnFRB,SCoRO,SCoRI,CCo
Acacia decurrens	green wattle	Sometimes confused with A. dealbata; aggressive in natural areas?	Unknown
Acacia melanoxylon	blackwood acacia	Reported from S.F. Bay area, central coast, Santa Cruz Is.; spreads slowly; other areas?	SnFrB,SCoRO,SCo,CCo
Aeschynomene rudis[B]	rough jointvetch	Princeton area, Colusa Co.; pest of rice crops; potential threat to riparian, wetland habitats?	ScV
Agrostis avenacea	Pacific bentgrass	Invading vernal pools in San Diego area; attempts at manual eradication unsuccessful so far; problem in other areas?	sNCo,sNCoR,SNF, GV,CW,nSCo
Aptenia cordifolia	red apple	Habitats where invasive?	CCo,SCo,sChl
Asphodelus fistulosus	asphodel	Common in SCo highway rights-of-way, other disturbed sites; threats to wildlands?	sSnJV,SCo
Carduus acanthoides[A]	giant plumeless thistle	Threatens wildlands?	NCoRI,nSN,SnFrB, nSCoRO,MP
Cistus ladanifer	gum cistus	Horticultural; invades coastal sage scrub, chaparral; areas where problematic?	sCCo,SnGb
Cordyline australis	New Zealand cabbage	Infestation at Salt Point State Park; bird-dispersed; other problem areas?	Not in Jepson
Cotoneaster spp. (exc. C. pannosus, C. lacteus)	cotoneaster	Horticultural; bird-distributed; which species are problems in wildlands?	Unknown
Cupressus macrocarpa	Monterey cypress	Native only to Monterey Peninsula; planted and naturalized CCo, NCo; threat to wildlands?	CCo
Descurainia sophia	flixweed, tansy mustard	Entering Mojave wildlands through washes; threat to wildlands?	CA
Dimorphotheca sinuata	African daisy, Cape marigold	Horticultural; reported as invasive in w. Riverside Co., Ventura Co.; problem elsewhere?	SnJV,SCoRO,SCo,PR
Echium candicans, E. pininana	pride of Madeira, pride of Teneriffe	Horticultural; riparian, grassland, coastal scrub communities; spreads by seed	CCo,SnFrB,SCo,sNCo
Ehrharta longiflora	veldt grass	Reported from San Diego	Not in Jepson
Erica lusitanica	heath	Threat to wildlands?	NCo (Humboldt Co.)
Euphorbia lathyris	caper spurge, gopher plant	Invades coastal scrub, marshes, dunes; Sonoma, Marin cos.; threat to wildlands?	NCo,CCo,GV,SCo
Gazania linearis	gazania	Horticultural; invades grassland in S.F., coastal scrub?	CCo,SCo
Glyceria declinata		Although reported from Central Valley vernal pools, genetic research is needed to confirm identity; plants that have been called G. declinata key in Jepson to native G. occidentalis	Uncertain; not in Jepson
Hedera canariensis	Algerian ivy	Horticultural; invasive in riparian areas in SoCal?	Not in Jepson
Hirschfeldia incana	Mediterranean or short-pod mustard	Increasing in western, southern Mojave; threat to wildlands?	NCo,SNF,GV,CW,SCo, DMoj
Hypericum canariense	Canary Island hypericum	Reported in San Diego area, coastal sage scrub, grassland; threat to wildlands?	SCo
Hypochaeris radicata	rough cat's-ear	Widespread in coastal grasslands, wetlands; threat to wildlands?	NW,CaRF,nSNF,ScV, CW,SCo
Isatis tinctoria[B]	dyers' woad	Well-known invader in Utah; threat to wildlands?	KR,CaR,nSNH,MP
Ligustrum lucidum	glossy privet	Horticultural; spreading rapidly on Mendocino coast; problem in other areas?	NCo; not in Jepson
Limonium ramosissimum ssp. *provinciale*	sea lavender	Reported spreading in Carpinteria Salt Marsh; problem in other areas?	Not in Jepson

Need More Information: Continued

Latin Name[1]	Common Name	Habitats of Concern and Other Comments	Distribution[2]
Ludwigia uruguayensis (= *L. hexapetala*)	water primrose	Invasive in aquatic habitats; non-native status questioned?	NCo,sNCoRO,CCo, SnFrB,SCo
Malephora crocea	ice plant	Invades margins of wetlands, bluffs along SCo	CCo,SCo,sChl
Maytenus boaria	mayten	Horticultural; scattered in riparian forests, ScV; east SnFrB	ScV,SnFrB
Mesembryanthemum nodiflorum	slender-leaved iceplant	Abundant on Channel Islands; invades wetlands; habitats where problematic?	SnFrB,SCo,ChI
Nicotiana glauca	tree tobacco	Disturbed places; not very competitive with natives in coastal scrub, chaparral; spreading along Putah Creek (Yolo Co.); problems elsewhere?	NCoRI,c&sSNF, GV,CW,SW,D
Oxalis pes-caprae	Bermuda buttercup	Invades disturbed sites; invasive in undisturbed habitats?	NCo,NCoRO,CCo, SnFrB,SCoRO,SCo
Parentucellia viscosa		Threat to NCo (Humboldt Co.) dune swales?	NCo,NCoRO,CCo,SCo
Passiflora caerulea		Horticultural; reported from SoCal; threat to wildlands?	SCo; not in Jepson
Pennisetum clandestinum[F,C]	Kikuyu grass	Disturbed sites, roadsides; threat to wildlands?	NCo,CCo,SnFrB,SCo, Santa Cruz Is.
Phyla nodiflora	mat lippia	Most varieties in CA are native; taxonomy unclear; status of plants in vernal pools, wetlands?	NW(except KR,NCoRH), GV,CCo,SnFrB,SCo, PR,DSon
Pinus radiata cultivars	Monterey pine	Cultivars invading native Monterey, Cambria forests, where spread of pine pitch canker is a concern	CCo
Piptatherum miliaceum	smilo grass	Aggressive in SoCal creeks, canyons; threats to wildlands?	NCo,GV,CW,SCo
Pistacia chinensis	Chinese pistache	Horticultural; invades riparian areas and woodlands in ScV	ScV
Prunus cerasifera	cherry plum	Oak woodland, riparian areas; esp. Marin, Sonoma cos.; bird-distributed; problems elsewhere?	SnFrB,CCo
Pyracantha angustifolia	pyracantha	Horticultural; spreads from seed in S.F. Bay area; bird-distributed; problem elsewhere?	sNCoRO,CCo,SnFrB, SCo
Salsola soda	glasswort	Threat to salt marshes?	nCCo,SnFrB
Salsola tragus[C]	Russian thistle, tumbleweed	Abundant in dry open areas in w. Mojave Desert, Great Basin; not limited to disturbed sites; threats?	CA
Salvia aethiopis[B]	Mediterranean sage	Creates monocultures in E. Oregon grasslands; threat to CA wildlands?	MP
Stipa capensis		Distribution and threats?	Not in Jepson
Tamarix aphylla	athel	Spreading in Salton Sea area; threats to wildlands?	nSnJV,nSCo,D
Tanacetum vulgare	common tansy	Jepson reports as uncommon, escape from cultivation in urban areas; problem in wildlands?	NCo,NCoRO,CaRH, SCoRO
Verbena bonariensis, V. litoralis	tall vervain	Horticultural; invades riparian forests, wetlands; extensive along ScV riparian corridors; roadsides (Yuba Co.); elsewhere?	ScV,nSnJV,nSnFrB,CCo



Annual Grasses

Latin Name[1]	Common Name	Habitats of Concern and Other Comments	Distribution[2]
Aegilops triuncialis[B]	barbed goatgrass	Serpentine soils, grasslands	sNCoR,CaRF, n&cSNF, ScV,nCW
Avena barbata	slender wild oat	Lower elev. in SoCal; coastal slopes, coastal sage scrub, disturbed sites	CA-FP,MP,DMoj
Avena fatua	wild oat	Lower elev. in SoCal; coastal slopes, coastal sage scrub on deeper soil, disturbed sites	CA-FP,MP,DMoj
Brachypodium distachyon	false brome	Expanding in SoCal; common in Orange Co.	sNCoR,sCaRF, SNF,GV,CW,SCo,sChI
Bromus diandrus	ripgut brome	Coastal dunes, coastal sage scrub, grasslands	CA
Lolium multiflorum	Italian ryegrass	Wetland areas, esp. vernal pools in San Diego Co.; common in disturbed sites	CA-FP
Schismus arabicus	Mediterranean grass	Threat to Mojave and Colorado desert shrublands?	SnJV,CW,sChI,D
Schismus barbatus	Mediterranean grass	Threat to Mojave and Colorado desert shrublands?	SnJV,SW,D

Considered, but not listed

Latin Name[1]	Common Name	Habitats of Concern and Other Comments
Albizia lophantha	plume acacia	Not invasive
Anthoxanthum odoratum	sweet vernal grass	Disturbed sites on coast; Marin, Sonoma, Mendocino cos.
Carpobrotus chilensis	sea fig	Native status in question; not a threat to wildlands
Centranthus ruber	red valerian	Horticultural; roadcuts in Marin Co.; not a threat to wildlands
Convolvulus arvensis[C]	field bindweed	Disturbed sites; ag lands
Coprosma repens	mirror plant	No evidence of wildland threat
Crocosmia x crocosmiiflora		Generally in disturbed coastal, urban areas, roadsides
Digitalis purpurea	foxglove	Horticultural; scattered in prairies, meadows, disturbed sites; not a major wildland threat
Dipsacus sativus, D. fullonum	wild teasel, Fuller's teasel	Roadsides, disturbed sites
Fumaria officinalis, F. parviflora	fumitory	S.F. Bay area, Monterey Bay salt marshes, sandy disturbed sites
Medicago polymorpha	California bur clover	Grasslands, moist sites; mainly restricted to disturbed sites
Melilotus officinalis	yellow sweet clover	Restricted to disturbed sites in CA
Nerium oleander	oleander	Horticultural; not invasive, although reported from riparian areas in Central Valley, San Bernardino Mtns.
Picris echioides	bristly ox-tongue	Disturbed areas
Silybum marianum	milk thistle	Disturbed areas, especially overgrazed moist pasturelands; may interfere with restoration
Xanthium spinosum	spiny cocklebur	Identified as native in *The Jepson Manual* (Hickman, 1993) and *A California Flora* (Munz and Keck, 1968); restricted to disturbed areas
Zantedeschia aethiopica	calla lily	Horticultural; mainly a garden escape in wet coastal areas
Zoysia cultivars	Amazoy and others	Horticultural; no evidence of wildland threat

Request for Information: Exotic Pest Plants of Greatest Ecological Concern in CA

Please use this form to propose adding a new plant to the CalEPPC list or to provide other comments. Please provide as much detail as possible. Use the second side of this form or attach additional sheets if more space is needed. Please mail completed form to: **Peter Warner, 555 Magnolia Avenue, Petaluma, CA, 94952-2080**. Comments can be submitted by email to **peterjwarner@earthlink.net**

Species Name: _____

Does this weed displace healthy native communities, or
is it mainly restricted to disturbed sites like roadsides, agricultural areas, etc.? _____

_____

In which region(s) of California does this weed infest wildlands?
Indicate county(ies) and/or Jepson regions (see page 3). _____

_____

Which native communities does it infest? _____

List any rare plants, animals or communities threatened by this weed: _____

_____

How does it spread? (Seeds carried by wind, birds, other animals; vegetative runners?) _____

_____

Is this plant a recent invader of California wildlands? Ideas about how it got here? _____

_____

Is this plant sold by nurseries, or used in landscaping, restoration
or other activities that might lead to its further spread in wildlands? _____

_____

Describe any techniques that have been used to eradicate this plant.
Have they been successful? If not, why is the plant difficult to eradicate? _____

_____

Other comments? _____

_____

_____

_____

Name: _____ Affiliation: _____

Address: _____ City: _____ State: _____ Zip: _____

Phone: _____ FAX: _____ email: _____

Request for Information: Exotic Pest Plants of Greatest Ecological Concern in CA

Notes:

Who We Are:

Throughout California, natural wildlands and parks are under attack from invasive pest plants. As natural habitat is replaced by exotic plants, we also lose many of the state's native birds, insects, fish and other wildlife species. People concerned with the protection, management and enjoyment of our natural areas have become increasingly alarmed about the spread of invasive exotic vegetation. Since its formation in 1992, CalEPPC has been dedicated to finding solutions to problems caused by non-native pest plant invasions of the state's natural areas. The objectives of CalEPPC are to:

- provide a focus for issues and concerns regarding exotic pest plants in California;
- facilitate communication and the exchange of information regarding all aspects of exotic pest plant control and management;
- provide a forum where all interested parties may participate in meetings and share in the benefits from the information generated by this council;
- promote public understanding regarding exotic pest plants and their control;
- serve as an advisory council regarding funding, research, management and control of exotic pest plants;
- facilitate action campaigns to monitor and control exotic pest plants in California; and
- review incipient and potential pest plant management problems and activities and provide relevant information to interested parties.

What We Do:

CalEPPC:

- Holds an annual statewide symposium;
- Co-sponsors regional workshops on control of problem wildland weeds;
- Publishes a quarterly newsletter with timely, practical information;
- Maintains an informative web site at **www.caleppc.org**
- Sponsors rigorous experiments on control methods for French broom, German ivy, pampas grass and other invasive pest plants;
- Advances public and professional awareness of wildland weed problems and solutions by sponsoring illustrated brochures and a soon-to-be published book on California's worst wildland weeds;
- Is recognized as an authoritative source of new information on all aspects of wildland weed management.

1999 CalEPPC Membership Form

If you would like to join CalEPPC, please remit your calendar dues using the form provided below. All members will receive the CalEPPC newsletter, be eligible to join CalEPPC working groups, be invited to the annual symposium and participate in selecting future board members. Your personal involvement and financial support are the keys to success. Additional contributions by present members are welcomed!

Individual		Institutional	
❑ Low Income/ Student*	$15.00	N/A	
❑ Regular	$25.00	Regular	$100.00
❑ Family	$40.00	Contributing	$250.00
❑ Contributing	$50.00	Patron	$500.00
❑ Sustaining	$100.00	Sustaining	$1000.00
❑ Lifetime	$1000.00		

Please make an additional contribution in my name to:

Student/Low Income membership: $_____

Cape Ivy Biocontrol Fund: $_____

Please make your check payable to **CalEPPC** and mail with this application form to:

CalEPPC Membership
c/o Sally Davis
32912 Calle del

Name _____

Affiliation _____

Address _____

City/State/Zip _____

Office Phone _____

Home Phone _____

Fax _____

email _____

** Students, please include current registration and/or class schedule*

The California Exotic Pest Plant Council is a California 501(c)3 non-profit, public benefit corporation organized to provide a focus for issues and concerns regarding exotic pest plants in California, and is recognized under federal and state tax laws as a qualified donee for tax deducible charitable contributions.

The CalEPPC List:

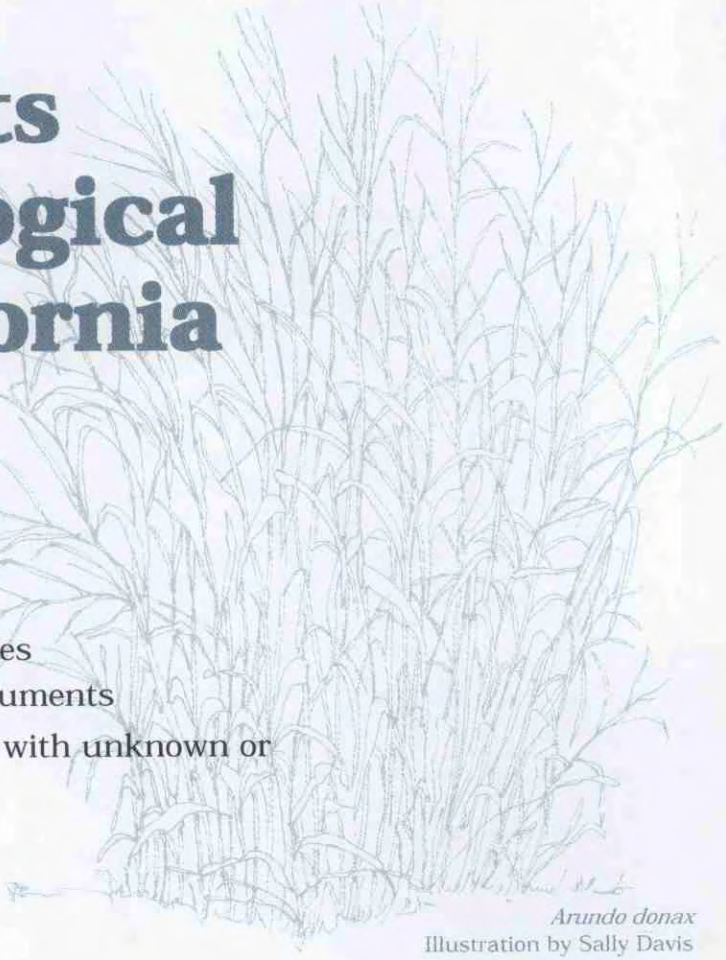
Exotic Pest Plants of Greatest Ecological Concern in California

October, 1999

Potential uses for this list:

- Informing the public
- Targeting species for control efforts
- Alerting restorationists to potential problem species
- Aiding those who comment on environmental documents
- Soliciting additional information on exotic plants with unknown or changing status

NOT FOR RESALE



Arundo donax
Illustration by Sally Davis

CALIFORNIA EXOTIC PEST PLANT COUNCIL
32912 Calle del Tesoro
San Juan Capistrano, CA 92675-4427

ADDRESS SERVICE REQUESTED

NON-PROFIT ORG.
U.S. POSTAGE
PAID
MISSION VIEJO, CA
PERMIT NO. 1117

Appendix 9

Report of Presence/Absence Trapping Surveys for Stephens' Kangaroo Rat

Presence/Absence Trapping Surveys for Stephens Kangaroo Rat Salvation Army Mussey Grade Project Ramona, California

Prepared for

Merkel and Associates Inc.

February 2, 2001

Prepared By

Philippe Vergne, ENVIRA, 23849 Gymkhana Road, Ramona, CA
Phone/fax 760-788-0450 E-mail PVERGNE@ATTMAIL.COM

TABLE OF CONTENT

EXECUTIVE SUMMARY 3

PROJECT DESCRIPTION 3

METHODS 3
- Stephens Kangaroo Rat 3
- Habitat Evaluation Surveys 3
- Trapping Surveys 4

RESULTS 4
- Topography 4
- Soils 4
- Vegetation 4
- Weather Conditions 5
- Trapping Results 5

CONCLUSIONS 9

Figure 1. Project Vicinity Map

Figure 2. Project Site and Trapping Locations

Table 1. Trapping Results

Pictures 1-4 Project Site Photos

EXECUTIVE SUMMARY

Philippe Vergne was contracted by Merkel and Associates Inc, to conduct trapping surveys for the proposed salvation Army development project. The trapping surveys were required due to the potential presence on the property of the Stephens' kangaroo rat- SKR (*Dipodomys stephensi*).

Following is a report describing the results of a field survey and habitat assessment for Stephens' kangaroo rats on the above-described property. The report is a summary of a walk-over phase one survey performed in December of 2000, and trapping surveys performed on January 14 to 18 of 2001, by Philippe Vergne, a certified SKR biologists.

Based on the available information and site conditions, there was a good probability that the SKR might occur on the proposed project site. Therefore after completing an initial walkover survey, during which kangaroo rat sign was found, the site was than trapped according to standard protocols developed for SKR. Through trapping it was possible to verify the absence of SKR in those areas which initially exhibited potential habitat and kangaroo rat sign. No SKR were captured during the trapping survey and therefore the site is currently not occupied by SKR.

PROJECT DESCRIPTION

The Salvation Army Divisional Camp (SADC) occupies an estimated 680 acres located to the west of Mossey grade Road in the town of Ramona in San Diego County, California (Figure 1). The proposed project, will impact portions of some of the 70 acres of disturbed annual grasslands located within the SADC. The SADC property is located in Section 1, T 14 south, R 1 west, of the USGS 7.5" San Vincente Reservoir Quadrangle. The project calls for the development of a cafeteria, cabins and related facilities.

METHODS

Stephens Kangaroo Rat

The Stephens' kangaroo rat is one of several kangaroo rat species in its range. The Dulzura (*Dipodomys* simulans), the Pacific kangaroo rat (*Dipodomys agilis*) and the Stephens kangaroo rat (*Dipodomys stephensi*) occur in overlapping ranges in southern California.

The Stephens kangaroo (SKR) rat prefers open areas with sparse perennial cover (Lackey 1967, Bleich 1977, Thomas 1975). They occur in areas of loose soil where the soil depth is at least 0.5 meters (Price and Endo, 1989). SKR will also inhabit disturbed areas such as fallow fields by using the burrows of other rodents, including pocket gophers (*Thomomys bottae*) (Bleich 1977) and the Beechey ground squirrel (*Spermophilus beecheyi*) (O'Farrell 1989).

Like all kangaroo rats, the SKR is primarily a seed eater, feeding on the seeds of both annual and shrub species. It also feeds on green vegetation and insects when these are available. Being primarily dry biome species kangaroo rats obtains nearly all of their water from the food they eat, and can subsist indefinitely on water extracted from dry seeds. They forages in open ground and underneath shrubs. Burrows are dug in loose soil.

The site was searched for characteristic kangaroo rat sign such as scat, tracks, burrows and dustbowls.

Habitat Evaluation Surveys

We conducted a preliminary phase one walkover survey of the site to determine the habitat types on site and identify potential habitat for the kangaroo rat. Kangaroo rat sign was observed in much of the disturbed annual grasslands and sparse scrub habitat on the site. During the reconnaissance survey it was determined that there was potential habitat for both the Dulzura and Stephens' kangaroo rats on the property (Sullivan and Best, 1997).

The species present in such marginal areas is difficult to estimate due to the likely presence of the Dulzura kangaroo rat (formerly the Pacific kangaroo rats (Dipodomys agilis - **PKR**)). Both the Dulzura and Pacific kangaroo rats are known to occasionally inhabit open grasslands more characteristic of SKR, while SKR are infrequently known to inhabit areas of denser vegetation. Therefore, verifiable assessments as to occupation and potential densities by SKR in many areas of the site required trapping. Trapping is often the only definitive method of confirming the presence, distribution, and abundance of SKR in areas where they are sympatric with other kangaroo rat species.

As part of the habitat assessment, we conducted a focused evaluation of the on site habitats and kangaroo rat sign in order to identify the most suitable trap sites. We also recorded the various plant communities and condition of the habitats on site. Based on the survey findings, we selected six areas for trapping (Figure Two).

Trapping Surveys

Trapping was conducted according to protocols established for the SKR. The protocol calls for five nights of trapping, conducted when the animal is active above-ground at night and preferably during a new moon phase. The trapping session lasted from January 14 to 19, 2001.

We placed the traps in suitable habitat areas on the project, concentrating on locating traps in areas containing soils and vegetation suitable for the SKR. Areas with kangaroo rat sign were also targeted. All trap locations were flagged to ensure the same trap sites were trapped each night. Each trap was baited with a mixture of bird seed and rolled oats, placed at the back of the traps. The traps we reopened at dusk each night and inspected at night and dawn each morning. All animals were identified and released at the point of capture.

Notes were recorded on the habitats, soils and other relevant characteristics where the traps were placed. We also noted the weather conditions at the time of the trapping surveys.

RESULTS

Topography

Topography of the site is primarily gently sloping terrain, surrounded by steeper hills and rocky outcrops. On site elevation ranges from 1290 to 1600 feet in the disturbed annual grasslands to over 2000 feet in the surrounding chaparral covered terrain.

Soils

The soils on site range from fine sandy loams to coarse loams, with pockets of clay. The loam soil types encountered on site are suitable for use by kangaroo rats.

Vegetation

Four major vegetation communities are present on the site: annual grasslands, re-sprouting and dense coastal sage scrub, chaparral, and oak woodland. Disturbed annual grassland and sparse sage scrub occur over most of the area surveyed for SKR.

The dominant vegetation community in the project development area disturbed annual grasslands dominated filaree (Erodium cicutarium), fiddleneck (Amsinckia tessellata), and shortpod mustard (Brassica geniculata), red brome (*Bromos madritensis*), ripgut grass (*Bromos diandrus*) and cheatgrass (*Bromos diandrus*). And California matchweed (*Gutierrezia californica*).

Dominant plant species in the resprouting sage scrub community adjacent to the

grasslands are flat-top buckwheat (Eriogonum fasciculatum), California sagebrush (Artemisia californica), and chamise (Adenostoma fasciculata). Shrub cover varies from sparse to dense. Scaterred oaks and remnant chaparral species are also found within the disturbed annual grasslands.

Disturbances present on the site include ornamentals (grass and plants), fire, paved and dirt roads, single family homes, cafeteria and offices, cabins with associated structures, pool, game areas, and baseball field.

Weather Conditions

Weather conditions changed little during the course of the trapping studies. Early morning temperatures were in the low to mid fifties throughout the survey. Trapping occurred a few days prior and during the quarter and rising moon phase.

Surrounding Land Uses

Surrounding land uses are varied. To the west are steep chaparral covered hillsides with no potential for SKR. To the North and south are mixes chaparral, sage scrub and oak woodlands with no SKR potential. To the east are disturbed annual grasslands and sage scrub/chaparral mixed scrub with low potential for SKR.

Trapping Results

The results of the trapping are provided in Table 1. Six sites were trapped. The trapping site selection was based based on known habitat requirements and observed sign for the targeted species. The sites were as follows:

Site 1

Site is disturbed annual grasslands adjacent to chaparral. Portions of the site have been mowed for weed control. Vegetation cover varies from 0 to 40%. Soils are sandy loams.

Site 2

Site 2 is disturbed annual grassland. Several dirt roads run along portions of the site. Soils are sandy loams, there also are some clay pockets and rocky outcrops. The plant cover from to 30 percent (Picture 1).

Site 3

Site 3 is dominated by disturbed annual grasslands, with scattered oaks and ornamentals. A game/baseball field is located in the center of the site. The plant cover varies from 0 to 30 percent (Picture 3).

Site 4

Site 4 is located along the main dirt road adjacent to large disturbed annual grasslands located off site. Soils are loams. Vegetation is mostly invasive grasses. Cover is about 30 percent.

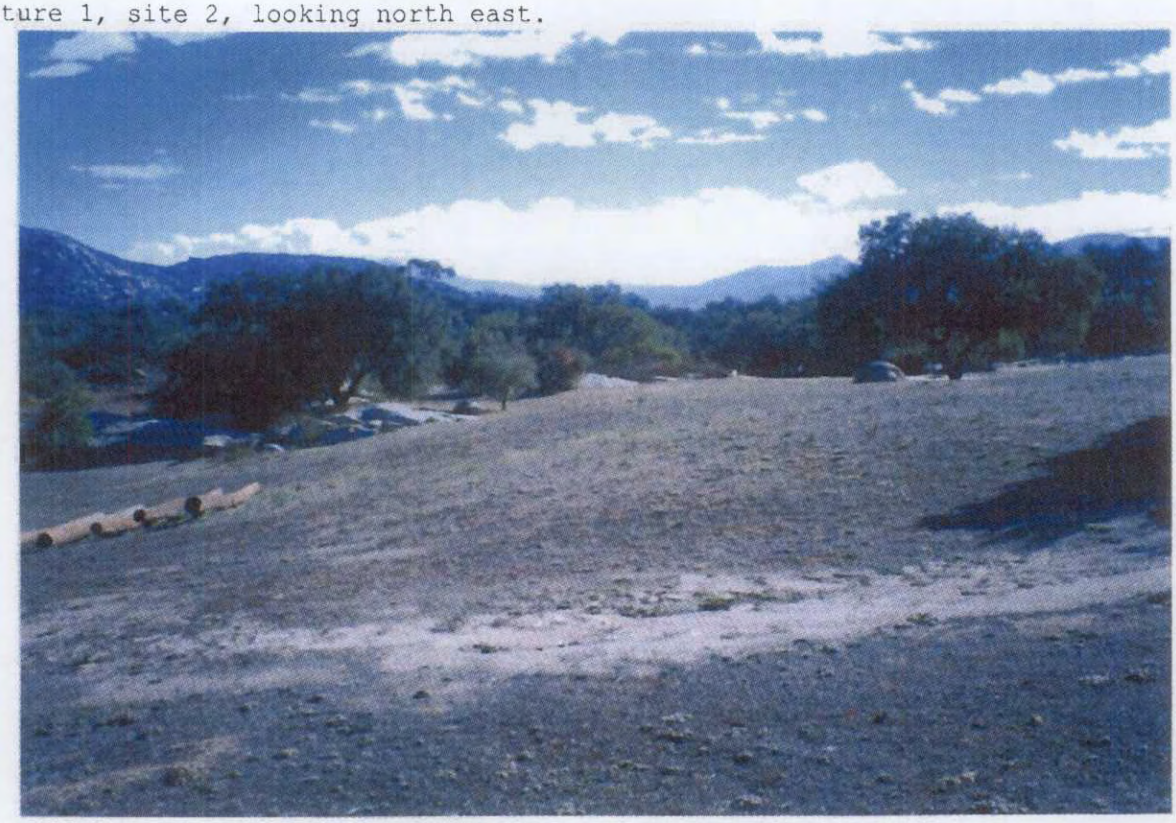
Site 5

Site 5 is dominated by disturbed annual grasslands, with scattered oaks. Cover ranges from 0 to 30 percent.

Site 6

Site 6 is located in disturbed annual grassland with sparse sage scrub. Cover ranges from 10 to 70 percent. Soils are loams and clay.

Picture 1, site 2, looking north east.



Picture 2, Site 3, looking north east.

Picture 3, site 4, Looking south down eastern edge of property.

Picture 5, site 6 Looking south.

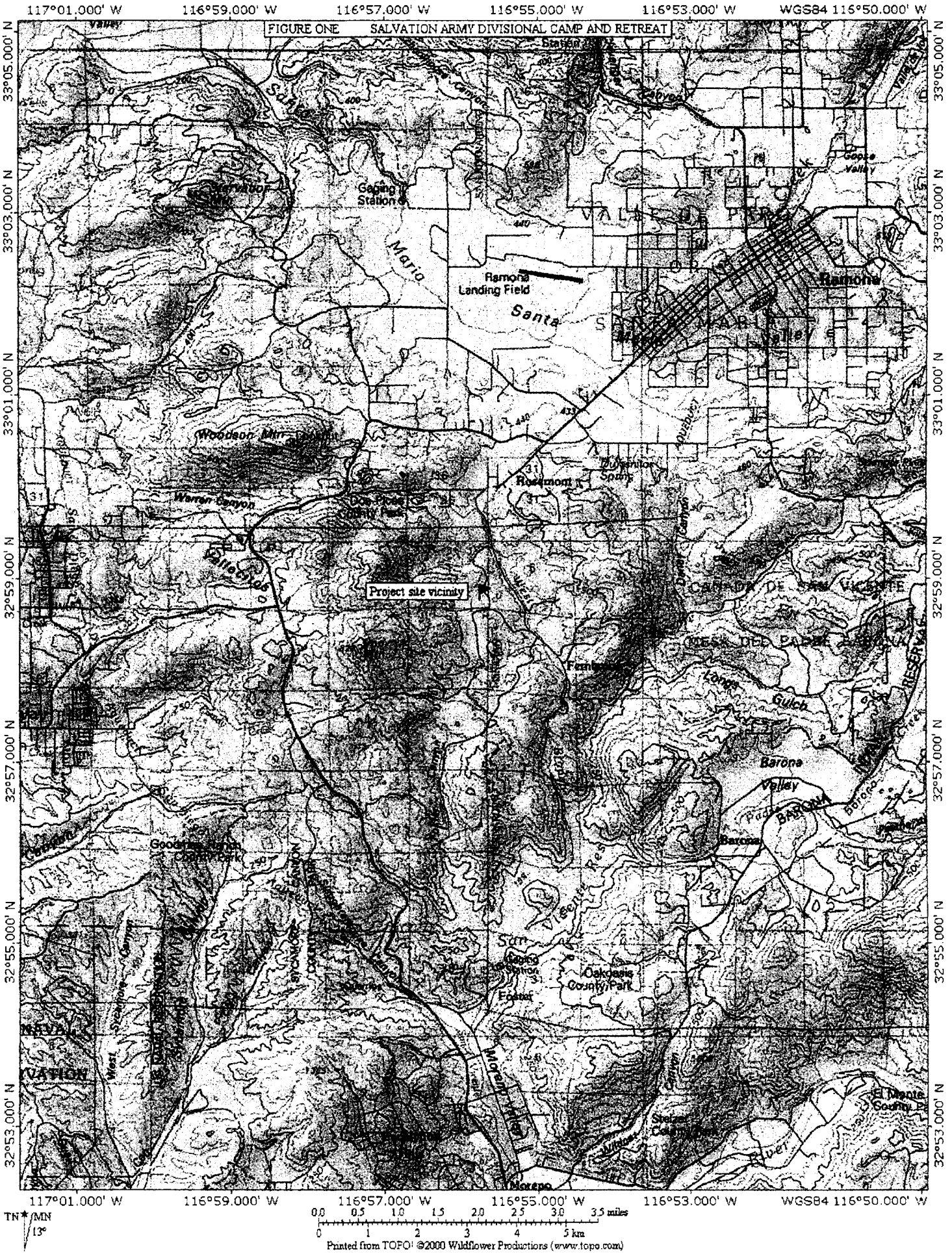
No SKR captured during the five day trapping effort. A total of 42 Dulzura kangaroo rats were captured. Dulzura kangaroo rats were captured at each trap line. Two sensitive species was also captured, the northwestern San Diego pocket mouse (*Chaetodipus fallax fallax*) and the desert woodrat (*Neotoma lepida*). Other species captured included the deer mouse (*Peromyscus maniculatus*), cactus mouse *(Peromyscus eremicus), and one parasitic mouse (Peromyscus californicus)*.

Trapping success was moderate over the entire trapping period. Table 1 provides information on the species trapped per night.

CONCLUSIONS

Based on the available information and site conditions, there was a low probability that the SKR might occur on the project site. SKR distribution in the Ramona area appears to be extremely fragmented due to disturbances, agricultural practices, and varied soil conditions ranging from small pockets of suitable loams to large areas of clay (Dr. m. O'Farrel pers. Com 2001; Vergne 99-2001 trapping results) . No SKR were caught during the trapping studies, and therefore this species is not present on the proposed project site.

FIGURE ONE SALVATION ARMY DIVISIONAL CAMP AND RETREAT



300 0 300 Feet

0.05 0 0.05 Miles

SMALL MAMMAL TRAPPING LOCATIONS ONE TO SIX

within

Salvation Army Divisional Camp and Retreat

N

Figure 2

Table 1. Trapping Results Salvation Army Site

DATE OF SET	TRAP LINE	# OF TRAPS	*Di. st.*	*Di. si.*	*Ch. fa.*	*Pe. er.*	*Pe. mu.*	*Ne. le.*	*Pe. ca.*	Other
01-14-2001	1	35		3			2			
	2	30		2	1	1	1			
	3	35		2		1				1 towhee
	4	30					1			
	5	20								
	6	30		1	2		1			
01-15-2001	1	35		1			2			
	2	30		2			2	1		
	3	35					1			
	4	30		1						
	5	20					2			
	6	30		2		1	1	1		
01-16-2001	1	35		3			1			
	2	30		2		2	1	1		
	3	35		2		1				
	4	30		1						
	5	20		2			1			
	6	30		2			1		1	
01-17-2001	1	35		2	1		2			
	2	30		3			2	1		
	3	35		3			1			
	4	30		1						
	5	20		2			1			
	6	30		3	1	1	1			
01-18-2001	1	35		1			1			
	2	30		2						
	3	35		2			2			
	4	30								
	5	20		2			1			
	6	30		2	2		2			
TOTAL		900	0	49	7	7	30	4		1
%		10.7%								

LEGEND

Di.st. *= Dipodomys stephensi* ***Di.si.*** *= Dipodomys simulans* ***Ch.fa.*** *= Chaetodipus fallax*

Pe.er. *= Peromyscus eremicus* ***Pe.ma.*** *= Peromyscus maniculatus*

Ne.le. *= Neotoma lepida* ***Pe.ca.*** *= Peromyscus californicus*

LITERATURE CITED

O'Farrell, M.J. and C. Uptain. 1989. Assessment of Population and Habitat Status of the Stephens' Kangaroo Rat (Dipodomys stephensi). California Department of Fish and Game, Non-game Bird and Mammal Section Report (July).

RECON. 1991. Methodology of Surveyeing for Stephens' Kangaroo Rat Habitat and Evaluating Suitability of Lands As Permanent Reserves. (March).

Sullivan, R.B. and T. L. Best. 1997. Systematic and Morphologic Variations in Two Chromosal Forms of the Agile Kangaroo Rat (*Dipodomys agilis*).Journal of Mamalogy Vol. 78, # 3.

Sullivan, R.B. and T. L. Best. 1997.Effects on Environment on Phenotypic Variations and sexual Dimorphism in *Dipodomys simulans* (Rodentia:Heteromyidae).Journal of Mamalogy Vol. 78, # 3.

Vergne, PJ. Results of Trapping survey for SKR on seven projects in the Ramona area (1999-2001).

Appendix 10

Salvation Army Expansion: Effects on Golden Eagles

SALVATION ARMY EXPANSION: EFFECTS ON GOLDEN EAGLES

MUSSEY GRADE ROAD
RAMONA, CALIFORNIA

Report Prepared For :
Merkel and Associates, Inc.
5434 Ruffin Road
San Diego, CA 92123
Fax 858-560-7779

June 6, 2001

Contact Person: Melissa Booker
Ph-(707) 523-3773

Report prepared by:

The Wildlife Research Institute
PO Box 2209
Ramona, CA 92065
(760)765-1957
Fax 765-3323

Contact: Dave Bittner, Exec. Director WRI
Co- Director, Golden Eagle Project

History:

The documented history of the pair of Golden Eagles we call, the Iron Mountain Pair, goes back to the 1920's. During this time James Dixon was collecting eggs for museums and private collectors called oologists. Mr. Dixon worked for the Water District and used the field knowledge of other employees and contacts throughout San Diego County to locate and collect the eggs of Golden Eagles. After collecting the eggs, notes were made on the egg itself, as to the date and location of where the eggs were collected. Many of his and others' egg collections ended up in museums all over the United States and Europe. Some of the collected eggs remain in local museums such as the Riverside Museum of Natural History and the Vertebrate Museum of Natural History in Los Angeles.

Mr. Dixon published a paper on the Golden Eagle territories he had knowledge of in the scientific journal, Condor (1936). Dixon reported 28 pairs that he had collected eggs from or had detailed knowledge of in northwest San Diego County. The Iron Mountain pair of Golden Eagles was one of those pairs. During this era of egg collection, the eggs were collected early in incubation, thus avoiding the possibility of something happening to the eggs and before the embryo grew to big, to easily blow out the egg contents. This collecting of eggs, early in incubation inadvertently had the effect of double-clutching the Eagles. Double-clutching is a method of getting eagles and other birds to lay a second set of eggs within a single breeding season. The collectors didn't collect the second set of eggs. This assured that the eagles would produce offspring and continue to nest, so that new eggs could be collected again the next year.

Egg collecting in San Diego County stopped in the 1940's. All the eagle pairs, known from the 1890's through the 1936 publishing of the Dixon paper still existed as viable nesting pairs. These established territories of Golden Eagles hadn't changed much since they were first found. This is consistent with knowledge gathered by others to follow.

John Colton, studied many of the same Golden Eagle territories after Dixon stopped his work in the 1950's. John Oakley, (Professor Emeritus), who is WRI's co-director of the Golden Eagle Project studied the same area of San Diego County as Dixon. John Oakley started in the 1940's and reports that all the Dixon eagle territories still existed up until the 1970's. Dr. Tom Scott studied the Golden Eagle population of San Diego County in the late 1970's through the early 1980's. Dr. Scott looked at the causes of a decline in the Golden Eagle population in San Diego County that started in the early 1970's with the expansion of development in the western portion of San Diego County.

In 1987 a group of ten biologists gathered in La Jolla to express their common concern about what they all perceived was a precipitous decline of Golden Eagle territories in San Diego County. They began a survey to study all the known Golden Eagle territories and to establish if they were still active. In addition they initiated a volunteer group to survey the entire County of San Diego for all the Golden Eagles. By 1991 most of the

territories had been observed for Golden Eagle activity and a few previously undocumented territories had been discovered.

Simultaneous with this survey the Wildlife Research Institute directed by Dave Bittner had also been investigating Golden Eagles in San Diego. In 1991 the two Golden Eagle surveys were combined under a cooperative agreement with John Oakley, Craig Culver and Dave Bittner directing the efforts. In 2001 the research on Golden Eagles is still ongoing and is currently co-directed by John Oakley and Dave Bittner.

Current research and historical data has allowed us to establish both the original and the current Golden Eagle population for San Diego County. Historically within San Diego County there were at least 85 pairs of Golden Eagles living in well established, distinct territories.

Current Status: Golden Eagles in San Diego County

The Golden Eagle territories that were know to James Dixon have had the most serious decline of any population known in North America. The original 28 Golden Eagle territories Dixon studied have been extirpated to a current 11 active territories. This is a decline of 61% of this population of Golden Eagles. (NOTE:Territory # 17 on the attached map is the Iron Mountain Pair as Dixon illustrated it in 1936. Territory #4 has been extirpated since the map was prepared.)

San Diego County has had a decline throughout the county from the original 85 pairs to the current forty two (42) pairs with active territories. County-wide this represents a decline of fifty one percent (51%) of all the Golden Eagles nesting and breeding. Additionally six (6) of the forty two (42) pairs are considered to be in immediate threat of extirpation. One of the Golden Eagle pairs considered in immediate threat of extirpation is the Iron Mountain Pair.

The Threat:

Golden Eagles become extirpated from territories when a combination of factors come together. These factors are usually related to changes in the foraging area that causes the eagles to no longer be able to hunt or human caused nest site disturbance which affects reproduction. Since Golden Eagles use well defined territories, that they defend from other eagles, we are able to locate the main foraging areas and the nest sites within the territory. Over time foraging areas shift very little and the nest sites remain very constant. In fact one pair of Golden Eagles is still nesting on the very same nest ledge, on a cliff that James Dixon collected eggs from in 1895. This is how stable Golden Eagle territories are if left undisturbed.

Foraging areas can shift in response to fires or changes in farming practices but the size of the territory remains rather constant. Golden Eagles defend a large territory of between 20 and 30 square miles. However, they use only a portion of this territory for

nesting and foraging. Defending a large territory keeps eagles spread out and allows for adequate food supply to feed themselves and raise young. Major changes within a territory must take place before Golden Eagles cease to breed then finally become totally extirpated.

Extirpation:

This process is a local extinction of an animal. With Golden Eagles that we have studied in San Diego County, the process usually takes several years to accomplish. The process of extirpation is not easy to detect unless constant monitoring is done but can be predicted by monitoring the changes in the territory.

In San Diego County the process usually goes like this. Development starts, in the form of housing, industry or agriculture changes from ranching to groves of avocados or oranges. Over time, expanding development, removes more and more available foraging land within the Golden Eagle territory. The Eagles respond by slowing down reproduction, because they cannot sustain themselves and young in the nest due to a decline in available prey animals. After a few years the development may also lead to increased people climbing and hiking near the nest site causing disturbance which further reduces successful reproduction. Finally all reproduction stops and the old adult eagles carry out their remaining years as best they can within the territory. Once one of the pair dies the remaining lone eagle cannot find a suitable replacement since the territory is degraded and no, potential replacement eagle, recognizes the territory as suitable. Therefore the lone eagle either leaves the territory to become a replacement mate in another territory or dies within the degraded territory of natural or manmade causes. The territory is now completely extirpated.

San Diego County has over 40 Golden Eagle Territories that have been Extirpated since the 1970's. To date, not one of these extirpated territories has ever been reoccupied by a nesting pair of Golden Eagles.

Extirpation can take five to ten years depending on the rate of development and the accidental death of one or both of the Golden Eagle pair. Once a territory is destroyed by development there is nowhere else for the territorial eagles to go since all available and remaining, suitable territories are occupied by other eagles.

Currently, in San Diego County, reproduction is barely staying ahead of mortality. Several pairs of Golden Eagles currently have replacement mates that are still in juvenile plumage and are not yet old enough to successfully reproduce. This is a telling sign of lack of available Floaters. Floaters, is a term used to describe young adult eagles that do not have breeding territories or mates but, float around the edges of territorial pairs. These floaters , in a natural healthy population, are usually recruited quickly by a territorial adult eagle who has lost a mate.

Recruitment of juvenile eagles as mates is not a sign of a healthy population. This is a sign of a population without sufficient reproduction or survivability of young to adulthood. It can also signal premature adult mortality.

Known reproduction to fledging, in 2000, was only 15 young from all 42 pairs. Reproduction to fledging, in 2001, was likewise only 17 eagles. This is low but adequate for replacement if survivability to adulthood is high. Survivability and recruitment is something we are currently researching. However, preliminary information indicates that juvenile survivability in San Diego County is low.

Iron Mountain Golden Eagles, Current Status:

Prior to 1974 the Iron Mountain Golden Eagles nested on nearby Mt. Woodson. This was prior to the climbing and hiking trails and the expansion of broadcast Antennas on the top of Mt.. Woodson. After 1974 the Golden Eagles moved to a nest on Iron Mountains' Sole Peak and abandoned the Mt. Woodson site. Sole Peak, is a large rock outcropping, approximately 200 feet high, facing north east and overlooking the Ramona Valley. Sole Peak is approximately one mile southeast of Mt. Woodson and 3/4 mile north of Iron Mountain's main peak.

Movement of a nest site is not unusual because eagles will often have several nests on the same or nearby cliffs. However, moving in reaction to disturbance, is unusual, but can be done if their are optional nest sites nearby. The Iron Mountain pair of Golden Eagles are running out of options for undisturbed nest sites.

Since 1974 when the Golden Eagles moved their nest site to Iron Mtn's, Sole Peak they enjoyed very little disturbance until very recently. The development of Iron Mountain as an open space park by the City of Poway placed many hikers and rock climbers on top of Iron Mountain. This has caused some nest site disturbance and loss of breeding success from the pair.

1996 was the last time that the pair actually fledged two young. Since then a series of factors has caused the pair to fail each year in producing young. They have attempted several times since 1996 to lay eggs and incubate only to be driven off the nest during critical times by climbers, hikers and developers. In 1997 there was an illegally graded road bulldozed to within 800 feet of the nest site. Another year, 1998, just prior to courtship the male eagle was killed by hitting an electric wire on Dye Road. This prevented the female from finding a mate in time for the 1999 nesting season. In 2000 the female had found a new mate and eggs were laid only to be driven off the nest during incubation by a rescue team performing a helicopter medivac of a woman who had fallen while climbing the cliffs nearby. This lead to the eggs being lost to depredating ravens while the female eagle was off the nest due to the disturbance.

During the courtship for the current 2001 breeding season the Golden Eagles were paired and seen performing courtship in the territory. However we have had no

observed egg laying or incubation on Sole Peak. The Golden Eagles did add new nest material to their old nest at Sole Peak in 2001 and currently remain a viable pair. The eagles failed to breed successfully in 2001 although they continue to be seen above the cliffs and in the known foraging areas.

Factors that are known to be affecting the Iron Mtn. Golden Eagles are:

1) Development of rangeland in Ramona and Poway to housing and other uses.

2) Changes of natural grassland to disc and plow in Ramona prior to developing EIR's by developers. This ranch land, now owned by out of town developers, was former favored foraging habitat by the Iron Mtn. pair of Golden Eagles.

3) Poisoning of California Ground Squirrels by nearby horse ranchers and developers has recently caused the death of two Golden Eagles that we found. Many others may not have been found. The Golden Eagles catch, kill and eat the dying Ground Squirrels that have ingested poison. The eagles themselves then become sick and die from secondary poisoning.

4) Climbing and Hiking near or on the nest cliff of Sole Peak causing nest site disturbance. Nest disturbance can cause abandonment , dead embryos or loss of eggs and or baby eagles to other predators.

5) Disturbance caused by illegal grading on the slopes of Iron Mtn. and Sole Peak.

6) Increase density of housing throughout the foraging area of the eagles. This has caused more and more acres to be fenced with eucalyptus trees planted around smaller and smaller parcels of land. This breaking up of the habitat into small parcels surrounded by high trees makes foraging by Golden Eagles impossible.

7) Iron Mountain fire, creates open foraging in the long term but causes losses of foraging for several years after the fire.

8) Shooting has been a problem in the past and is suspected in the loss of a nearby pair.

9) Electrocution and Line Strikes have caused the death of the male in 1999. Additional development brings more poles, more lines and the increased risk to the Golden Eagles. This problem needs to be addressed if expansion is approved.

Effects of the proposed Salvation Army Camp Expansion on the Golden Eagles of Iron Mountain.

The issue of development and it's stress on Golden Eagles is complex and difficult, as are all biological systems. The reasons, for potential effects, have a lot to do with what is happening throughout the entire territory of the Golden Eagles in question. Cumulative effects of all of the factors that influence Golden Eagle behavior and affect their ability to thrive enter into a formula that is as complex as the territory of the Golden Eagles is diverse.

The more diverse and open the territory the easier it is for Golden Eagles to live and prosper. The more man takes away from the diversity and open space the more stress is placed on the Golden Eagle pair. Each acre of foraging habitat that is carved out of the territory and converted to other uses is one less acre available for the eagles and their young.

The Salvation Army camp is close to the Golden Eagle nest cliffs located on Sole Peak. The Golden Eagles nest is less than one half (1/2) mile from the western edge of the proposed expansion's footprint and only nine tenths of a mile from the nest to the current Salvation Army Headquarters Buildings. This distance is within the sphere of influence that could effect Golden Eagle Reproduction. Flight distance, (the distance at which an eagle would fly from the nest when approached by a human on foot), is between one half (1/2) and three quarters (3/4) of a mile. Since the proposed Salvation Army project would place up to an additional 800 people within this flight distance, the project could have adverse affects on the nesting of the Golden Eagles.

Any assumption that 800 people could live, hike and/or recreate within one half mile of the nest and not have an adverse impact could easily be challenged. This is even assuming that they would not be tempted to hike up to Sole Peak itself. Sole Peak is the most visible mountain peak from the camp. The cliffs and peak would be an inviting climbing destination for outdoor oriented people. If they do hike up it would result in even greater disturbance of the nesting Golden Eagles.

Additionally the open areas of the Salvation Army camp are part of an area used by the eagles to hunt. Therefore the loss of these open spaces could have an impact on foraging. The Golden Eagles continue to be seen at the other foraging areas (where we have observers) on a regular basis. Therefore we know that in 2001 the eagles are still active and will probably attempt to nest again in 2002.

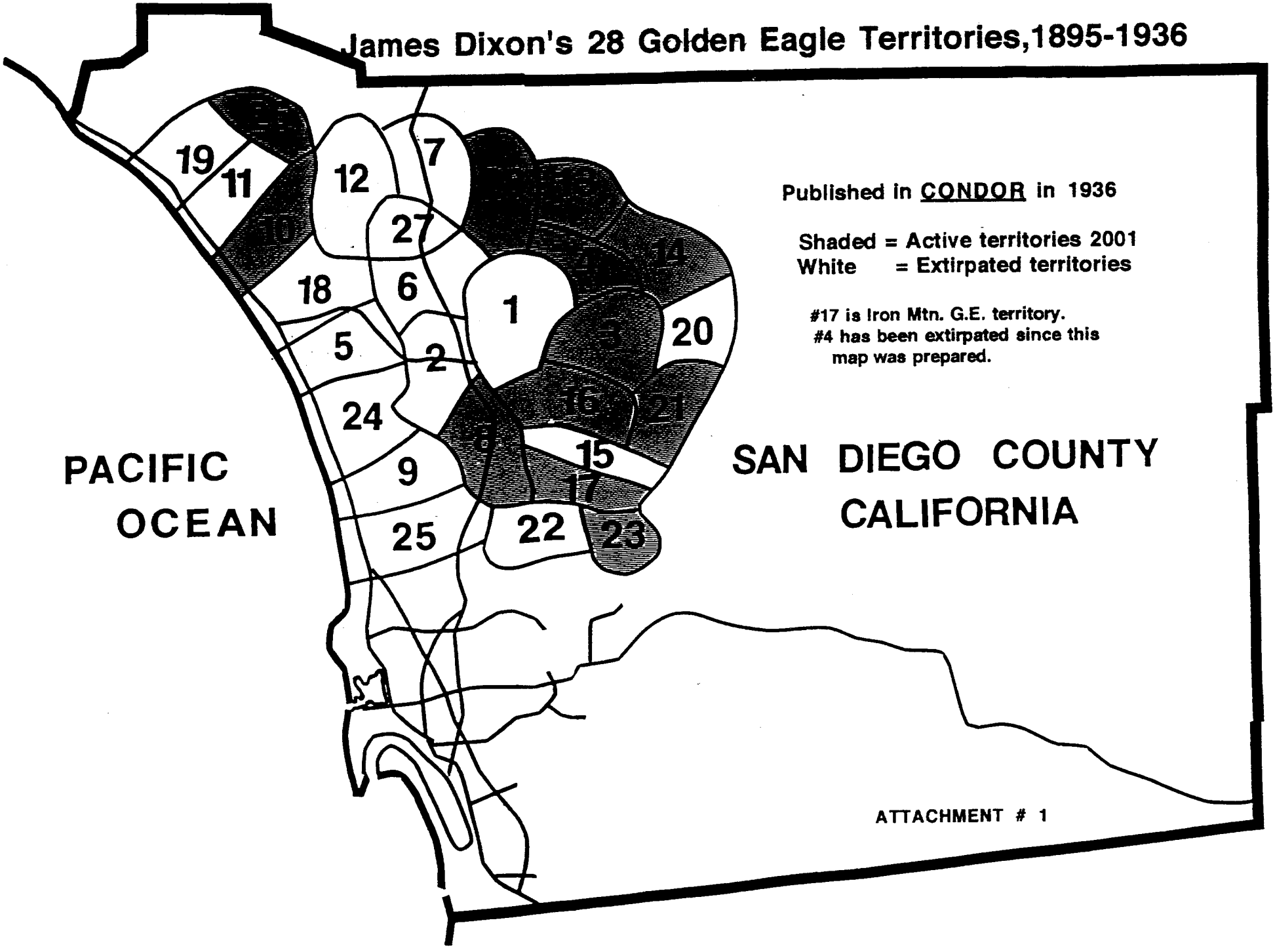
Note: This report was prepared from existing WRI data and regular site visits. Active, weekly monitoring by WRI observers of the nest site in 2001 indicated a lower than normal nest site use. This could be a result of the eagles simply taking a year off from breeding or could indicate the beginning of extirpation. WRI will continue to monitor this pair in the future.

The Multiple Species Conservation Plan, (MSCP) has designated the Golden Eagle to be a target species for preservation and monitoring. This pair of Golden Eagles, nest within the MSCP, and are therefore under the rules adopted under the MSCP in coordination with the U.S. Fish and Wildlife Service, and the California Fish and Game. Currently lands nearby to the proposed Salvation Army expansion are being purchased to add to the protected areas in the MSCP. These areas include the Boulder Oaks ranch and the former Boys and Girls Club property. Current monitoring of this pair of Golden Eagles indicate that these properties along with Wildwood Ranch, Salvation Army and the Golden Eagle Ranch West represent an important foraging area for these eagles (see attached map).

CONCLUSIONS:

Based on the footprint and scope of the proposed Salvation Army expansion there is high probability of significant adverse affects to the Golden Eagles nesting on Iron Mountain's, Sole Peak. Direct disturbance and loss of foraging habitat are the two most significant criteria used to arrive at this conclusion.

James Dixon's 28 Golden Eagle Territories,1895-1936



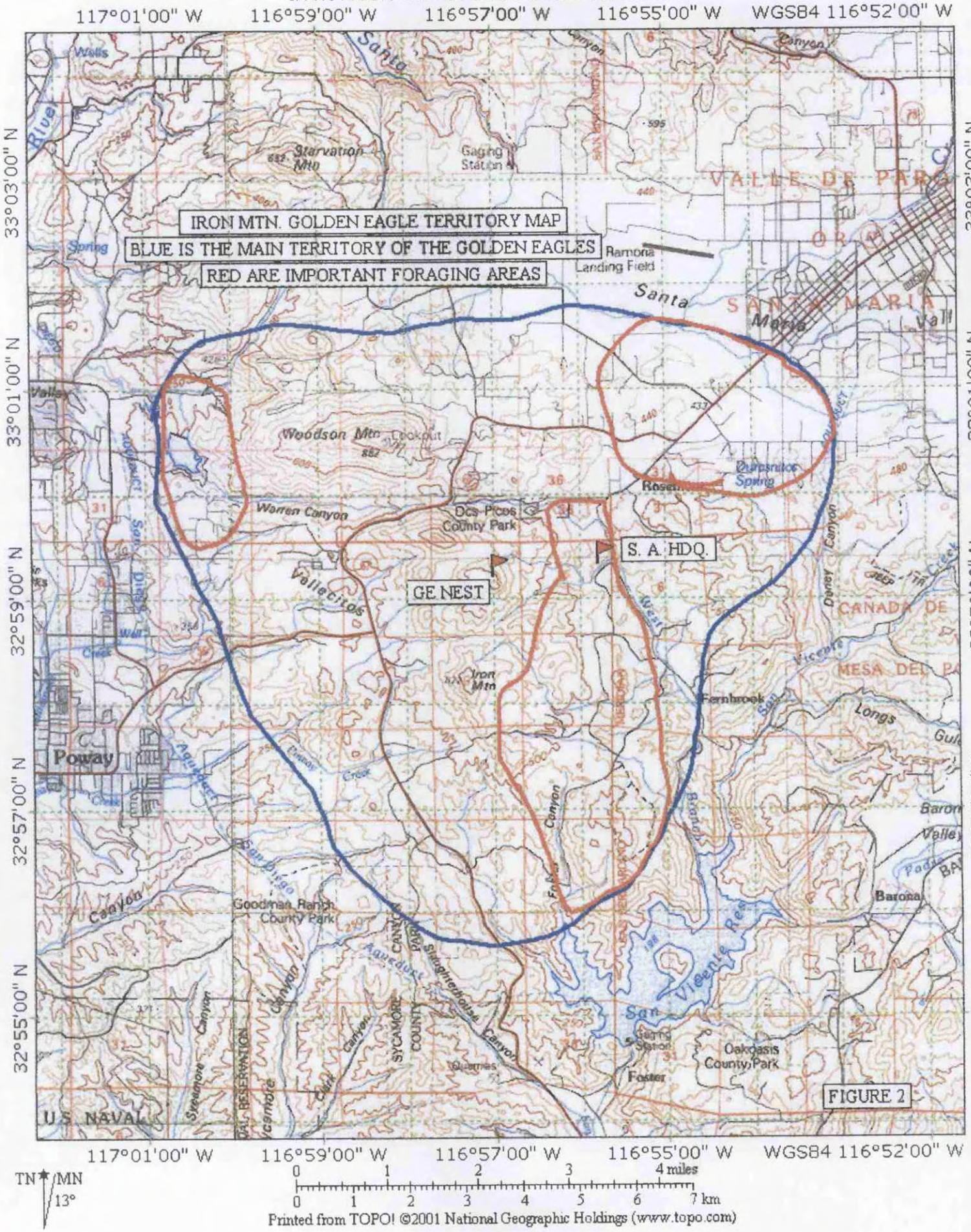
Published in CONDOR in 1936

Shaded = Active territories 2001
White = Extirpated territories

#17 is Iron Mtn. G.E. territory.
#4 has been extirpated since this map was prepared.

ATTACHMENT # 1

IRON MOUNTAIN GOLDEN EAGLE TERRITORY



Printed from TOPO! ©2001 National Geographic Holdings (www.topo.com)

Appendix 11

45-day Letter Report of Quino Checkerspot Butterfly (*Euphydryas editha quino*) Focused Surveys for the Salvation Army Project

Merkel & Associates, Inc.
5434 Ruffin Road, San Diego,CA 92123
Tel: 858/560-5465 • Fax: 858/560-7779
e-mail: associates@merkelinc.com

May 15, 2001
M&A #99-051-09

Ms. Christine Moen
Recovery Permit Coordinator
U. S. Fish and Wildlife Service – Carlsbad Fish and Wildlife Office
2730 Loker Avenue West
Carlsbad, California 92008

Re: 45-day Letter Report of Quino Checkerspot Butterfly (*Euphydryas editha quino*) Focused Surveys for the Salvation Army Project Located in Ramona, County of San Diego, Conducted under Federal Endangered Species Act, Section 10(a)(1)(A) permit #797999 and State California Endangered Species Act Memorandum of Understanding.

Dear Ms. Moen:

SUMMARY

Merkel & Associates, Inc. conducted focused surveys for the federally listed, endangered Quino Checkerspot Butterfly (*Euphydryas editha quino*) at the Salvation Army project site. The focused surveys were authorized under Federal Endangered Species Act, Section 10(a)(1)(A) permit #797999 and State California Endangered Species Act Memorandum of Understanding. The surveys followed the recommended guidelines of the U.S. Fish and Wildlife Service Quino Checkerspot Butterfly Survey Protocol dated January 2000. The project site contained approximately 100 acres of moderate to moderately-high quality Quino habitat. The site contained many nectaring resources, trails, open areas, hilltopping areas, and rock outcrops. However, the site lacked Dot-seed Plantain (*Plantego erecta*) which is the primary Quino Checkerspot Butterfly host plant. Only a few relatively small populations of secondary host plants, Purple Owl's Clover (*Castilleja exserta*) and Birds Beak (*Cordylanthus rigidus*), were found on-site. No Quino Checkerspot Butterflies were detected during the surveys.

INTRODUCTION

Merkel & Associates, Inc. (M&A) conducted focused Quino Checkerspot Butterfly (*Euphydryas editha quino*) presence/absence surveys for the Salvation Army project, at the request of BRG Consulting, Inc. on behalf of the Salvation Army. The purpose of this investigation was to determine the presence or potential presence of the Quino Checkerspot Butterfly (QCB) and whether suitable habitat occurs within the project study area.

LOCATION

The 565-acre project site is located in Sections 1 and 12 of Township 14 South, Ranges 1 West and 1 East of USGS 7.5' San Vicente Quadrangle, San Bernardino Base & Meridian (Figure 1). The site is located on San Diego County Land within the community of Ramona just east of Highway 67 off of Mussey Grade Road.

GENERAL PHYSIOGRAPHY

The project site is bounded on the northeast by Mussey Grade Road and on the west by extensive undisturbed chaparral. To the north, south, and southeast are areas of rural or development, and/or agricultural lands. The project site also lies on the County MSCP Subarea Plan boundary.

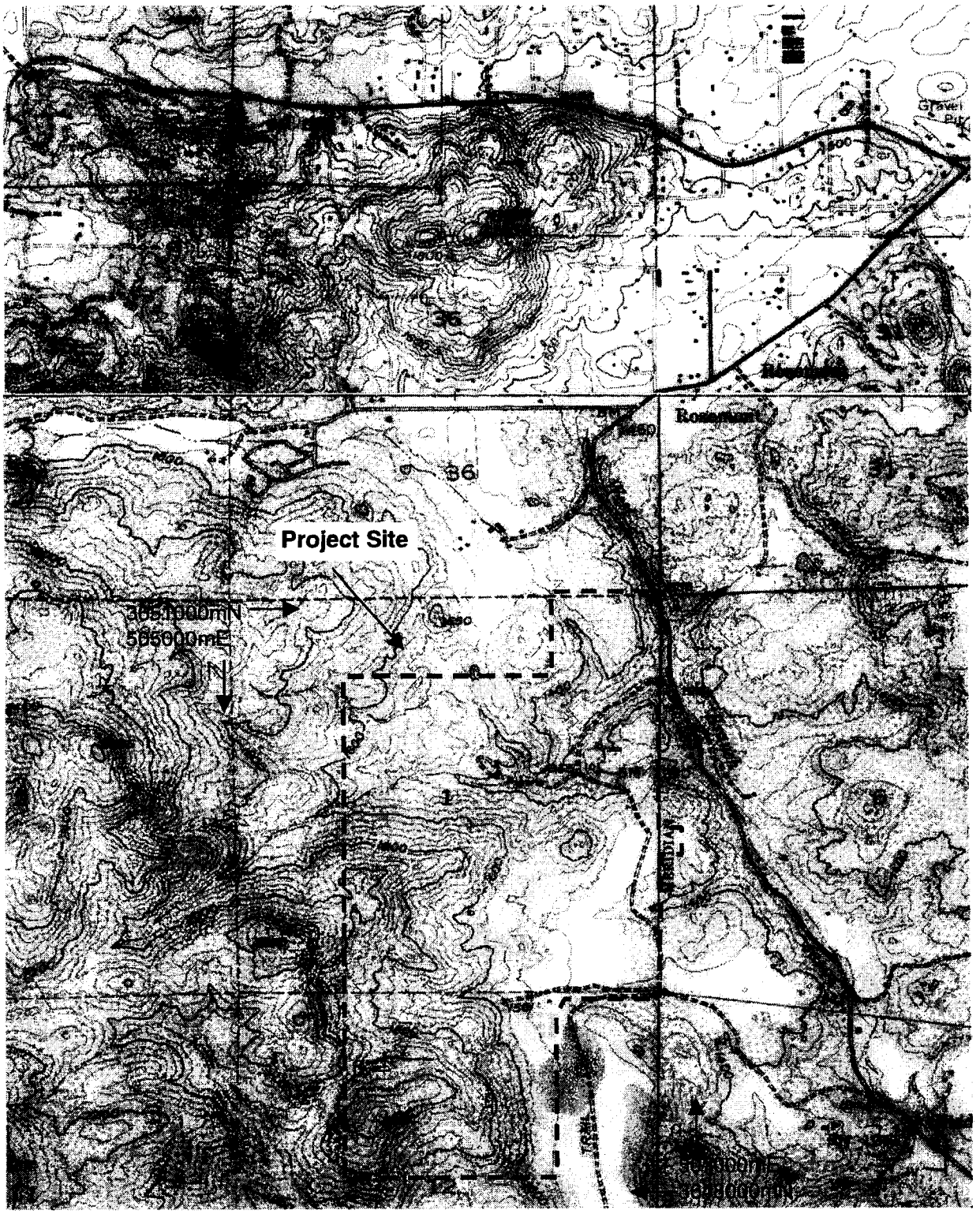
The project site lies within the Foothill Province of north central San Diego County. Topographically, the property is characterized by steep slopes in the eastern portions, which transform into rolling hills and pasture-like areas. These areas are occasionally bisected by intermittent and ephemeral drainages. The elevation of the site is between approximately 1300 to 2000 feet above the mean sea level.

METHODS

Site assessments were completed during previous site visits and biological work conducted by Merkel & Associates biologists. The previous work met the recommended guidelines specified in the USFWS QCB Survey Protocol dated January 2000. Biologists slowly searched for specific habitat components of the QCB (*e.g.*, larval food plants, nectar resources, open/sparsely vegetated areas, suitable topographic features and dirt trails/roads) and mapped these locations as butterfly survey areas. Areas that did not contain potential QCB habitat (*e.g.* developed areas, non-native and closed-canopy vegetated areas) were mapped as excluded areas not requiring butterfly surveys as per USFWS QCB Survey Protocol.

The QCB flight season began in San Diego County on March 1, 2001. M&A biologists Vanessa A. Lee, Navroop K. Jassal, Antonette T. Gutierrez, Craig H. Reiser and Jean-Paul W. LaCount, authorized under Federal Endangered Species Act (ESA) section 10(a)(1)(A) permit #797999 and State California Endangered Species Act (CESA) Memorandum of Understanding (MOU), conducted all focused adult QCB surveys. The surveys were conducted according to the recommended guidelines noted in the USFWS QCB Survey Protocol. Biologists slowly walked all pre-determined butterfly survey areas, carefully followed the movements of butterflies, and periodically stopped within areas containing more favorable QCB conditions. Biologists recorded locations of all larval host plants, potential nectaring resources, and butterfly species detected within the study area.

The focused surveys were conducted at approximate weekly intervals, beginning on March 5, 2001 and lasting until the close of the QCB flight season on April 5, 2001 (Table 1). An additional survey was conducted after the close of the QCB flight season in order to offset missing an entire week of surveying due to inclement weather conditions. QCB survey dates and times varied according to weather and scheduling conditions, and individual biologists used professional judgement to comply with USFWS QCB protocol requirements as closely as possible. Biologists recorded field notes for each field survey.



1" = 2,000'

Project Vicinity Map

Source: USGS 7.5' San Vicente Reservoir and San Pasqual, CA Quadrangles

Figure 1

Table 1. Summary of QCB Survey Dates, Times, Conditions, and Staff, and the Number of Acres Surveyed per Hour and Day.

Date (mm/dd/yyyy)	Survey	Time	Conditions (start-end)	Permitted Biologist(s)	Acres/ Hour	Acres/ Day
3/5/2001	1	0930-1410	Weather: Sunny Wind: 3-5 (mph) Temp.: 65°-70°F	Vanessa A. Lee, Craig H. Reiser, Navroop K. Jassal	7.4	100
3/13/2001	2	0930-1530	Weather: Sunny Wind: 1-4 (mph) Temp.: 67°-74°F	Vanessa A. Lee, Antonette T. Gutierrez, Jean-Paul W. LaCount	5.6	100
3/15/2001	3	1000-1530	Weather: Partial Clouds Wind: 1-4 (mph) Temp.: 68°-70°F	Antonette T. Gutierrez, Navroop K. Jassal, Jean-Paul W. LaCount	6.1	100
*3/22/2001	-	1100-1230	Weather: Mostly Cloudy Wind: 1-3 (mph) Temp.: 64°-68°F	Vanessa A. Lee, Navroop K. Jassal, Kyle L. Ince	-	-
*3/26/2001	-	1145-1300	Weather: Mostly Cloudy Wind: 0-5 (mph) Temp.: 63°F	Vanessa A. Lee, Navroop K. Jassal, Kyle L. Ince	-	-
*3/29/2001	-	0900-1200	Weather: Mostly Cloudy Wind: 3-5 (mph) Temp.: 61°-62°F	Vanessa A. Lee, Antonette T. Gutierrez Craig H. Reiser	-	-
3/30/2001	4	0945-1530	Weather: Sunny Wind: 0-5 (mph) Temp.: 78°-83°F	Vanessa A. Lee, Jean-Paul W. LaCount	8.7	100
*4/02/2001	-	1045-1200	Weather: Mostly Cloudy Wind: 3-7 (mph) Temp.: 64°-60°F	Vanessa A. Lee, Navroop K. Jassal, Antonette T. Gutierrez	-	-
4/05/2001	5	0930-1330	Weather: Sunny Wind: 3-5 (mph) Temp.: 65°-67°F	Vanessa A. Lee, Navroop K. Jassal, Jean-Paul W. LaCount	8.3	100
*4/10/2001	-	1020-1300	Weather: Mostly Cloudy Wind: 0-5 (mph) Temp.: 63°F	Vanessa A. Lee, Jean-Paul W. LaCount Stephen R. Rink	-	-
**4/13/2001	6	0930-1415	Weather: Sunny Wind: 1-8 (mph) Temp.: 67°-74°F	Antonette T. Gutierrez, Navroop K. Jassal, Jean-Paul W. LaCount	7.4	100

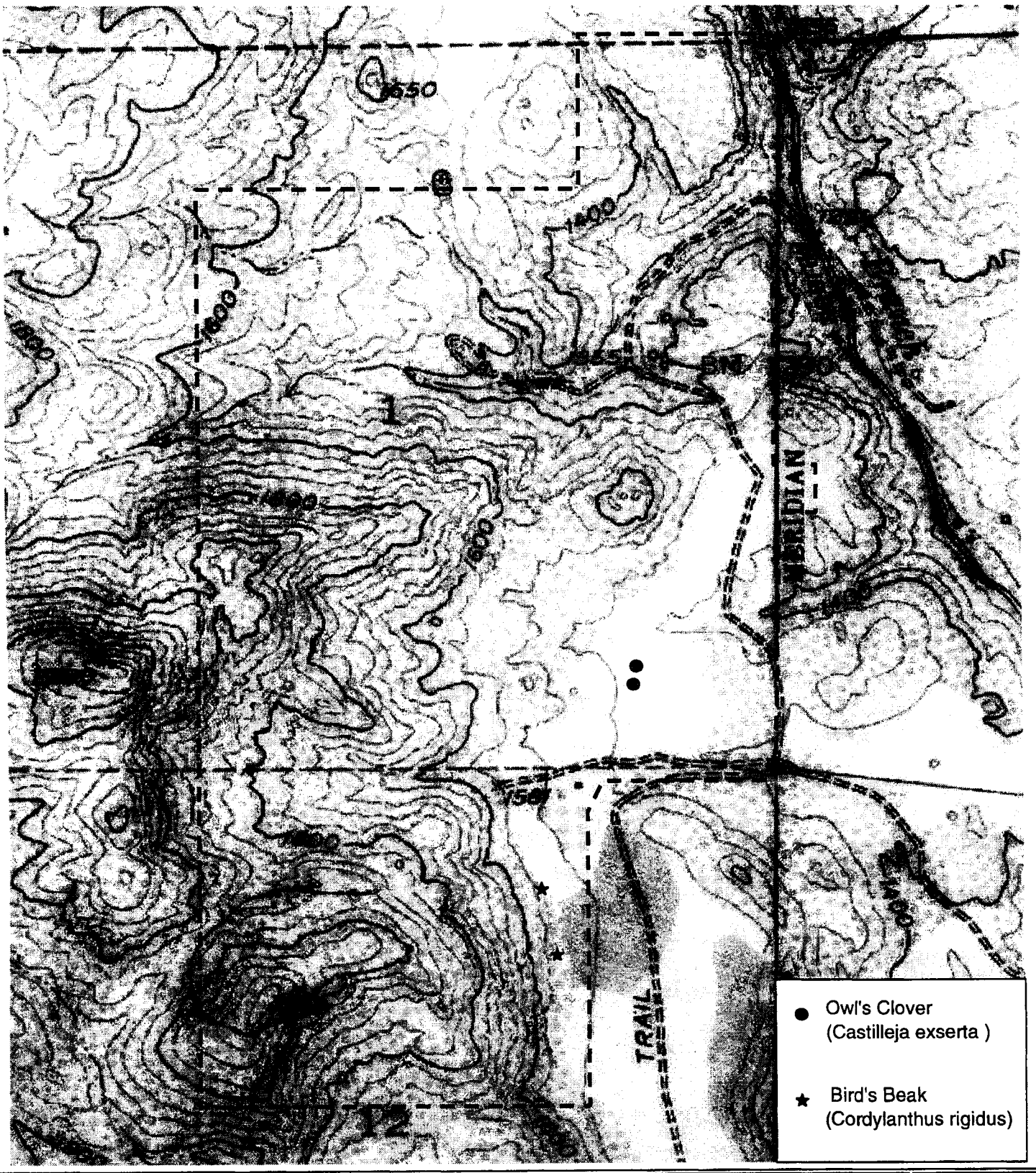
*Surveys were attempted on these dates; however, due to inclement weather conditions, surveys were not completed.
**Additional Survey was conducted after the close of the flight season in order to offset missing a complete survey during Week 4 (3/16/2001-3/23/2001) due to inclement weather conditions.

SCIENTIFIC NOMENCLATURE

Scientific nomenclature used in this report is from the following standard references: vegetation and communities, Holland (1986); flora, Skinner and Pavlik (CNPS) (1994), Hickman (1993); and butterflies, Garth and Tilden (1986);

RESULTS

Information regarding QCB survey areas, excluded areas, and QCB host plants are mapped on a 1" = 1,000' topographical map of the project site (Figure 2). Appendix 1 provides a list of butterfly species observed during the field surveys. Appendix 2 provides a copy of field notes for each focused survey conducted.


1650
1400
1600
1800
1400
1600
1400
1400
1400

SURVEY AREAS

Thirteen vegetation communities, according to current Holland Code descriptions, are identified within the study area: Non-Native Woodland, Disturbed, Urban/Developed, Diegan Coastal Sage Scrub, Southern Mixed Chaparral, Mafic Southern Mixed Chaparral, Coastal Sage-Chaparral Scrub, Non-Native Grasslands, Southern Coast Live Oak Riparian Forest, Mule Fat Scrub, Southern Willow Scrub, Emergent Wetland, and Coast Live Oak Woodland. Also present on-site are extensive areas of rock outcrop.

The following habitats were excluded from the QCB focused surveys because they exhibit characteristics unsuitable for potential QCB habitat, such as developed areas, non-native vegetation, and closed-canopy vegetation: Non-native Woodland, Urban/Developed, Southern Mixed Chaparral, Southern Coast Live Oak, Riparian Forest, Southern Willow Scrub, Mulefat Scrub, and Coast Live Oak Woodland. However, any accessible small paths or open areas within these excluded areas that contain suitable QCB habitat characteristics were surveyed.

The following text provides brief descriptions of the habitats surveyed. They are Disturbed Habitat, Diegan Coastal Sage Scrub, Coastal Sage-Chaparral Scrub, Mafic Southern Mixed Chaparral, Non-native Grassland, and Emergent Wetland.

Disturbed Habitat – Oberbauer Code 11300

Disturbed habitats on the site include the areas around the existing development that have been historically cleared or brushed and are maintained through a similar regime. These areas include, but are not limited to, maintained dirt roads and trails.

Because several species of butterflies including the Quino Checkerspot Butterfly typically fly along trails and disturbed areas, the areas of disturbed habitat have been included in the focused surveys. Furthermore, Dot-seed Plantain (*Plantego erecta*), the primary QCB host plant, often occurs in disturbed areas. Although Dot-seed Plantain was not found onsite, these areas were continuously examined for potential primary host plant growth during the focused surveys. Two relatively small populations of Purple Owl's Clover (*Castilleja exserta*), a QCB secondary host plant, were found within disturbed areas.

Diegan Coastal Sage Scrub - Holland Code 32500

Diegan Coastal Sage Scrub includes a dominance of low, soft-woody sub-shrubs that are typically drought deciduous. California Sagebrush (*Artemesia californica*) and Flat-top Buckwheat (*Eriognum fasiculatum*) are most common with significant incursions of Laurel Sumac (*Malosma laurina*) and White Sage (*Salvia apiana*). Flat-top Buckwheat is a common nectar source for many butterflies; however very few plants were in flower at the time of the surveys. Other nectar sources such as Ranchers Fireweed (*Amsinckia menziesri*), Cryptantha (*Cryptantha intermedia*), Common Goldsfields (*Lasthenia californica*), Wild Hyacinth (*Dichelostemma capitatum*) and Blue-eyed-grass (*Sisyrmchiun bellum*) are found within this habitat.

Although not found, host plants such as Dot-seed Plantain and Purple Owl's Clover are also generally known to occur in this habitat. In fact, two small populations of Bird's Beak (*Cordylanthus rigidus*), another secondary host plant, occur in the southern area of Diegan Coastal Sage Scrub.

Mafic Southern Mixed Chaparral - Holland Code 37122

Southern Mixed Chaparral accounts for most of the on-site chaparral, but it is replaced at the higher elevation with Mafic Southern Mixed Chaparral. This habitat contains much of the same species as the Southern Mixed Chaparral including Chamise (*Adenostoma fasiculatum*), Mission Manzanita (*Xylococcus bicolor*), Our Lord's Candle (*Yucca whipplei*), and a few species of Ceanothus.

All accessible open areas within this vegetation community were surveyed. These areas contain many rock outcrops that provide suitable habitat for Dot-seed Plantain and other nectar resources. Although Dot-seed Plantain was not found, these areas were carefully examined during each survey in order to check for late emergence.

Coastal Sage-Chaparral Scrub - Holland Code 37G00

A mix of sclerophyllous, woody chaparral species and drought-deciduous, malacophyllous sage scrub species characterize this habitat (Holland 1986). Areas mapped as chaparral scrub on-site contain predominately chaparral associated species with irregular sage scrub species presence. This habitat contains some open areas and many of the same nectar sources as Southern Mixed Chaparral and Diegan Coastal Sage Scrub.

Non-native Grasslands - Holland Code 42200

Non-native Grasslands are well distributed in the central portion of the site. Such communities develop most commonly where native scrub has been disturbed by grazing, discing, or fire. They usually occur in close association with rural land uses. Local grasslands have a preponderance of non-native grasses and forbs, such as the bromes and wild oats, with only occasional representation from native elements. Although this habitat is dominated by non-native vegetation, the Quino Checkerspot Butterfly is generally associated with grasslands among other habitats. Therefore, the Non-native Grasslands were included in the focused surveys despite the dominance of non-native vegetation.

The primary available nectar resource in this habitat is the Short-beak Filaree (*Erodium brachycarpum*). Other potential nectar resources include Red Maids (*Calandrinia cillata*), Scarlet Pimpernel (*Anagallis arrensis*), and Short-pod Mustard (*Hirschfeldia incana*).

Emergent Wetland - Oberbauer Code 52440 from Holland 52400

Small, isolated patches of Emergent Wetland occur within the Non-native Grassland. This habitat consists of herbaceous wetland species such as Common Monkeyflower (*Mimulus guttatus*), Grass Poly (*Lythrum hyssopifolia*), and Pale Spike-Sedge (*Eleocharis macrostachya*). Because these patches of wetlands occur within the Non-native Grasslands, they were included in the focused surveys.

FOCUSED PRESENCE/ABSENCE SURVEYS FOR THE QUINO CHECKERSPOT BUTTERFLY

No Quino Checkerspot Butterflies were observed on-site during the focused surveys. The most common butterfly species observed were the West Coast Lady (*Vanessa anabella)*, Painted Lady (*Vanessa cardui*), Funeral Duskywing (*Erynnis zarucco funeralis*), Mournful Duskywing (*Erynnis tristis*), and Sara Orangetip (*Anthocharis sara*). Also seen were the Southern Blue (*Glaucopsyche lygdamus australis*), Acmon Blue (*Icaricia acmon*), Brown Elfin (*Incisalia augustinus*), Perpelxing Hairstreak (*Callophrys perplexa*), and Pale Swallowtail (*Papilio eurymedon*). Appendix 1 gives a more complete list of butterfly species observed on-site.

DISCUSSION

POTENTIAL QUINO CHECKERSPOT BUTTERFLY HABITAT QUALITY

Approximately 100 acres of potential Quino Checkerspot Butterfly habitat occur on the project site. Habitat quality has been determined to be moderate to moderately-high due to the ample occurrence of nectaring plants and trails, several hilltoping areas and rock outcrops, and the presence of host plants. Although a few populations of secondary host plants are found on-site, they are relatively small stands consisting of approximately 45-60 individual plants. Furthermore, the primary host plant, Dot-seed Plantain, does not occur onsite despite the presence of suitable habitat for this plant species.

POTENTIAL QUINO CHECKERSPOT BUTTERFLY PREDATORS

No potential Quino checkerspot butterfly predators, such as earwigs, sowbugs, and exotic ant species were observed at the Salvation Army site. However, because these pest insects typically follow urban/rural development and human disturbances and the site currently supports recreational uses and facilities, it is expected that these predatory species occur in and around the Urban/Developed areas on-site.

If you have any additional questions concerning the QCB work conducted for the Salvation Army project, please call me at (858) 560-5465.

Sincerely,

Vanessa A. Lee
Associate Biologist/Project Manager

cc: BRG Consulting, Inc.

LITERATURE CITED

Garth, John S., and J. W. Tilden. 1986. California Butterflies. University of California Press, Berkeley, California. California Natural History Guides. 51pp.

Hickman, James C., ed. 1993. The Jepson Manual, Higher Plants of California. University of California Press, Berkeley. 1400pp.

Holland, Robert F. 1986. Preliminary Descriptions of the Terrestrial Natural Communities of California. California Department of Fish and Game.

Skinner, Mark W., and Bruce M. Pavlik. 1994. California's Native Plant Society's Inventory of Rare and Endangered Vascular Plants of California. California Native Plant Society. 338pp.

United States Department of the Interior, Fish and Wildlife Service. Year 200 Survey Protocol for the Endangered Quino Checkerspot Butterfly (*Euphydryas editha quino*). January, 2000.

Appendix 12

Intensified Wetland Delineation Forms

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site:	Salvation Army	Date:	17 December 2001
Applicant/Owner:	Salvation Army	County:	San Diego
Investigator:	Vanessa A. Lee, Melissa A. Booker, and Kara A. Altvater	State:	California
Do normal circumstances exist on the site?	☒ Yes ☐ No	Community ID:	CLORF
Is the site significantly disturbed (Atypical Situation)?	☐ Yes ☒ No	Transect ID:	
Is the area a potential Problem Area? (If needed, explain on reverse.)	☐ Yes ☒ No	Plot ID:	DP 1A, PP 1A

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. *Platanus racemosa*	T	FACW	9.		
2. *Quercus agrifolia*	T	NI	10.		
3. *Artemisia douglasiana*	H	FACW	11.		
4. *Toxicodendron diversilobum*	H	NI	12.		
5. *Piptatherum miliaceum*	H	NI	13.		
6.			14.		
7.			15.		
8.			16.		

Percentage of Dominant Species that are OBL, FACW or FAC (excluding FAC-). 40%

Remarks: Data point lies in grouping of Western Sycamores (*Platanus racemosa*) within Southern Coast Live Oak Riparian Forest vegetation. Corps determination shows that area does not meet hydrophytic vegetation criteria; however, per County direction, area is considered a County RPO wetland.

HYDROLOGY

☒ Recorded Data (Described in Remarks):
- ☐ Stream, Lake, or Tide Gauge
- ☒ Aerial Photographs
- ☐ Other

☐ No Recorded Data Available

Field Observations:

Depth of Surface Water:	----	(in.)
Depth to free Water in Pit	----	(in.)
Depth of Saturated Soil:	----	(in.)

Wetland Hydrology Indicators:

Primary Indicators:
- ☐ Inundated
- ☐ Saturated in Upper 12 inches
- ☐ Water Marks
- ☐ Drift Lines
- ☐ Sediment Deposits
- ☐ Drainage Patterns in Wetlands

Secondary Indicators (2 or more required):
- ☐ Oxidized Root Channels in Upper 12 Inches
- ☐ Water-Stained Leaves
- ☐ Local Soil Survey Data
- ☐ FAC-Neutral Test
- ☐ Other (Explain in Remarks)

Remarks: No hydrology indicators.

SOILS

Map Unit Name
(Series and Phase): Visalia sandy loam

Drainage Class: Moderately well drained

Field Observations
Confirm Mapped Type? ☒ Yes ☐ No

Taxonomy (Subgroup): Pachic Haploxerolls

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle (Abundance/Contrast)	Texture, Concretions, Structure, etc.
0-14	---	10YR 3/3	---	---	Sandy loam

Hydric Soil Indicators:

- ☐ Histosol
- ☐ Histic Epipedon
- ☐ Sulfidic Odor
- ☐ Aquic Moisture Regime
- ☐ Reducing Conditions
- ☐ Gleyed or Low-Chroma Colors
- ☐ Concretions
- ☐ High Organic Content in surface layer in Sandy Soils
- ☐ Organic Streaking in Sandy Soils
- ☐ Listed on Local Hydric Soils List
- ☐ Listed on National Hydric Soils List
- ☐ Other (Explain in Remarks)

Remarks: No hydric soil indicators.

WETLAND DETERMINATION

Hydrophytic Vegetation Present?	Yes ☐	No ☒		
Wetland Hydrology Present?	Yes ☐	No ☒		
Hydric Soils Present?	Yes ☐	No ☒	Is this Sampling Point Within a Wetland?	Yes ☐ No ☒

Remarks: Area does not qualify as an ACOE jurisdictional wetland. Area is jurisdictional under CDFG only as Adjacent Riparian vegetation. Finally, per County direction, the area is also considered an RPO Wetland even though the area does not meet any of the three wetland parameters.

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site:	Salvation Army	Date:	17 December 2001
Applicant/Owner:	Salvation Army	County:	San Diego
Investigator:	Vanessa A. Lee, Melissa A. Booker, and Kara A. Altvater	State:	California

Do normal circumstances exist on the site?	☒ Yes	☐ No	Community ID:	CLORF
Is the site significantly disturbed (Atypical Situation)?	☒ Yes	☐ No	Transect ID:	T 1, 0ft
Is the area a potential Problem Area? (If needed, explain on reverse.)	☐ Yes	☒ No	Plot ID:	DP 2A, PP 2A

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. *Quercus agrifolia*	T	NI	9.		
2. *Arctostaphylos glandulosa*	S	NI	10.		
3. *Stellaria media*	H	FACU	11.		
4.			12.		
5.			13.		
6.			14.		
7.			15.		
8.			16.		

Percentage of Dominant Species that are OBL, FACW or FAC (excluding FAC-). 0%

Remarks: No hydrophytic plants present. Data point located at the edge of main road. Immediate area potentially has abnormal conditions due to disturbance from the road.

HYDROLOGY

☒ Recorded Data (Described in Remarks):
- ☐ Stream, Lake, or Tide Gauge
- ☒ Aerial Photographs
- ☐ Other

☐ No Recorded Data Available

Field Observations:

Depth of Surface Water:	----	(in.)
Depth to free Water in Pit	----	(in.)
Depth of Saturated Soil:	----	(in.)

Wetland Hydrology Indicators:

Primary Indicators:
- ☐ Inundated
- ☐ Saturated in Upper 12 inches
- ☐ Water Marks
- ☐ Drift Lines
- ☐ Sediment Deposits
- ☐ Drainage Patterns in Wetlands

Secondary Indicators (2 or more required):
- ☐ Oxidized Root Channels in Upper 12 Inches
- ☐ Water-Stained Leaves
- ☐ Local Soil Survey Data
- ☐ FAC-Neutral Test
- ☐ Other (Explain in Remarks)

Remarks: No hydrology indicators.

SOILS

Map Unit Name
(Series and Phase): Visalia sandy loam

Drainage Class: Moderately well drained

Field Observations
Confirm Mapped Type? ☒ Yes ☐ No

Taxonomy (Subgroup): Pachic Haploxerolls

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle (Abundance/Contrast)	Texture, Concretions, Structure, etc.
0-6	---	10YR 2/2	---	---	Sandy loam with high concentration of humus
6-14	---	10YR 2/2	---	---	Sandy loam

Hydric Soil Indicators:

- ☐ Histosol
- ☐ Histic Epipedon
- ☐ Sulfidic Odor
- ☐ Aquic Moisture Regime
- ☐ Reducing Conditions
- ☐ Gleyed or Low-Chroma Colors
- ☐ Concretions
- ☐ High Organic Content in surface layer in Sandy Soils
- ☐ Organic Streaking in Sandy Soils
- ☐ Listed on Local Hydric Soils List
- ☐ Listed on National Hydric Soils List
- ☐ Other (Explain in Remarks)

Remarks: No hydric soil indicators. There is possibly fill material from road construction.

WETLAND DETERMINATION

Hydrophytic Vegetation Present?	Yes	☐	No	☒
Wetland Hydrology Present?	Yes	☐	No	☒
Hydric Soils Present?	Yes	☐	No	☒

Is this Sampling Point Within a Wetland? Yes ☐ No ☒

Remarks: Data point located on the edge of main road beneath Southern Coast Live Oak Riparian Forest. This area does not qualify as a wetland. However, it is jurisdictional under CDFG as Adjacent Riparian habitat.

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site:	Salvation Army	Date:	17 December 2001
Applicant/Owner:	Salvation Army	County:	San Diego
Investigator:	Vanessa A. Lee, Melissa A. Booker, and Kara A. Altvater	State:	California

Do normal circumstances exist on the site?	☐ Yes	☒ No	Community ID:	CLORF
Is the site significantly disturbed (Atypical Situation)?	☒ Yes	☐ No	Transect ID:	T 1, 10ft
Is the area a potential Problem Area? (If needed, explain on reverse.)	☐ Yes	☒ No	Plot ID:	DP 3A, PP 3A

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. *Quercus agrifolia*	T	NI	9.		
2. *Arctostaphylos glandulosa*	S	NI	10.		
3. *Stellaria media*	H	FACU	11.		
4.			12.		
5.			13.		
6.			14.		
7.			15.		
8.			16.		

Percentage of Dominant Species that are OBL, FACW or FAC (excluding FAC-). 0%

Remarks: No hydrophytic plants present. Data point located near main road. Immediate area potentially has abnormal conditions due to disturbance from the road.

HYDROLOGY

☒ Recorded Data (Described in Remarks):
- ☐ Stream, Lake, or Tide Gauge
- ☒ Aerial Photographs
- ☐ Other

☐ No Recorded Data Available

Field Observations:

Depth of Surface Water:	----	(in.)
Depth to free Water in Pit	----	(in.)
Depth of Saturated Soil:	----	(in.)

Wetland Hydrology Indicators:

Primary Indicators:
- ☐ Inundated
- ☐ Saturated in Upper 12 inches
- ☐ Water Marks
- ☐ Drift Lines
- ☐ Sediment Deposits
- ☐ Drainage Patterns in Wetlands

Secondary Indicators (2 or more required):
- ☐ Oxidized Root Channels in Upper 12 Inches
- ☐ Water-Stained Leaves
- ☐ Local Soil Survey Data
- ☐ FAC-Neutral Test
- ☐ Other (Explain in Remarks)

Remarks: No hydrology indicators.

SOILS

Map Unit Name
(Series and Phase): Visalia sandy loam

Drainage Class: Moderately well drained

Field Observations
Confirm Mapped Type? ☒ Yes ☐ No

Taxonomy (Subgroup): Pachic Haploxerolls

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle (Abundance/Contrast)	Texture, Concretions, Structure, etc.
0-14	---	10YR 3/3	---	---	Sandy loam

Hydric Soil Indicators:

- ☐ Histosol
- ☐ Histic Epipedon
- ☐ Sulfidic Odor
- ☐ Aquic Moisture Regime
- ☐ Reducing Conditions
- ☐ Gleyed or Low-Chroma Colors
- ☐ Concretions
- ☐ High Organic Content in surface layer in Sandy Soils
- ☐ Organic Streaking in Sandy Soils
- ☐ Listed on Local Hydric Soils List
- ☐ Listed on National Hydric Soils List
- ☐ Other (Explain in Remarks)

Remarks: No hydric soil indicators. There is possibly fill material from road construction.

WETLAND DETERMINATION

Hydrophytic Vegetation Present?	Yes	☐	No	☒
Wetland Hydrology Present?	Yes	☐	No	☒
Hydric Soils Present?	Yes	☐	No	☒

Is this Sampling Point Within a Wetland? Yes ☐ No ☒

Remarks: Data point located near main road beneath Southern Coast Live Oak Riparian Forest. This area does not qualify as a wetland. However, it is jurisdictional under CDFG as Adjacent Riparian habitat.

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site:	Salvation Army	Date:	17 December 2001
Applicant/Owner:	Salvation Army	County:	San Diego
Investigator:	Vanessa A. Lee, Melissa A. Booker, and Kara A. Altvater	State:	California

Do normal circumstances exist on the site?	☐ Yes	☒ No	Community ID:	CLORF
Is the site significantly disturbed (Atypical Situation)?	☒ Yes	☐ No	Transect ID:	T 1, 20ft
Is the area a potential Problem Area? (If needed, explain on reverse.)	☐ Yes	☒ No	Plot ID:	DP 4A, PP 4A

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. *Quercus agrifolia*	T	NI	9.		
2. *Arctostaphylos glandulosa*	S	NI	10.		
3. *Stellaria media*	H	FACU	11.		
4.			12.		
5.			13.		
6.			14.		
7.			15.		
8.			16.		

Percentage of Dominant Species that are OBL, FACW or FAC (excluding FAC-). 0%

Remarks: No hydrophytic plants present. Data point located near main road. Immediate area potentially has abnormal conditions due to disturbance from the road.

HYDROLOGY

☒ Recorded Data (Described in Remarks):
- ☐ Stream, Lake, or Tide Gauge
- ☒ Aerial Photographs
- ☐ Other

☐ No Recorded Data Available

Field Observations:

Depth of Surface Water:	----	(in.)
Depth to free Water in Pit	----	(in.)
Depth of Saturated Soil:	----	(in.)

Wetland Hydrology Indicators:

Primary Indicators:
- ☐ Inundated
- ☐ Saturated in Upper 12 inches
- ☐ Water Marks
- ☐ Drift Lines
- ☐ Sediment Deposits
- ☐ Drainage Patterns in Wetlands

Secondary Indicators (2 or more required):
- ☐ Oxidized Root Channels in Upper 12 Inches
- ☐ Water-Stained Leaves
- ☐ Local Soil Survey Data
- ☐ FAC-Neutral Test
- ☐ Other (Explain in Remarks)

Remarks: No hydrology indicators.

SOILS

Map Unit Name
(Series and Phase): Visalia sandy loam

Drainage Class: Moderately well drained

Field Observations
Confirm Mapped Type? ☒ Yes ☐ No

Taxonomy (Subgroup): Pachic Haploxerolls

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle (Abundance/Contrast)	Texture, Concretions, Structure, etc.
0-14	---	7.5YR 3/2	---	---	Sandy loam

Hydric Soil Indicators:

- ☐ Histosol
- ☐ Histic Epipedon
- ☐ Sulfidic Odor
- ☐ Aquic Moisture Regime
- ☐ Reducing Conditions
- ☐ Gleyed or Low-Chroma Colors
- ☐ Concretions
- ☐ High Organic Content in surface layer in Sandy Soils
- ☐ Organic Streaking in Sandy Soils
- ☐ Listed on Local Hydric Soils List
- ☐ Listed on National Hydric Soils List
- ☐ Other (Explain in Remarks)

Remarks: No hydric soil indicators. There is possibly fill material from road construction.

WETLAND DETERMINATION

Hydrophytic Vegetation Present?	Yes	☐	No	☒
Wetland Hydrology Present?	Yes	☐	No	☒
Hydric Soils Present?	Yes	☐	No	☒

Is this Sampling Point Within a Wetland? Yes ☐ No ☒

Remarks: Data point located near main road beneath Southern Coast Live Oak Riparian Forest. This area does not qualify as a wetland. However, it is jurisdictional under CDFG as Adjacent Riparian habitat.

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site:	Salvation Army	Date:	17 December 2001
Applicant/Owner:	Salvation Army	County:	San Diego
Investigator:	Vanessa A. Lee, Melissa A. Booker, and Kara A. Altvater	State:	California

Do normal circumstances exist on the site?	☒ Yes	☐ No	Community ID:	CLORF
Is the site significantly disturbed (Atypical Situation)?	☐ Yes	☒ No	Transect ID:	T 1, 30ft
Is the area a potential Problem Area? (If needed, explain on reverse.)	☐ Yes	☒ No	Plot ID:	DP 5A, PP 5A

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. *Quercus agrifolia*	T	NI	9.		
2. *Arctostaphylos glandulosa*	S	NI	10.		
3. *Stellaria media*	H	FACU	11.		
4.			12.		
5.			13.		
6.			14.		
7.			15.		
8.			16.		

Percentage of Dominant Species that are OBL, FACW or FAC (excluding FAC-). 0%

Remarks: No hydrophytic plants present. Data point located near main road. Immediate area potentially has abnormal conditions due to disturbance from the road.

HYDROLOGY

☒ Recorded Data (Described in Remarks):
- ☐ Stream, Lake, or Tide Gauge
- ☒ Aerial Photographs
- ☐ Other

☐ No Recorded Data Available

Field Observations:

Depth of Surface Water:	----	(in.)
Depth to free Water in Pit	----	(in.)
Depth of Saturated Soil:	----	(in.)

Wetland Hydrology Indicators:

Primary Indicators:
- ☐ Inundated
- ☐ Saturated in Upper 12 inches
- ☐ Water Marks
- ☐ Drift Lines
- ☐ Sediment Deposits
- ☐ Drainage Patterns in Wetlands

Secondary Indicators (2 or more required):
- ☐ Oxidized Root Channels in Upper 12 Inches
- ☐ Water-Stained Leaves
- ☐ Local Soil Survey Data
- ☐ FAC-Neutral Test
- ☐ Other (Explain in Remarks)

Remarks: No hydrology indicators.

SOILS

Map Unit Name
(Series and Phase): Visalia sandy loam

Drainage Class: Moderately well drained

Field Observations
Confirm Mapped Type? ☒ Yes ☐ No

Taxonomy (Subgroup): Pachic Haploxerolls

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle (Abundance/Contrast)	Texture, Concretions, Structure, etc.
0-14	---	10YR 2/2	---	---	Sandy loam

Hydric Soil Indicators:

- ☐ Histosol
- ☐ Histic Epipedon
- ☐ Sulfidic Odor
- ☐ Aquic Moisture Regime
- ☐ Reducing Conditions
- ☐ Gleyed or Low-Chroma Colors
- ☐ Concretions
- ☐ High Organic Content in surface layer in Sandy Soils
- ☐ Organic Streaking in Sandy Soils
- ☐ Listed on Local Hydric Soils List
- ☐ Listed on National Hydric Soils List
- ☐ Other (Explain in Remarks)

Remarks: No hydric soil indicators. There is possibly fill material from road construction.

WETLAND DETERMINATION

Hydrophytic Vegetation Present?	Yes	☐	No	☒
Wetland Hydrology Present?	Yes	☐	No	☒
Hydric Soils Present?	Yes	☐	No	☒

Is this Sampling Point Within a Wetland? Yes ☐ No ☒

Remarks: Data point located near main road beneath Southern Coast Live Oak Riparian Forest. This area does not qualify as a wetland. However, it is jurisdictional under CDFG as Adjacent Riparian habitat.

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site:	Salvation Army	Date:	17 December 2001
Applicant/Owner:	Salvation Army	County:	San Diego
Investigator:	Vanessa A. Lee, Melissa A. Booker, and Kara A. Altvater	State:	California
Do normal circumstances exist on the site?	☒ Yes ☐ No	Community ID:	CLORF
Is the site significantly disturbed (Atypical Situation)?	☐ Yes ☒ No	Transect ID:	T 1, 40ft
Is the area a potential Problem Area? (If needed, explain on reverse.)	☐ Yes ☒ No	Plot ID:	DP 6A, PP 6A

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. *Quercus agrifolia*	T	NI	9.		
2. *Bromus diandrus*	H	NI	10.		
3.			11.		
4.			12.		
5.			13.		
6.			14.		
7.			15.		
8.			16.		

Percentage of Dominant Species that are OBL, FACW or FAC (excluding FAC-). 0%

Remarks: No hydrophytic plants present.

HYDROLOGY

☒ Recorded Data (Described in Remarks):
- ☐ Stream, Lake, or Tide Gauge
- ☒ Aerial Photographs
- ☐ Other

☐ No Recorded Data Available

Field Observations:

Depth of Surface Water:	----	(in.)
Depth to free Water in Pit	----	(in.)
Depth of Saturated Soil:	----	(in.)

Wetland Hydrology Indicators:

Primary Indicators:
- ☐ Inundated
- ☐ Saturated in Upper 12 inches
- ☐ Water Marks
- ☐ Drift Lines
- ☐ Sediment Deposits
- ☐ Drainage Patterns in Wetlands

Secondary Indicators (2 or more required):
- ☐ Oxidized Root Channels in Upper 12 Inches
- ☐ Water-Stained Leaves
- ☐ Local Soil Survey Data
- ☐ FAC-Neutral Test
- ☐ Other (Explain in Remarks)

Remarks: No hydrology indicators.

SOILS

Map Unit Name
(Series and Phase): Visalia sandy loam

Drainage Class: Moderately well drained

Field Observations
Confirm Mapped Type? ☒ Yes ☐ No

Taxonomy (Subgroup): Pachic Haploxerolls

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle (Abundance/Contrast)	Texture, Concretions, Structure, etc.
0-16	---	10YR 2/2	---	---	Sandy loam

Hydric Soil Indicators:

- ☐ Histosol
- ☐ Histic Epipedon
- ☐ Sulfidic Odor
- ☐ Aquic Moisture Regime
- ☐ Reducing Conditions
- ☐ Gleyed or Low-Chroma Colors
- ☐ Concretions
- ☐ High Organic Content in surface layer in Sandy Soils
- ☐ Organic Streaking in Sandy Soils
- ☐ Listed on Local Hydric Soils List
- ☐ Listed on National Hydric Soils List
- ☐ Other (Explain in Remarks)

Remarks: No hydric soil indicators.

WETLAND DETERMINATION

Hydrophytic Vegetation Present?	Yes	☐	No	☒
Wetland Hydrology Present?	Yes	☐	No	☒
Hydric Soils Present?	Yes	☐	No	☒

Is this Sampling Point Within a Wetland? Yes ☐ No ☒

Remarks: This area of Southern Coast Live Oak Riparian Forest does not qualify as a wetland. However, the area is jurisdictional under CDFG as Adjacent Riparian habitat.

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site:	Salvation Army	Date:	17 December 2001
Applicant/Owner:	Salvation Army	County:	San Diego
Investigator:	Vanessa A. Lee, Melissa A. Booker, and Kara A. Altvater	State:	California

Do normal circumstances exist on the site?	☒ Yes	☐ No	Community ID:	CLORF
Is the site significantly disturbed (Atypical Situation)?	☐ Yes	☒ No	Transect ID:	T 1, 50ft
Is the area a potential Problem Area? (If needed, explain on reverse.)	☐ Yes	☒ No	Plot ID:	DP 7A, PP 7A

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. *Quercus agrifolia*	T	NI	9.		
2. *Rhamnus ilicifolia*	S	NI	10.		
3. *Bromus hordeaceus*	H	FACU	11.		
4.			12.		
5.			13.		
6.			14.		
7.			15.		
8.			16.		

Percentage of Dominant Species that are OBL, FACW or FAC (excluding FAC-). 0%

Remarks: No hydrophytic plants present.

HYDROLOGY

☒ Recorded Data (Described in Remarks):
- ☐ Stream, Lake, or Tide Gauge
- ☒ Aerial Photographs
- ☐ Other

☐ No Recorded Data Available

Field Observations:

Depth of Surface Water:	----	(in.)
Depth to free Water in Pit	----	(in.)
Depth of Saturated Soil:	----	(in.)

Wetland Hydrology Indicators:

Primary Indicators:
- ☐ Inundated
- ☐ Saturated in Upper 12 inches
- ☐ Water Marks
- ☐ Drift Lines
- ☐ Sediment Deposits
- ☐ Drainage Patterns in Wetlands

Secondary Indicators (2 or more required):
- ☐ Oxidized Root Channels in Upper 12 Inches
- ☐ Water-Stained Leaves
- ☐ Local Soil Survey Data
- ☐ FAC-Neutral Test
- ☐ Other (Explain in Remarks)

Remarks: No hydrology indicators.

SOILS

Map Unit Name
(Series and Phase): Visalia sandy loam

Drainage Class: Moderately well drained

Field Observations
Confirm Mapped Type? ☒ Yes ☐ No

Taxonomy (Subgroup): Pachic Haploxerolls

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle (Abundance/Contrast)	Texture, Concretions, Structure, etc.
0-14	---	10YR 3/2	---	---	Sandy loam

Hydric Soil Indicators:

- ☐ Histosol
- ☐ Histic Epipedon
- ☐ Sulfidic Odor
- ☐ Aquic Moisture Regime
- ☐ Reducing Conditions
- ☐ Gleyed or Low-Chroma Colors
- ☐ Concretions
- ☐ High Organic Content in surface layer in Sandy Soils
- ☐ Organic Streaking in Sandy Soils
- ☐ Listed on Local Hydric Soils List
- ☐ Listed on National Hydric Soils List
- ☐ Other (Explain in Remarks)

Remarks: No hydric soil indicators.

WETLAND DETERMINATION

Hydrophytic Vegetation Present?	Yes	☐	No	☒
Wetland Hydrology Present?	Yes	☐	No	☒
Hydric Soils Present?	Yes	☐	No	☒

Is this Sampling Point Within a Wetland? Yes ☐ No ☒

Remarks: This area of Southern Coast Live Oak Riparian Forest does not qualify as a wetland. However, the area is jurisdictional under CDFG as Adjacent Riparian habitat.

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site:	Salvation Army	Date:	17 December 2001
Applicant/Owner:	Salvation Army	County:	San Diego
Investigator:	Vanessa A. Lee, Melissa A. Booker, and Kara A. Altvater	State:	California

Do normal circumstances exist on the site?	☒ Yes	☐ No	Community ID:	CLORF
Is the site significantly disturbed (Atypical Situation)?	☐ Yes	☒ No	Transect ID:	T 1, 60ft
Is the area a potential Problem Area? (If needed, explain on reverse.)	☐ Yes	☒ No	Plot ID:	DP 8A, PP 8A

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. *Quercus agrifolia*	T	NI	9.		
2. *Platanus racemosa*	T	FACW	10.		
3. *Rhamnus ilicifolia*	S	NI	11.		
4. *Toxicodendron diversilobum*	H	NI	12.		
5.			13.		
6.			14.		
7.			15.		
8.			16.		

Percentage of Dominant Species that are OBL, FACW or FAC (excluding FAC-). 25%

Remarks: Hydrophytic vegetation criteria not satisfied.

HYDROLOGY

☒ Recorded Data (Described in Remarks):
- ☐ Stream, Lake, or Tide Gauge
- ☒ Aerial Photographs
- ☐ Other

☐ No Recorded Data Available

Field Observations:

Depth of Surface Water:	----	(in.)
Depth to free Water in Pit	----	(in.)
Depth of Saturated Soil:	----	(in.)

Wetland Hydrology Indicators:

Primary Indicators:
- ☐ Inundated
- ☐ Saturated in Upper 12 inches
- ☐ Water Marks
- ☐ Drift Lines
- ☐ Sediment Deposits
- ☐ Drainage Patterns in Wetlands

Secondary Indicators (2 or more required):
- ☐ Oxidized Root Channels in Upper 12 Inches
- ☐ Water-Stained Leaves
- ☐ Local Soil Survey Data
- ☐ FAC-Neutral Test
- ☐ Other (Explain in Remarks)

Remarks: No hydrology indicators.

SOILS

Map Unit Name
(Series and Phase): Visalia sandy loam

Drainage Class: Moderately well drained

Field Observations
Confirm Mapped Type? ☒ Yes ☐ No

Taxonomy (Subgroup): Pachic Haploxerolls

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle (Abundance/Contrast)	Texture, Concretions, Structure, etc.
0-14	---	10YR 3/6	---	---	Sandy loam

Hydric Soil Indicators:

- ☐ Histosol
- ☐ Histic Epipedon
- ☐ Sulfidic Odor
- ☐ Aquic Moisture Regime
- ☐ Reducing Conditions
- ☐ Gleyed or Low-Chroma Colors
- ☐ Concretions
- ☐ High Organic Content in surface layer in Sandy Soils
- ☐ Organic Streaking in Sandy Soils
- ☐ Listed on Local Hydric Soils List
- ☐ Listed on National Hydric Soils List
- ☐ Other (Explain in Remarks)

Remarks: No hydric soil indicators.

WETLAND DETERMINATION

Hydrophytic Vegetation Present?	Yes	☐	No	☒
Wetland Hydrology Present?	Yes	☐	No	☒
Hydric Soils Present?	Yes	☐	No	☒

Is this Sampling Point Within a Wetland? Yes ☐ No ☒

Remarks: This area of Southern Coast Live Oak Riparian Forest does not qualify as a wetland. However, the area is jurisdictional under CDFG as Adjacent Riparian habitat.

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site:	Salvation Army	Date:	17 December 2001
Applicant/Owner:	Salvation Army	County:	San Diego
Investigator:	Vanessa A. Lee, Melissa A. Booker, and Kara A. Altvater	State:	California
Do normal circumstances exist on the site?	☒ Yes ☐ No	Community ID:	CLORF
Is the site significantly disturbed (Atypical Situation)?	☐ Yes ☒ No	Transect ID:	T 1, 70ft
Is the area a potential Problem Area? (If needed, explain on reverse.)	☐ Yes ☒ No	Plot ID:	DP 9A, PP 9A

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. *Quercus agrifolia*	T	NI	9.		
2. *Platanus racemosa*	T	FACW	10.		
3. *Toxicodendron diversilobum*	H	NI	11.		
4.			12.		
5.			13.		
6.			14.		
7.			15.		
8.			16.		

Percentage of Dominant Species that are OBL, FACW or FAC (excluding FAC-). 33%

Remarks: Hydrophytic vegetation criteria not satisfied.

HYDROLOGY

☒ Recorded Data (Described in Remarks):
- ☐ Stream, Lake, or Tide Gauge
- ☒ Aerial Photographs
- ☐ Other

☐ No Recorded Data Available

Field Observations:

Depth of Surface Water:	----	(in.)
Depth to free Water in Pit	----	(in.)
Depth of Saturated Soil:	----	(in.)

Wetland Hydrology Indicators:

Primary Indicators:
- ☐ Inundated
- ☐ Saturated in Upper 12 inches
- ☐ Water Marks
- ☐ Drift Lines
- ☐ Sediment Deposits
- ☐ Drainage Patterns in Wetlands

Secondary Indicators (2 or more required):
- ☐ Oxidized Root Channels in Upper 12 Inches
- ☐ Water-Stained Leaves
- ☐ Local Soil Survey Data
- ☐ FAC-Neutral Test
- ☐ Other (Explain in Remarks)

Remarks: No hydrology indicators.

SOILS

Map Unit Name
(Series and Phase): Visalia sandy loam

Drainage Class: Moderately well drained

Field Observations
Confirm Mapped Type? ☒ Yes ☐ No

Taxonomy (Subgroup): Pachic Haploxerolls

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle (Abundance/Contrast)	Texture, Concretions, Structure, etc.
0-14	---	10YR 3/3	---	---	Sandy loam

Hydric Soil Indicators:

- ☐ Histosol
- ☐ Histic Epipedon
- ☐ Sulfidic Odor
- ☐ Aquic Moisture Regime
- ☐ Reducing Conditions
- ☐ Gleyed or Low-Chroma Colors
- ☐ Concretions
- ☐ High Organic Content in surface layer in Sandy Soils
- ☐ Organic Streaking in Sandy Soils
- ☐ Listed on Local Hydric Soils List
- ☐ Listed on National Hydric Soils List
- ☐ Other (Explain in Remarks)

Remarks: No hydric soil indicators.

WETLAND DETERMINATION

Hydrophytic Vegetation Present?	Yes	☐	No	☒
Wetland Hydrology Present?	Yes	☐	No	☒
Hydric Soils Present?	Yes	☐	No	☒

Is this Sampling Point Within a Wetland? Yes ☐ No ☒

Remarks: This area of Southern Coast Live Oak Riparian Forest does not qualify as a wetland. However, the area is jurisdictional under CDFG as Adjacent Riparian habitat.

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site:	Salvation Army	Date:	17 December 2001
Applicant/Owner:	Salvation Army	County:	San Diego
Investigator:	Vanessa A. Lee, Melissa A. Booker, and Kara A. Altvater	State:	California
Do normal circumstances exist on the site?	☒ Yes ☐ No	Community ID:	CLORF
Is the site significantly disturbed (Atypical Situation)?	☒ Yes ☐ No	Transect ID:	T 1, 80ft
Is the area a potential Problem Area? (If needed, explain on reverse.)	☐ Yes ☒ No	Plot ID:	DP 10A, PP 10A

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. *Quercus agrifolia*	T	NI	9.		
2. *Platanus racemosa*	T	FACW	10.		
3. *Toxicodendron diversilobum*	H	NI	11.		
4.			12.		
5.			13.		
6.			14.		
7.			15.		
8.			16.		

Percentage of Dominant Species that are OBL, FACW or FAC (excluding FAC-). 33%

Remarks: Hydrophytic vegetation criteria not satisfied.

HYDROLOGY

☒ Recorded Data (Described in Remarks):
- ☐ Stream, Lake, or Tide Gauge
- ☒ Aerial Photographs
- ☐ Other

☐ No Recorded Data Available

Field Observations:

Depth of Surface Water:	----	(in.)
Depth to free Water in Pit	----	(in.)
Depth of Saturated Soil:	----	(in.)

Wetland Hydrology Indicators:

Primary Indicators:
- ☐ Inundated
- ☐ Saturated in Upper 12 inches
- ☐ Water Marks
- ☐ Drift Lines
- ☐ Sediment Deposits
- ☒ Drainage Patterns in Wetlands

Secondary Indicators (2 or more required):
- ☐ Oxidized Root Channels in Upper 12 Inches
- ☐ Water-Stained Leaves
- ☐ Local Soil Survey Data
- ☐ FAC-Neutral Test
- ☐ Other (Explain in Remarks)

Remarks: Hydrology indicated by presence of 10-foot wide drainage (measured at approximate ordinary high water mark). Streambed width (most likely eroded from a 100-year event) is 13 feet (measured from bank to bank).

SOILS

Map Unit Name
(Series and Phase): Visalia sandy loam

Drainage Class: Moderately well drained

Field Observations
Confirm Mapped Type? ☒ Yes ☐ No

Taxonomy (Subgroup): Pachic Haploxerolls

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle (Abundance/Contrast)	Texture, Concretions, Structure, etc.
0	---	---	---	---	Rock/Cobble

Hydric Soil Indicators:

- ☐ Histosol
- ☐ Histic Epipedon
- ☐ Sulfidic Odor
- ☐ Aquic Moisture Regime
- ☐ Reducing Conditions
- ☐ Gleyed or Low-Chroma Colors
- ☐ Concretions
- ☐ High Organic Content in surface layer in Sandy Soils
- ☐ Organic Streaking in Sandy Soils
- ☐ Listed on Local Hydric Soils List
- ☐ Listed on National Hydric Soils List
- ☐ Other (Explain in Remarks)

Remarks: Could not dig due to abundance of cobble. Width of cobble in drainage is 10 feet. It is possible that sediment deposits between cobble satisfy hydric conditions; however, this cannot be determined. In this case, soils are considered to be a natural atypical situation, and the presence of hydric soils is assumed.

WETLAND DETERMINATION

Hydrophytic Vegetation Present?	Yes	☐	No	☒
Wetland Hydrology Present?	Yes	☒	No	☐
Hydric Soils Present?	Yes	☒	No	☐

Is this Sampling Point Within a Wetland? Yes ☐ No ☒

Remarks: This area of Southern Coast Live Oak Riparian Forest does not qualify as an ACOE wetland. However, the area is jurisdictional under CDFG as Adjacent Riparian habitat. The drainage is considered to be Non-wetland Waters of the U.S. (ACOE) and is also jurisdictional under the County and CDFG.

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site:	Salvation Army	Date:	17 December 2001
Applicant/Owner:	Salvation Army	County:	San Diego
Investigator:	Vanessa A. Lee, Melissa A. Booker, and Kara A. Altvater	State:	California

Do normal circumstances exist on the site?	☒ Yes	☐ No	Community ID:	CLORF
Is the site significantly disturbed (Atypical Situation)?	☐ Yes	☒ No	Transect ID:	T 1, 90ft
Is the area a potential Problem Area? (If needed, explain on reverse.)	☐ Yes	☒ No	Plot ID:	DP 11A, PP 11A

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. *Quercus agrifolia*	T	NI	9.		
2. *Rhamnus ilicifolia*	S	NI	10.		
3. *Bromus diandrus*	H	NI	11.		
4. *Lonicera subspicata*	V	NI	12.		
5.			13.		
6.			14.		
7.			15.		
8.			16.		

Percentage of Dominant Species that are OBL, FACW or FAC (excluding FAC-). 0%

Remarks: No hydrophytic vegetation present.

HYDROLOGY

☒ Recorded Data (Described in Remarks):
- ☐ Stream, Lake, or Tide Gauge
- ☒ Aerial Photographs
- ☐ Other

☐ No Recorded Data Available

Field Observations:

Depth of Surface Water:	----	(in.)
Depth to free Water in Pit	----	(in.)
Depth of Saturated Soil:	----	(in.)

Wetland Hydrology Indicators:

Primary Indicators:
- ☐ Inundated
- ☐ Saturated in Upper 12 inches
- ☐ Water Marks
- ☐ Drift Lines
- ☐ Sediment Deposits
- ☐ Drainage Patterns in Wetlands

Secondary Indicators (2 or more required):
- ☐ Oxidized Root Channels in Upper 12 Inches
- ☐ Water-Stained Leaves
- ☐ Local Soil Survey Data
- ☐ FAC-Neutral Test
- ☐ Other (Explain in Remarks)

Remarks: No hydrology indicators.

SOILS

Map Unit Name
(Series and Phase): Visalia sandy loam

Drainage Class: Moderately well drained

Field Observations
Confirm Mapped Type? ☒ Yes ☐ No

Taxonomy (Subgroup): Pachic Haploxerolls

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle (Abundance/Contrast)	Texture, Concretions, Structure, etc.
0-10	---	10YR 3/2	---	---	Sandy loam

Hydric Soil Indicators:

- ☐ Histosol
- ☐ Histic Epipedon
- ☐ Sulfidic Odor
- ☐ Aquic Moisture Regime
- ☐ Reducing Conditions
- ☐ Gleyed or Low-Chroma Colors
- ☐ Concretions
- ☐ High Organic Content in surface layer in Sandy Soils
- ☐ Organic Streaking in Sandy Soils
- ☐ Listed on Local Hydric Soils List
- ☐ Listed on National Hydric Soils List
- ☐ Other (Explain in Remarks)

Remarks: No hydric soil indicators.

WETLAND DETERMINATION

Hydrophytic Vegetation Present?	Yes	☐	No	☒
Wetland Hydrology Present?	Yes	☐	No	☒
Hydric Soils Present?	Yes	☐	No	☒

Is this Sampling Point Within a Wetland? Yes ☐ No ☒

Remarks: This area of Southern Coast Live Oak Riparian Forest does not qualify as a wetland. However, the area is jurisdictional under CDFG as Adjacent Riparian habitat.

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site:	Salvation Army	Date:	17 December 2001
Applicant/Owner:	Salvation Army	County:	San Diego
Investigator:	Vanessa A. Lee, Melissa A. Booker, and Kara A. Altvater	State:	California

Do normal circumstances exist on the site?	☒ Yes	☐ No	Community ID:	CLORF
Is the site significantly disturbed (Atypical Situation)?	☐ Yes	☒ No	Transect ID:	T 1, 100ft
Is the area a potential Problem Area? (If needed, explain on reverse.)	☐ Yes	☒ No	Plot ID:	DP 12A, PP 12A

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. *Quercus agrifolia*	T	NI	9.		
2. *Rhamnus ilicifolia*	S	NI	10.		
3. *Bromus diandrus*	H	NI	11.		
4.			12.		
5.			13.		
6.			14.		
7.			15.		
8.			16.		

Percentage of Dominant Species that are OBL, FACW or FAC (excluding FAC-). 0%

Remarks: No hydrophytic vegetation present.

HYDROLOGY

☒ Recorded Data (Described in Remarks):
- ☐ Stream, Lake, or Tide Gauge
- ☒ Aerial Photographs
- ☐ Other

☐ No Recorded Data Available

Field Observations:

Depth of Surface Water:	----	(in.)
Depth to free Water in Pit	----	(in.)
Depth of Saturated Soil:	----	(in.)

Wetland Hydrology Indicators:

Primary Indicators:
- ☐ Inundated
- ☐ Saturated in Upper 12 inches
- ☐ Water Marks
- ☐ Drift Lines
- ☐ Sediment Deposits
- ☐ Drainage Patterns in Wetlands

Secondary Indicators (2 or more required):
- ☐ Oxidized Root Channels in Upper 12 Inches
- ☐ Water-Stained Leaves
- ☐ Local Soil Survey Data
- ☐ FAC-Neutral Test
- ☐ Other (Explain in Remarks)

Remarks: No hydrology indicators.

SOILS

Map Unit Name
(Series and Phase): Visalia sandy loam

Drainage Class: Moderately well drained

Field Observations
Confirm Mapped Type? ☒ Yes ☐ No

Taxonomy (Subgroup): Pachic Haploxerolls

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle (Abundance/Contrast)	Texture, Concretions, Structure, etc.
0-10	---	10YR 3/2	---	---	Sandy loam

Hydric Soil Indicators:

- ☐ Histosol
- ☐ Histic Epipedon
- ☐ Sulfidic Odor
- ☐ Aquic Moisture Regime
- ☐ Reducing Conditions
- ☐ Gleyed or Low-Chroma Colors
- ☐ Concretions
- ☐ High Organic Content in surface layer in Sandy Soils
- ☐ Organic Streaking in Sandy Soils
- ☐ Listed on Local Hydric Soils List
- ☐ Listed on National Hydric Soils List
- ☐ Other (Explain in Remarks)

Remarks: No hydric soil indicators.

WETLAND DETERMINATION

Hydrophytic Vegetation Present?	Yes	☐	No	☒
Wetland Hydrology Present?	Yes	☐	No	☒
Hydric Soils Present?	Yes	☐	No	☒

Is this Sampling Point Within a Wetland? Yes ☐ No ☒

Remarks: This area of Southern Coast Live Oak Riparian Forest does not qualify as a wetland. However, the area is jurisdictional under CDFG as Adjacent Riparian habitat.

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site:	Salvation Army	Date:	18 December 2001
Applicant/Owner:	Salvation Army	County:	San Diego
Investigator:	Vanessa A. Lee and Kara A. Altvater	State:	California

Do normal circumstances exist on the site?	☒ Yes	☐ No	Community ID:	CLORF
Is the site significantly disturbed (Atypical Situation)?	☐ Yes	☒ No	Transect ID:	T 2, 0ft
Is the area a potential Problem Area? (If needed, explain on reverse.)	☐ Yes	☒ No	Plot ID:	DP 13A, PP 13A

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. *Quercus agrifolia*	T	NI	9.		
2. *Stellaria media*	H	FACU	10.		
3. *Bromus hordeaceus*	H	FACU	11.		
4. *Taraxacum officinale*	H	FACU	12.		
5.			13.		
6.			14.		
7.			15.		
8.			16.		

Percentage of Dominant Species that are OBL, FACW or FAC (excluding FAC-). 0%

Remarks: No hydrophytic vegetation present.

HYDROLOGY

☒ Recorded Data (Described in Remarks):
- ☐ Stream, Lake, or Tide Gauge
- ☒ Aerial Photographs
- ☐ Other

☐ No Recorded Data Available

Field Observations:

Depth of Surface Water:	----	(in.)
Depth to free Water in Pit	----	(in.)
Depth of Saturated Soil:	----	(in.)

Wetland Hydrology Indicators:

Primary Indicators:
- ☐ Inundated
- ☐ Saturated in Upper 12 inches
- ☐ Water Marks
- ☐ Drift Lines
- ☐ Sediment Deposits
- ☐ Drainage Patterns in Wetlands

Secondary Indicators (2 or more required):
- ☐ Oxidized Root Channels in Upper 12 Inches
- ☐ Water-Stained Leaves
- ☐ Local Soil Survey Data
- ☐ FAC-Neutral Test
- ☐ Other (Explain in Remarks)

Remarks: No hydrology indicators.

SOILS

Map Unit Name
(Series and Phase): Visalia sandy loam

Drainage Class: Moderately well drained

Field Observations
Confirm Mapped Type? ☒ Yes ☐ No

Taxonomy (Subgroup): Pachic Haploxerolls

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle (Abundance/Contrast)	Texture, Concretions, Structure, etc.
0-14	---	10YR 3/2	---	---	Sandy loam

Hydric Soil Indicators:

- ☐ Histosol
- ☐ Histic Epipedon
- ☐ Sulfidic Odor
- ☐ Aquic Moisture Regime
- ☐ Reducing Conditions
- ☐ Gleyed or Low-Chroma Colors
- ☐ Concretions
- ☐ High Organic Content in surface layer in Sandy Soils
- ☐ Organic Streaking in Sandy Soils
- ☐ Listed on Local Hydric Soils List
- ☐ Listed on National Hydric Soils List
- ☐ Other (Explain in Remarks)

Remarks: No hydric soil indicators.

WETLAND DETERMINATION

Hydrophytic Vegetation Present?	Yes	☐	No	☒
Wetland Hydrology Present?	Yes	☐	No	☒
Hydric Soils Present?	Yes	☐	No	☒

Is this Sampling Point Within a Wetland? Yes ☐ No ☒

Remarks: This area of Southern Coast Live Oak Riparian Forest does not qualify as a wetland. However, the area is jurisdictional under CDFG as Adjacent Riparian habitat.

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site:	Salvation Army	Date:	18 December 2001
Applicant/Owner:	Salvation Army	County:	San Diego
Investigator:	Vanessa A. Lee and Kara A. Altvater	State:	California

Do normal circumstances exist on the site?	☒ Yes	☐ No	Community ID:	CLORF
Is the site significantly disturbed (Atypical Situation)?	☒ Yes	☐ No	Transect ID:	T 2, 10ft
Is the area a potential Problem Area? (If needed, explain on reverse.)	☐ Yes	☒ No	Plot ID:	DP 14A, PP 14A

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. *Quercus agrifolia*	T	NI	9.		
2. *Eriogonum fasciculatum*	H	NI	10.		
3. *Bromus diandrus*	H	NI	11.		
4. *Hirschfeldia incana*	H	NI	12.		
5.			13.		
6.			14.		
7.			15.		
8.			16.		

Percentage of Dominant Species that are OBL, FACW or FAC (excluding FAC-). 0%

Remarks: No hydrophytic vegetation present.

HYDROLOGY

☒ Recorded Data (Described in Remarks):
- ☐ Stream, Lake, or Tide Gauge
- ☒ Aerial Photographs
- ☐ Other

☐ No Recorded Data Available

Field Observations:

Depth of Surface Water:	----	(in.)
Depth to free Water in Pit	----	(in.)
Depth of Saturated Soil:	----	(in.)

Wetland Hydrology Indicators:

Primary Indicators:
- ☐ Inundated
- ☐ Saturated in Upper 12 inches
- ☐ Water Marks
- ☐ Drift Lines
- ☐ Sediment Deposits
- ☒ Drainage Patterns in Wetlands

Secondary Indicators (2 or more required):
- ☐ Oxidized Root Channels in Upper 12 Inches
- ☐ Water-Stained Leaves
- ☐ Local Soil Survey Data
- ☐ FAC-Neutral Test
- ☐ Other (Explain in Remarks)

Remarks: Hydrology indicated by presence of 6-foot wide drainage (measured at approximate ordinary high water mark). Streambed width is 10 feet (measured from bank to bank).

SOILS

Map Unit Name
(Series and Phase): Visalia sandy loam

Drainage Class: Moderately well drained

Field Observations
Confirm Mapped Type? ☒ Yes ☐ No

Taxonomy (Subgroup): Pachic Haploxerolls

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle (Abundance/Contrast)	Texture, Concretions, Structure, etc.
0	---	---	---	---	Rock/Cobble

Hydric Soil Indicators:

- ☐ Histosol
- ☐ Histic Epipedon
- ☐ Sulfidic Odor
- ☐ Aquic Moisture Regime
- ☐ Reducing Conditions
- ☐ Gleyed or Low-Chroma Colors
- ☐ Concretions
- ☐ High Organic Content in surface layer in Sandy Soils
- ☐ Organic Streaking in Sandy Soils
- ☐ Listed on Local Hydric Soils List
- ☐ Listed on National Hydric Soils List
- ☐ Other (Explain in Remarks)

Remarks: Could not dig due to abundance of cobble. Width of cobble within drainage is 6 feet. It is possible that sediment deposits between cobble satisfy hydric conditions; however, this cannot be determined. In this case, soils are considered to be a natural atypical situation, and the presence of hydric soils is assumed.

WETLAND DETERMINATION

Hydrophytic Vegetation Present?	Yes	☐	No	☒
Wetland Hydrology Present?	Yes	☒	No	☐
Hydric Soils Present?	Yes	☒	No	☐

Is this Sampling Point Within a Wetland? Yes ☐ No ☒

Remarks: This area of Southern Coast Live Oak Riparian Forest does not qualify as an ACOE wetland. However, the area is jurisdictional under CDFG as Adjacent Riparian habitat. The drainage is considered to be Non-wetland Waters of the U.S. (ACOE) and is also jurisdictional under the County and CDFG.

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site:	Salvation Army	Date:	18 December 2001
Applicant/Owner:	Salvation Army	County:	San Diego
Investigator:	Vanessa A. Lee and Kara A. Altvater	State:	California

Do normal circumstances exist on the site?	☒ Yes	☐ No	Community ID:	CLORF
Is the site significantly disturbed (Atypical Situation)?	☐ Yes	☒ No	Transect ID:	T 2, 20ft
Is the area a potential Problem Area? (If needed, explain on reverse.)	☐ Yes	☒ No	Plot ID:	DP 15A, PP 15A

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. *Quercus agrifolia*	T	NI	9.		
2. *Eriogonum fasciculatum*	H	NI	10.		
3. *Bromus diandrus*	H	NI	11.		
4. *Picris echioides*	H	FAC	12.		
5.			13.		
6.			14.		
7.			15.		
8.			16.		

Percentage of Dominant Species that are OBL, FACW or FAC (excluding FAC-). 25%

Remarks: Hydrophytic vegetation criteria not satisfied.

HYDROLOGY

☒ Recorded Data (Described in Remarks):
- ☐ Stream, Lake, or Tide Gauge
- ☒ Aerial Photographs
- ☐ Other

☐ No Recorded Data Available

Field Observations:

Depth of Surface Water:	----	(in.)
Depth to free Water in Pit	----	(in.)
Depth of Saturated Soil:	----	(in.)

Wetland Hydrology Indicators:

Primary Indicators:
- ☐ Inundated
- ☐ Saturated in Upper 12 inches
- ☐ Water Marks
- ☐ Drift Lines
- ☐ Sediment Deposits
- ☐ Drainage Patterns in Wetlands

Secondary Indicators (2 or more required):
- ☐ Oxidized Root Channels in Upper 12 Inches
- ☐ Water-Stained Leaves
- ☐ Local Soil Survey Data
- ☐ FAC-Neutral Test
- ☐ Other (Explain in Remarks)

Remarks: No hydrology indicators.

SOILS

Map Unit Name
(Series and Phase): Visalia sandy loam

Drainage Class: Moderately well drained

Field Observations
Confirm Mapped Type? ☒ Yes ☐ No

Taxonomy (Subgroup): Pachic Haploxerolls

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle (Abundance/Contrast)	Texture, Concretions, Structure, etc.
0-14	---	10YR 3/2	---	---	Sandy loam

Hydric Soil Indicators:

- ☐ Histosol
- ☐ Histic Epipedon
- ☐ Sulfidic Odor
- ☐ Aquic Moisture Regime
- ☐ Reducing Conditions
- ☐ Gleyed or Low-Chroma Colors
- ☐ Concretions
- ☐ High Organic Content in surface layer in Sandy Soils
- ☐ Organic Streaking in Sandy Soils
- ☐ Listed on Local Hydric Soils List
- ☐ Listed on National Hydric Soils List
- ☐ Other (Explain in Remarks)

Remarks: No hydric soil indicators.

WETLAND DETERMINATION

Hydrophytic Vegetation Present?	Yes	☐	No	☒
Wetland Hydrology Present?	Yes	☐	No	☒
Hydric Soils Present?	Yes	☐	No	☒

Is this Sampling Point Within a Wetland? Yes ☐ No ☒

Remarks: Data point located at the edge of Southern Coast Live Oak Riparian Forest canopy. This area of Southern Coast Live Oak Riparian Forest does not qualify as a wetland. However, the area is jurisdictional under CDFG as Adjacent Riparian habitat.

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site:	Salvation Army	Date:	18 December 2001
Applicant/Owner:	Salvation Army	County:	San Diego
Investigator:	Vanessa A. Lee and Kara A. Altvater	State:	California

Do normal circumstances exist on the site?	☒ Yes	☐ No	Community ID:	CSS
Is the site significantly disturbed (Atypical Situation)?	☐ Yes	☒ No	Transect ID:	T 3, 0ft
Is the area a potential Problem Area? (If needed, explain on reverse.)	☐ Yes	☒ No	Plot ID:	DP 16A, PP 16A

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. *Pennisetum setaceum*	H	NI	9.		
2. *Taraxacum officinale*	H	FACU	10.		
3. *Stellaria media*	H	FACU	11.		
4. *Bromus hordeaceus*	H	FACU	12.		
5.			13.		
6.			14.		
7.			15.		
8.			16.		

Percentage of Dominant Species that are OBL, FACW or FAC (excluding FAC-). 0%

Remarks: No hydrophytic vegetation present.

HYDROLOGY

☒ Recorded Data (Described in Remarks):
- ☐ Stream, Lake, or Tide Gauge
- ☒ Aerial Photographs
- ☐ Other

☐ No Recorded Data Available

Field Observations:

Depth of Surface Water:	----	(in.)
Depth to free Water in Pit	----	(in.)
Depth of Saturated Soil:	----	(in.)

Wetland Hydrology Indicators:

Primary Indicators:
- ☐ Inundated
- ☐ Saturated in Upper 12 inches
- ☐ Water Marks
- ☐ Drift Lines
- ☐ Sediment Deposits
- ☐ Drainage Patterns in Wetlands

Secondary Indicators (2 or more required):
- ☐ Oxidized Root Channels in Upper 12 Inches
- ☐ Water-Stained Leaves
- ☐ Local Soil Survey Data
- ☐ FAC-Neutral Test
- ☐ Other (Explain in Remarks)

Remarks: No hydrology indicators.

SOILS

Map Unit Name
(Series and Phase): Visalia sandy loam

Drainage Class: Moderately well drained

Field Observations
Confirm Mapped Type? ☒ Yes ☐ No

Taxonomy (Subgroup): Pachic Haploxerolls

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle (Abundance/Contrast)	Texture, Concretions, Structure, etc.
0-14	---	10YR 3/2	---	---	Sandy loam

Hydric Soil Indicators:

- ☐ Histosol
- ☐ Histic Epipedon
- ☐ Sulfidic Odor
- ☐ Aquic Moisture Regime
- ☐ Reducing Conditions
- ☐ Gleyed or Low-Chroma Colors
- ☐ Concretions
- ☐ High Organic Content in surface layer in Sandy Soils
- ☐ Organic Streaking in Sandy Soils
- ☐ Listed on Local Hydric Soils List
- ☐ Listed on National Hydric Soils List
- ☐ Other (Explain in Remarks)

Remarks: No hydric soil indicators.

WETLAND DETERMINATION

Hydrophytic Vegetation Present?	Yes	☐	No	☒
Wetland Hydrology Present?	Yes	☐	No	☒
Hydric Soils Present?	Yes	☐	No	☒

Is this Sampling Point Within a Wetland? Yes ☐ No ☒

Remarks: Diegan Coastal Sage Scrub habitat.

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site:	Salvation Army	Date:	18 December 2001
Applicant/Owner:	Salvation Army	County:	San Diego
Investigator:	Vanessa A. Lee and Kara A. Altvater	State:	California
Do normal circumstances exist on the site?	☒ Yes ☐ No	Community ID:	CSS
Is the site significantly disturbed (Atypical Situation)?	☒ Yes ☐ No	Transect ID:	T 3, 10ft
Is the area a potential Problem Area? (If needed, explain on reverse.)	☐ Yes ☒ No	Plot ID:	DP 17A, PP 17A

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. *Picris echioides*	H	FAC	9.		
2. *Bromus hordeaceus*	H	FACU	10.		
3. *Taraxacum officinale*	H	FACU	11.		
4. *Eriogonum fasciculatum*	H	NI	12.		
5. *Bromus diandrus*	H	NI	13.		
6.			14.		
7.			15.		
8.			16.		

Percentage of Dominant Species that are OBL, FACW or FAC (excluding FAC-). 20%

Remarks: No hydrophytic vegetation present.

HYDROLOGY

☒ Recorded Data (Described in Remarks):
- ☐ Stream, Lake, or Tide Gauge
- ☒ Aerial Photographs
- ☐ Other

☐ No Recorded Data Available

Field Observations:

Depth of Surface Water:	----	(in.)
Depth to free Water in Pit	----	(in.)
Depth of Saturated Soil:	----	(in.)

Wetland Hydrology Indicators:

Primary Indicators:
- ☐ Inundated
- ☐ Saturated in Upper 12 inches
- ☐ Water Marks
- ☐ Drift Lines
- ☐ Sediment Deposits
- ☒ Drainage Patterns in Wetlands

Secondary Indicators (2 or more required):
- ☐ Oxidized Root Channels in Upper 12 Inches
- ☐ Water-Stained Leaves
- ☐ Local Soil Survey Data
- ☐ FAC-Neutral Test
- ☐ Other (Explain in Remarks)

Remarks: Hydrology indicated by presence of 6-foot wide drainage (measured at approximate ordinary high water mark). Streambed width is 12 feet (measured from bank to bank).

SOILS

Map Unit Name
(Series and Phase): Visalia sandy loam

Drainage Class: Moderately well drained

Field Observations
Confirm Mapped Type? ☒ Yes ☐ No

Taxonomy (Subgroup): Pachic Haploxerolls

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle (Abundance/Contrast)	Texture, Concretions, Structure, etc.
0	---	---	---	---	Rock/Cobble

Hydric Soil Indicators:

- ☐ Histosol
- ☐ Histic Epipedon
- ☐ Sulfidic Odor
- ☐ Aquic Moisture Regime
- ☐ Reducing Conditions
- ☐ Gleyed or Low-Chroma Colors
- ☐ Concretions
- ☐ High Organic Content in surface layer in Sandy Soils
- ☐ Organic Streaking in Sandy Soils
- ☐ Listed on Local Hydric Soils List
- ☐ Listed on National Hydric Soils List
- ☐ Other (Explain in Remarks)

Remarks: Could not dig due to abundance of cobble. Width of cobble in drainage is 6 feet. It is possible that sediment deposits between cobble satisfy hydric conditions; however, this cannot be determined. In this case, soils are considered to be a natural atypical situation, and the presence of hydric soils is assumed.

WETLAND DETERMINATION

Hydrophytic Vegetation Present?	Yes	☐	No	☒
Wetland Hydrology Present?	Yes	☒	No	☐
Hydric Soils Present?	Yes	☒	No	☐

Is this Sampling Point Within a Wetland? Yes ☐ No ☒

Remarks: Data point located in Diegan Coastal Sage Scrub habitat. The drainage is considered to be Non-wetland Waters of the U.S. (ACOE) and is also jurisdictional under the County and CDFG.

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site:	Salvation Army	Date:	18 December 2001
Applicant/Owner:	Salvation Army	County:	San Diego
Investigator:	Vanessa A. Lee and Kara A. Altvater	State:	California

Do normal circumstances exist on the site?	☒ Yes	☐ No	Community ID:	CSS
Is the site significantly disturbed (Atypical Situation)?	☐ Yes	☒ No	Transect ID:	T 3, 20ft
Is the area a potential Problem Area? (If needed, explain on reverse.)	☐ Yes	☒ No	Plot ID:	DP 18A, PP 18A

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. *Picris echioides*	H	FAC	9.		
2. *Bromus diandrus*	H	NI	10.		
3. *Cryptantha intermedia*	H	NI	11.		
4. *Eriogonum fasciculatum*	H	NI	12.		
5. *Bromus madritensis ssp. rubens*	H	NI	13.		
6.			14.		
7.			15.		
8.			16.		

Percentage of Dominant Species that are OBL, FACW or FAC (excluding FAC-). 20%

Remarks: Hydrophytic vegetation criteria not satisfied.

HYDROLOGY

☒ Recorded Data (Described in Remarks):
- ☐ Stream, Lake, or Tide Gauge
- ☒ Aerial Photographs
- ☐ Other

☐ No Recorded Data Available

Field Observations:

Depth of Surface Water:	----	(in.)
Depth to free Water in Pit	----	(in.)
Depth of Saturated Soil:	----	(in.)

Wetland Hydrology Indicators:

Primary Indicators:
- ☐ Inundated
- ☐ Saturated in Upper 12 inches
- ☐ Water Marks
- ☐ Drift Lines
- ☐ Sediment Deposits
- ☐ Drainage Patterns in Wetlands

Secondary Indicators (2 or more required):
- ☐ Oxidized Root Channels in Upper 12 Inches
- ☐ Water-Stained Leaves
- ☐ Local Soil Survey Data
- ☐ FAC-Neutral Test
- ☐ Other (Explain in Remarks)

Remarks: No hydrology indicators.

SOILS

Map Unit Name
(Series and Phase): Visalia sandy loam

Drainage Class: Moderately well drained

Field Observations
Confirm Mapped Type? ☒ Yes ☐ No

Taxonomy (Subgroup): Pachic Haploxerolls

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle (Abundance/Contrast)	Texture, Concretions, Structure, etc.
0-16	---	10YR 3/2	---	---	Sandy loam

Hydric Soil Indicators:

- ☐ Histosol
- ☐ Histic Epipedon
- ☐ Sulfidic Odor
- ☐ Aquic Moisture Regime
- ☐ Reducing Conditions
- ☐ Gleyed or Low-Chroma Colors
- ☐ Concretions
- ☐ High Organic Content in surface layer in Sandy Soils
- ☐ Organic Streaking in Sandy Soils
- ☐ Listed on Local Hydric Soils List
- ☐ Listed on National Hydric Soils List
- ☐ Other (Explain in Remarks)

Remarks: No hydric soil indicators.

WETLAND DETERMINATION

Hydrophytic Vegetation Present?	Yes	☐	No	☒
Wetland Hydrology Present?	Yes	☐	No	☒
Hydric Soils Present?	Yes	☐	No	☒

Is this Sampling Point Within a Wetland? Yes ☐ No ☒

Remarks: Data point located within Diegan Coastal Sage Scrub vegetation above bank of drainage.

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site:	Salvation Army	Date:	18 December 2001
Applicant/Owner:	Salvation Army	County:	San Diego
Investigator:	Vanessa A. Lee and Kara A. Altvater	State:	California

Do normal circumstances exist on the site?	☒ Yes	☐ No	Community ID:	CLORF
Is the site significantly disturbed (Atypical Situation)?	☐ Yes	☒ No	Transect ID:	T 4, 0ft
Is the area a potential Problem Area? (If needed, explain on reverse.)	☐ Yes	☒ No	Plot ID:	DP 19A, PP 19A

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. *Platanus racemosa*	T	FACW	9.		
2. *Bromus diandrus*	H	NI	10.		
3.			11.		
4.			12.		
5.			13.		
6.			14.		
7.			15.		
8.			16.		

Percentage of Dominant Species that are OBL, FACW or FAC (excluding FAC-). 50%

Remarks: Hydrophytic vegetation criteria not satisfied. (Only one Western Sycamore tree present. This is not a grouping of trees.)

HYDROLOGY

☒ Recorded Data (Described in Remarks):
- ☐ Stream, Lake, or Tide Gauge
- ☒ Aerial Photographs
- ☐ Other

☐ No Recorded Data Available

Field Observations:

Depth of Surface Water:	----	(in.)
Depth to free Water in Pit	----	(in.)
Depth of Saturated Soil:	----	(in.)

Wetland Hydrology Indicators:

Primary Indicators:
- ☐ Inundated
- ☐ Saturated in Upper 12 inches
- ☐ Water Marks
- ☐ Drift Lines
- ☐ Sediment Deposits
- ☐ Drainage Patterns in Wetlands

Secondary Indicators (2 or more required):
- ☐ Oxidized Root Channels in Upper 12 Inches
- ☐ Water-Stained Leaves
- ☐ Local Soil Survey Data
- ☐ FAC-Neutral Test
- ☐ Other (Explain in Remarks)

Remarks: No hydrology indicators.

SOILS

Map Unit Name
(Series and Phase): Visalia sandy loam

Drainage Class: Moderately well drained

Field Observations
Confirm Mapped Type? ☒ Yes ☐ No

Taxonomy (Subgroup): Pachic sandy loam

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle (Abundance/Contrast)	Texture, Concretions, Structure, etc.
0-14	---	10YR 3/2	---	---	Sandy loam

Hydric Soil Indicators:

- ☐ Histosol
- ☐ Histic Epipedon
- ☐ Sulfidic Odor
- ☐ Aquic Moisture Regime
- ☐ Reducing Conditions
- ☐ Gleyed or Low-Chroma Colors
- ☐ Concretions
- ☐ High Organic Content in surface layer in Sandy Soils
- ☐ Organic Streaking in Sandy Soils
- ☐ Listed on Local Hydric Soils List
- ☐ Listed on National Hydric Soils List
- ☐ Other (Explain in Remarks)

Remarks: No hydric soil indicators.

WETLAND DETERMINATION

Hydrophytic Vegetation Present?	Yes	☐	No	☒
Wetland Hydrology Present?	Yes	☐	No	☒
Hydric Soils Present?	Yes	☐	No	☒

Is this Sampling Point Within a Wetland? Yes ☐ No ☒

Remarks: Data point located at the edge of Southern Coast Live Oak Riparian Forest canopy. Area is jurisdictional under CDFG as Adjacent Riparian habitat.

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site:	Salvation Army	Date:	18 December 2001
Applicant/Owner:	Salvation Army	County:	San Diego
Investigator:	Vanessa A. Lee and Kara A. Altvater	State:	California

Do normal circumstances exist on the site?	☒ Yes	☐ No	Community ID:	CLORF
Is the site significantly disturbed (Atypical Situation)?	☐ Yes	☒ No	Transect ID:	T 4, 10ft
Is the area a potential Problem Area? (If needed, explain on reverse.)	☐ Yes	☒ No	Plot ID:	DP 20A, PP 20A

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. *Quercus agrifolia*	T	NI	9.		
2. *Platanus racemosa*	T	FACW	10.		
3. *Bromus diandrus*	H	NI	11.		
4. *Hirschfeldia incana*	H	NI	12.		
5.			13.		
6.			14.		
7.			15.		
8.			16.		

Percentage of Dominant Species that are OBL, FACW or FAC (excluding FAC-). 25%

Remarks: Hydrophytic vegetation criteria not satisfied.

HYDROLOGY

☒ Recorded Data (Described in Remarks):
- ☐ Stream, Lake, or Tide Gauge
- ☒ Aerial Photographs
- ☐ Other

☐ No Recorded Data Available

Field Observations:

Depth of Surface Water:	----	(in.)
Depth to free Water in Pit	----	(in.)
Depth of Saturated Soil:	----	(in.)

Wetland Hydrology Indicators:

Primary Indicators:
- ☐ Inundated
- ☐ Saturated in Upper 12 inches
- ☐ Water Marks
- ☐ Drift Lines
- ☐ Sediment Deposits
- ☒ Drainage Patterns in Wetlands

Secondary Indicators (2 or more required):
- ☐ Oxidized Root Channels in Upper 12 Inches
- ☐ Water-Stained Leaves
- ☐ Local Soil Survey Data
- ☐ FAC-Neutral Test
- ☐ Other (Explain in Remarks)

Remarks: Hydrology indicated by presence of 4-foot wide drainage (measured at approximate ordinary high water mark). Streambed width is 10 feet (measured from bank to bank).

SOILS

Map Unit Name
(Series and Phase): Visalia sandy loam

Drainage Class: Moderately well drained

Field Observations
Confirm Mapped Type? ☒ Yes ☐ No

Taxonomy (Subgroup): Pachic Haploxerolls

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle (Abundance/Contrast)	Texture, Concretions, Structure, etc.
0-2	---	10YR 3/2	---	---	Sandy Loam
2					Cobble

Hydric Soil Indicators:

- ☐ Histosol
- ☐ Histic Epipedon
- ☐ Sulfidic Odor
- ☐ Aquic Moisture Regime
- ☐ Reducing Conditions
- ☐ Gleyed or Low-Chroma Colors
- ☐ Concretions
- ☐ High Organic Content in surface layer in Sandy Soils
- ☐ Organic Streaking in Sandy Soils
- ☐ Listed on Local Hydric Soils List
- ☐ Listed on National Hydric Soils List
- ☐ Other (Explain in Remarks)

Remarks: Could not dig past 2 inches due to cobble. Width of cobble is 4 feet within drainage. Although it is possible that sediment deposits between cobble contain hydric characteristics, it is not expect to be so, due to the lack of hydric conditions in the surface soil.

WETLAND DETERMINATION

Hydrophytic Vegetation Present?	Yes	☐	No	☒
Wetland Hydrology Present?	Yes	☒	No	☐
Hydric Soils Present?	Yes	☐	No	☒

Is this Sampling Point Within a Wetland? Yes ☐ No ☒

Remarks: This area of Southern Coast Live Oak Riparian Forest does not qualify as an ACOE wetland. However, the area is jurisdictional under CDFG as Adjacent Riparian habitat. The drainage is considered to be Non-wetland Waters of the U.S. (ACOE) and is also jurisdictional under the County and CDFG.

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site:	Salvation Army	Date:	18 December 2001
Applicant/Owner:	Salvation Army	County:	San Diego
Investigator:	Vanessa A. Lee and Kara A. Altvater	State:	California

Do normal circumstances exist on the site?	☒ Yes	☐ No	Community ID:	CLORF
Is the site significantly disturbed (Atypical Situation)?	☐ Yes	☒ No	Transect ID:	T 4 , 20ft
Is the area a potential Problem Area? (If needed, explain on reverse.)	☐ Yes	☒ No	Plot ID:	DP 21A, PP 21A

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. *Quercus agrifolia*	T	NI	9.		
2. *Eriogonum fasciculatum*	H	NI	10.		
3. *Bromus diandrus*	H	NI	11.		
4. *Bromus hordeaceus*	H	FACU	12.		
5. *Cryptantha intermedia*	H	NI	13.		
6.			14.		
7.			15.		
8.			16.		

Percentage of Dominant Species that are OBL, FACW or FAC (excluding FAC-). 0%

Remarks: No hydrophytic vegetation present.

HYDROLOGY

☒ Recorded Data (Described in Remarks):
- ☐ Stream, Lake, or Tide Gauge
- ☒ Aerial Photographs
- ☐ Other

☐ No Recorded Data Available

Field Observations:

Depth of Surface Water:	----	(in.)
Depth to free Water in Pit	----	(in.)
Depth of Saturated Soil:	----	(in.)

Wetland Hydrology Indicators:

Primary Indicators:
- ☐ Inundated
- ☐ Saturated in Upper 12 inches
- ☐ Water Marks
- ☐ Drift Lines
- ☐ Sediment Deposits
- ☐ Drainage Patterns in Wetlands

Secondary Indicators (2 or more required):
- ☐ Oxidized Root Channels in Upper 12 Inches
- ☐ Water-Stained Leaves
- ☐ Local Soil Survey Data
- ☐ FAC-Neutral Test
- ☐ Other (Explain in Remarks)

Remarks: No hydrology indicators present.

SOILS

Map Unit Name
(Series and Phase): Visalia sandy loam

Drainage Class: Moderately well drained

Field Observations
Confirm Mapped Type? ☒ Yes ☐ No

Taxonomy (Subgroup): Pachic Haploxerolls

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle (Abundance/Contrast)	Texture, Concretions, Structure, etc.
0-14	---	10YR 3/2	---	---	Sandy Loam

Hydric Soil Indicators:

- ☐ Histosol
- ☐ Histic Epipedon
- ☐ Sulfidic Odor
- ☐ Aquic Moisture Regime
- ☐ Reducing Conditions
- ☐ Gleyed or Low-Chroma Colors
- ☐ Concretions
- ☐ High Organic Content in surface layer in Sandy Soils
- ☐ Organic Streaking in Sandy Soils
- ☐ Listed on Local Hydric Soils List
- ☐ Listed on National Hydric Soils List
- ☐ Other (Explain in Remarks)

Remarks: No hydric soil indicators.

WETLAND DETERMINATION

Hydrophytic Vegetation Present?	Yes	☐	No	☒
Wetland Hydrology Present?	Yes	☐	No	☒
Hydric Soils Present?	Yes	☐	No	☒

Is this Sampling Point Within a Wetland? Yes ☐ No ☒

Remarks: Data point located at the edge of Southern Coast Live Oak Riparian Forest canopy. Understory is Diegan Coastal Sage Scrub. Area is jurisdictional under CDFG as Adjacent Riparian habitat.

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site:	Salvation Army	Date:	18 December 2001
Applicant/Owner:	Salvation Army	County:	San Diego
Investigator:	Vanessa A. Lee and Kara A. Altvater	State:	California
Do normal circumstances exist on the site?	☒ Yes ☐ No	Community ID:	CSS
Is the site significantly disturbed (Atypical Situation)?	☒ Yes ☐ No	Transect ID:	T 5, 0ft
Is the area a potential Problem Area? (If needed, explain on reverse.)	☐ Yes ☒ No	Plot ID:	DP 22A, PP 22A

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. *Hirschfeldia incana*	H	NI	9.		
2. *Avena barbata*	H	NI	10.		
3.			11.		
4.			12.		
5.			13.		
6.			14.		
7.			15.		
8.			16.		

Percentage of Dominant Species that are OBL, FACW or FAC (excluding FAC-). 0%

Remarks: No hydrophytic vegetation present. Data point located in Diegan Coastal Sage Scrub vegetation with high component of non-native grasses and forbs. However, data point is also located at the edge of main access road where disturbance is greater.

HYDROLOGY

☒ Recorded Data (Described in Remarks):
- ☐ Stream, Lake, or Tide Gauge
- ☒ Aerial Photographs
- ☐ Other

☐ No Recorded Data Available

Field Observations:

Depth of Surface Water:	----	(in.)
Depth to free Water in Pit	----	(in.)
Depth of Saturated Soil:	----	(in.)

Wetland Hydrology Indicators:

Primary Indicators:
- ☐ Inundated
- ☐ Saturated in Upper 12 inches
- ☐ Water Marks
- ☐ Drift Lines
- ☐ Sediment Deposits
- ☐ Drainage Patterns in Wetlands

Secondary Indicators (2 or more required):
- ☐ Oxidized Root Channels in Upper 12 Inches
- ☐ Water-Stained Leaves
- ☐ Local Soil Survey Data
- ☐ FAC-Neutral Test
- ☐ Other (Explain in Remarks)

Remarks: No hydrology indicators.

SOILS

Map Unit Name
(Series and Phase): Visalia sandy loam

Drainage Class: Moderately well drained

Field Observations
Confirm Mapped Type? ☒ Yes ☐ No

Taxonomy (Subgroup): Pachic Haploxerolls

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle (Abundance/Contrast)	Texture, Concretions, Structure, etc.
0-4"	---	10YR 3/3	---	---	Sandy Loam
4-6"	---	7.5YR 4/6	---	---	Sandy Loam

Hydric Soil Indicators:

- ☐ Histosol
- ☐ Histic Epipedon
- ☐ Sulfidic Odor
- ☐ Aquic Moisture Regime
- ☐ Reducing Conditions
- ☐ Gleyed or Low-Chroma Colors
- ☐ Concretions
- ☐ High Organic Content in surface layer in Sandy Soils
- ☐ Organic Streaking in Sandy Soils
- ☐ Listed on Local Hydric Soils List
- ☐ Listed on National Hydric Soils List
- ☐ Other (Explain in Remarks)

Remarks: Potential atypical situation, because data point is adjacent to main access road. After 6 inches of digging, shovel hit hard surface, which was most likely due to road materials.

WETLAND DETERMINATION

Hydrophytic Vegetation Present?	Yes	☐	No	☒
Wetland Hydrology Present?	Yes	☐	No	☒
Hydric Soils Present?	Yes	☐	No	☒

Is this Sampling Point Within a Wetland? Yes ☐ No ☒

Remarks: Data point located in disturbed Diegan Coastal Sage Scrub vegetation (high component of non-native, weedy vegetation). This gap in the Southern Coast Live Oak Riparian Forest could be a potential wetland mitigation area.

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site:	Salvation Army	Date:	18 December 2001
Applicant/Owner:	Salvation Army	County:	San Diego
Investigator:	Vanessa A. Lee and Kara A. Altvater	State:	California

Do normal circumstances exist on the site?	☒ Yes	☐ No	Community ID:	CSS
Is the site significantly disturbed (Atypical Situation)?	☒ Yes	☐ No	Transect ID:	T 5, 10ft
Is the area a potential Problem Area? (If needed, explain on reverse.)	☐ Yes	☒ No	Plot ID:	DP 23A, PP 23A

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. *Bromus diandrus*	H	NI	9.		
2. *Hirschfeldia incana*	H	NI	10.		
3. *Bromus hordeaceus*	H	FACU	11.		
4. *Picris echioides*	H	FAC	12.		
5.			13.		
6.			14.		
7.			15.		
8.			16.		

Percentage of Dominant Species that are OBL, FACW or FAC (excluding FAC-). 25%

Remarks: Hydrophytic vegetation criteria not satisfied. Data point located in Diegan Coastal Sage Scrub with high component of non-native grasses.

HYDROLOGY

☒ Recorded Data (Described in Remarks):
- ☐ Stream, Lake, or Tide Gauge
- ☒ Aerial Photographs
- ☐ Other

☐ No Recorded Data Available

Field Observations:

Depth of Surface Water:	----	(in.)
Depth to free Water in Pit	----	(in.)
Depth of Saturated Soil:	----	(in.)

Wetland Hydrology Indicators:

Primary Indicators:
- ☐ Inundated
- ☐ Saturated in Upper 12 inches
- ☐ Water Marks
- ☐ Drift Lines
- ☒ Sediment Deposits
- ☐ Drainage Patterns in Wetlands

Secondary Indicators (2 or more required):
- ☐ Oxidized Root Channels in Upper 12 Inches
- ☐ Water-Stained Leaves
- ☐ Local Soil Survey Data
- ☐ FAC-Neutral Test
- ☐ Other (Explain in Remarks)

Remarks: Hydrology indicated by 4-foot wide drainage (measured at approximate ordinary high water mark). Streambed width is 9 feet (measured from bank to bank).

SOILS

Map Unit Name
(Series and Phase): Visalia sandy loam

Drainage Class: Moderately well drained

Field Observations
Confirm Mapped Type? ☒ Yes ☐ No

Taxonomy (Subgroup): Pachic Haploxerolls

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle (Abundance/Contrast)	Texture, Concretions, Structure, etc.
0	---	---	---	---	Cobble

Hydric Soil Indicators:

- ☐ Histosol
- ☐ Histic Epipedon
- ☐ Sulfidic Odor
- ☐ Aquic Moisture Regime
- ☐ Reducing Conditions
- ☐ Gleyed or Low-Chroma Colors
- ☐ Concretions
- ☐ High Organic Content in surface layer in Sandy Soils
- ☐ Organic Streaking in Sandy Soils
- ☐ Listed on Local Hydric Soils List
- ☐ Listed on National Hydric Soils List
- ☐ Other (Explain in Remarks)

Remarks: Could not dig due to presence of cobble. Cobble width within drainage is 4 feet. It is possible that sediment deposits between cobble satisfy hydric conditions; however, this cannot be determined. In this case, soils are considered to be a natural atypical situation, and the presence of hydric soils is assumed.

WETLAND DETERMINATION

Hydrophytic Vegetation Present?	Yes	☐	No	☒
Wetland Hydrology Present?	Yes	☒	No	☐
Hydric Soils Present?	Yes	☒	No	☐

Is this Sampling Point Within a Wetland? Yes ☐ No ☒

Remarks: The data point is not within an ACOE wetland; however, the drainage is considered to be Non-wetland Waters of the U.S. (ACOE) and is also jurisdictional under the County and CDFG.

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site:	Salvation Army	Date:	18 December 2001
Applicant/Owner:	Salvation Army	County:	San Diego
Investigator:	Vanessa A. Lee and Kara A. Altvater	State:	California

Do normal circumstances exist on the site?	☒ Yes	☐ No	Community ID:	CSS
Is the site significantly disturbed (Atypical Situation)?	☐ Yes	☒ No	Transect ID:	T 5, 20ft
Is the area a potential Problem Area? (If needed, explain on reverse.)	☐ Yes	☒ No	Plot ID:	DP 24A, PP 24A

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. *Bromus diandrus*	H	NI	9.		
2. *Erigonum fasciculatum*	H	NI	10.		
3.			11.		
4.			12.		
5.			13.		
6.			14.		
7.			15.		
8.			16.		

Percentage of Dominant Species that are OBL, FACW or FAC (excluding FAC-). 0%

Remarks: No hydrophytic vegetation present.

HYDROLOGY

☒ Recorded Data (Described in Remarks):
- ☐ Stream, Lake, or Tide Gauge
- ☒ Aerial Photographs
- ☐ Other

☐ No Recorded Data Available

Field Observations:

Depth of Surface Water:	----	(in.)
Depth to free Water in Pit	----	(in.)
Depth of Saturated Soil:	----	(in.)

Wetland Hydrology Indicators:

Primary Indicators:
- ☐ Inundated
- ☐ Saturated in Upper 12 inches
- ☐ Water Marks
- ☐ Drift Lines
- ☐ Sediment Deposits
- ☐ Drainage Patterns in Wetlands

Secondary Indicators (2 or more required):
- ☐ Oxidized Root Channels in Upper 12 Inches
- ☐ Water-Stained Leaves
- ☐ Local Soil Survey Data
- ☐ FAC-Neutral Test
- ☐ Other (Explain in Remarks)

Remarks: No hydrology indicators.

SOILS

Map Unit Name
(Series and Phase): Visalia sandy loam

Drainage Class: Moderately well drained

Field Observations
Confirm Mapped Type? ☒ Yes ☐ No

Taxonomy (Subgroup): Pachic Haploxerolls

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle (Abundance/Contrast)	Texture, Concretions, Structure, etc.
0-14"	---	10YR 3/3	---	---	Sandy Loam

Hydric Soil Indicators:

- ☐ Histosol
- ☐ Histic Epipedon
- ☐ Sulfidic Odor
- ☐ Aquic Moisture Regime
- ☐ Reducing Conditions
- ☐ Gleyed or Low-Chroma Colors
- ☐ Concretions
- ☐ High Organic Content in surface layer in Sandy Soils
- ☐ Organic Streaking in Sandy Soils
- ☐ Listed on Local Hydric Soils List
- ☐ Listed on National Hydric Soils List
- ☐ Other (Explain in Remarks)

Remarks: No hydric soil indicators.

WETLAND DETERMINATION

Hydrophytic Vegetation Present? Yes ☐ No ☒

Wetland Hydrology Present? Yes ☐ No ☒

Hydric Soils Present? Yes ☐ No ☒

Is this Sampling Point Within a Wetland? Yes ☐ No ☒

Remarks: Data point located within Diegan Coastal Sage Scrub. Area is located within gap of Southern Coast Live Oak Riparian Forest, and could be potential wetland mitigation area.

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site:	Salvation Army	Date:	18 December 2001
Applicant/Owner:	Salvation Army	County:	San Diego
Investigator:	Vanessa A. Lee and Kara A. Altvater	State:	California

Do normal circumstances exist on the site?	☒ Yes	☐ No	Community ID:	CSS
Is the site significantly disturbed (Atypical Situation)?	☐ Yes	☒ No	Transect ID:	T 6, 0ft
Is the area a potential Problem Area? (If needed, explain on reverse.)	☐ Yes	☒ No	Plot ID:	DP 25A, PP 25A

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. *Eriogonum fasciculatum*	H	NI	9.		
2. *Hirschfeldia incana*	H	NI	10.		
3. *Bromus diandrus*	H	NI	11.		
4.			12.		
5.			13.		
6.			14.		
7.			15.		
8.			16.		

Percentage of Dominant Species that are OBL, FACW or FAC (excluding FAC-). 0%

Remarks: Hydrophytic vegetation criteria not satisfied. Disturbed Coastal Sage Scrub vegetation (high component of non-native grasses).

HYDROLOGY

☒ Recorded Data (Described in Remarks):
- ☐ Stream, Lake, or Tide Gauge
- ☒ Aerial Photographs
- ☐ Other

☐ No Recorded Data Available

Field Observations:

Depth of Surface Water:	----	(in.)
Depth to free Water in Pit	----	(in.)
Depth of Saturated Soil:	----	(in.)

Wetland Hydrology Indicators:

Primary Indicators:
- ☐ Inundated
- ☐ Saturated in Upper 12 inches
- ☐ Water Marks
- ☐ Drift Lines
- ☐ Sediment Deposits
- ☐ Drainage Patterns in Wetlands

Secondary Indicators (2 or more required):
- ☐ Oxidized Root Channels in Upper 12 Inches
- ☐ Water-Stained Leaves
- ☐ Local Soil Survey Data
- ☐ FAC-Neutral Test
- ☐ Other (Explain in Remarks)

Remarks: No hydrology indicators.

SOILS

Map Unit Name
(Series and Phase): Visalia sandy loam

Drainage Class: Moderately well drained

Field Observations
Confirm Mapped Type? ☒ Yes ☐ No

Taxonomy (Subgroup): Pachic Haploxerolls

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle (Abundance/Contrast)	Texture, Concretions, Structure, etc.
0-16"	---	10YR 3/3	---	---	Sandy Loam

Hydric Soil Indicators:

- ☐ Histosol
- ☐ Histic Epipedon
- ☐ Sulfidic Odor
- ☐ Aquic Moisture Regime
- ☐ Reducing Conditions
- ☐ Gleyed or Low-Chroma Colors
- ☐ Concretions
- ☐ High Organic Content in surface layer in Sandy Soils
- ☐ Organic Streaking in Sandy Soils
- ☐ Listed on Local Hydric Soils List
- ☐ Listed on National Hydric Soils List
- ☐ Other (Explain in Remarks)

Remarks: No hydric soil indicators.

WETLAND DETERMINATION

Hydrophytic Vegetation Present?	Yes	☐	No	☒
Wetland Hydrology Present?	Yes	☐	No	☒
Hydric Soils Present?	Yes	☐	No	☒

Is this Sampling Point Within a Wetland? Yes ☐ No ☒

Remarks: Disturbed Coastal Sage Scrub vegetation (high component of non-native grasses and immediately adjacent to main access road).

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site:	Salvation Army	Date:	18 December 2001
Applicant/Owner:	Salvation Army	County:	San Diego
Investigator:	Vanessa A. Lee and Kara A. Altvater	State:	California

Do normal circumstances exist on the site?	☒ Yes	☐ No	Community ID:	CSS
Is the site significantly disturbed (Atypical Situation)?	☐ Yes	☒ No	Transect ID:	T6, 10ft
Is the area a potential Problem Area? (If needed, explain on reverse.)	☐ Yes	☒ No	Plot ID:	DP 26A, PP 26A

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. *Bromus diandrus*	H	NI	9.		
2. *Picris echioides*	H	FAC	10.		
3. *Hirschfeldia incana*	H	NI	11.		
4.			12.		
5.			13.		
6.			14.		
7.			15.		
8.			16.		

Percentage of Dominant Species that are OBL, FACW or FAC (excluding FAC-). 33%

Remarks: Hydrophytic vegetation criteria not satisfied. Diegan Coastal Sage Scrub vegetation with high component of non-native grasses and forbs.

HYDROLOGY

☒ Recorded Data (Described in Remarks):
- ☐ Stream, Lake, or Tide Gauge
- ☒ Aerial Photographs
- ☐ Other

☐ No Recorded Data Available

Field Observations:

Depth of Surface Water:	----	(in.)
Depth to free Water in Pit	----	(in.)
Depth of Saturated Soil:	----	(in.)

Wetland Hydrology Indicators:

Primary Indicators:
- ☐ Inundated
- ☐ Saturated in Upper 12 inches
- ☐ Water Marks
- ☐ Drift Lines
- ☐ Sediment Deposits
- ☒ Drainage Patterns in Wetlands

Secondary Indicators (2 or more required):
- ☐ Oxidized Root Channels in Upper 12 Inches
- ☐ Water-Stained Leaves
- ☐ Local Soil Survey Data
- ☐ FAC-Neutral Test
- ☐ Other (Explain in Remarks)

Remarks: Hydrology indicated by presence of 7-foot wide drainage (measured at approximate ordinary high water mark). Streambed width 11 feet (measured from bank to bank).

SOILS

Map Unit Name
(Series and Phase): Visalia sandy loam

Drainage Class: Moderately well drained

Field Observations
Confirm Mapped Type? ☒ Yes ☐ No

Taxonomy (Subgroup): Pachic Haploxerolls

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle (Abundance/Contrast)	Texture, Concretions, Structure, etc.
0-3	---	10YR 3/2	---	---	Sandy Loam
3	---	---	---	---	Cobble

Hydric Soil Indicators:

- ☐ Histosol
- ☐ Histic Epipedon
- ☐ Sulfidic Odor
- ☐ Aquic Moisture Regime
- ☐ Reducing Conditions
- ☐ Gleyed or Low-Chroma Colors
- ☐ Concretions
- ☐ High Organic Content in surface layer in Sandy Soils
- ☐ Organic Streaking in Sandy Soils
- ☐ Listed on Local Hydric Soils List
- ☐ Listed on National Hydric Soils List
- ☐ Other (Explain in Remarks)

Remarks: Could not dig past 3 inches due to cobble. Cobble width within the drainage is 7 feet. Although it is possible that sediment deposits between cobble contain hydric characteristics, it is not expect to be so, due to the lack of hydric conditions in the surface soil.

WETLAND DETERMINATION

Hydrophytic Vegetation Present?	Yes	☐	No	☒
Wetland Hydrology Present?	Yes	☒	No	☐
Hydric Soils Present?	Yes	☐	No	☒

Is this Sampling Point Within a Wetland? Yes ☐ No ☒

Remarks: This data point does not lie within an ACOE wetland; however, the drainage is considered to be Non-wetland Waters of the U.S. (ACOE) and is also jurisdictional under the County and CDFG.

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site:	Salvation Army	Date:	18 December 2001
Applicant/Owner:	Salvation Army	County:	San Diego
Investigator:	Vanessa A. Lee and Kara A. Altvater	State:	California

Do normal circumstances exist on the site?	☒ Yes	☐ No	Community ID:	CSS
Is the site significantly disturbed (Atypical Situation)?	☐ Yes	☒ No	Transect ID:	T 6, 20ft
Is the area a potential Problem Area? (If needed, explain on reverse.)	☐ Yes	☒ No	Plot ID:	DP 27A, PP 27A

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. *Picris echioides*	H	FAC	9.		
2. *Bromus diandrus*	H	NI	10.		
3.			11.		
4.			12.		
5.			13.		
6.			14.		
7.			15.		
8.			16.		

Percentage of Dominant Species that are OBL, FACW or FAC (excluding FAC-). 50%

Remarks: Hydrophytic vegetation criteria not satisfied.

HYDROLOGY

☒ Recorded Data (Described in Remarks):
- ☐ Stream, Lake, or Tide Gauge
- ☒ Aerial Photographs
- ☐ Other

☐ No Recorded Data Available

Field Observations:

Depth of Surface Water:	----	(in.)
Depth to free Water in Pit	----	(in.)
Depth of Saturated Soil:	----	(in.)

Wetland Hydrology Indicators:

Primary Indicators:
- ☐ Inundated
- ☐ Saturated in Upper 12 inches
- ☐ Water Marks
- ☐ Drift Lines
- ☐ Sediment Deposits
- ☐ Drainage Patterns in Wetlands

Secondary Indicators (2 or more required):
- ☐ Oxidized Root Channels in Upper 12 Inches
- ☐ Water-Stained Leaves
- ☐ Local Soil Survey Data
- ☐ FAC-Neutral Test
- ☐ Other (Explain in Remarks)

Remarks: No hydrology indicators.

SOILS

Map Unit Name
(Series and Phase): Visalia sandy loam

Drainage Class: Moderately well drained

Field Observations
Confirm Mapped Type? ☒ Yes ☐ No

Taxonomy (Subgroup): Pachic Haploxerolls

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle (Abundance/Contrast)	Texture, Concretions, Structure, etc.
0-15"	---	10YR 3/2	---	---	Sandy Loam

Hydric Soil Indicators:

- ☐ Histosol
- ☐ Histic Epipedon
- ☐ Sulfidic Odor
- ☐ Aquic Moisture Regime
- ☐ Reducing Conditions
- ☐ Gleyed or Low-Chroma Colors
- ☐ Concretions
- ☐ High Organic Content in surface layer in Sandy Soils
- ☐ Organic Streaking in Sandy Soils
- ☐ Listed on Local Hydric Soils List
- ☐ Listed on National Hydric Soils List
- ☐ Other (Explain in Remarks)

Remarks: No hydric soil indicators.

WETLAND DETERMINATION

Hydrophytic Vegetation Present?	Yes	☐	No	☒
Wetland Hydrology Present?	Yes	☐	No	☒
Hydric Soils Present?	Yes	☐	No	☒

Is this Sampling Point Within a Wetland? Yes ☐ No ☒

Remarks: Disturbed Coastal Sage Scrub vegetation (high component of non-native grasses). Area has potential to serve as wetland mitigation area.

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site:	Salvation Army	Date:	18 December 2001
Applicant/Owner:	Salvation Army	County:	San Diego
Investigator:	Vanessa A. Lee and Kara A. Altvater	State:	California

Do normal circumstances exist on the site?	☒ Yes	☐ No	Community ID:	CLORF
Is the site significantly disturbed (Atypical Situation)?	☐ Yes	☒ No	Transect ID:	T 6, 30ft
Is the area a potential Problem Area? (If needed, explain on reverse.)	☐ Yes	☒ No	Plot ID:	DP 28A, PP 28A

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. *Bromus diandrus*	H	NI	9.		
2. *Hirschfeldia incana*	H	NI	10.		
3. *Eriogonum fasciculatum*	H	NI	11.		
4. *Platanus racemosa*	T	FACW	12.		
5.			13.		
6.			14.		
7.			15.		
8.			16.		

Percentage of Dominant Species that are OBL, FACW or FAC (excluding FAC-). 25%

Remarks: Hydrophytic vegetation criteria not satisfied. Disturbed Diegan Coastal Sage Scrub vegetation beneath canopy of Coast Live Oak Riparian Forest.

HYDROLOGY

☒ Recorded Data (Described in Remarks):
- ☐ Stream, Lake, or Tide Gauge
- ☒ Aerial Photographs
- ☐ Other

☐ No Recorded Data Available

Field Observations:

Depth of Surface Water:	----	(in.)
Depth to free Water in Pit	----	(in.)
Depth of Saturated Soil:	----	(in.)

Wetland Hydrology Indicators:

Primary Indicators:
- ☐ Inundated
- ☐ Saturated in Upper 12 inches
- ☐ Water Marks
- ☐ Drift Lines
- ☐ Sediment Deposits
- ☐ Drainage Patterns in Wetlands

Secondary Indicators (2 or more required):
- ☐ Oxidized Root Channels in Upper 12 Inches
- ☐ Water-Stained Leaves
- ☐ Local Soil Survey Data
- ☐ FAC-Neutral Test
- ☐ Other (Explain in Remarks)

Remarks: No hydrology indicators.

SOILS

Map Unit Name
(Series and Phase): Visalia sandy loam

Drainage Class: Moderately well drained

Field Observations
Confirm Mapped Type? ☒ Yes ☐ No

Taxonomy (Subgroup): Pachic Haploxerolls

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle (Abundance/Contrast)	Texture, Concretions, Structure, etc.
0-14"	---	10YR 3/3	---	---	Sandy Loam

Hydric Soil Indicators:

- ☐ Histosol
- ☐ Histic Epipedon
- ☐ Sulfidic Odor
- ☐ Aquic Moisture Regime
- ☐ Reducing Conditions
- ☐ Gleyed or Low-Chroma Colors
- ☐ Concretions
- ☐ High Organic Content in surface layer in Sandy Soils
- ☐ Organic Streaking in Sandy Soils
- ☐ Listed on Local Hydric Soils List
- ☐ Listed on National Hydric Soils List
- ☐ Other (Explain in Remarks)

Remarks: No hydric soil indicators.

WETLAND DETERMINATION

Hydrophytic Vegetation Present?	Yes	☐	No	☒
Wetland Hydrology Present?	Yes	☐	No	☒
Hydric Soils Present?	Yes	☐	No	☒

Is this Sampling Point Within a Wetland? Yes ☐ No ☒

Remarks: Disturbed Coastal Sage Scrub beneath canopy of Coast Live Oak Riparian Forest. Area is jurisdictional under CDFG as Adjacent Riparian habitat.

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site:	Salvation Army	Date:	18 December 2001
Applicant/Owner:	Salvation Army	County:	San Diego
Investigator:	Vanessa A. Lee and Kara A. Altvater	State:	California

Do normal circumstances exist on the site?	☒ Yes	☐ No	Community ID:	CLORF
Is the site significantly disturbed (Atypical Situation)?	☐ Yes	☒ No	Transect ID:	T 6, 40ft
Is the area a potential Problem Area? (If needed, explain on reverse.)	☐ Yes	☒ No	Plot ID:	DP 29A, PP 29A

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. *Eeriogonum fasciculatum*	H	NI	9.		
2. *Platanus racemosa*	T	FACW	10.		
3. *Quercus agrifolia*	T	NI	11.		
4. *Amsinckia intermedia*	H	NI	12.		
5.			13.		
6.			14.		
7.			15.		
8.			16.		

Percentage of Dominant Species that are OBL, FACW or FAC (excluding FAC-). 25%

Remarks: Hydrophytic vegetation criteria not satisfied.

HYDROLOGY

☒ Recorded Data (Described in Remarks):
- ☐ Stream, Lake, or Tide Gauge
- ☒ Aerial Photographs
- ☐ Other

☐ No Recorded Data Available

Field Observations:

Depth of Surface Water:	----	(in.)
Depth to free Water in Pit	----	(in.)
Depth of Saturated Soil:	----	(in.)

Wetland Hydrology Indicators:

Primary Indicators:
- ☐ Inundated
- ☐ Saturated in Upper 12 inches
- ☐ Water Marks
- ☐ Drift Lines
- ☐ Sediment Deposits
- ☐ Drainage Patterns in Wetlands

Secondary Indicators (2 or more required):
- ☐ Oxidized Root Channels in Upper 12 Inches
- ☐ Water-Stained Leaves
- ☐ Local Soil Survey Data
- ☐ FAC-Neutral Test
- ☐ Other (Explain in Remarks)

Remarks: No hydrology indicators.

SOILS

Map Unit Name
(Series and Phase): Visalia sandy loam

Drainage Class: Moderately well drained

Field Observations
Confirm Mapped Type? ☒ Yes ☐ No

Taxonomy (Subgroup): Pachic Haploxerolls

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle (Abundance/Contrast)	Texture, Concretions, Structure, etc.
0-14"	---	10YR 3/2	---	---	Sandy Loam

Hydric Soil Indicators:

- ☐ Histosol
- ☐ Histic Epipedon
- ☐ Sulfidic Odor
- ☐ Aquic Moisture Regime
- ☐ Reducing Conditions
- ☐ Gleyed or Low-Chroma Colors
- ☐ Concretions
- ☐ High Organic Content in surface layer in Sandy Soils
- ☐ Organic Streaking in Sandy Soils
- ☐ Listed on Local Hydric Soils List
- ☐ Listed on National Hydric Soils List
- ☐ Other (Explain in Remarks)

Remarks: No hydric soil indicators.

WETLAND DETERMINATION

Hydrophytic Vegetation Present?	Yes	☐	No	☒
Wetland Hydrology Present?	Yes	☐	No	☒
Hydric Soils Present?	Yes	☐	No	☒

Is this Sampling Point Within a Wetland? Yes ☐ No ☒

Remarks: Disturbed Diegan Coastal Sage Scrub beneath the canopy of Coast Live Oak Riparian Forest. Area is jurisdictional under CDFG as Adjacent Riparian habitat.

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site:	Salvation Army	Date:	18 December 2001
Applicant/Owner:	Salvation Army	County:	San Diego
Investigator:	Vanessa A. Lee and Kara A. Altvater	State:	California

Do normal circumstances exist on the site?	☒ Yes	☐ No	Community ID:	CLORF
Is the site significantly disturbed (Atypical Situation)?	☐ Yes	☒ No	Transect ID:	T 6, 50ft
Is the area a potential Problem Area? (If needed, explain on reverse.)	☐ Yes	☒ No	Plot ID:	DP 30A, PP 30A

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. *Quercus agrifolia*	T	NI	9.		
2. *Platanus racemosa*	T	FACW	10.		
3. *Amsinckia intermedia*	H	NI	11.		
4.			12.		
5.			13.		
6.			14.		
7.			15.		
8.			16.		

Percentage of Dominant Species that are OBL, FACW or FAC (excluding FAC-). 33%

Remarks: Hydrophytic vegetation criteria not satisfied.

HYDROLOGY

☒ Recorded Data (Described in Remarks):
- ☐ Stream, Lake, or Tide Gauge
- ☒ Aerial Photographs
- ☐ Other

☐ No Recorded Data Available

Field Observations:

Depth of Surface Water:	----	(in.)
Depth to free Water in Pit	----	(in.)
Depth of Saturated Soil:	----	(in.)

Wetland Hydrology Indicators:

Primary Indicators:
- ☐ Inundated
- ☐ Saturated in Upper 12 inches
- ☐ Water Marks
- ☐ Drift Lines
- ☐ Sediment Deposits
- ☐ Drainage Patterns in Wetlands

Secondary Indicators (2 or more required):
- ☐ Oxidized Root Channels in Upper 12 Inches
- ☐ Water-Stained Leaves
- ☐ Local Soil Survey Data
- ☐ FAC-Neutral Test
- ☐ Other (Explain in Remarks)

Remarks: No hydrology indicators.

SOILS

Map Unit Name
(Series and Phase): Visalia sandy loam

Drainage Class: Moderately well drained

Field Observations
Confirm Mapped Type? ☒ Yes ☐ No

Taxonomy (Subgroup): Pachic Haploxerolls

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle (Abundance/Contrast)	Texture, Concretions, Structure, etc.
0-16"	---	10YR 3/2	---	---	Sandy Loam

Hydric Soil Indicators:

- ☐ Histosol
- ☐ Histic Epipedon
- ☐ Sulfidic Odor
- ☐ Aquic Moisture Regime
- ☐ Reducing Conditions
- ☐ Gleyed or Low-Chroma Colors
- ☐ Concretions
- ☐ High Organic Content in surface layer in Sandy Soils
- ☐ Organic Streaking in Sandy Soils
- ☐ Listed on Local Hydric Soils List
- ☐ Listed on National Hydric Soils List
- ☐ Other (Explain in Remarks)

Remarks: No hydric soil indicators.

WETLAND DETERMINATION

Hydrophytic Vegetation Present?	Yes	☐	No	☒
Wetland Hydrology Present?	Yes	☐	No	☒
Hydric Soils Present?	Yes	☐	No	☒

Is this Sampling Point Within a Wetland? Yes ☐ No ☒

Remarks: Data point within Coast Live Oak Riparian Forest. Area is jurisdictional under CDFG as Adjacent Riparian habitat.

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site:	Salvation Army	Date:	18 December 2001
Applicant/Owner:	Salvation Army	County:	San Diego
Investigator:	Vanessa A. Lee and Kara A. Altvater	State:	California

Do normal circumstances exist on the site?	☒ Yes	☐ No	Community ID:	CLORF
Is the site significantly disturbed (Atypical Situation)?	☐ Yes	☒ No	Transect ID:	T 6, 60ft
Is the area a potential Problem Area? (If needed, explain on reverse.)	☐ Yes	☒ No	Plot ID:	DP 31A, PP 31A

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. *Platanus racemosa*	T	FACW	9.		
2. *Bromus diandrus*	H	NI	10.		
3. *Quercus agrifolia*	T	NI	11.		
4. *Picris echioides*	H	FAC	12.		
5.			13.		
6.			14.		
7.			15.		
8.			16.		

Percentage of Dominant Species that are OBL, FACW or FAC (excluding FAC-). 50%

Remarks: Hydrophytic vegetation criteria not satisfied.

HYDROLOGY

☒ Recorded Data (Described in Remarks):
- ☐ Stream, Lake, or Tide Gauge
- ☒ Aerial Photographs
- ☐ Other

☐ No Recorded Data Available

Field Observations:

Depth of Surface Water:	----	(in.)
Depth to free Water in Pit	----	(in.)
Depth of Saturated Soil:	----	(in.)

Wetland Hydrology Indicators:

Primary Indicators:
- ☐ Inundated
- ☐ Saturated in Upper 12 inches
- ☐ Water Marks
- ☐ Drift Lines
- ☐ Sediment Deposits
- ☐ Drainage Patterns in Wetlands

Secondary Indicators (2 or more required):
- ☐ Oxidized Root Channels in Upper 12 Inches
- ☐ Water-Stained Leaves
- ☐ Local Soil Survey Data
- ☐ FAC-Neutral Test
- ☐ Other (Explain in Remarks)

Remarks: No hydrology indicators.

SOILS

Map Unit Name
(Series and Phase): Visalia sandy loam

Drainage Class: Moderately well drained

Field Observations
Confirm Mapped Type? ☒ Yes ☐ No

Taxonomy (Subgroup): Pachic Haploxerolls

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle (Abundance/Contrast)	Texture, Concretions, Structure, etc.
0-16"	---	10YR 3/2	---	---	Sandy Loam

Hydric Soil Indicators:

- ☐ Histosol
- ☐ Histic Epipedon
- ☐ Sulfidic Odor
- ☐ Aquic Moisture Regime
- ☐ Reducing Conditions
- ☐ Gleyed or Low-Chroma Colors
- ☐ Concretions
- ☐ High Organic Content in surface layer in Sandy Soils
- ☐ Organic Streaking in Sandy Soils
- ☐ Listed on Local Hydric Soils List
- ☐ Listed on National Hydric Soils List
- ☐ Other (Explain in Remarks)

Remarks: No hydric soil indicators.

WETLAND DETERMINATION

Hydrophytic Vegetation Present?	Yes	☐	No	☒
Wetland Hydrology Present?	Yes	☐	No	☒
Hydric Soils Present?	Yes	☐	No	☒

Is this Sampling Point Within a Wetland? Yes ☐ No ☒

Remarks: Data point within Coast Live Oak Riparian Forest. Area is jurisdictional under CDFG as Adjacent Riparian habitat.

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site:	Salvation Army	Date:	18 December 2001
Applicant/Owner:	Salvation Army	County:	San Diego
Investigator:	Vanessa A. Lee and Kara A. Altvater	State:	California

Do normal circumstances exist on the site?	☒ Yes	☐ No	Community ID:	CLORF
Is the site significantly disturbed (Atypical Situation)?	☐ Yes	☒ No	Transect ID:	T 6, 70ft
Is the area a potential Problem Area? (If needed, explain on reverse.)	☐ Yes	☒ No	Plot ID:	DP 32A, PP 32A

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. *Quercus agrifolia*	T	NI	9.		
2. *Adenostoma fasciculatum*	S	NI	10.		
3. *Bromus diandrus*	H	NI	11.		
4. *Platanus racemosa*	T	FACW	12.		
5.			13.		
6.			14.		
7.			15.		
8.			16.		

Percentage of Dominant Species that are OBL, FACW or FAC (excluding FAC-). 25%

Remarks: Hydrophytic vegetation criteria not satisfied.

HYDROLOGY

☒ Recorded Data (Described in Remarks):
- ☐ Stream, Lake, or Tide Gauge
- ☒ Aerial Photographs
- ☐ Other

☐ No Recorded Data Available

Field Observations:

Depth of Surface Water:	----	(in.)
Depth to free Water in Pit	----	(in.)
Depth of Saturated Soil:	----	(in.)

Wetland Hydrology Indicators:

Primary Indicators:
- ☐ Inundated
- ☐ Saturated in Upper 12 inches
- ☐ Water Marks
- ☐ Drift Lines
- ☐ Sediment Deposits
- ☐ Drainage Patterns in Wetlands

Secondary Indicators (2 or more required):
- ☐ Oxidized Root Channels in Upper 12 Inches
- ☐ Water-Stained Leaves
- ☐ Local Soil Survey Data
- ☐ FAC-Neutral Test
- ☐ Other (Explain in Remarks)

Remarks: No hydrology indicators.

SOILS

Map Unit Name
(Series and Phase): Visalia sandy loam

Drainage Class: Moderately well drained

Field Observations
Confirm Mapped Type? ☒ Yes ☐ No

Taxonomy (Subgroup): Pachic Haploxerolls

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle (Abundance/Contrast)	Texture, Concretions, Structure, etc.
0-1"	---	10YR 4/6	---	---	Loamy sand

Hydric Soil Indicators:

- ☐ Histosol
- ☐ Histic Epipedon
- ☐ Sulfidic Odor
- ☐ Aquic Moisture Regime
- ☐ Reducing Conditions
- ☐ Gleyed or Low-Chroma Colors
- ☐ Concretions
- ☐ High Organic Content in surface layer in Sandy Soils
- ☐ Organic Streaking in Sandy Soils
- ☐ Listed on Local Hydric Soils List
- ☐ Listed on National Hydric Soils List
- ☐ Other (Explain in Remarks)

Remarks: No hydric soil indicators.

WETLAND DETERMINATION

Hydrophytic Vegetation Present?	Yes	☐	No	☒
Wetland Hydrology Present?	Yes	☐	No	☒
Hydric Soils Present?	Yes	☐	No	☒

Is this Sampling Point Within a Wetland? Yes ☐ No ☒

Remarks: Data point within chaparral beneath Coast Live Oak Riparian Forest canopy. Area is jurisdictional under CDFG as Adjacent Riparian habitat.

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site:	Salvation Army	Date:	18 December 2001
Applicant/Owner:	Salvation Army	County:	San Diego
Investigator:	Vanessa A. Lee and Kara A. Altvater	State:	California

Do normal circumstances exist on the site?	☒ Yes	☐ No	Community ID:	CLORF
Is the site significantly disturbed (Atypical Situation)?	☐ Yes	☒ No	Transect ID:	
Is the area a potential Problem Area? (If needed, explain on reverse.)	☐ Yes	☒ No	Plot ID:	DP 33A, PP 33A

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. *Platanus racemosa*	T	FACW	9.		
2. *Quercus agrifolia*	T	NI	10.		
3. *Artemisia douglasiana*	H	FACW	11.		
4.			12.		
5.			13.		
6.			14.		
7.			15.		
8.			16.		

Percentage of Dominant Species that are OBL, FACW or FAC (excluding FAC-). 66%

Remarks: Data point is located just east of Transect 6. Hydrophytic vegetation criteria satisfied. Area qualifies as County RPO and CDFG wetland.

HYDROLOGY

☒ Recorded Data (Described in Remarks):
- ☐ Stream, Lake, or Tide Gauge
- ☒ Aerial Photographs
- ☐ Other

☐ No Recorded Data Available

Field Observations:

Depth of Surface Water:	----	(in.)
Depth to free Water in Pit	----	(in.)
Depth of Saturated Soil:	----	(in.)

Wetland Hydrology Indicators:

Primary Indicators:
- ☐ Inundated
- ☐ Saturated in Upper 12 inches
- ☐ Water Marks
- ☐ Drift Lines
- ☐ Sediment Deposits
- ☒ Drainage Patterns in Wetlands

Secondary Indicators (2 or more required):
- ☐ Oxidized Root Channels in Upper 12 Inches
- ☐ Water-Stained Leaves
- ☐ Local Soil Survey Data
- ☐ FAC-Neutral Test
- ☐ Other (Explain in Remarks)

Remarks: Small depression in the topography where water is able to pond.

SOILS

Map Unit Name
(Series and Phase): Visalia sandy loam

Drainage Class: Moderately well drained

Field Observations
Confirm Mapped Type? ☒ Yes ☐ No

Taxonomy (Subgroup): Pachic Haploxerolls

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle (Abundance/Contrast)	Texture, Concretions, Structure, etc.
0-14	---	7.5YR 3/3	---	---	Loamy Sand

Hydric Soil Indicators:

- ☐ Histosol
- ☐ Histic Epipedon
- ☐ Sulfidic Odor
- ☐ Aquic Moisture Regime
- ☐ Reducing Conditions
- ☐ Gleyed or Low-Chroma Colors
- ☐ Concretions
- ☒ High Organic Content in surface layer in Sandy Soils
- ☐ Organic Streaking in Sandy Soils
- ☐ Listed on Local Hydric Soils List
- ☐ Listed on National Hydric Soils List
- ☐ Other (Explain in Remarks)

Remarks: Hydric soil indicted by high organic content in the surface layer. Area qualifies as County RPO, CDFG, and ACOE wetland.

WETLAND DETERMINATION

Hydrophytic Vegetation Present?	Yes	☒	No	☐
Wetland Hydrology Present?	Yes	☒	No	☐
Hydric Soils Present?	Yes	☒	No	☐

Is this Sampling Point Within a Wetland? Yes ☒ No ☐

Remarks: Data point located approximately 10 feet east of Transect 6 at the 60-foot mark. Area of Southern Coast Live Oak Riparian Forest is jurisdictional under County RPO, CDFG, and ACOE.

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site:	Salvation Army	Date:	18 December 2001
Applicant/Owner:	Salvation Army	County:	San Diego
Investigator:	Vanessa A. Lee and Kara A. Altvater	State:	California

Do normal circumstances exist on the site?	☒ Yes	☐ No	Community ID:	CLORF
Is the site significantly disturbed (Atypical Situation)?	☐ Yes	☒ No	Transect ID:	
Is the area a potential Problem Area? (If needed, explain on reverse.)	☐ Yes	☒ No	Plot ID:	DP 34A, PP 34A

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. *Platanus racemosa*	T	FACW	9.		
2. *Quercus agrifolia*	T	NI	10.		
3.			11.		
4.			12.		
5.			13.		
6.			14.		
7.			15.		
8.			16.		

Percentage of Dominant Species that are OBL, FACW or FAC (excluding FAC-). 50%

Remarks: Hydrophytic vegetation criteria not satisfied.

HYDROLOGY

☒ Recorded Data (Described in Remarks):
- ☐ Stream, Lake, or Tide Gauge
- ☒ Aerial Photographs
- ☐ Other

☐ No Recorded Data Available

Field Observations:

Depth of Surface Water:	----	(in.)
Depth to free Water in Pit	----	(in.)
Depth of Saturated Soil:	----	(in.)

Wetland Hydrology Indicators:

Primary Indicators:
- ☐ Inundated
- ☐ Saturated in Upper 12 inches
- ☐ Water Marks
- ☐ Drift Lines
- ☐ Sediment Deposits
- ☐ Drainage Patterns in Wetlands

Secondary Indicators (2 or more required):
- ☐ Oxidized Root Channels in Upper 12 Inches
- ☐ Water-Stained Leaves
- ☐ Local Soil Survey Data
- ☐ FAC-Neutral Test
- ☐ Other (Explain in Remarks)

Remarks: No hydrology indicators.

SOILS

Map Unit Name
(Series and Phase): Visalia sandy loam

Drainage Class: Moderately well drained

Field Observations
Confirm Mapped Type? ☒ Yes ☐ No

Taxonomy (Subgroup): Pachic Haploxerolls

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle (Abundance/Contrast)	Texture, Concretions, Structure, etc.
0-14"	---	10YR 4/6	---	---	Sandy Loam

Hydric Soil Indicators:

- ☐ Histosol
- ☐ Histic Epipedon
- ☐ Sulfidic Odor
- ☐ Aquic Moisture Regime
- ☐ Reducing Conditions
- ☐ Gleyed or Low-Chroma Colors
- ☐ Concretions
- ☐ High Organic Content in surface layer in Sandy Soils
- ☐ Organic Streaking in Sandy Soils
- ☐ Listed on Local Hydric Soils List
- ☐ Listed on National Hydric Soils List
- ☐ Other (Explain in Remarks)

Remarks: No hydric soil indicators.

WETLAND DETERMINATION

Hydrophytic Vegetation Present?	Yes	☐	No	☒
Wetland Hydrology Present?	Yes	☐	No	☒
Hydric Soils Present?	Yes	☐	No	☒

Is this Sampling Point Within a Wetland? Yes ☐ No ☒

Remarks: Data point located just outside of depression near Data point 33A. Area is jurisdictional under CDFG as Adjacent Riparian habitat.

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site:	Salvation Army	Date:	19 December 2001
Applicant/Owner:	Salvation Army	County:	San Diego
Investigator:	Vanessa A. Lee and Kara A. Altvater	State:	California

Do normal circumstances exist on the site?	☒ Yes	☐ No	Community ID:	CLORF
Is the site significantly disturbed (Atypical Situation)?	☐ Yes	☒ No	Transect ID:	T 7, 0 ft
Is the area a potential Problem Area? (If needed, explain on reverse.)	☐ Yes	☒ No	Plot ID:	DP 35A, PP 35A

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. *Rhamnus ilicifolia*	S	NI	9.		
2. *Lonicera subspicata*	V	NI	10.		
3. *Bromus diandrus*	H	NI	11.		
4.			12.		
5.			13.		
6.			14.		
7.			15.		
8.			16.		

Percentage of Dominant Species that are OBL, FACW or FAC (excluding FAC-). 0%

Remarks: Hydrophytic vegetation criteria not satisfied.

HYDROLOGY

☒ Recorded Data (Described in Remarks):
- ☐ Stream, Lake, or Tide Gauge
- ☒ Aerial Photographs
- ☐ Other

☐ No Recorded Data Available

Field Observations:

Depth of Surface Water:	----	(in.)
Depth to free Water in Pit	----	(in.)
Depth of Saturated Soil:	----	(in.)

Wetland Hydrology Indicators:

Primary Indicators:
- ☐ Inundated
- ☐ Saturated in Upper 12 inches
- ☐ Water Marks
- ☐ Drift Lines
- ☐ Sediment Deposits
- ☐ Drainage Patterns in Wetlands

Secondary Indicators (2 or more required):
- ☐ Oxidized Root Channels in Upper 12 Inches
- ☐ Water-Stained Leaves
- ☐ Local Soil Survey Data
- ☐ FAC-Neutral Test
- ☐ Other (Explain in Remarks)

Remarks: No hydrology indicators.

SOILS

Map Unit Name
(Series and Phase): Visalia sandy loam

Drainage Class: Moderately well drained

Field Observations
Confirm Mapped Type? ☒ Yes ☐ No

Taxonomy (Subgroup): Pachic Haploxerolls

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle (Abundance/Contrast)	Texture, Concretions, Structure, etc.
0-16"	---	10YR 3/2	---	---	Sandy loam

Hydric Soil Indicators:

- ☐ Histosol
- ☐ Histic Epipedon
- ☐ Sulfidic Odor
- ☐ Aquic Moisture Regime
- ☐ Reducing Conditions
- ☐ Gleyed or Low-Chroma Colors
- ☐ Concretions
- ☐ High Organic Content in surface layer in Sandy Soils
- ☐ Organic Streaking in Sandy Soils
- ☐ Listed on Local Hydric Soils List
- ☐ Listed on National Hydric Soils List
- ☐ Other (Explain in Remarks)

Remarks: No hydric soil indicators.

WETLAND DETERMINATION

Hydrophytic Vegetation Present?	Yes	☐	No	☒
Wetland Hydrology Present?	Yes	☐	No	☒
Hydric Soils Present?	Yes	☐	No	☒

Is this Sampling Point Within a Wetland? Yes ☐ No ☒

Remarks: Data point located in Southern Coast Live Oak Riparian Forest. Area is jurisdictional under CDFG as Adjacent Riparian habitat.

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site:	Salvation Army	Date:	19 December 2001
Applicant/Owner:	Salvation Army	County:	San Diego
Investigator:	Vanessa A. Lee and Kara A. Altvater	State:	California

Do normal circumstances exist on the site?	☒ Yes	☐ No	Community ID:	CLORF
Is the site significantly disturbed (Atypical Situation)?	☒ Yes	☐ No	Transect ID:	T 7, 10 ft
Is the area a potential Problem Area? (If needed, explain on reverse.)	☐ Yes	☒ No	Plot ID:	DP 36A, PP 36A

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. *Quercus agrifolia*	T	NI	9.		
2. *Rhamnus ilicifolia*	S	NI	10.		
3. *Amsinckia intermedia*	H	NI	11.		
4. *Raphanus sativus*	H	NI	12.		
5. *Bromus diandrus*	H	NI	13.		
6.			14.		
7.			15.		
8.			16.		

Percentage of Dominant Species that are OBL, FACW or FAC (excluding FAC-). 0%

Remarks: No hydrophytic vegetation present.

HYDROLOGY

☒ Recorded Data (Described in Remarks):
- ☐ Stream, Lake, or Tide Gauge
- ☒ Aerial Photographs
- ☐ Other

☐ No Recorded Data Available

Field Observations:

Depth of Surface Water:	----	(in.)
Depth to free Water in Pit	----	(in.)
Depth of Saturated Soil:	----	(in.)

Wetland Hydrology Indicators:

Primary Indicators:
- ☐ Inundated
- ☐ Saturated in Upper 12 inches
- ☐ Water Marks
- ☐ Drift Lines
- ☐ Sediment Deposits
- ☒ Drainage Patterns in Wetlands

Secondary Indicators (2 or more required):
- ☐ Oxidized Root Channels in Upper 12 Inches
- ☐ Water-Stained Leaves
- ☐ Local Soil Survey Data
- ☐ FAC-Neutral Test
- ☐ Other (Explain in Remarks)

Remarks: Hydrology is indicated by the presence of 6'-wide drainage (measured at approximate ordinary high water mark). Streambed width is 14 feet (measured from bank to bank).

SOILS

Map Unit Name
(Series and Phase): Visalia sandy loam

Drainage Class: Moderately well drained

Field Observations
Confirm Mapped Type? ☒ Yes ☐ No

Taxonomy (Subgroup): Pachic Haploxerolls

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle (Abundance/Contrast)	Texture, Concretions, Structure, etc.
0	---	---	---	---	Cobble

Hydric Soil Indicators:

- ☐ Histosol
- ☐ Histic Epipedon
- ☐ Sulfidic Odor
- ☐ Aquic Moisture Regime
- ☐ Reducing Conditions
- ☐ Gleyed or Low-Chroma Colors
- ☐ Concretions
- ☐ High Organic Content in surface layer in Sandy Soils
- ☐ Organic Streaking in Sandy Soils
- ☐ Listed on Local Hydric Soils List
- ☐ Listed on National Hydric Soils List
- ☐ Other (Explain in Remarks)

Remarks: Could not dig due to high cobble content. Non-soil width within drainage is 6 feet. It is possible that sediment deposits between cobble satisfy hydric conditions; however, this cannot be determined. In this case, soils are considered to be a natural atypical situation, and the presence of hydric soils is assumed.

WETLAND DETERMINATION

Hydrophytic Vegetation Present?	Yes	☐	No	☒
Wetland Hydrology Present?	Yes	☒	No	☐
Hydric Soils Present?	Yes	☒	No	☐

Is this Sampling Point Within a Wetland? Yes ☐ No ☒

Remarks: This area of Southern Coast Live Oak Riparian Forest does not qualify as an ACOE wetland. However, the area is jurisdictional under CDFG as Adjacent Riparian habitat. The drainage is also considered to be Non-wetland Waters of the U.S. (ACOE) and is also jurisdictional under the County and CDFG.

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site:	Salvation Army	Date:	19 December 2001
Applicant/Owner:	Salvation Army	County:	San Diego
Investigator:	Vanessa A. Lee and Kara A. Altvater	State:	California

Do normal circumstances exist on the site?	☒ Yes	☐ No	Community ID:	CLORF
Is the site significantly disturbed (Atypical Situation)?	☐ Yes	☒ No	Transect ID:	T 7, 20 ft
Is the area a potential Problem Area? (If needed, explain on reverse.)	☐ Yes	☒ No	Plot ID:	DP 37A, PP 37A

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. *Quercus agrifolia*	T	NI	9.		
2. *Eriognum fasciculatum*	S	NI	10.		
3.			11.		
4.			12.		
5.			13.		
6.			14.		
7.			15.		
8.			16.		

Percentage of Dominant Species that are OBL, FACW or FAC (excluding FAC-). 0%

Remarks: Hydrophytic vegetation criteria not satisfied.

HYDROLOGY

☒ Recorded Data (Described in Remarks):
- ☐ Stream, Lake, or Tide Gauge
- ☒ Aerial Photographs
- ☐ Other

☐ No Recorded Data Available

Field Observations:

Depth of Surface Water:	----	(in.)
Depth to free Water in Pit	----	(in.)
Depth of Saturated Soil:	----	(in.)

Wetland Hydrology Indicators:

Primary Indicators:
- ☐ Inundated
- ☐ Saturated in Upper 12 inches
- ☐ Water Marks
- ☐ Drift Lines
- ☐ Sediment Deposits
- ☐ Drainage Patterns in Wetlands

Secondary Indicators (2 or more required):
- ☐ Oxidized Root Channels in Upper 12 Inches
- ☐ Water-Stained Leaves
- ☐ Local Soil Survey Data
- ☐ FAC-Neutral Test
- ☐ Other (Explain in Remarks)

Remarks: No hydrology indicators. Data Point lies just outside of bank.

SOILS

Map Unit Name
(Series and Phase): Visalia sandy loam

Drainage Class: Moderately well drained

Field Observations
Confirm Mapped Type? ☒ Yes ☐ No

Taxonomy (Subgroup): Pachic Haploxerolls

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle (Abundance/Contrast)	Texture, Concretions, Structure, etc.
0-14"	---	10YR 3/2	---	---	Sandy loam

Hydric Soil Indicators:

- ☐ Histosol
- ☐ Histic Epipedon
- ☐ Sulfidic Odor
- ☐ Aquic Moisture Regime
- ☐ Reducing Conditions
- ☐ Gleyed or Low-Chroma Colors
- ☐ Concretions
- ☐ High Organic Content in surface layer in Sandy Soils
- ☐ Organic Streaking in Sandy Soils
- ☐ Listed on Local Hydric Soils List
- ☐ Listed on National Hydric Soils List
- ☐ Other (Explain in Remarks)

Remarks: No hydric soil indicators.

WETLAND DETERMINATION

Hydrophytic Vegetation Present?	Yes	☐	No	☒
Wetland Hydrology Present?	Yes	☐	No	☒
Hydric Soils Present?	Yes	☐	No	☒

Is this Sampling Point Within a Wetland? Yes ☐ No ☒

Remarks: Data point located in Southern Coast Live Oak Riparian Forest. Area is jurisdictional under CDFG as Adjacent Riparian habitat.

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site:	Salvation Army	Date:	19 December 2001
Applicant/Owner:	Salvation Army	County:	San Diego
Investigator:	Vanessa A. Lee and Kara A. Altvater	State:	California

Do normal circumstances exist on the site?	☒ Yes	☐ No	Community ID:	CLORF
Is the site significantly disturbed (Atypical Situation)?	☐ Yes	☒ No	Transect ID:	T 8 ,0 ft
Is the area a potential Problem Area? (If needed, explain on reverse.)	☐ Yes	☒ No	Plot ID:	DP 38A, PP 38A

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. *Quercus agrifolia*	T	NI	9.		
2. *Platanus racemosa*	T	FACW	10.		
3. *Taraxacum officinale*	H	FACU	11.		
4.			12.		
5.			13.		
6.			14.		
7.			15.		
8.			16.		

Percentage of Dominant Species that are OBL, FACW or FAC (excluding FAC-). 33%

Remarks: Hydrophytic vegetation criteria not satisfied.

HYDROLOGY

☒ Recorded Data (Described in Remarks):
- ☐ Stream, Lake, or Tide Gauge
- ☒ Aerial Photographs
- ☐ Other

☐ No Recorded Data Available

Field Observations:

Depth of Surface Water:	----	(in.)
Depth to free Water in Pit	----	(in.)
Depth of Saturated Soil:	----	(in.)

Wetland Hydrology Indicators:

Primary Indicators:
- ☐ Inundated
- ☐ Saturated in Upper 12 inches
- ☐ Water Marks
- ☐ Drift Lines
- ☐ Sediment Deposits
- ☐ Drainage Patterns in Wetlands

Secondary Indicators (2 or more required):
- ☐ Oxidized Root Channels in Upper 12 Inches
- ☐ Water-Stained Leaves
- ☐ Local Soil Survey Data
- ☐ FAC-Neutral Test
- ☐ Other (Explain in Remarks)

Remarks: No hydrology indicators.

SOILS

Map Unit Name
(Series and Phase): Visalia sandy loam

Drainage Class: Moderately well drained

Field Observations
Confirm Mapped Type? ☒ Yes ☐ No

Taxonomy (Subgroup): Pachic Haploxerolls

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle (Abundance/Contrast)	Texture, Concretions, Structure, etc.
0-16"	---	10YR 3/2	---	---	Sandy loam

Hydric Soil Indicators:

- ☐ Histosol
- ☐ Histic Epipedon
- ☐ Sulfidic Odor
- ☐ Aquic Moisture Regime
- ☐ Reducing Conditions
- ☐ Gleyed or Low-Chroma Colors
- ☐ Concretions
- ☐ High Organic Content in surface layer in Sandy Soils
- ☐ Organic Streaking in Sandy Soils
- ☐ Listed on Local Hydric Soils List
- ☐ Listed on National Hydric Soils List
- ☐ Other (Explain in Remarks)

Remarks: No hydric soil indicators.

WETLAND DETERMINATION

Hydrophytic Vegetation Present?	Yes	☐	No	☒
Wetland Hydrology Present?	Yes	☐	No	☒
Hydric Soils Present?	Yes	☐	No	☒

Is this Sampling Point Within a Wetland? Yes ☐ No ☒

Remarks: Data point located in Southern Coast Live Oak Riparian Forest, adjacent to main access road. Area is jurisdictional under CDFG as Adjacent Riparian habitat.

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site:	Salvation Army	Date:	19 December 2001
Applicant/Owner:	Salvation Army	County:	San Diego
Investigator:	Vanessa A. Lee and Kara A. Altvater	State:	California

Do normal circumstances exist on the site?	☒ Yes	☐ No	Community ID:	CLORF
Is the site significantly disturbed (Atypical Situation)?	☒ Yes	☐ No	Transect ID:	T 8, 10 ft
Is the area a potential Problem Area? (If needed, explain on reverse.)	☐ Yes	☒ No	Plot ID:	DP 39A, PP 39A

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. *Quercus agrifolia*	T	NI	9.		
2. *Platanus racemosa*	T	FACW	10.		
3. *Bromus diandrus*	H	NI	11.		
4. *Pennisetum setaceum*	H	NI	12.		
5. *Lolium temulentum*	H	NI	13.		
6.			14.		
7.			15.		
8.			16.		

Percentage of Dominant Species that are OBL, FACW or FAC (excluding FAC-). 20%

Remarks: Hydrophytic vegetation criteria not satisfied.

HYDROLOGY

☒ Recorded Data (Described in Remarks):
- ☐ Stream, Lake, or Tide Gauge
- ☒ Aerial Photographs
- ☐ Other

☐ No Recorded Data Available

Field Observations:

Depth of Surface Water:	----	(in.)
Depth to free Water in Pit	----	(in.)
Depth of Saturated Soil:	----	(in.)

Wetland Hydrology Indicators:

Primary Indicators:
- ☐ Inundated
- ☐ Saturated in Upper 12 inches
- ☐ Water Marks
- ☐ Drift Lines
- ☐ Sediment Deposits
- ☒ Drainage Patterns in Wetlands

Secondary Indicators (2 or more required):
- ☐ Oxidized Root Channels in Upper 12 Inches
- ☐ Water-Stained Leaves
- ☐ Local Soil Survey Data
- ☐ FAC-Neutral Test
- ☐ Other (Explain in Remarks)

Remarks: Hydrology is indicated by 5'-wide drainage (measured at approximate ordinary high water mark). Streambed width is 10 feet (measured from bank to bank).

SOILS

Map Unit Name
(Series and Phase): Visalia sandy loam

Drainage Class: Moderately well drained

Field Observations
Confirm Mapped Type? ☒ Yes ☐ No

Taxonomy (Subgroup): Pachic Haploxerolls

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle (Abundance/Contrast)	Texture, Concretions, Structure, etc.
0	---	---	---	---	Cobble

Hydric Soil Indicators:

- ☐ Histosol
- ☐ Histic Epipedon
- ☐ Sulfidic Odor
- ☐ Aquic Moisture Regime
- ☐ Reducing Conditions
- ☐ Gleyed or Low-Chroma Colors
- ☐ Concretions
- ☐ High Organic Content in surface layer in Sandy Soils
- ☐ Organic Streaking in Sandy Soils
- ☐ Listed on Local Hydric Soils List
- ☐ Listed on National Hydric Soils List
- ☐ Other (Explain in Remarks)

Remarks: Could not dig due to high cobble content. Non-soil width within drainage is 5 feet. It is possible that sediment deposits between cobble satisfy hydric conditions; however, this cannot be determined. In this case, soils are considered to be a natural atypical situation, and the presence of hydric soils is assumed.

WETLAND DETERMINATION

Hydrophytic Vegetation Present?	Yes	☐	No	☒
Wetland Hydrology Present?	Yes	☒	No	☐
Hydric Soils Present?	Yes	☒	No	☐

Is this Sampling Point Within a Wetland? Yes ☐ No ☒

Remarks: This area of Southern Coast Live Oak Riparian Forest does not qualify as an ACOE wetland. However, the area is jurisdictional under CDFG as Adjacent Riparian habitat. The drainage is also considered to be Non-wetland Waters of the U.S. (ACOE) and is also jurisdictional under the County and CDFG.

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site:	Salvation Army	Date:	19 December 2001
Applicant/Owner:	Salvation Army	County:	San Diego
Investigator:	Vanessa A. Lee and Kara A. Altvater	State:	California

Do normal circumstances exist on the site?	☒ Yes	☐ No	Community ID:	CLORF
Is the site significantly disturbed (Atypical Situation)?	☐ Yes	☒ No	Transect ID:	T 8,20 ft
Is the area a potential Problem Area? (If needed, explain on reverse.)	☐ Yes	☒ No	Plot ID:	DP 40A, PP 40A

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. *Quercus agrifolia*	T	NI	9.		
2. *Platanus racemosa*	T	FACW	10.		
3. *Bromus diandrus*	H	NI	11.		
4. *Rhamnus ilicifolia*	S	NI	12.		
5.			13.		
6.			14.		
7.			15.		
8.			16.		

Percentage of Dominant Species that are OBL, FACW or FAC (excluding FAC-). 25%

Remarks: Hydrophytic vegetation criteria not satisfied.

HYDROLOGY

☒ Recorded Data (Described in Remarks):
- ☐ Stream, Lake, or Tide Gauge
- ☒ Aerial Photographs
- ☐ Other

☐ No Recorded Data Available

Field Observations:

Depth of Surface Water:	----	(in.)
Depth to free Water in Pit	----	(in.)
Depth of Saturated Soil:	----	(in.)

Wetland Hydrology Indicators:

Primary Indicators:
- ☐ Inundated
- ☐ Saturated in Upper 12 inches
- ☐ Water Marks
- ☐ Drift Lines
- ☐ Sediment Deposits
- ☐ Drainage Patterns in Wetlands

Secondary Indicators (2 or more required):
- ☐ Oxidized Root Channels in Upper 12 Inches
- ☐ Water-Stained Leaves
- ☐ Local Soil Survey Data
- ☐ FAC-Neutral Test
- ☐ Other (Explain in Remarks)

Remarks: No hydrology indicators.

SOILS

Map Unit Name
(Series and Phase): Visalia sandy loam

Drainage Class: Moderately well drained

Field Observations
Confirm Mapped Type? ☒ Yes ☐ No

Taxonomy (Subgroup): Pachic Haploxerolls

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle (Abundance/Contrast)	Texture, Concretions, Structure, etc.
0-14"	---	10YR 3/2	---	---	Sandy loam

Hydric Soil Indicators:

- ☐ Histosol
- ☐ Histic Epipedon
- ☐ Sulfidic Odor
- ☐ Aquic Moisture Regime
- ☐ Reducing Conditions
- ☐ Gleyed or Low-Chroma Colors
- ☐ Concretions
- ☐ High Organic Content in surface layer in Sandy Soils
- ☐ Organic Streaking in Sandy Soils
- ☐ Listed on Local Hydric Soils List
- ☐ Listed on National Hydric Soils List
- ☐ Other (Explain in Remarks)

Remarks: No hydric soil indicators.

WETLAND DETERMINATION

Hydrophytic Vegetation Present?	Yes	☐	No	☒
Wetland Hydrology Present?	Yes	☐	No	☒
Hydric Soils Present?	Yes	☐	No	☒

Is this Sampling Point Within a Wetland? Yes ☐ No ☒

Remarks: Data point is within Southern Coast Live Oak Riparian Forest. This area is jurisdictional under CDFG as Adjacent Riparian habitat.

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site:	Salvation Army	Date:	19 December 2001
Applicant/Owner:	Salvation Army	County:	San Diego
Investigator:	Vanessa A. Lee and Kara A. Altvater	State:	California

Do normal circumstances exist on the site?	☒ Yes	☐ No	Community ID:	CLORF
Is the site significantly disturbed (Atypical Situation)?	☐ Yes	☒ No	Transect ID:	T 8,26 ft*
Is the area a potential Problem Area? (If needed, explain on reverse.)	☐ Yes	☒ No	Plot ID:	DP 41A, PP 41A

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. *Quercus agrifolia*	T	NI	9.		
2. *Platanus racemosa*	T	FACW	10.		
3. *Bromus diandrus*	H	NI	11.		
4. *Rhamnus ilicifolia*	S	NI	12.		
5. *Toxicodendron diversilobum*	S	NI	13.		
6.			14.		
7.			15.		
8.			16.		

Percentage of Dominant Species that are OBL, FACW or FAC (excluding FAC-). 20%

Remarks: Hydrophytic vegetation criteria not satisfied.

* Data Point taken at 26-foot mark rather than 30-foot mark due to dense Poison Oak.

HYDROLOGY

☒ Recorded Data (Described in Remarks):
- ☐ Stream, Lake, or Tide Gauge
- ☒ Aerial Photographs
- ☐ Other

☐ No Recorded Data Available

Field Observations:

Depth of Surface Water:	----	(in.)
Depth to free Water in Pit	----	(in.)
Depth of Saturated Soil:	----	(in.)

Wetland Hydrology Indicators:

Primary Indicators:
- ☐ Inundated
- ☐ Saturated in Upper 12 inches
- ☐ Water Marks
- ☐ Drift Lines
- ☐ Sediment Deposits
- ☐ Drainage Patterns in Wetlands

Secondary Indicators (2 or more required):
- ☐ Oxidized Root Channels in Upper 12 Inches
- ☐ Water-Stained Leaves
- ☐ Local Soil Survey Data
- ☐ FAC-Neutral Test
- ☐ Other (Explain in Remarks)

Remarks: No hydrology indicators.

SOILS

Map Unit Name
(Series and Phase): Visalia sandy loam

Drainage Class: Moderately well drained

Field Observations
Confirm Mapped Type? ☒ Yes ☐ No

Taxonomy (Subgroup): Pachic Haploxerolls

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle (Abundance/Contrast)	Texture, Concretions, Structure, etc.
0-14"	---	10YR 3/2	---	---	Sandy loam

Hydric Soil Indicators:

- ☐ Histosol
- ☐ Histic Epipedon
- ☐ Sulfidic Odor
- ☐ Aquic Moisture Regime
- ☐ Reducing Conditions
- ☐ Gleyed or Low-Chroma Colors
- ☐ Concretions
- ☐ High Organic Content in surface layer in Sandy Soils
- ☐ Organic Streaking in Sandy Soils
- ☐ Listed on Local Hydric Soils List
- ☐ Listed on National Hydric Soils List
- ☐ Other (Explain in Remarks)

Remarks: No hydric soil indicators.

WETLAND DETERMINATION

Hydrophytic Vegetation Present?	Yes	☐	No	☒
Wetland Hydrology Present?	Yes	☐	No	☒
Hydric Soils Present?	Yes	☐	No	☒

Is this Sampling Point Within a Wetland? Yes ☐ No ☒

Remarks: Data point is within Coast Live Oak Riparian Forest. Area is jurisdictional under CDFG as Adjacent Riparian habitat. No wetland vegetation or drainages beyond this Data point along transect.

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site:	Salvation Army	Date:	19 December 2001
Applicant/Owner:	Salvation Army	County:	San Diego
Investigator:	Vanessa A. Lee and Kara A. Altvater	State:	California

Do normal circumstances exist on the site?	☒ Yes	☐ No	Community ID:	CLORF
Is the site significantly disturbed (Atypical Situation)?	☐ Yes	☒ No	Transect ID:	T9, 0 ft
Is the area a potential Problem Area? (If needed, explain on reverse.)	☐ Yes	☒ No	Plot ID:	DP 42A, PP 42A

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. *Quercus agrifolia*	T	NI	9.		
2. *Salix lucida ssp. lasiandra*	T	OBL	10.		
3. *Bromus diandrus*	H	NI	11.		
4.			12.		
5.			13.		
6.			14.		
7.			15.		
8.			16.		

Percentage of Dominant Species that are OBL, FACW or FAC (excluding FAC-). 33%

Remarks: Hydrophytic vegetation criteria not satisfied.

HYDROLOGY

☒ Recorded Data (Described in Remarks):
- ☐ Stream, Lake, or Tide Gauge
- ☒ Aerial Photographs
- ☐ Other

☐ No Recorded Data Available

Field Observations:

Depth of Surface Water:	----	(in.)
Depth to free Water in Pit	----	(in.)
Depth of Saturated Soil:	----	(in.)

Wetland Hydrology Indicators:

Primary Indicators:
- ☐ Inundated
- ☐ Saturated in Upper 12 inches
- ☐ Water Marks
- ☐ Drift Lines
- ☐ Sediment Deposits
- ☐ Drainage Patterns in Wetlands

Secondary Indicators (2 or more required):
- ☐ Oxidized Root Channels in Upper 12 Inches
- ☐ Water-Stained Leaves
- ☐ Local Soil Survey Data
- ☐ FAC-Neutral Test
- ☐ Other (Explain in Remarks)

Remarks: No hydrology indicators.

SOILS

Map Unit Name
(Series and Phase): Visalia sandy loam

Drainage Class: Moderately well drained

Field Observations
Confirm Mapped Type? ☒ Yes ☐ No

Taxonomy (Subgroup): Pachic Haploxerolls

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle (Abundance/Contrast)	Texture, Concretions, Structure, etc.
0-14	---	7.5YR 3/2	---	---	Sandy Loam

Hydric Soil Indicators:

- ☐ Histosol
- ☐ Histic Epipedon
- ☐ Sulfidic Odor
- ☐ Aquic Moisture Regime
- ☐ Reducing Conditions
- ☐ Gleyed or Low-Chroma Colors
- ☐ Concretions
- ☐ High Organic Content in surface layer in Sandy Soils
- ☐ Organic Streaking in Sandy Soils
- ☐ Listed on Local Hydric Soils List
- ☐ Listed on National Hydric Soils List
- ☐ Other (Explain in Remarks)

Remarks: No hydric soil indicators.

WETLAND DETERMINATION

Hydrophytic Vegetation Present?	Yes	☐	No	☒
Wetland Hydrology Present?	Yes	☐	No	☒
Hydric Soils Present?	Yes	☐	No	☒

Is this Sampling Point Within a Wetland? Yes ☐ No ☒

Remarks: Data point located in Southern Coast Live Oak Riparian Forest. Area is jurisdictional under CDFG as Adjacent Riparian habitat.

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site:	Salvation Army	Date:	19 December 2001
Applicant/Owner:	Salvation Army	County:	San Diego
Investigator:	Vanessa A. Lee and Kara A. Altvater	State:	California

Do normal circumstances exist on the site?	☒ Yes	☐ No	Community ID:	CLORF
Is the site significantly disturbed (Atypical Situation)?	☐ Yes	☒ No	Transect ID:	T9, 10 ft
Is the area a potential Problem Area?	☐ Yes	☒ No	Plot ID:	DP 43A, PP 43A
(If needed, explain on reverse.)				

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. *Quercus agrifolia*	T	NI	9.		
2. *Salix lucida ssp. lasiandra*	T	OBL	10.		
3. *Bromus diandrus*	H	NI	11.		
4.			12.		
5.			13.		
6.			14.		
7.			15.		
8.			16.		

Percentage of Dominant Species that are OBL, FACW or FAC (excluding FAC-). 33%

Remarks: Hydrophytic vegetation criteria not satisfied.

HYDROLOGY

☒ Recorded Data (Described in Remarks):
- ☐ Stream, Lake, or Tide Gauge
- ☒ Aerial Photographs
- ☐ Other

☐ No Recorded Data Available

Field Observations:

Depth of Surface Water:	----	(in.)
Depth to free Water in Pit	----	(in.)
Depth of Saturated Soil:	----	(in.)

Wetland Hydrology Indicators:

Primary Indicators:
- ☐ Inundated
- ☐ Saturated in Upper 12 inches
- ☐ Water Marks
- ☐ Drift Lines
- ☐ Sediment Deposits
- ☐ Drainage Patterns in Wetlands

Secondary Indicators (2 or more required):
- ☐ Oxidized Root Channels in Upper 12 Inches
- ☐ Water-Stained Leaves
- ☐ Local Soil Survey Data
- ☐ FAC-Neutral Test
- ☐ Other (Explain in Remarks)

Remarks: No hydrology indicators. Data point located at edge of bank.

SOILS

Map Unit Name
(Series and Phase): Visalia sandy loam

Drainage Class: Moderately well drained

Field Observations
Confirm Mapped Type? ☒ Yes ☐ No

Taxonomy (Subgroup): Pachic Haploxerolls

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle (Abundance/Contrast)	Texture, Concretions, Structure, etc.
0-10	---	7.5YR 2.5/2	---	---	Sandy Loam
10-14	---	10YR 4/2	---	---	Sandy Loam

Hydric Soil Indicators:

- ☐ Histosol
- ☐ Histic Epipedon
- ☐ Sulfidic Odor
- ☐ Aquic Moisture Regime
- ☐ Reducing Conditions
- ☐ Gleyed or Low-Chroma Colors
- ☐ Concretions
- ☐ High Organic Content in surface layer in Sandy Soils
- ☐ Organic Streaking in Sandy Soils
- ☐ Listed on Local Hydric Soils List
- ☐ Listed on National Hydric Soils List
- ☐ Other (Explain in Remarks)

Remarks: No hydric soil indicators.

WETLAND DETERMINATION

Hydrophytic Vegetation Present? Yes ☐ No ☒

Wetland Hydrology Present? Yes ☐ No ☒

Hydric Soils Present? Yes ☐ No ☒

Is this Sampling Point Within a Wetland? Yes ☐ No ☒

Remarks: Data point located beneath Southern Coast Live Oak Riparian Forest canopy. Area is jurisdictional under CDFG as Adjacent Riparian habitat.

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site:	Salvation Army	Date:	19 December 2001
Applicant/Owner:	Salvation Army	County:	San Diego
Investigator:	Vanessa A. Lee and Kara A. Altvater	State:	California

Do normal circumstances exist on the site?	☒ Yes	☐ No	Community ID:	CLORF
Is the site significantly disturbed (Atypical Situation)?	☒ Yes	☐ No	Transect ID:	T9, 20 ft
Is the area a potential Problem Area?	☐ Yes	☒ No	Plot ID:	DP 44A, PP 44A
(If needed, explain on reverse.)				

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. *Quercus agrifolia*	T	NI	9.		
2. *Salix lucida ssp. lasiandra*	T	OBL	10.		
3. *Bromus diandrus*	H	NI	11.		
4. *Picris echioides*	H	FAC	12.		
5.			13.		
6.			14.		
7.			15.		
8.			16.		

Percentage of Dominant Species that are OBL, FACW or FAC (excluding FAC-). 50%

Remarks: Hydrophytic vegetation criteria not satisfied. Data point located under canopy of Southern Coast Live Oak Riparian Forest.

HYDROLOGY

☒ Recorded Data (Described in Remarks):
- ☐ Stream, Lake, or Tide Gauge
- ☒ Aerial Photographs
- ☐ Other

☐ No Recorded Data Available

Field Observations:

Depth of Surface Water:	----	(in.)
Depth to free Water in Pit	----	(in.)
Depth of Saturated Soil:	----	(in.)

Wetland Hydrology Indicators:

Primary Indicators:
- ☐ Inundated
- ☐ Saturated in Upper 12 inches
- ☐ Water Marks
- ☐ Drift Lines
- ☐ Sediment Deposits
- ☒ Drainage Patterns in Wetlands

Secondary Indicators (2 or more required):
- ☐ Oxidized Root Channels in Upper 12 Inches
- ☐ Water-Stained Leaves
- ☐ Local Soil Survey Data
- ☐ FAC-Neutral Test
- ☐ Other (Explain in Remarks)

Remarks: Streambed spans a width of 9 feet from bank to bank. Hydrology indicated by 6-foot wide drainage (measured at approximate ordinary high water mark).

SOILS

Map Unit Name
(Series and Phase): Visalia sandy loam

Drainage Class: Moderately well drained

Field Observations
Confirm Mapped Type? ☒ Yes ☐ No

Taxonomy (Subgroup): Pachic Haploxerolls

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle (Abundance/Contrast)	Texture, Concretions, Structure, etc.
0	---	---	---	---	Cobble

Hydric Soil Indicators:

- ☐ Histosol
- ☐ Histic Epipedon
- ☐ Sulfidic Odor
- ☐ Aquic Moisture Regime
- ☐ Reducing Conditions
- ☐ Gleyed or Low-Chroma Colors
- ☐ Concretions
- ☐ High Organic Content in surface layer in Sandy Soils
- ☐ Organic Streaking in Sandy Soils
- ☐ Listed on Local Hydric Soils List
- ☐ Listed on National Hydric Soils List
- ☐ Other (Explain in Remarks)

Remarks: Could not dig test pit in cobble. Cobble width within drainage is 6 feet. It is possible that sediment deposits between cobble satisfy hydric conditions; however, this cannot be determined. In this case, soils are considered to be a natural atypical situation, and the presence of hydric soils is assumed.

WETLAND DETERMINATION

Hydrophytic Vegetation Present?	Yes	☐	No	☒
Wetland Hydrology Present?	Yes	☒	No	☐
Hydric Soils Present?	Yes	☒	No	☐

Is this Sampling Point Within a Wetland? Yes ☐ No ☒

Remarks: This area of Southern Coast Live Oak Riparian Forest does not qualify as an ACOE wetland. However, the area is jurisdictional under CDFG as Adjacent Riparian habitat. The drainage is also considered to be Non-wetland Waters of the U.S. (ACOE) and is also jurisdictional under the County and CDFG.

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site:	Salvation Army	Date:	19 December 2001
Applicant/Owner:	Salvation Army	County:	San Diego
Investigator:	Vanessa A. Lee and Kara A. Altvater	State:	California

Do normal circumstances exist on the site?	☒ Yes	☐ No	Community ID:	CLORF
Is the site significantly disturbed (Atypical Situation)?	☐ Yes	☒ No	Transect ID:	T9, 30 ft
Is the area a potential Problem Area? (If needed, explain on reverse.)	☐ Yes	☒ No	Plot ID:	DP 45A, PP 45A

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. *Quercus agrifolia*	T	NI	9.		
2. *Platanus racemosa*	T	FACW	10.		
3. *Bromus diandrus*	H	NI	11.		
4. *Picris echioides*	H	FAC	12.		
5. *Rhamnus ilicifolia*	S	NI	13.		
6.			14.		
7.			15.		
8.			16.		

Percentage of Dominant Species that are OBL, FACW or FAC (excluding FAC-). 40%

Remarks: Hydrophytic vegetation criteria not satisfied.

HYDROLOGY

☒ Recorded Data (Described in Remarks):
- ☐ Stream, Lake, or Tide Gauge
- ☒ Aerial Photographs
- ☐ Other

☐ No Recorded Data Available

Field Observations:

Depth of Surface Water:	----	(in.)
Depth to free Water in Pit	----	(in.)
Depth of Saturated Soil:	----	(in.)

Wetland Hydrology Indicators:

Primary Indicators:
- ☐ Inundated
- ☐ Saturated in Upper 12 inches
- ☐ Water Marks
- ☐ Drift Lines
- ☐ Sediment Deposits
- ☐ Drainage Patterns in Wetlands

Secondary Indicators (2 or more required):
- ☐ Oxidized Root Channels in Upper 12 Inches
- ☐ Water-Stained Leaves
- ☐ Local Soil Survey Data
- ☐ FAC-Neutral Test
- ☐ Other (Explain in Remarks)

Remarks: No hydrology indicators.

SOILS

Map Unit Name
(Series and Phase): Visalia sandy loam

Drainage Class: Moderately well drained

Field Observations
Confirm Mapped Type? ☒ Yes ☐ No

Taxonomy (Subgroup): Pachic Haploxerolls

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle (Abundance/Contrast)	Texture, Concretions, Structure, etc.
0-14	---	7.5YR 3/2	---	---	Sandy Loam

Hydric Soil Indicators:

- ☐ Histosol
- ☐ Histic Epipedon
- ☐ Sulfidic Odor
- ☐ Aquic Moisture Regime
- ☐ Reducing Conditions
- ☐ Gleyed or Low-Chroma Colors
- ☐ Concretions
- ☐ High Organic Content in surface layer in Sandy Soils
- ☐ Organic Streaking in Sandy Soils
- ☐ Listed on Local Hydric Soils List
- ☐ Listed on National Hydric Soils List
- ☐ Other (Explain in Remarks)

Remarks: No hydric soil indicators.

WETLAND DETERMINATION

Hydrophytic Vegetation Present?	Yes	☐	No	☒
Wetland Hydrology Present?	Yes	☐	No	☒
Hydric Soils Present?	Yes	☐	No	☒

Is this Sampling Point Within a Wetland? Yes ☐ No ☒

Remarks: Data point located within Southern Coast Live Oak Riparian Forest. Area is jurisdictional under CDFG as Adjacent Riparian habitat.

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site:	Salvation Army	Date:	19 December 2001
Applicant/Owner:	Salvation Army	County:	San Diego
Investigator:	Vanessa A. Lee and Kara A. Altvater	State:	California

Do normal circumstances exist on the site?	☒ Yes	☐ No	Community ID:	CLORF
Is the site significantly disturbed (Atypical Situation)?	☐ Yes	☒ No	Transect ID:	T9, 40 ft
Is the area a potential Problem Area? (If needed, explain on reverse.)	☐ Yes	☒ No	Plot ID:	DP 46A, PP 46A

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. *Quercus agrifolia*	T	NI	9.		
2. *Platanus racemosa*	T	FACW	10.		
3. *Bromus diandrus*	H	NI	11.		
4. *Picris echioides*	H	FAC	12.		
5. *Rhamnus ilicifolia*	S	NI	13.		
6.			14.		
7.			15.		
8.			16.		

Percentage of Dominant Species that are OBL, FACW or FAC (excluding FAC-). 40%

Remarks: Hydrophytic vegetation criteria not satisfied.

HYDROLOGY

☒ Recorded Data (Described in Remarks):
- ☐ Stream, Lake, or Tide Gauge
- ☒ Aerial Photographs
- ☐ Other

☐ No Recorded Data Available

Field Observations:

Depth of Surface Water:	----	(in.)
Depth to free Water in Pit	----	(in.)
Depth of Saturated Soil:	----	(in.)

Wetland Hydrology Indicators:

Primary Indicators:
- ☐ Inundated
- ☐ Saturated in Upper 12 inches
- ☐ Water Marks
- ☐ Drift Lines
- ☐ Sediment Deposits
- ☐ Drainage Patterns in Wetlands

Secondary Indicators (2 or more required):
- ☐ Oxidized Root Channels in Upper 12 Inches
- ☐ Water-Stained Leaves
- ☐ Local Soil Survey Data
- ☐ FAC-Neutral Test
- ☐ Other (Explain in Remarks)

Remarks: No hydrology indicators.

SOILS

Map Unit Name
(Series and Phase): Visalia sandy loam

Drainage Class: Moderately well drained

Field Observations
Confirm Mapped Type? ☒ Yes ☐ No

Taxonomy (Subgroup): Pachic Haploxerolls

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle (Abundance/Contrast)	Texture, Concretions, Structure, etc.
0-14"	---	7.5YR 3/2	---	---	Sandy Loam

Hydric Soil Indicators:

- ☐ Histosol
- ☐ Histic Epipedon
- ☐ Sulfidic Odor
- ☐ Aquic Moisture Regime
- ☐ Reducing Conditions
- ☐ Gleyed or Low-Chroma Colors
- ☐ Concretions
- ☐ High Organic Content in surface layer in Sandy Soils
- ☐ Organic Streaking in Sandy Soils
- ☐ Listed on Local Hydric Soils List
- ☐ Listed on National Hydric Soils List
- ☐ Other (Explain in Remarks)

Remarks: No hydric soil indicators.

WETLAND DETERMINATION

Hydrophytic Vegetation Present?	Yes	☐	No	☒
Wetland Hydrology Present?	Yes	☐	No	☒
Hydric Soils Present?	Yes	☐	No	☒

Is this Sampling Point Within a Wetland? Yes ☐ No ☒

Remarks: Data point located within Southern Coast Live Oak Riparian Forest. Area is jurisdictional under CDFG as Adjacent Riparian habitat.

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site:	Salvation Army	Date:	19 December 2001
Applicant/Owner:	Salvation Army	County:	San Diego
Investigator:	Vanessa A. Lee and Kara A. Altvater	State:	California

Do normal circumstances exist on the site?	☒ Yes	☐ No	Community ID:	CLORF
Is the site significantly disturbed (Atypical Situation)?	☐ Yes	☒ No	Transect ID:	T9, 50 ft
Is the area a potential Problem Area? (If needed, explain on reverse.)	☐ Yes	☒ No	Plot ID:	DP 47A, PP 47A

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. *Quercus agrifolia*	T	NI	9.		
2. *Rhamnus ilicifolia*	S	NI	10.		
3.			11.		
4.			12.		
5.			13.		
6.			14.		
7.			15.		
8.			16.		

Percentage of Dominant Species that are OBL, FACW or FAC (excluding FAC-). 0%

Remarks: No hydrophytic vegetation present.

HYDROLOGY

☒ Recorded Data (Described in Remarks):
- ☐ Stream, Lake, or Tide Gauge
- ☒ Aerial Photographs
- ☐ Other

☐ No Recorded Data Available

Field Observations:

Depth of Surface Water:	----	(in.)
Depth to free Water in Pit	----	(in.)
Depth of Saturated Soil:	----	(in.)

Wetland Hydrology Indicators:

Primary Indicators:
- ☐ Inundated
- ☐ Saturated in Upper 12 inches
- ☐ Water Marks
- ☐ Drift Lines
- ☐ Sediment Deposits
- ☐ Drainage Patterns in Wetlands

Secondary Indicators (2 or more required):
- ☐ Oxidized Root Channels in Upper 12 Inches
- ☐ Water-Stained Leaves
- ☐ Local Soil Survey Data
- ☐ FAC-Neutral Test
- ☐ Other (Explain in Remarks)

Remarks: No hydrology indicators.

SOILS

Map Unit Name
(Series and Phase): Visalia sandy loam

Drainage Class: Moderately well drained

Field Observations
Confirm Mapped Type? ☒ Yes ☐ No

Taxonomy (Subgroup): Pachic Haploxerolls

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle (Abundance/Contrast)	Texture, Concretions, Structure, etc.
0-14"	---	7.5YR 3/2	---	---	Sandy Loam

Hydric Soil Indicators:

- ☐ Histosol
- ☐ Histic Epipedon
- ☐ Sulfidic Odor
- ☐ Aquic Moisture Regime
- ☐ Reducing Conditions
- ☐ Gleyed or Low-Chroma Colors
- ☐ Concretions
- ☐ High Organic Content in surface layer in Sandy Soils
- ☐ Organic Streaking in Sandy Soils
- ☐ Listed on Local Hydric Soils List
- ☐ Listed on National Hydric Soils List
- ☐ Other (Explain in Remarks)

Remarks: No hydric soil indicators.

WETLAND DETERMINATION

Hydrophytic Vegetation Present?	Yes	☐	No	☒
Wetland Hydrology Present?	Yes	☐	No	☒
Hydric Soils Present?	Yes	☐	No	☒

Is this Sampling Point Within a Wetland? Yes ☐ No ☒

Remarks: Data point located within Southern Coast Live Oak Riparian Forest. Area is jurisdictional under CDFG as Adjacent Riparian habitat. No wetland vegetation or drainages beyond transect.

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site:	Salvation Army	Date:	19 December 2001
Applicant/Owner:	Salvation Army	County:	San Diego
Investigator:	Vanessa A. Lee and Kara A. Altvater	State:	California

Do normal circumstances exist on the site?	☒ Yes	☐ No	Community ID:	CLORF
Is the site significantly disturbed (Atypical Situation)?	☐ Yes	☒ No	Transect ID:	T10, 0 ft
Is the area a potential Problem Area? (If needed, explain on reverse.)	☐ Yes	☒ No	Plot ID:	DP 48A, PP 48A

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. *Quercus agrifolia*	T	NI	9.		
2. *Bromus hordeaceus*	H	FACU	10.		
3. *Bromus diandrus*	H	NI	11.		
4. *Hirschfeldia incana*	H	NI	12.		
5.			13.		
6.			14.		
7.			15.		
8.			16.		

Percentage of Dominant Species that are OBL, FACW or FAC (excluding FAC-). 0%

Remarks: No hydrophytic vegetation present.

HYDROLOGY

☒ Recorded Data (Described in Remarks):
- ☐ Stream, Lake, or Tide Gauge
- ☒ Aerial Photographs
- ☐ Other

☐ No Recorded Data Available

Field Observations:

Depth of Surface Water:	----	(in.)
Depth to free Water in Pit	----	(in.)
Depth of Saturated Soil:	----	(in.)

Wetland Hydrology Indicators:

Primary Indicators:
- ☐ Inundated
- ☐ Saturated in Upper 12 inches
- ☐ Water Marks
- ☐ Drift Lines
- ☐ Sediment Deposits
- ☐ Drainage Patterns in Wetlands

Secondary Indicators (2 or more required):
- ☐ Oxidized Root Channels in Upper 12 Inches
- ☐ Water-Stained Leaves
- ☐ Local Soil Survey Data
- ☐ FAC-Neutral Test
- ☐ Other (Explain in Remarks)

Remarks: No hydrology indicators.

SOILS

Map Unit Name
(Series and Phase): Visalia sandy loam

Drainage Class: Moderately well drained

Field Observations
Confirm Mapped Type? ☒ Yes ☐ No

Taxonomy (Subgroup): Pachic Haploxerolls

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle (Abundance/Contrast)	Texture, Concretions, Structure, etc.
0-14"	---	10YR 3/2	---	---	Sandy Loam

Hydric Soil Indicators:

- ☐ Histosol
- ☐ Histic Epipedon
- ☐ Sulfidic Odor
- ☐ Aquic Moisture Regime
- ☐ Reducing Conditions
- ☐ Gleyed or Low-Chroma Colors
- ☐ Concretions
- ☐ High Organic Content in surface layer in Sandy Soils
- ☐ Organic Streaking in Sandy Soils
- ☐ Listed on Local Hydric Soils List
- ☐ Listed on National Hydric Soils List
- ☐ Other (Explain in Remarks)

Remarks: No hydric soil indicators.

WETLAND DETERMINATION

Hydrophytic Vegetation Present?	Yes	☐	No	☒
Wetland Hydrology Present?	Yes	☐	No	☒
Hydric Soils Present?	Yes	☐	No	☒

Is this Sampling Point Within a Wetland? Yes ☐ No ☒

Remarks: Data point located within Southern Coast Live Oak Riparian Forest. Area is jurisdictional under CDFG as Adjacent Riparian habitat.

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site:	Salvation Army	Date:	19 December 2001
Applicant/Owner:	Salvation Army	County:	San Diego
Investigator:	Vanessa A. Lee and Kara A. Altvater	State:	California

Do normal circumstances exist on the site?	☒ Yes	☐ No	Community ID:	
Is the site significantly disturbed (Atypical Situation)?	☐ Yes	☒ No	Transect ID:	T10, 10 ft
Is the area a potential Problem Area? (If needed, explain on reverse.)	☐ Yes	☒ No	Plot ID:	DP 49A, PP 49A

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. *Quercus agrifolia*	T	NI	9.		
2. *Picris echioides*	H	FAC	10.		
3. *Bromus hordeaceus*	H	FACU	11.		
4. *Hirschfeldia incana*	H	NI	12.		
5.			13.		
6.			14.		
7.			15.		
8.			16.		

Percentage of Dominant Species that are OBL, FACW or FAC (excluding FAC-). 25%

Remarks: Hydrophytic vegetation criteria not satisfied.

HYDROLOGY

☒ Recorded Data (Described in Remarks):
- ☐ Stream, Lake, or Tide Gauge
- ☒ Aerial Photographs
- ☐ Other

☐ No Recorded Data Available

Field Observations:

Depth of Surface Water:	----	(in.)
Depth to free Water in Pit	----	(in.)
Depth of Saturated Soil:	----	(in.)

Wetland Hydrology Indicators:

Primary Indicators:
- ☐ Inundated
- ☐ Saturated in Upper 12 inches
- ☐ Water Marks
- ☐ Drift Lines
- ☐ Sediment Deposits
- ☐ Drainage Patterns in Wetlands

Secondary Indicators (2 or more required):
- ☐ Oxidized Root Channels in Upper 12 Inches
- ☐ Water-Stained Leaves
- ☐ Local Soil Survey Data
- ☐ FAC-Neutral Test
- ☐ Other (Explain in Remarks)

Remarks: No hydrology indicators.

SOILS

Map Unit Name
(Series and Phase): Visalia sandy loam

Drainage Class: Moderately well drained

Field Observations
Confirm Mapped Type? ☒ Yes ☐ No

Taxonomy (Subgroup): Pachic Haploxerolls

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle (Abundance/Contrast)	Texture, Concretions, Structure, etc.
0-12	---	10YR 3/2	---	---	Sandy Loam
12-14	---	---	---	---	Sand

Hydric Soil Indicators:

- ☐ Histosol
- ☐ Histic Epipedon
- ☐ Sulfidic Odor
- ☐ Aquic Moisture Regime
- ☐ Reducing Conditions
- ☐ Gleyed or Low-Chroma Colors
- ☐ Concretions
- ☐ High Organic Content in surface layer in Sandy Soils
- ☐ Organic Streaking in Sandy Soils
- ☐ Listed on Local Hydric Soils List
- ☐ Listed on National Hydric Soils List
- ☐ Other (Explain in Remarks)

Remarks: No hydric soil indicators. Soil is moist, but not saturated.

WETLAND DETERMINATION

Hydrophytic Vegetation Present?	Yes	☐	No	☒
Wetland Hydrology Present?	Yes	☐	No	☒
Hydric Soils Present?	Yes	☐	No	☒

Is this Sampling Point Within a Wetland? Yes ☐ No ☒

Remarks: Data point located within Southern Coast Live Oak Riparian Forest. Area is jurisdictional under CDFG as Adjacent Riparian habitat.

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site:	Salvation Army	Date:	19 December 2001
Applicant/Owner:	Salvation Army	County:	San Diego
Investigator:	Vanessa A. Lee and Kara A. Altvater	State:	California

Do normal circumstances exist on the site?	☒ Yes	☐ No	Community ID:	CLORF
Is the site significantly disturbed (Atypical Situation)?	☐ Yes	☒ No	Transect ID:	T10, 20 ft
Is the area a potential Problem Area? (If needed, explain on reverse.)	☐ Yes	☒ No	Plot ID:	DP 50A, PP 50A

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. *Picris echioides*	H	FAC	9.		
2. *Salix lucida ssp. lasiandra*	T	OBL	10.		
3. *Raphanus sativus*	H	NI	11.		
4. *Artemisia douglasiana*	H	FACW	12.		
5.			13.		
6.			14.		
7.			15.		
8.			16.		

Percentage of Dominant Species that are OBL, FACW or FAC (excluding FAC-). 75%

Remarks: Hydrophytic vegetation criteria satisfied. Willows overhanging data point.

HYDROLOGY

☒ Recorded Data (Described in Remarks):
- ☐ Stream, Lake, or Tide Gauge
- ☒ Aerial Photographs
- ☐ Other

☐ No Recorded Data Available

Field Observations:

Depth of Surface Water:	----	(in.)
Depth to free Water in Pit	----	(in.)
Depth of Saturated Soil:	----	(in.)

Wetland Hydrology Indicators:

Primary Indicators:
- ☐ Inundated
- ☐ Saturated in Upper 12 inches
- ☐ Water Marks
- ☐ Drift Lines
- ☐ Sediment Deposits
- ☒ Drainage Patterns in Wetlands

Secondary Indicators (2 or more required):
- ☐ Oxidized Root Channels in Upper 12 Inches
- ☐ Water-Stained Leaves
- ☐ Local Soil Survey Data
- ☒ FAC-Neutral Test
- ☐ Other (Explain in Remarks)

Remarks: Hydrology indicated by 9-foot wide drainage.

SOILS

Map Unit Name
(Series and Phase): Visalia sandy loam

Drainage Class: Moderately well drained

Field Observations
Confirm Mapped Type? ☒ Yes ☐ No

Taxonomy (Subgroup): Pachic Haploxerolls

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle (Abundance/Contrast)	Texture, Concretions, Structure, etc.
0-12	---	10YR 3/2	---	---	Sandy Loam

Hydric Soil Indicators:

- ☐ Histosol
- ☐ Histic Epipedon
- ☐ Sulfidic Odor
- ☐ Aquic Moisture Regime
- ☐ Reducing Conditions
- ☐ Gleyed or Low-Chroma Colors
- ☐ Concretions
- ☐ High Organic Content in surface layer in Sandy Soils
- ☐ Organic Streaking in Sandy Soils
- ☐ Listed on Local Hydric Soils List
- ☐ Listed on National Hydric Soils List
- ☐ Other (Explain in Remarks)

Remarks: No hydric soil indicators.

WETLAND DETERMINATION

Hydrophytic Vegetation Present?	Yes	☒	No	☐	
Wetland Hydrology Present?	Yes	☒	No	☐	
Hydric Soils Present?	Yes	☐	No	☒	Is this Sampling Point Within a Wetland? Yes ☐ No ☒

Remarks: Area is not considered an ACOE jurisdictional wetland. However, the area is jurisdictional under CDFG and County RPO. The drainage is also jurisdictional under ACOE as a Non-wetland Water of the U.S.

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site:	Salvation Army	Date:	19 December 2001
Applicant/Owner:	Salvation Army	County:	San Diego
Investigator:	Vanessa A. Lee and Kara A. Altvater	State:	California

Do normal circumstances exist on the site?	☒ Yes	☐ No	Community ID:	CLORF
Is the site significantly disturbed (Atypical Situation)?	☒ Yes	☐ No	Transect ID:	T 10, 30ft
Is the area a potential Problem Area? (If needed, explain on reverse.)	☐ Yes	☒ No	Plot ID:	DP 51A, PP 51A

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. *Salix lucida ssp. lasiandra*	T	OBL	9.		
2. *Rhamnus ilicifolia*	S	NI	10.		
3. *Picris echioides*	H	FAC	11.		
4. *Raphanus sativus*	H	NI	12.		
5.			13.		
6.			14.		
7.			15.		
8.			16.		

Percentage of Dominant Species that are OBL, FACW or FAC (excluding FAC-). 50%

Remarks: Hydrophytic vegetation criteria not satisfied.

HYDROLOGY

☒ Recorded Data (Described in Remarks):
- ☐ Stream, Lake, or Tide Gauge
- ☒ Aerial Photographs
- ☐ Other

☐ No Recorded Data Available

Field Observations:

Depth of Surface Water:	----	(in.)
Depth to free Water in Pit	----	(in.)
Depth of Saturated Soil:	----	(in.)

Wetland Hydrology Indicators:

Primary Indicators:
- ☐ Inundated
- ☐ Saturated in Upper 12 inches
- ☐ Water Marks
- ☐ Drift Lines
- ☐ Sediment Deposits
- ☒ Drainage Patterns in Wetlands

Secondary Indicators (2 or more required):
- ☐ Oxidized Root Channels in Upper 12 Inches
- ☐ Water-Stained Leaves
- ☐ Local Soil Survey Data
- ☐ FAC-Neutral Test
- ☐ Other (Explain in Remarks)

Remarks: Data point located within 10-foot wide drainage (measured at approximate ordinary high water mark). Streambed width is 15 feet (measured from bank to bank).

SOILS

Map Unit Name
(Series and Phase): Visalia sandy loam

Drainage Class: Moderately well drained

Field Observations
Confirm Mapped Type? ☒ Yes ☐ No

Taxonomy (Subgroup): Pachic Haploxerolls

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle (Abundance/Contrast)	Texture, Concretions, Structure, etc.
0	---	---	---	---	Cobble

Hydric Soil Indicators:

- ☐ Histosol
- ☐ Histic Epipedon
- ☐ Sulfidic Odor
- ☐ Aquic Moisture Regime
- ☐ Reducing Conditions
- ☐ Gleyed or Low-Chroma Colors
- ☐ Concretions
- ☐ High Organic Content in surface layer in Sandy Soils
- ☐ Organic Streaking in Sandy Soils
- ☐ Listed on Local Hydric Soils List
- ☐ Listed on National Hydric Soils List
- ☐ Other (Explain in Remarks)

Remarks: Could not dig through cobble. Cobble spans a width of 10 feet within drainage. It is possible that sediment deposits between cobble satisfy hydric conditions; however, this cannot be determined. In this case, soils are considered to be a natural atypical situation, and the presence of hydric soils is assumed.

WETLAND DETERMINATION

Hydrophytic Vegetation Present?	Yes	☐	No	☒
Wetland Hydrology Present?	Yes	☒	No	☐
Hydric Soils Present?	Yes	☒	No	☐

Is this Sampling Point Within a Wetland? Yes ☐ No ☒

Remarks: This area of Southern Coast Live Oak Riparian Forest does not qualify as an ACOE wetland. However, the area is jurisdictional under CDFG as Adjacent Riparian habitat. The drainage is also considered to be Non-wetland Waters of the U.S. (ACOE) and is also jurisdictional under the County and CDFG.

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site:	Salvation Army	Date:	19 December 2001
Applicant/Owner:	Salvation Army	County:	San Diego
Investigator:	Vanessa A. Lee and Kara A. Altvater	State:	California

Do normal circumstances exist on the site?	☒ Yes	☐ No	Community ID:	CLORF
Is the site significantly disturbed (Atypical Situation)?	☒ Yes	☐ No	Transect ID:	T10, 40 ft
Is the area a potential Problem Area? (If needed, explain on reverse.)	☐ Yes	☒ No	Plot ID:	DP 52A, PP 52A

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. *Picris echioides*	H	FAC	9.		
2. *Platanus racemosa*	T	FACW	10.		
3. *Raphanus sativus*	H	NI	11.		
4.			12.		
5.			13.		
6.			14.		
7.			15.		
8.			16.		

Percentage of Dominant Species that are OBL, FACW or FAC (excluding FAC-). 66%

Remarks: Hydrophytic vegetation criteria satisfied.

HYDROLOGY

☒ Recorded Data (Described in Remarks):
- ☐ Stream, Lake, or Tide Gauge
- ☒ Aerial Photographs
- ☐ Other

☐ No Recorded Data Available

Field Observations:

Depth of Surface Water:	----	(in.)
Depth to free Water in Pit	----	(in.)
Depth of Saturated Soil:	----	(in.)

Wetland Hydrology Indicators:

Primary Indicators:
- ☐ Inundated
- ☐ Saturated in Upper 12 inches
- ☐ Water Marks
- ☐ Drift Lines
- ☐ Sediment Deposits
- ☒ Drainage Patterns in Wetlands

Secondary Indicators (2 or more required):
- ☐ Oxidized Root Channels in Upper 12 Inches
- ☐ Water-Stained Leaves
- ☐ Local Soil Survey Data
- ☐ FAC-Neutral Test
- ☐ Other (Explain in Remarks)

Remarks: Hydrology is indicated by 16-foot wide drainage (measured at approximate ordinary high water mark). Streambed width is 20 feet (measured from bank to bank). This is the same drainage as the one sampled in previous data point. The drainage takes a turn and runs along the transect rather than perpendicularly to it.

SOILS

Map Unit Name
(Series and Phase): Visalia sandy loam

Drainage Class: Moderately well drained

Field Observations
Confirm Mapped Type? ☒ Yes ☐ No

Taxonomy (Subgroup): Pachic Haploxerolls

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle (Abundance/Contrast)	Texture, Concretions, Structure, etc.
0	---	---	---	---	Cobble

Hydric Soil Indicators:

- ☐ Histosol
- ☐ Histic Epipedon
- ☐ Sulfidic Odor
- ☐ Aquic Moisture Regime
- ☐ Reducing Conditions
- ☐ Gleyed or Low-Chroma Colors
- ☐ Concretions
- ☐ High Organic Content in surface layer in Sandy Soils
- ☐ Organic Streaking in Sandy Soils
- ☐ Listed on Local Hydric Soils List
- ☐ Listed on National Hydric Soils List
- ☐ Other (Explain in Remarks)

Remarks: Could not dig in cobble substrate. Width of Cobble within drainage is 16 feet. It is possible that sediment deposits between cobble satisfy hydric conditions; however, this cannot be determined. In this case, soils are considered to be a natural atypical situation, and the presence of hydric soils is assumed.

WETLAND DETERMINATION

Hydrophytic Vegetation Present?	Yes	☒	No	☐
Wetland Hydrology Present?	Yes	☒	No	☐
Hydric Soils Present?	Yes	☒	No	☐

Is this Sampling Point Within a Wetland? Yes ☒ No ☐

Remarks: This area of Southern Coast Live Oak Riparian Forest is jurisdictional under ACOE, CDFG, and the County.

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site:	Salvation Army	Date:	19 December 2001
Applicant/Owner:	Salvation Army	County:	San Diego
Investigator:	Vanessa A. Lee and Kara A. Altvater	State:	California

Do normal circumstances exist on the site?	☒ Yes	☐ No	Community ID:	CLORF
Is the site significantly disturbed (Atypical Situation)?	☐ Yes	☒ No	Transect ID:	T 10, 50ft
Is the area a potential Problem Area? (If needed, explain on reverse.)	☐ Yes	☒ No	Plot ID:	DP 53A, PP 53A

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. *Platanus racemosa*	T	FACW	9.		
2.			10.		
3.			11.		
4.			12.		
5.			13.		
6.			14.		
7.			15.		
8.			16.		

Percentage of Dominant Species that are OBL, FACW or FAC (excluding FAC-). 100%

Remarks: Data point is on boulder with Sycamore hanging over the point.

HYDROLOGY

☒ Recorded Data (Described in Remarks):
- ☐ Stream, Lake, or Tide Gauge
- ☒ Aerial Photographs
- ☐ Other

☐ No Recorded Data Available

Field Observations:

Depth of Surface Water:	----	(in.)
Depth to free Water in Pit	----	(in.)
Depth of Saturated Soil:	----	(in.)

Wetland Hydrology Indicators:

Primary Indicators:
- ☐ Inundated
- ☐ Saturated in Upper 12 inches
- ☐ Water Marks
- ☐ Drift Lines
- ☐ Sediment Deposits
- ☐ Drainage Patterns in Wetlands

Secondary Indicators (2 or more required):
- ☐ Oxidized Root Channels in Upper 12 Inches
- ☐ Water-Stained Leaves
- ☐ Local Soil Survey Data
- ☐ FAC-Neutral Test
- ☐ Other (Explain in Remarks)

Remarks: No hydrology indicators.

SOILS

Map Unit Name
(Series and Phase): Visalia sandy loam

Drainage Class: Moderately well drained

Field Observations
Confirm Mapped Type? ☒ Yes ☐ No

Taxonomy (Subgroup): Pachic Haploxerolls

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle (Abundance/Contrast)	Texture, Concretions, Structure, etc.
0	---	---	---	---	Large boulder

Hydric Soil Indicators:

- ☐ Histosol
- ☐ Histic Epipedon
- ☐ Sulfidic Odor
- ☐ Aquic Moisture Regime
- ☐ Reducing Conditions
- ☐ Gleyed or Low-Chroma Colors
- ☐ Concretions
- ☐ High Organic Content in surface layer in Sandy Soils
- ☐ Organic Streaking in Sandy Soils
- ☐ Listed on Local Hydric Soils List
- ☐ Listed on National Hydric Soils List
- ☐ Other (Explain in Remarks)

Remarks: Soils not sampled due to presence of large boulder.

WETLAND DETERMINATION

Hydrophytic Vegetation Present?	Yes	☒	No	☐
Wetland Hydrology Present?	Yes	☐	No	☒
Hydric Soils Present?	Yes	☐	No	☒

Is this Sampling Point Within a Wetland? Yes ☐ No ☒

Remarks: This area of Southern Coast Live Oak Riparian Forest does not qualify as an ACOE wetland. However, it is jurisdictional under CDFG and County RPO.

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site:	Salvation Army	Date:	19 December 2001
Applicant/Owner:	Salvation Army	County:	San Diego
Investigator:	Vanessa A. Lee and Kara A. Altvater	State:	California

Do normal circumstances exist on the site?	☒ Yes	☐ No	Community ID:	CLORF
Is the site significantly disturbed (Atypical Situation)?	☐ Yes	☒ No	Transect ID:	T 10, 60ft
Is the area a potential Problem Area? (If needed, explain on reverse.)	☐ Yes	☒ No	Plot ID:	DP 54A, PP 54A

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. *Platanus racemosa*	T	FACW	9.		
2. *Bromus diandrus*	H	NI	10.		
3.			11.		
4.			12.		
5.			13.		
6.			14.		
7.			15.		
8.			16.		

Percentage of Dominant Species that are OBL, FACW or FAC (excluding FAC-). 50%

Remarks: Hydrophytic vegetation criteria not satisfied.

HYDROLOGY

☒ Recorded Data (Described in Remarks):
- ☐ Stream, Lake, or Tide Gauge
- ☒ Aerial Photographs
- ☐ Other

☐ No Recorded Data Available

Field Observations:

Depth of Surface Water:	----	(in.)
Depth to free Water in Pit	----	(in.)
Depth of Saturated Soil:	----	(in.)

Wetland Hydrology Indicators:

Primary Indicators:
- ☐ Inundated
- ☐ Saturated in Upper 12 inches
- ☐ Water Marks
- ☐ Drift Lines
- ☐ Sediment Deposits
- ☐ Drainage Patterns in Wetlands

Secondary Indicators (2 or more required):
- ☐ Oxidized Root Channels in Upper 12 Inches
- ☐ Water-Stained Leaves
- ☐ Local Soil Survey Data
- ☐ FAC-Neutral Test
- ☐ Other (Explain in Remarks)

Remarks: No hydrology indicators.

SOILS

Map Unit Name
(Series and Phase): Visalia sandy loam

Drainage Class: Moderately well drained

Field Observations
Confirm Mapped Type? ☒ Yes ☐ No

Taxonomy (Subgroup): Pachic Haploxerolls

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle (Abundance/Contrast)	Texture, Concretions, Structure, etc.
0-14	---	10YR 3/2	---	---	Sandy Loam

Hydric Soil Indicators:

- ☐ Histosol
- ☐ Histic Epipedon
- ☐ Sulfidic Odor
- ☐ Aquic Moisture Regime
- ☐ Reducing Conditions
- ☐ Gleyed or Low-Chroma Colors
- ☐ Concretions
- ☐ High Organic Content in surface layer in Sandy Soils
- ☐ Organic Streaking in Sandy Soils
- ☐ Listed on Local Hydric Soils List
- ☐ Listed on National Hydric Soils List
- ☐ Other (Explain in Remarks)

Remarks: No hydric soil indicators.

WETLAND DETERMINATION

Hydrophytic Vegetation Present?	Yes	☐	No	☒
Wetland Hydrology Present?	Yes	☐	No	☒
Hydric Soils Present?	Yes	☐	No	☒

Is this Sampling Point Within a Wetland? Yes ☐ No ☒

Remarks: This area of Southern Coast Live Oak Riparian Forest does not qualify as an ACOE wetland. However, the area is jurisdictional under CDFG and the County (see Data Point 53A).

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site:	Salvation Army	Date:	19 December 2001
Applicant/Owner:	Salvation Army	County:	San Diego
Investigator:	Vanessa A. Lee and Kara A. Altvater	State:	California

Do normal circumstances exist on the site?	☒ Yes	☐ No	Community ID:	CLORF
Is the site significantly disturbed (Atypical Situation)?	☐ Yes	☒ No	Transect ID:	T 10, 70ft
Is the area a potential Problem Area? (If needed, explain on reverse.)	☐ Yes	☒ No	Plot ID:	DP 55A, PP 55A

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. *Platanus racemosa*	T	FACW	9.		
2. *Bromus diandrus*	H	NI	10.		
3. *Eriogonum fasciculatum*	H	NI	11.		
4.			12.		
5.			13.		
6.			14.		
7.			15.		
8.			16.		

Percentage of Dominant Species that are OBL, FACW or FAC (excluding FAC-). 33%

Remarks: Hydrophytic vegetation criteria not satisfied. Sycamore overhanging data point.

HYDROLOGY

☒ Recorded Data (Described in Remarks):
- ☐ Stream, Lake, or Tide Gauge
- ☒ Aerial Photographs
- ☐ Other

☐ No Recorded Data Available

Field Observations:

Depth of Surface Water:	----	(in.)
Depth to free Water in Pit	----	(in.)
Depth of Saturated Soil:	----	(in.)

Wetland Hydrology Indicators:

Primary Indicators:
- ☐ Inundated
- ☐ Saturated in Upper 12 inches
- ☐ Water Marks
- ☐ Drift Lines
- ☐ Sediment Deposits
- ☐ Drainage Patterns in Wetlands

Secondary Indicators (2 or more required):
- ☐ Oxidized Root Channels in Upper 12 Inches
- ☐ Water-Stained Leaves
- ☐ Local Soil Survey Data
- ☐ FAC-Neutral Test
- ☐ Other (Explain in Remarks)

Remarks: No hydrology indicators.

SOILS

Map Unit Name
(Series and Phase): Visalia sandy loam

Drainage Class: Moderately well drained

Field Observations
Confirm Mapped Type? ☒ Yes ☐ No

Taxonomy (Subgroup): Pachic Haploxerolls

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle (Abundance/Contrast)	Texture, Concretions, Structure, etc.
0-14	---	10YR 3/2	---	---	Sandy Loam

Hydric Soil Indicators:

- ☐ Histosol
- ☐ Histic Epipedon
- ☐ Sulfidic Odor
- ☐ Aquic Moisture Regime
- ☐ Reducing Conditions
- ☐ Gleyed or Low-Chroma Colors
- ☐ Concretions
- ☐ High Organic Content in surface layer in Sandy Soils
- ☐ Organic Streaking in Sandy Soils
- ☐ Listed on Local Hydric Soils List
- ☐ Listed on National Hydric Soils List
- ☐ Other (Explain in Remarks)

Remarks: No hydric soil indicators.

WETLAND DETERMINATION

Hydrophytic Vegetation Present?	Yes	☐	No	☒
Wetland Hydrology Present?	Yes	☐	No	☒
Hydric Soils Present?	Yes	☐	No	☒

Is this Sampling Point Within a Wetland? Yes ☐ No ☒

Remarks: This area of Southern Coast Live Oak Riparian Forest does not qualify as an ACOE wetland. However, the area is jurisdictional under CDFG and the County (see Data Point 53A). Beyond this data point, the transect continues up-slope. All vegetation beneath and beyond this grouping of Western Sycamores is upland vegetation.

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site:	Salvation Army	Date:	20 December 2001
Applicant/Owner:	Salvation Army	County:	San Diego
Investigator:	Vanessa A. Lee and Brian D. Parker	State:	California

Do normal circumstances exist on the site?	☒ Yes	☐ No	Community ID:	CLORF
Is the site significantly disturbed (Atypical Situation)?	☐ Yes	☒ No	Transect ID:	T 11, 0ft
Is the area a potential Problem Area? (If needed, explain on reverse.)	☐ Yes	☒ No	Plot ID:	DP 56A, PP 56A

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. *Quercus agrifolia*	T	NI	9.		
2. *Rhamnus ilicifolia*	S	NI	10.		
3. *Toxicodendron diversilobum*	H	NI	11.		
4.			12.		
5.			13.		
6.			14.		
7.			15.		
8.			16.		

Percentage of Dominant Species that are OBL, FACW or FAC (excluding FAC-). 0%

Remarks: No hydrophytic vegetation present. Coast Live Oak Riparian Forest vegetation.

HYDROLOGY

☒ Recorded Data (Described in Remarks):
- ☐ Stream, Lake, or Tide Gauge
- ☒ Aerial Photographs
- ☐ Other

☐ No Recorded Data Available

Field Observations:

Depth of Surface Water:	----	(in.)
Depth to free Water in Pit	----	(in.)
Depth of Saturated Soil:	----	(in.)

Wetland Hydrology Indicators:

Primary Indicators:
- ☐ Inundated
- ☐ Saturated in Upper 12 inches
- ☐ Water Marks
- ☐ Drift Lines
- ☐ Sediment Deposits
- ☐ Drainage Patterns in Wetlands

Secondary Indicators (2 or more required):
- ☐ Oxidized Root Channels in Upper 12 Inches
- ☐ Water-Stained Leaves
- ☐ Local Soil Survey Data
- ☐ FAC-Neutral Test
- ☐ Other (Explain in Remarks)

Remarks: No hydrology indicators.

SOILS

Map Unit Name
(Series and Phase): Visalia sandy loam

Drainage Class: Moderately well drained

Field Observations
Confirm Mapped Type? ☒ Yes ☐ No

Taxonomy (Subgroup): Pachic Haploxerolls

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle (Abundance/Contrast)	Texture, Concretions, Structure, etc.
0-8	---	7.5YR 3/2	---	---	Sandy Loam
8-12	---	10YR 4/4	---	---	Sandy Loam

Hydric Soil Indicators:

- ☐ Histosol
- ☐ Histic Epipedon
- ☐ Sulfidic Odor
- ☐ Aquic Moisture Regime
- ☐ Reducing Conditions
- ☐ Gleyed or Low-Chroma Colors
- ☐ Concretions
- ☐ High Organic Content in surface layer in Sandy Soils
- ☐ Organic Streaking in Sandy Soils
- ☐ Listed on Local Hydric Soils List
- ☐ Listed on National Hydric Soils List
- ☐ Other (Explain in Remarks)

Remarks: No hydric soil indicators. Hit rock at 12 inches.

WETLAND DETERMINATION

Hydrophytic Vegetation Present?	Yes	☐	No	☒
Wetland Hydrology Present?	Yes	☐	No	☒
Hydric Soils Present?	Yes	☐	No	☒

Is this Sampling Point Within a Wetland? Yes ☐ No ☒

Remarks: This area of Southern Coast Live Oak Riparian Forest does not qualify as a wetland. However, the area is jurisdictional under CDFG as Adjacent Riparian habitat.

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site:	Salvation Army	Date:	20 December 2001
Applicant/Owner:	Salvation Army	County:	San Diego
Investigator:	Vanessa A. Lee and Brian D. Parker	State:	California

Do normal circumstances exist on the site?	☒ Yes	☐ No	Community ID:	CLORF
Is the site significantly disturbed (Atypical Situation)?	☐ Yes	☒ No	Transect ID:	T 11, 10ft
Is the area a potential Problem Area? (If needed, explain on reverse.)	☐ Yes	☒ No	Plot ID:	DP 57A, PP57A

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. *Quercus agrifolia*	T	NI	9.		
2. *Bromus diandrus*	H	NI	10.		
3. *Toxicodendron diversilobum*	S	NI	11.		
4. *Picris echioides*	H	FAC	12.		
5.			13.		
6.			14.		
7.			15.		
8.			16.		

Percentage of Dominant Species that are OBL, FACW or FAC (excluding FAC-). 25%

Remarks: Hydrophytic vegetation criteria not satisfied.

HYDROLOGY

☒ Recorded Data (Described in Remarks):
- ☐ Stream, Lake, or Tide Gauge
- ☒ Aerial Photographs
- ☐ Other

☐ No Recorded Data Available

Field Observations:

Depth of Surface Water:	----	(in.)
Depth to free Water in Pit	----	(in.)
Depth of Saturated Soil:	----	(in.)

Wetland Hydrology Indicators:

Primary Indicators:
- ☐ Inundated
- ☐ Saturated in Upper 12 inches
- ☐ Water Marks
- ☐ Drift Lines
- ☐ Sediment Deposits
- ☐ Drainage Patterns in Wetlands

Secondary Indicators (2 or more required):
- ☐ Oxidized Root Channels in Upper 12 Inches
- ☐ Water-Stained Leaves
- ☐ Local Soil Survey Data
- ☐ FAC-Neutral Test
- ☐ Other (Explain in Remarks)

Remarks: No hydrology indicators.

SOILS

Map Unit Name
(Series and Phase): Visalia sandy loam

Drainage Class: Moderately well drained

Field Observations
Confirm Mapped Type? ☒ Yes ☐ No

Taxonomy (Subgroup): Pachic Haploxerolls

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle (Abundance/Contrast)	Texture, Concretions, Structure, etc.
0-7	---	7.5YR 3/2	---	---	Sandy Loam
7-14	---	10YR 4/4	---	---	Sandy Loam

Hydric Soil Indicators:

- ☐ Histosol
- ☐ Histic Epipedon
- ☐ Sulfidic Odor
- ☐ Aquic Moisture Regime
- ☐ Reducing Conditions
- ☐ Gleyed or Low-Chroma Colors
- ☐ Concretions
- ☐ High Organic Content in surface layer in Sandy Soils
- ☐ Organic Streaking in Sandy Soils
- ☐ Listed on Local Hydric Soils List
- ☐ Listed on National Hydric Soils List
- ☐ Other (Explain in Remarks)

Remarks: No hydric soil indicators.

WETLAND DETERMINATION

Hydrophytic Vegetation Present?	Yes	☐	No	☒
Wetland Hydrology Present?	Yes	☐	No	☒
Hydric Soils Present?	Yes	☐	No	☒

Is this Sampling Point Within a Wetland? Yes ☐ No ☒

Remarks: This area of Southern Coast Live Oak Riparian Forest does not qualify as a wetland. However, the area is jurisdictional under CDFG as Adjacent Riparian habitat.

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site:	Salvation Army	Date:	20 December 2001
Applicant/Owner:	Salvation Army	County:	San Diego
Investigator:	Vanessa A. Lee and Brian D. Parker	State:	California

Do normal circumstances exist on the site?	☒ Yes	☐ No	Community ID:	CLORF
Is the site significantly disturbed (Atypical Situation)?	☒ Yes	☐ No	Transect ID:	T 11, 20ft
Is the area a potential Problem Area? (If needed, explain on reverse.)	☐ Yes	☒ No	Plot ID:	DP 58A, PP 58A

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. *Quercus agrifolia*	T	NI	9.		
2. *Picris echioides*	H	FAC	10.		
3. *Toxicodendron diversilobum*	H	NI	11.		
4.			12.		
5.			13.		
6.			14.		
7.			15.		
8.			16.		

Percentage of Dominant Species that are OBL, FACW or FAC (excluding FAC-). 33%

Remarks: Hydrophytic vegetation criteria not satisfied.

HYDROLOGY

☒ Recorded Data (Described in Remarks):
- ☐ Stream, Lake, or Tide Gauge
- ☒ Aerial Photographs
- ☐ Other

☐ No Recorded Data Available

Field Observations:

Depth of Surface Water:	----	(in.)
Depth to free Water in Pit	----	(in.)
Depth of Saturated Soil:	----	(in.)

Wetland Hydrology Indicators:

Primary Indicators:
- ☐ Inundated
- ☐ Saturated in Upper 12 inches
- ☐ Water Marks
- ☐ Drift Lines
- ☐ Sediment Deposits
- ☐ Drainage Patterns in Wetlands

Secondary Indicators (2 or more required):
- ☐ Oxidized Root Channels in Upper 12 Inches
- ☐ Water-Stained Leaves
- ☐ Local Soil Survey Data
- ☐ FAC-Neutral Test
- ☐ Other (Explain in Remarks)

Remarks: Hydrology indicated by 6-foot wide drainage (measured at approximate ordinary high water mark). Streambed width is 10 feet (measured from bank to bank).

SOILS

Map Unit Name
(Series and Phase): Visalia sandy loam

Drainage Class: Moderately well drained

Field Observations
Confirm Mapped Type? ☒ Yes ☐ No

Taxonomy (Subgroup): Pachic Haploxerolls

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle (Abundance/Contrast)	Texture, Concretions, Structure, etc.
0	---	---	---	---	Cobble
			---	---	

Hydric Soil Indicators:

- ☐ Histosol
- ☐ Histic Epipedon
- ☐ Sulfidic Odor
- ☐ Aquic Moisture Regime
- ☐ Reducing Conditions
- ☐ Gleyed or Low-Chroma Colors
- ☐ Concretions
- ☐ High Organic Content in surface layer in Sandy Soils
- ☐ Organic Streaking in Sandy Soils
- ☐ Listed on Local Hydric Soils List
- ☐ Listed on National Hydric Soils List
- ☐ Other (Explain in Remarks)

Remarks: Could not dig due to cobble. Cobble width within drainage is 6 feet. It is possible that sediment deposits between cobble satisfy hydric conditions; however, this cannot be determined. In this case, soils are considered to be a natural atypical situation, and the presence of hydric soils is assumed.

WETLAND DETERMINATION

Hydrophytic Vegetation Present?	Yes	☐	No	☒
Wetland Hydrology Present?	Yes	☒	No	☐
Hydric Soils Present?	Yes	☒	No	☐

Is this Sampling Point Within a Wetland? Yes ☐ No ☒

Remarks: This area of Southern Coast Live Oak Riparian Forest does not qualify as an ACOE wetland. However, the area is jurisdictional under CDFG as Adjacent Riparian habitat. The drainage is considered to be Non-wetland Waters of the U.S. (ACOE) and is also jurisdictional under the County and CDFG.

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site:	Salvation Army	Date:	20 December 2001
Applicant/Owner:	Salvation Army	County:	San Diego
Investigator:	Vanessa A. Lee and Brian D. Parker	State:	California

Do normal circumstances exist on the site?	☒ Yes	☐ No	Community ID:	NNG
Is the site significantly disturbed (Atypical Situation)?	☐ Yes	☒ No	Transect ID:	T 11, 30ft
Is the area a potential Problem Area? (If needed, explain on reverse.)	☐ Yes	☒ No	Plot ID:	DP 59A, PP 59A

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. *Raphanus sativus*	H	NI	9.		
2.			10.		
3.			11.		
4.			12.		
5.			13.		
6.			14.		
7.			15.		
8.			16.		

Percentage of Dominant Species that are OBL, FACW or FAC (excluding FAC-). 0%

Remarks: No hydrophytic vegetation present.

HYDROLOGY

☒ Recorded Data (Described in Remarks):
- ☐ Stream, Lake, or Tide Gauge
- ☒ Aerial Photographs
- ☐ Other

☐ No Recorded Data Available

Field Observations:

Depth of Surface Water:	----	(in.)
Depth to free Water in Pit	----	(in.)
Depth of Saturated Soil:	----	(in.)

Wetland Hydrology Indicators:

Primary Indicators:
- ☐ Inundated
- ☐ Saturated in Upper 12 inches
- ☐ Water Marks
- ☐ Drift Lines
- ☐ Sediment Deposits
- ☐ Drainage Patterns in Wetlands

Secondary Indicators (2 or more required):
- ☐ Oxidized Root Channels in Upper 12 Inches
- ☐ Water-Stained Leaves
- ☐ Local Soil Survey Data
- ☐ FAC-Neutral Test
- ☐ Other (Explain in Remarks)

Remarks: No hydrology indicators.

SOILS

Map Unit Name
(Series and Phase): Visalia sandy loam

Drainage Class: Moderately well drained

Field Observations
Confirm Mapped Type? ☒ Yes ☐ No

Taxonomy (Subgroup): Pachic Haploxerolls

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle (Abundance/Contrast)	Texture, Concretions, Structure, etc.
1-14	---	7.5YR 3/2	---	---	Sandy Loam

Hydric Soil Indicators:

- ☐ Histosol
- ☐ Histic Epipedon
- ☐ Sulfidic Odor
- ☐ Aquic Moisture Regime
- ☐ Reducing Conditions
- ☐ Gleyed or Low-Chroma Colors
- ☐ Concretions
- ☐ High Organic Content in surface layer in Sandy Soils
- ☐ Organic Streaking in Sandy Soils
- ☐ Listed on Local Hydric Soils List
- ☐ Listed on National Hydric Soils List
- ☐ Other (Explain in Remarks)

Remarks: No hydric soil indicators.

WETLAND DETERMINATION

Hydrophytic Vegetation Present?	Yes	☐	No	☒
Wetland Hydrology Present?	Yes	☐	No	☒
Hydric Soils Present?	Yes	☐	No	☒

Is this Sampling Point Within a Wetland? Yes ☐ No ☒

Remarks: Non-native Grassland vegetation dominated by Radish. This is a potential wetland mitigation area adjacent to Southern Coast Live Oak Riparian Forest habitat.

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site:	Salvation Army	Date:	20 December 2001
Applicant/Owner:	Salvation Army	County:	San Diego
Investigator:	Vanessa A. Lee and Brian D. Parker	State:	California

Do normal circumstances exist on the site?	☒ Yes	☐ No	Community ID:	NNG
Is the site significantly disturbed (Atypical Situation)?	☐ Yes	☒ No	Transect ID:	T 11, 40ft
Is the area a potential Problem Area? (If needed, explain on reverse.)	☐ Yes	☒ No	Plot ID:	DP 60A, PP 60A

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. *Raphanus sativus*	H	NI	9.		
2.			10.		
3.			11.		
4.			12.		
5.			13.		
6.			14.		
7.			15.		
8.			16.		

Percentage of Dominant Species that are OBL, FACW or FAC (excluding FAC-). 0%

Remarks: No hydrophytic vegetation present.

HYDROLOGY

☒ Recorded Data (Described in Remarks):
- ☐ Stream, Lake, or Tide Gauge
- ☒ Aerial Photographs
- ☐ Other

☐ No Recorded Data Available

Field Observations:

Depth of Surface Water:	----	(in.)
Depth to free Water in Pit	----	(in.)
Depth of Saturated Soil:	----	(in.)

Wetland Hydrology Indicators:

Primary Indicators:
- ☐ Inundated
- ☐ Saturated in Upper 12 inches
- ☐ Water Marks
- ☐ Drift Lines
- ☐ Sediment Deposits
- ☐ Drainage Patterns in Wetlands

Secondary Indicators (2 or more required):
- ☐ Oxidized Root Channels in Upper 12 Inches
- ☐ Water-Stained Leaves
- ☐ Local Soil Survey Data
- ☐ FAC-Neutral Test
- ☐ Other (Explain in Remarks)

Remarks: No hydrology indicators.

SOILS

Map Unit Name
(Series and Phase): Visalia sandy loam

Drainage Class: Moderately well drained

Field Observations
Confirm Mapped Type? ☒ Yes ☐ No

Taxonomy (Subgroup): Pachic Haploxerolls

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle (Abundance/Contrast)	Texture, Concretions, Structure, etc.
0-14	---	7.5YR 3/2	---	---	Sandy Loam

Hydric Soil Indicators:

- ☐ Histosol
- ☐ Histic Epipedon
- ☐ Sulfidic Odor
- ☐ Aquic Moisture Regime
- ☐ Reducing Conditions
- ☐ Gleyed or Low-Chroma Colors
- ☐ Concretions
- ☐ High Organic Content in surface layer in Sandy Soils
- ☐ Organic Streaking in Sandy Soils
- ☐ Listed on Local Hydric Soils List
- ☐ Listed on National Hydric Soils List
- ☐ Other (Explain in Remarks)

Remarks: No hydric soil indicators.

WETLAND DETERMINATION

Hydrophytic Vegetation Present?	Yes	☐	No	☒
Wetland Hydrology Present?	Yes	☐	No	☒
Hydric Soils Present?	Yes	☐	No	☒

Is this Sampling Point Within a Wetland? Yes ☐ No ☒

Remarks: Non-native Grassland vegetation dominated by Radish. This is a potential wetland mitigation area adjacent to Southern Coast Live Oak Riparian Forest habitat.

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site:	Salvation Army	Date:	20 December 2001
Applicant/Owner:	Salvation Army	County:	San Diego
Investigator:	Vanessa A. Lee and Brian D. Parker	State:	California

Do normal circumstances exist on the site?	☒ Yes	☐ No	Community ID:	NNG
Is the site significantly disturbed (Atypical Situation)?	☐ Yes	☒ No	Transect ID:	T 11, 50ft
Is the area a potential Problem Area? (If needed, explain on reverse.)	☐ Yes	☒ No	Plot ID:	DP 61A, PP 61A

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. *Raphanus sativus*	H	NI	9.		
2.			10.		
3.			11.		
4.			12.		
5.			13.		
6.			14.		
7.			15.		
8.			16.		

Percentage of Dominant Species that are OBL, FACW or FAC (excluding FAC-). 0%

Remarks: No hydrophytic vegetation present.

HYDROLOGY

☒ Recorded Data (Described in Remarks):
- ☐ Stream, Lake, or Tide Gauge
- ☒ Aerial Photographs
- ☐ Other

☐ No Recorded Data Available

Field Observations:

Depth of Surface Water:	----	(in.)
Depth to free Water in Pit	----	(in.)
Depth of Saturated Soil:	----	(in.)

Wetland Hydrology Indicators:

Primary Indicators:
- ☐ Inundated
- ☐ Saturated in Upper 12 inches
- ☐ Water Marks
- ☐ Drift Lines
- ☐ Sediment Deposits
- ☐ Drainage Patterns in Wetlands

Secondary Indicators (2 or more required):
- ☐ Oxidized Root Channels in Upper 12 Inches
- ☐ Water-Stained Leaves
- ☐ Local Soil Survey Data
- ☐ FAC-Neutral Test
- ☐ Other (Explain in Remarks)

Remarks: No hydrology indicators.

SOILS

Map Unit Name
(Series and Phase): Visalia sandy loam

Drainage Class: Moderately well drained

Field Observations
Confirm Mapped Type? ☒ Yes ☐ No

Taxonomy (Subgroup): Pachic Haploxerolls

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle (Abundance/Contrast)	Texture, Concretions, Structure, etc.
0-14	---	7.5YR 3/2	---	---	Sandy Loam
			---	---	

Hydric Soil Indicators:

- ☐ Histosol
- ☐ Histic Epipedon
- ☐ Sulfidic Odor
- ☐ Aquic Moisture Regime
- ☐ Reducing Conditions
- ☐ Gleyed or Low-Chroma Colors
- ☐ Concretions
- ☐ High Organic Content in surface layer in Sandy Soils
- ☐ Organic Streaking in Sandy Soils
- ☐ Listed on Local Hydric Soils List
- ☐ Listed on National Hydric Soils List
- ☐ Other (Explain in Remarks)

Remarks: No hydric soil indicators.

WETLAND DETERMINATION

Hydrophytic Vegetation Present?	Yes	☐	No	☒
Wetland Hydrology Present?	Yes	☐	No	☒
Hydric Soils Present?	Yes	☐	No	☒

Is this Sampling Point Within a Wetland? Yes ☐ No ☒

Remarks: Non-native Grassland vegetation dominated by Radish. This is a potential wetland mitigation area adjacent to Southern Coast Live Oak Riparian Forest habitat.

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site:	Salvation Army	Date:	20 December 2001
Applicant/Owner:	Salvation Army	County:	San Diego
Investigator:	Vanessa A. Lee and Brian D. Parker	State:	California

Do normal circumstances exist on the site?	☒ Yes	☐ No	Community ID:	NNG
Is the site significantly disturbed (Atypical Situation)?	☐ Yes	☒ No	Transect ID:	T 11, 60ft
Is the area a potential Problem Area? (If needed, explain on reverse.)	☐ Yes	☒ No	Plot ID:	DP 62A, PP 62A

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. *Raphanus sativus*	H	NI	9.		
2.			10.		
3.			11.		
4.			12.		
5.			13.		
6.			14.		
7.			15.		
8.			16.		

Percentage of Dominant Species that are OBL, FACW or FAC (excluding FAC-). 0%

Remarks: No hydrophytic vegetation present.

HYDROLOGY

☒ Recorded Data (Described in Remarks):
- ☐ Stream, Lake, or Tide Gauge
- ☒ Aerial Photographs
- ☐ Other

☐ No Recorded Data Available

Field Observations:

Depth of Surface Water:	----	(in.)
Depth to free Water in Pit	----	(in.)
Depth of Saturated Soil:	----	(in.)

Wetland Hydrology Indicators:

Primary Indicators:
- ☐ Inundated
- ☐ Saturated in Upper 12 inches
- ☐ Water Marks
- ☐ Drift Lines
- ☐ Sediment Deposits
- ☐ Drainage Patterns in Wetlands

Secondary Indicators (2 or more required):
- ☐ Oxidized Root Channels in Upper 12 Inches
- ☐ Water-Stained Leaves
- ☐ Local Soil Survey Data
- ☐ FAC-Neutral Test
- ☐ Other (Explain in Remarks)

Remarks: No hydrology indicators.

SOILS

Map Unit Name
(Series and Phase): Visalia sandy loam

Drainage Class: Moderately well drained

Field Observations
Confirm Mapped Type? ☒ Yes ☐ No

Taxonomy (Subgroup): Pachic Haploxerolls

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle (Abundance/Contrast)	Texture, Concretions, Structure, etc.
0-6	---	---	---	---	Sand
6-10	---	10YR 3/2	---	---	Silt Loam
10-16	---	10YR 4/4	---	---	Silt Loam

Hydric Soil Indicators:

- ☐ Histosol
- ☐ Histic Epipedon
- ☐ Sulfidic Odor
- ☐ Aquic Moisture Regime
- ☐ Reducing Conditions
- ☐ Gleyed or Low-Chroma Colors
- ☐ Concretions
- ☐ High Organic Content in surface layer in Sandy Soils
- ☐ Organic Streaking in Sandy Soils
- ☐ Listed on Local Hydric Soils List
- ☐ Listed on National Hydric Soils List
- ☐ Other (Explain in Remarks)

Remarks: No hydric soil indicators.

WETLAND DETERMINATION

Hydrophytic Vegetation Present? Yes ☐ No ☒

Wetland Hydrology Present? Yes ☐ No ☒

Hydric Soils Present? Yes ☐ No ☒

Is this Sampling Point Within a Wetland? Yes ☐ No ☒

Remarks: Non-native Grassland vegetation dominated by Radish. This is a potential wetland mitigation area adjacent to Southern Coast Live Oak Riparian Forest habitat.

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site:	Salvation Army	Date:	20 December 2001
Applicant/Owner:	Salvation Army	County:	San Diego
Investigator:	Vanessa A. Lee and Brian D. Parker	State:	California

Do normal circumstances exist on the site?	☒ Yes	☐ No	Community ID:	DIST
Is the site significantly disturbed (Atypical Situation)?	☐ Yes	☒ No	Transect ID:	T 11, 70ft
Is the area a potential Problem Area? (If needed, explain on reverse.)	☐ Yes	☒ No	Plot ID:	DP 63A, PP 63A

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. *Raphanus sativus*	H	NI	9.		
2.			10.		
3.			11.		
4.			12.		
5.			13.		
6.			14.		
7.			15.		
8.			16.		

Percentage of Dominant Species that are OBL, FACW or FAC (excluding FAC-). 0%

Remarks: Disturbed habitat dominated by *Raphanus*.

HYDROLOGY

☒ Recorded Data (Described in Remarks):
- ☐ Stream, Lake, or Tide Gauge
- ☒ Aerial Photographs
- ☐ Other

☐ No Recorded Data Available

Field Observations:

Depth of Surface Water:	----	(in.)
Depth to free Water in Pit	----	(in.)
Depth of Saturated Soil:	----	(in.)

Wetland Hydrology Indicators:

Primary Indicators:
- ☐ Inundated
- ☐ Saturated in Upper 12 inches
- ☐ Water Marks
- ☐ Drift Lines
- ☐ Sediment Deposits
- ☐ Drainage Patterns in Wetlands

Secondary Indicators (2 or more required):
- ☐ Oxidized Root Channels in Upper 12 Inches
- ☐ Water-Stained Leaves
- ☐ Local Soil Survey Data
- ☐ FAC-Neutral Test
- ☐ Other (Explain in Remarks)

Remarks: No hydrology indicators.

SOILS

Map Unit Name
(Series and Phase): Visalia sandy loam

Drainage Class: Moderately well drained

Field Observations
Confirm Mapped Type? ☒ Yes ☐ No

Taxonomy (Subgroup): Pachic Haploxerolls

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle (Abundance/Contrast)	Texture, Concretions, Structure, etc.
0-14	---	7.5 YR 3/2	---	---	Loam

Hydric Soil Indicators:

- ☐ Histosol
- ☐ Histic Epipedon
- ☐ Sulfidic Odor
- ☐ Aquic Moisture Regime
- ☐ Reducing Conditions
- ☐ Gleyed or Low-Chroma Colors
- ☐ Concretions
- ☐ High Organic Content in surface layer in Sandy Soils
- ☐ Organic Streaking in Sandy Soils
- ☐ Listed on Local Hydric Soils List
- ☐ Listed on National Hydric Soils List
- ☐ Other (Explain in Remarks)

Remarks: No hydric soil indicators.

WETLAND DETERMINATION

Hydrophytic Vegetation Present?	Yes	☐	No	☒
Wetland Hydrology Present?	Yes	☐	No	☒
Hydric Soils Present?	Yes	☐	No	☒

Is this Sampling Point Within a Wetland? Yes ☐ No ☒

Remarks: Disturbed habitat.

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site:	Salvation Army	Date:	20 December 2001
Applicant/Owner:	Salvation Army	County:	San Diego
Investigator:	Vanessa A. Lee and Brian D. Parker	State:	California

Do normal circumstances exist on the site?	☒ Yes	☐ No	Community ID:	NNG
Is the site significantly disturbed (Atypical Situation)?	☐ Yes	☒ No	Transect ID:	T 11, 80ft
Is the area a potential Problem Area? (If needed, explain on reverse.)	☐ Yes	☒ No	Plot ID:	DP 64A, PP 64A

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. *Raphanus sativus*	H	NI	9.		
2. *Bromus diandrus*	H	NI	10.		
3. *Galium angustifolium*	H	FAC	11.		
4. *Picris echioides*	H	NI	12.		
5. *Silybum marianum*	H	NI	13.		
6.			14.		
7.			15.		
8.			16.		

Percentage of Dominant Species that are OBL, FACW or FAC (excluding FAC-). 20%

Remarks: Hydrophytic vegetation criteria not satisfied.

HYDROLOGY

☒ Recorded Data (Described in Remarks):
- ☐ Stream, Lake, or Tide Gauge
- ☒ Aerial Photographs
- ☐ Other

☐ No Recorded Data Available

Field Observations:

Depth of Surface Water:	----	(in.)
Depth to free Water in Pit	----	(in.)
Depth of Saturated Soil:	----	(in.)

Wetland Hydrology Indicators:

Primary Indicators:
- ☐ Inundated
- ☐ Saturated in Upper 12 inches
- ☐ Water Marks
- ☐ Drift Lines
- ☐ Sediment Deposits
- ☐ Drainage Patterns in Wetlands

Secondary Indicators (2 or more required):
- ☐ Oxidized Root Channels in Upper 12 Inches
- ☐ Water-Stained Leaves
- ☐ Local Soil Survey Data
- ☐ FAC-Neutral Test
- ☐ Other (Explain in Remarks)

Remarks: No hydrology indicators.

SOILS

Map Unit Name
(Series and Phase): Cieneba rocky coarse sandy loam

Drainage Class: Excessively drained

Field Observations
Confirm Mapped Type? ☒ Yes ☐ No

Taxonomy (Subgroup): Typic Xerorthents

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle (Abundance/Contrast)	Texture, Concretions, Structure, etc.
0-6	---	10 YR 2/2	---	---	Silt Loam
6-14	---	10YR 4/3	---	---	Loam

Hydric Soil Indicators:

- ☐ Histosol
- ☐ Histic Epipedon
- ☐ Sulfidic Odor
- ☐ Aquic Moisture Regime
- ☐ Reducing Conditions
- ☐ Gleyed or Low-Chroma Colors
- ☐ Concretions
- ☐ High Organic Content in surface layer in Sandy Soils
- ☐ Organic Streaking in Sandy Soils
- ☐ Listed on Local Hydric Soils List
- ☐ Listed on National Hydric Soils List
- ☐ Other (Explain in Remarks)

Remarks: No hydric soil indicators.

WETLAND DETERMINATION

Hydrophytic Vegetation Present?	Yes	☐	No	☒
Wetland Hydrology Present?	Yes	☐	No	☒
Hydric Soils Present?	Yes	☐	No	☒

Is this Sampling Point Within a Wetland? Yes ☐ No ☒

Remarks: Non-native Grassland vegetation dominated by Radish. This is a potential wetland mitigation area adjacent to Southern Coast Live Oak Riparian Forest habitat.

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site:	Salvation Army	Date:	20 December 2001
Applicant/Owner:	Salvation Army	County:	San Diego
Investigator:	Vanessa A. Lee and Brian D. Parker	State:	California

Do normal circumstances exist on the site?	☒ Yes	☐ No	Community ID:	NNG
Is the site significantly disturbed (Atypical Situation)?	☐ Yes	☒ No	Transect ID:	T 11, 90ft
Is the area a potential Problem Area? (If needed, explain on reverse.)	☐ Yes	☒ No	Plot ID:	DP 65A, PP 65A

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. *Raphanus sativus*	H	NI	9.		
2. *Bromus diandrus*	H	NI	10.		
3.			11.		
4.			12.		
5.			13.		
6.			14.		
7.			15.		
8.			16.		

Percentage of Dominant Species that are OBL, FACW or FAC (excluding FAC-). 0%

Remarks: No hydrophytic vegetation present.

HYDROLOGY

☒ Recorded Data (Described in Remarks):
- ☐ Stream, Lake, or Tide Gauge
- ☒ Aerial Photographs
- ☐ Other

☐ No Recorded Data Available

Field Observations:

Depth of Surface Water:	----	(in.)
Depth to free Water in Pit	----	(in.)
Depth of Saturated Soil:	----	(in.)

Wetland Hydrology Indicators:

Primary Indicators:
- ☐ Inundated
- ☐ Saturated in Upper 12 inches
- ☐ Water Marks
- ☐ Drift Lines
- ☐ Sediment Deposits
- ☐ Drainage Patterns in Wetlands

Secondary Indicators (2 or more required):
- ☐ Oxidized Root Channels in Upper 12 Inches
- ☐ Water-Stained Leaves
- ☐ Local Soil Survey Data
- ☐ FAC-Neutral Test
- ☐ Other (Explain in Remarks)

Remarks: No hydrology indicators.

SOILS

Map Unit Name
(Series and Phase): Cieneba rocky coarse sandy loam

Drainage Class: Excessively drained

Field Observations
Confirm Mapped Type? ☒ Yes ☐ No

Taxonomy (Subgroup): Typic Xerorthents

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle (Abundance/Contrast)	Texture, Concretions, Structure, etc.
0-14	---	10YR 3/3	---	---	Loamy Sand
			---	---	

Hydric Soil Indicators:

- ☐ Histosol
- ☐ Histic Epipedon
- ☐ Sulfidic Odor
- ☐ Aquic Moisture Regime
- ☐ Reducing Conditions
- ☐ Gleyed or Low-Chroma Colors
- ☐ Concretions
- ☐ High Organic Content in surface layer in Sandy Soils
- ☐ Organic Streaking in Sandy Soils
- ☐ Listed on Local Hydric Soils List
- ☐ Listed on National Hydric Soils List
- ☐ Other (Explain in Remarks)

Remarks: No hydric soil indicators.

WETLAND DETERMINATION

Hydrophytic Vegetation Present?	Yes	☐	No	☒
Wetland Hydrology Present?	Yes	☐	No	☒
Hydric Soils Present?	Yes	☐	No	☒

Is this Sampling Point Within a Wetland? Yes ☐ No ☒

Remarks: Non-native Grassland vegetation dominated by Radish. This is a potential wetland mitigation area adjacent to Southern Coast Live Oak Riparian Forest habitat.

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site:	Salvation Army	Date:	20 December 2001
Applicant/Owner:	Salvation Army	County:	San Diego
Investigator:	Vanessa A. Lee and Brian D. Parker	State:	California

Do normal circumstances exist on the site?	☒ Yes	☐ No	Community ID:	NNG
Is the site significantly disturbed (Atypical Situation)?	☐ Yes	☒ No	Transect ID:	T 11, 100ft
Is the area a potential Problem Area? (If needed, explain on reverse.)	☐ Yes	☒ No	Plot ID:	DP 66A, PP 66A

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. *Bromus diandrus*	H	NI	9.		
2. *Eriogonum fasciculatum*	H	NI	10.		
3. *Amsinckia intermedia*	H	NI	11.		
4.			12.		
5.			13.		
6.			14.		
7.			15.		
8.			16.		

Percentage of Dominant Species that are OBL, FACW or FAC (excluding FAC-). 0%

Remarks: No hydrophytic vegetation present.

HYDROLOGY

☒ Recorded Data (Described in Remarks):
- ☐ Stream, Lake, or Tide Gauge
- ☒ Aerial Photographs
- ☐ Other

☐ No Recorded Data Available

Field Observations:

Depth of Surface Water:	----	(in.)
Depth to free Water in Pit	----	(in.)
Depth of Saturated Soil:	----	(in.)

Wetland Hydrology Indicators:

Primary Indicators:
- ☐ Inundated
- ☐ Saturated in Upper 12 inches
- ☐ Water Marks
- ☐ Drift Lines
- ☐ Sediment Deposits
- ☐ Drainage Patterns in Wetlands

Secondary Indicators (2 or more required):
- ☐ Oxidized Root Channels in Upper 12 Inches
- ☐ Water-Stained Leaves
- ☐ Local Soil Survey Data
- ☐ FAC-Neutral Test
- ☐ Other (Explain in Remarks)

Remarks: No hydrology indicators.

SOILS

Map Unit Name
(Series and Phase): Cieneba rocky coarse sandy loam

Drainage Class: Excessively drained

Field Observations
Confirm Mapped Type? ☒ Yes ☐ No

Taxonomy (Subgroup): Typic Xerorthents

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle (Abundance/Contrast)	Texture, Concretions, Structure, etc.
0-14	---	10YR 4/4	---	---	Loamy Sand

Hydric Soil Indicators:

- ☐ Histosol
- ☐ Histic Epipedon
- ☐ Sulfidic Odor
- ☐ Aquic Moisture Regime
- ☐ Reducing Conditions
- ☐ Gleyed or Low-Chroma Colors
- ☐ Concretions
- ☐ High Organic Content in surface layer in Sandy Soils
- ☐ Organic Streaking in Sandy Soils
- ☐ Listed on Local Hydric Soils List
- ☐ Listed on National Hydric Soils List
- ☐ Other (Explain in Remarks)

Remarks: No hydric soil indicators.

WETLAND DETERMINATION

Hydrophytic Vegetation Present? Yes ☐ No ☒

Wetland Hydrology Present? Yes ☐ No ☒

Hydric Soils Present? Yes ☐ No ☒

Is this Sampling Point Within a Wetland? Yes ☐ No ☒

Remarks: Non-native Grassland vegetation dominated by Radish. This is a potential wetland mitigation area adjacent to Southern Coast Live Oak Riparian Forest habitat.

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site:	Salvation Army	Date:	20 December 2001
Applicant/Owner:	Salvation Army	County:	San Diego
Investigator:	Vanessa A. Lee and Brian D. Parker	State:	California

Do normal circumstances exist on the site?	☒ Yes	☐ No	Community ID:	CLORF
Is the site significantly disturbed (Atypical Situation)?	☐ Yes	☒ No	Transect ID:	
Is the area a potential Problem Area? (If needed, explain on reverse.)	☐ Yes	☒ No	Plot ID:	DP 67A, PP 67A

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. *Artemisia douglasiana*	H	FACW	9.		
2. *Bromus diandrus*	H	NI	10.		
3.			11.		
4.			12.		
5.			13.		
6.			14.		
7.			15.		
8.			16.		

Percentage of Dominant Species that are OBL, FACW or FAC (excluding FAC-). 50%

Remarks: Hydrophytic vegetation criteria not satisfied. Area consists of patch of Mugwort beneath break in canopy of Southern Coast Live Oak Riparian Forest.

HYDROLOGY

☒ Recorded Data (Described in Remarks):
- ☐ Stream, Lake, or Tide Gauge
- ☒ Aerial Photographs
- ☐ Other

☐ No Recorded Data Available

Field Observations:

Depth of Surface Water:	----	(in.)
Depth to free Water in Pit	----	(in.)
Depth of Saturated Soil:	----	(in.)

Wetland Hydrology Indicators:

Primary Indicators:
- ☐ Inundated
- ☐ Saturated in Upper 12 inches
- ☐ Water Marks
- ☐ Drift Lines
- ☐ Sediment Deposits
- ☐ Drainage Patterns in Wetlands

Secondary Indicators (2 or more required):
- ☐ Oxidized Root Channels in Upper 12 Inches
- ☐ Water-Stained Leaves
- ☐ Local Soil Survey Data
- ☐ FAC-Neutral Test
- ☐ Other (Explain in Remarks)

Remarks: No hydrology indicators.

SOILS

Map Unit Name
(Series and Phase): Visalia sandy loam

Drainage Class: Moderately well drained

Field Observations
Confirm Mapped Type? ☒ Yes ☐ No

Taxonomy (Subgroup): Pachic Haploxerolls

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle (Abundance/Contrast)	Texture, Concretions, Structure, etc.
0-10	---	10YR 3/2	---	---	Sandy Loam

Hydric Soil Indicators:

- ☐ Histosol
- ☐ Histic Epipedon
- ☐ Sulfidic Odor
- ☐ Aquic Moisture Regime
- ☐ Reducing Conditions
- ☐ Gleyed or Low-Chroma Colors
- ☐ Concretions
- ☐ High Organic Content in surface layer in Sandy Soils
- ☐ Organic Streaking in Sandy Soils
- ☐ Listed on Local Hydric Soils List
- ☐ Listed on National Hydric Soils List
- ☐ Other (Explain in Remarks)

Remarks: No hydric soil indicators.

WETLAND DETERMINATION

Hydrophytic Vegetation Present?	Yes	☐	No	☒
Wetland Hydrology Present?	Yes	☐	No	☒
Hydric Soils Present?	Yes	☐	No	☒

Is this Sampling Point Within a Wetland? Yes ☐ No ☒

Remarks: This small area is included in the mapping of Southern Coast Live Oak Riparian Forest, and does not qualify as a wetland. However, the area is jurisdictional under CDFG as Adjacent Riparian habitat.

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site:	Salvation Army	Date:	20 December 2001
Applicant/Owner:	Salvation Army	County:	San Diego
Investigator:	Vanessa A. Lee and Brian D. Parker	State:	California

Do normal circumstances exist on the site?	☒ Yes	☐ No	Community ID:	CLORF
Is the site significantly disturbed (Atypical Situation)?	☐ Yes	☒ No	Transect ID:	
Is the area a potential Problem Area? (If needed, explain on reverse.)	☐ Yes	☒ No	Plot ID:	DP 68A, PP 68A

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. *Quercus agrifolia*	T	NI	9.		
2. *Bromus diandrus*	H	NI	10.		
3. *Platanus racemosa*	T	FACW	11.		
4. *Toxicodendron diversilobum*	H	NI	12.		
5.			13.		
6.			14.		
7.			15.		
8.			16.		

Percentage of Dominant Species that are OBL, FACW or FAC (excluding FAC-). 25%

Remarks: Hydrophytic vegetation criteria not satisfied. However, per County direction this grouping of Western Sycamores is considered County RPO wetlands.

HYDROLOGY

☒ Recorded Data (Described in Remarks):
- ☐ Stream, Lake, or Tide Gauge
- ☒ Aerial Photographs
- ☐ Other

☐ No Recorded Data Available

Field Observations:

Depth of Surface Water:	----	(in.)
Depth to free Water in Pit	----	(in.)
Depth of Saturated Soil:	----	(in.)

Wetland Hydrology Indicators:

Primary Indicators:
- ☐ Inundated
- ☐ Saturated in Upper 12 inches
- ☐ Water Marks
- ☐ Drift Lines
- ☐ Sediment Deposits
- ☐ Drainage Patterns in Wetlands

Secondary Indicators (2 or more required):
- ☐ Oxidized Root Channels in Upper 12 Inches
- ☐ Water-Stained Leaves
- ☐ Local Soil Survey Data
- ☐ FAC-Neutral Test
- ☐ Other (Explain in Remarks)

Remarks: No hydrology indicators.

SOILS

Map Unit Name
(Series and Phase): Visalia sandy loam

Drainage Class: Moderately well drained

Field Observations
Confirm Mapped Type? ☒ Yes ☐ No

Taxonomy (Subgroup): Pachic Haploxerolls

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle (Abundance/Contrast)	Texture, Concretions, Structure, etc.
0-10	---	10YR 3/2	---	---	Sandy Loam

Hydric Soil Indicators:

- ☐ Histosol
- ☐ Histic Epipedon
- ☐ Sulfidic Odor
- ☐ Aquic Moisture Regime
- ☐ Reducing Conditions
- ☐ Gleyed or Low-Chroma Colors
- ☐ Concretions
- ☐ High Organic Content in surface layer in Sandy Soils
- ☐ Organic Streaking in Sandy Soils
- ☐ Listed on Local Hydric Soils List
- ☐ Listed on National Hydric Soils List
- ☐ Other (Explain in Remarks)

Remarks: Soil test pit not performed due to abundance of Poison Oak. Test pit information comes from immediately adjacent area.

WETLAND DETERMINATION

Hydrophytic Vegetation Present?	Yes	☐	No	☒
Wetland Hydrology Present?	Yes	☐	No	☒
Hydric Soils Present?	Yes	☐	No	☒

Is this Sampling Point Within a Wetland? Yes ☐ No ☒

Remarks: This area of Southern Coast Live Oak Riparian Forest does not qualify as an ACOE wetland. However, the area is jurisdictional under the County and CDFG as Adjacent Riparian habitat.

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site:	Salvation Army	Date:	20 December 2001
Applicant/Owner:	Salvation Army	County:	San Diego
Investigator:	Vanessa A. Lee and Brian D. Parker	State:	California

Do normal circumstances exist on the site?	☒ Yes	☐ No	Community ID:	NNG
Is the site significantly disturbed (Atypical Situation)?	☐ Yes	☒ No	Transect ID:	
Is the area a potential Problem Area? (If needed, explain on reverse.)	☐ Yes	☒ No	Plot ID:	DP 69A, PP 69A

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. *Raphanus sativus*	H	NI	9.		
2.			10.		
3.			11.		
4.			12.		
5.			13.		
6.			14.		
7.			15.		
8.			16.		

Percentage of Dominant Species that are OBL, FACW or FAC (excluding FAC-). 0%

Remarks: No hydrophytic vegetation present.

HYDROLOGY

☒ Recorded Data (Described in Remarks):
- ☐ Stream, Lake, or Tide Gauge
- ☒ Aerial Photographs
- ☐ Other

☐ No Recorded Data Available

Field Observations:

Depth of Surface Water:	----	(in.)
Depth to free Water in Pit	----	(in.)
Depth of Saturated Soil:	----	(in.)

Wetland Hydrology Indicators:

Primary Indicators:
- ☐ Inundated
- ☐ Saturated in Upper 12 inches
- ☐ Water Marks
- ☐ Drift Lines
- ☐ Sediment Deposits
- ☐ Drainage Patterns in Wetlands

Secondary Indicators (2 or more required):
- ☐ Oxidized Root Channels in Upper 12 Inches
- ☐ Water-Stained Leaves
- ☐ Local Soil Survey Data
- ☐ FAC-Neutral Test
- ☐ Other (Explain in Remarks)

Remarks: No hydrology indicators.

SOILS

Map Unit Name
(Series and Phase): Cieneba rocky coarse sandy loam

Drainage Class: Excessively drained

Field Observations
Confirm Mapped Type? ☒ Yes ☐ No

Taxonomy (Subgroup): Typic Xerorthents

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle (Abundance/Contrast)	Texture, Concretions, Structure, etc.
0-14	---	10 YR 3/2	---	---	Sandy Loam

Hydric Soil Indicators:

- ☐ Histosol
- ☐ Histic Epipedon
- ☐ Sulfidic Odor
- ☐ Aquic Moisture Regime
- ☐ Reducing Conditions
- ☐ Gleyed or Low-Chroma Colors
- ☐ Concretions
- ☐ High Organic Content in surface layer in Sandy Soils
- ☐ Organic Streaking in Sandy Soils
- ☐ Listed on Local Hydric Soils List
- ☐ Listed on National Hydric Soils List
- ☐ Other (Explain in Remarks)

Remarks: No hydric soil indicators.

WETLAND DETERMINATION

Hydrophytic Vegetation Present?	Yes	☐	No	☒
Wetland Hydrology Present?	Yes	☐	No	☒
Hydric Soils Present?	Yes	☐	No	☒

Is this Sampling Point Within a Wetland? Yes ☐ No ☒

Remarks: Non-native Grassland vegetation dominated by Radish. This is a potential wetland mitigation area adjacent to Southern Coast Live Oak Riparian Forest habitat.

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site:	Salvation Army	Date:	20 December 2001
Applicant/Owner:	Salvation Army	County:	San Diego
Investigator:	Vanessa A. Lee and Brian D. Parker	State:	California

Do normal circumstances exist on the site?	☒ Yes	☐ No	Community ID:	DIST
Is the site significantly disturbed (Atypical Situation)?	☐ Yes	☒ No	Transect ID:	T12 , 0ft
Is the area a potential Problem Area? (If needed, explain on reverse.)	☐ Yes	☒ No	Plot ID:	DP 70A, PP 70A

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. *Silybum marianum*	H	NI	9.		
2.			10.		
3.			11.		
4.			12.		
5.			13.		
6.			14.		
7.			15.		
8.			16.		

Percentage of Dominant Species that are OBL, FACW or FAC (excluding FAC-). 0%

Remarks: No hydrophytic vegetation present.

HYDROLOGY

☒ Recorded Data (Described in Remarks):
- ☐ Stream, Lake, or Tide Gauge
- ☒ Aerial Photographs
- ☐ Other

☐ No Recorded Data Available

Field Observations:

Depth of Surface Water:	----	(in.)
Depth to free Water in Pit	----	(in.)
Depth of Saturated Soil:	----	(in.)

Wetland Hydrology Indicators:

Primary Indicators:
- ☐ Inundated
- ☐ Saturated in Upper 12 inches
- ☐ Water Marks
- ☐ Drift Lines
- ☐ Sediment Deposits
- ☐ Drainage Patterns in Wetlands

Secondary Indicators (2 or more required):
- ☐ Oxidized Root Channels in Upper 12 Inches
- ☐ Water-Stained Leaves
- ☐ Local Soil Survey Data
- ☐ FAC-Neutral Test
- ☐ Other (Explain in Remarks)

Remarks: No hydrology indicators.

SOILS

Map Unit Name
(Series and Phase): Cieneba rocky coarse sandy loam

Drainage Class: Excessively drained

Field Observations
Confirm Mapped Type? ☒ Yes ☐ No

Taxonomy (Subgroup): Typic Xerorthents

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle (Abundance/Contrast)	Texture, Concretions, Structure, etc.
0-12	---	7.5YR 3/2	---	---	Loam

Hydric Soil Indicators:

- ☐ Histosol
- ☐ Histic Epipedon
- ☐ Sulfidic Odor
- ☐ Aquic Moisture Regime
- ☐ Reducing Conditions
- ☐ Gleyed or Low-Chroma Colors
- ☐ Concretions
- ☐ High Organic Content in surface layer in Sandy Soils
- ☐ Organic Streaking in Sandy Soils
- ☐ Listed on Local Hydric Soils List
- ☐ Listed on National Hydric Soils List
- ☐ Other (Explain in Remarks)

Remarks: No hydric soil indicators.

WETLAND DETERMINATION

Hydrophytic Vegetation Present?	Yes	☐	No	☒
Wetland Hydrology Present?	Yes	☐	No	☒
Hydric Soils Present?	Yes	☐	No	☒

Is this Sampling Point Within a Wetland? Yes ☐ No ☒

Remarks: Non-native Grassland vegetation dominated by Milk Thistle. This is a potential wetland mitigation area adjacent to Southern Coast Live Oak Riparian Forest habitat.

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site:	Salvation Army	Date:	26 December 2001
Applicant/Owner:	Salvation Army	County:	San Diego
Investigator:	Vanessa A. Lee and Kara A. Altvater	State:	California

Do normal circumstances exist on the site?	☒ Yes	☐ No	Community ID:	NNG
Is the site significantly disturbed (Atypical Situation)?	☐ Yes	☒ No	Transect ID:	T 12, 10ft
Is the area a potential Problem Area? (If needed, explain on reverse.)	☐ Yes	☒ No	Plot ID:	DP 71A, PP 71A

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. *Silybum marianum*	H	NI	9.		
2.			10.		
3.			11.		
4.			12.		
5.			13.		
6.			14.		
7.			15.		
8.			16.		

Percentage of Dominant Species that are OBL, FACW or FAC (excluding FAC-). 0%

Remarks: No hydrophytic vegetation present.

HYDROLOGY

☒ Recorded Data (Described in Remarks):
- ☐ Stream, Lake, or Tide Gauge
- ☒ Aerial Photographs
- ☐ Other

☐ No Recorded Data Available

Field Observations:

Depth of Surface Water:	----	(in.)
Depth to free Water in Pit	----	(in.)
Depth of Saturated Soil:	----	(in.)

Wetland Hydrology Indicators:

Primary Indicators:
- ☐ Inundated
- ☐ Saturated in Upper 12 inches
- ☐ Water Marks
- ☐ Drift Lines
- ☐ Sediment Deposits
- ☐ Drainage Patterns in Wetlands

Secondary Indicators (2 or more required):
- ☐ Oxidized Root Channels in Upper 12 Inches
- ☐ Water-Stained Leaves
- ☐ Local Soil Survey Data
- ☐ FAC-Neutral Test
- ☐ Other (Explain in Remarks)

Remarks: No hydrology indicators.

SOILS

Map Unit Name
(Series and Phase): Cieneba rocky coarse sandy loam

Drainage Class: Excessively drained

Field Observations
Confirm Mapped Type? ☒ Yes ☐ No

Taxonomy (Subgroup): Typic Xerorthents

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle (Abundance/Contrast)	Texture, Concretions, Structure, etc.
0-14	---	7.5YR 3/2	---	---	Loam

Hydric Soil Indicators:

- ☐ Histosol
- ☐ Histic Epipedon
- ☐ Sulfidic Odor
- ☐ Aquic Moisture Regime
- ☐ Reducing Conditions
- ☐ Gleyed or Low-Chroma Colors
- ☐ Concretions
- ☐ High Organic Content in surface layer in Sandy Soils
- ☐ Organic Streaking in Sandy Soils
- ☐ Listed on Local Hydric Soils List
- ☐ Listed on National Hydric Soils List
- ☐ Other (Explain in Remarks)

Remarks: No hydric soil indicators.

WETLAND DETERMINATION

Hydrophytic Vegetation Present?	Yes	☐	No	☒
Wetland Hydrology Present?	Yes	☐	No	☒
Hydric Soils Present?	Yes	☐	No	☒

Is this Sampling Point Within a Wetland? Yes ☐ No ☒

Remarks: Non-native Grassland vegetation dominated by Milk Thistle. This is a potential wetland mitigation area adjacent to Southern Coast Live Oak Riparian Forest habitat.

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site:	Salvation Army	Date:	26 December 2001
Applicant/Owner:	Salvation Army	County:	San Diego
Investigator:	Vanessa A. Lee and Kara A. Altvater	State:	California

Do normal circumstances exist on the site?	☒ Yes	☐ No	Community ID:	NNG
Is the site significantly disturbed (Atypical Situation)?	☐ Yes	☒ No	Transect ID:	T 12, 20ft
Is the area a potential Problem Area? (If needed, explain on reverse.)	☐ Yes	☒ No	Plot ID:	DP 72A, PP 72A

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. *Silybum marianum*	H	NI	9.		
2.			10.		
3.			11.		
4.			12.		
5.			13.		
6.			14.		
7.			15.		
8.			16.		

Percentage of Dominant Species that are OBL, FACW or FAC (excluding FAC-). 0%

Remarks: No hydrophytic vegetation present.

HYDROLOGY

☒ Recorded Data (Described in Remarks):
- ☐ Stream, Lake, or Tide Gauge
- ☒ Aerial Photographs
- ☐ Other

☐ No Recorded Data Available

Field Observations:

Depth of Surface Water:	----	(in.)
Depth to free Water in Pit	----	(in.)
Depth of Saturated Soil:	----	(in.)

Wetland Hydrology Indicators:

Primary Indicators:
- ☐ Inundated
- ☐ Saturated in Upper 12 inches
- ☐ Water Marks
- ☐ Drift Lines
- ☐ Sediment Deposits
- ☐ Drainage Patterns in Wetlands

Secondary Indicators (2 or more required):
- ☐ Oxidized Root Channels in Upper 12 Inches
- ☐ Water-Stained Leaves
- ☐ Local Soil Survey Data
- ☐ FAC-Neutral Test
- ☐ Other (Explain in Remarks)

Remarks: No hydrology indicators.

SOILS

Map Unit Name
(Series and Phase): Cieneba rocky coarse sandy loam

Drainage Class: Excessively drained

Field Observations
Confirm Mapped Type? ☒ Yes ☐ No

Taxonomy (Subgroup): Typic Xerorthents

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle (Abundance/Contrast)	Texture, Concretions, Structure, etc.
0-14	---	7.5YR 3/2	---	---	Loam

Hydric Soil Indicators:

- ☐ Histosol
- ☐ Histic Epipedon
- ☐ Sulfidic Odor
- ☐ Aquic Moisture Regime
- ☐ Reducing Conditions
- ☐ Gleyed or Low-Chroma Colors
- ☐ Concretions
- ☐ High Organic Content in surface layer in Sandy Soils
- ☐ Organic Streaking in Sandy Soils
- ☐ Listed on Local Hydric Soils List
- ☐ Listed on National Hydric Soils List
- ☐ Other (Explain in Remarks)

Remarks: No hydric soil indicators.

WETLAND DETERMINATION

Hydrophytic Vegetation Present?	Yes	☐	No	☒
Wetland Hydrology Present?	Yes	☐	No	☒
Hydric Soils Present?	Yes	☐	No	☒

Is this Sampling Point Within a Wetland? Yes ☐ No ☒

Remarks: Non-native Grassland vegetation dominated by Milk Thistle. This is a potential wetland mitigation area adjacent to Southern Coast Live Oak Riparian Forest habitat.

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site:	Salvation Army	Date:	26 December 2001
Applicant/Owner:	Salvation Army	County:	San Diego
Investigator:	Vanessa A. Lee and Kara A. Altvater	State:	California

Do normal circumstances exist on the site?	☒ Yes	☐ No	Community ID:	NNG
Is the site significantly disturbed (Atypical Situation)?	☐ Yes	☒ No	Transect ID:	T 12, 30ft
Is the area a potential Problem Area? (If needed, explain on reverse.)	☐ Yes	☒ No	Plot ID:	DP 73A, PP 73A

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. *Silybum marianum*	H	NI	9.		
2. *Picris echioides*	H	FAC	10.		
3.			11.		
4.			12.		
5.			13.		
6.			14.		
7.			15.		
8.			16.		

Percentage of Dominant Species that are OBL, FACW or FAC (excluding FAC-). 50%

Remarks: Hydrophytic vegetation criteria not satisfied.

HYDROLOGY

☒ Recorded Data (Described in Remarks):
- ☐ Stream, Lake, or Tide Gauge
- ☒ Aerial Photographs
- ☐ Other

☐ No Recorded Data Available

Field Observations:

Depth of Surface Water:	----	(in.)
Depth to free Water in Pit	----	(in.)
Depth of Saturated Soil:	----	(in.)

Wetland Hydrology Indicators:

Primary Indicators:
- ☐ Inundated
- ☐ Saturated in Upper 12 inches
- ☐ Water Marks
- ☐ Drift Lines
- ☐ Sediment Deposits
- ☐ Drainage Patterns in Wetlands

Secondary Indicators (2 or more required):
- ☐ Oxidized Root Channels in Upper 12 Inches
- ☐ Water-Stained Leaves
- ☐ Local Soil Survey Data
- ☐ FAC-Neutral Test
- ☐ Other (Explain in Remarks)

Remarks: No hydrology indicators.

SOILS

Map Unit Name
(Series and Phase): Cieneba rocky coarse sandy loam

Drainage Class: Excessively drained

Field Observations
Confirm Mapped Type? ☒ Yes ☐ No

Taxonomy (Subgroup): Typic Xerorthents

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle (Abundance/Contrast)	Texture, Concretions, Structure, etc.
0-14	---	7.5YR 3/2	---	---	Loam

Hydric Soil Indicators:

- ☐ Histosol
- ☐ Histic Epipedon
- ☐ Sulfidic Odor
- ☐ Aquic Moisture Regime
- ☐ Reducing Conditions
- ☐ Gleyed or Low-Chroma Colors
- ☐ Concretions
- ☐ High Organic Content in surface layer in Sandy Soils
- ☐ Organic Streaking in Sandy Soils
- ☐ Listed on Local Hydric Soils List
- ☐ Listed on National Hydric Soils List
- ☐ Other (Explain in Remarks)

Remarks: No hydric soil indicators.

WETLAND DETERMINATION

Hydrophytic Vegetation Present?	Yes	☐	No	☒
Wetland Hydrology Present?	Yes	☐	No	☒
Hydric Soils Present?	Yes	☐	No	☒

Is this Sampling Point Within a Wetland? Yes ☐ No ☒

Remarks: Non-native Grassland vegetation dominated by Milk Thistle. This is a potential wetland mitigation area adjacent to Southern Coast Live Oak Riparian Forest habitat. This transect continues in upland vegetation and heads upslope.

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site:	Salvation Army	Date:	26 December 2001
Applicant/Owner:	Salvation Army	County:	San Diego
Investigator:	Vanessa A. Lee and Kara A. Altvater	State:	California

Do normal circumstances exist on the site?	☒ Yes	☐ No	Community ID:	CLORF
Is the site significantly disturbed (Atypical Situation)?	☐ Yes	☒ No	Transect ID:	T 13, 0ft
Is the area a potential Problem Area? (If needed, explain on reverse.)	☐ Yes	☒ No	Plot ID:	DP 74A, PP 74A

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. *Silybum marianum*	H	NI	9.		
2. *Platanus racemosa*	T	FACW	10.		
3. *Quercus agrifolia*	T	NI	11.		
4. *Bromus diandrus*	H	NI	12.		
5. *Raphanus sativus*	H	NI	13.		
6.			14.		
7.			15.		
8.			16.		

Percentage of Dominant Species that are OBL, FACW or FAC (excluding FAC-). 20%

Remarks: Hydrophytic vegetation criteria not satisfied. Only one Sycamore tree present.

HYDROLOGY

☒ Recorded Data (Described in Remarks):
- ☐ Stream, Lake, or Tide Gauge
- ☒ Aerial Photographs
- ☐ Other

☐ No Recorded Data Available

Field Observations:

Depth of Surface Water:	----	(in.)
Depth to free Water in Pit	----	(in.)
Depth of Saturated Soil:	----	(in.)

Wetland Hydrology Indicators:

Primary Indicators:
- ☐ Inundated
- ☐ Saturated in Upper 12 inches
- ☐ Water Marks
- ☐ Drift Lines
- ☐ Sediment Deposits
- ☐ Drainage Patterns in Wetlands

Secondary Indicators (2 or more required):
- ☐ Oxidized Root Channels in Upper 12 Inches
- ☐ Water-Stained Leaves
- ☐ Local Soil Survey Data
- ☐ FAC-Neutral Test
- ☐ Other (Explain in Remarks)

Remarks: No hydrology indicators.

SOILS

Map Unit Name
(Series and Phase): Cieneba rocky coarse sandy loam

Drainage Class: Excessively drained

Field Observations
Confirm Mapped Type? ☒ Yes ☐ No

Taxonomy (Subgroup): Typic Xerorthents

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle (Abundance/Contrast)	Texture, Concretions, Structure, etc.
0-14	---	7.5YR 3/2	---	---	Loam

Hydric Soil Indicators:

- ☐ Histosol
- ☐ Histic Epipedon
- ☐ Sulfidic Odor
- ☐ Aquic Moisture Regime
- ☐ Reducing Conditions
- ☐ Gleyed or Low-Chroma Colors
- ☐ Concretions
- ☐ High Organic Content in surface layer in Sandy Soils
- ☐ Organic Streaking in Sandy Soils
- ☐ Listed on Local Hydric Soils List
- ☐ Listed on National Hydric Soils List
- ☐ Other (Explain in Remarks)

Remarks: No hydric soil indicators.

WETLAND DETERMINATION

Hydrophytic Vegetation Present?	Yes	☐	No	☒
Wetland Hydrology Present?	Yes	☐	No	☒
Hydric Soils Present?	Yes	☐	No	☒

Is this Sampling Point Within a Wetland? Yes ☐ No ☒

Remarks: This area of Southern Coast Live Oak Riparian Forest does not qualify as an ACOE wetland or a County RPO wetland. However, the area is jurisdictional under CDFG as Adjacent Riparian habitat.

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site:	Salvation Army	Date:	26 December 2001
Applicant/Owner:	Salvation Army	County:	San Diego
Investigator:	Vanessa A. Lee and Kara A. Altvater	State:	California

Do normal circumstances exist on the site?	☒ Yes	☐ No	Community ID:	CLORF
Is the site significantly disturbed (Atypical Situation)?	☐ Yes	☒ No	Transect ID:	T 13, 10ft
Is the area a potential Problem Area? (If needed, explain on reverse.)	☐ Yes	☒ No	Plot ID:	DP 75A, PP 75A

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. *Silybum marianum*	H	NI	9.		
2. *Platanus racemosa*	T	FACW	10.		
3. *Quercus agrifolia*	T	NI	11.		
4. *Raphanus sativus*	H	NI	12.		
5.			13.		
6.			14.		
7.			15.		
8.			16.		

Percentage of Dominant Species that are OBL, FACW or FAC (excluding FAC-). 25%

Remarks: Hydrophytic vegetation criteria not satisfied.

HYDROLOGY

☒ Recorded Data (Described in Remarks):
- ☐ Stream, Lake, or Tide Gauge
- ☒ Aerial Photographs
- ☐ Other

☐ No Recorded Data Available

Field Observations:

Depth of Surface Water:	----	(in.)
Depth to free Water in Pit	----	(in.)
Depth of Saturated Soil:	----	(in.)

Wetland Hydrology Indicators:

Primary Indicators:
- ☐ Inundated
- ☐ Saturated in Upper 12 inches
- ☐ Water Marks
- ☐ Drift Lines
- ☐ Sediment Deposits
- ☐ Drainage Patterns in Wetlands

Secondary Indicators (2 or more required):
- ☐ Oxidized Root Channels in Upper 12 Inches
- ☐ Water-Stained Leaves
- ☐ Local Soil Survey Data
- ☐ FAC-Neutral Test
- ☐ Other (Explain in Remarks)

Remarks: No hydrology indicators.

SOILS

Map Unit Name
(Series and Phase): Cieneba rocky coarse sandy loam

Drainage Class: Excessively drained

Field Observations
Confirm Mapped Type? ☒ Yes ☐ No

Taxonomy (Subgroup): Typic Xerorthents

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle (Abundance/Contrast)	Texture, Concretions, Structure, etc.
0-12	---	7.5YR 4/2	---	---	loam

Hydric Soil Indicators:

- ☐ Histosol
- ☐ Histic Epipedon
- ☐ Sulfidic Odor
- ☐ Aquic Moisture Regime
- ☐ Reducing Conditions
- ☐ Gleyed or Low-Chroma Colors
- ☐ Concretions
- ☐ High Organic Content in surface layer in Sandy Soils
- ☐ Organic Streaking in Sandy Soils
- ☐ Listed on Local Hydric Soils List
- ☐ Listed on National Hydric Soils List
- ☐ Other (Explain in Remarks)

Remarks: No hydric soil indicators.

WETLAND DETERMINATION

Hydrophytic Vegetation Present?	Yes	☐	No	☒
Wetland Hydrology Present?	Yes	☐	No	☒
Hydric Soils Present?	Yes	☐	No	☒

Is this Sampling Point Within a Wetland? Yes ☐ No ☒

Remarks: Data point on edge of Coast Live Oak Riparian Forest canopy. This area does not qualify as a wetland. However, the area is jurisdictional under CDFG as Adjacent Riparian habitat.

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site:	Salvation Army	Date:	26 December 2001
Applicant/Owner:	Salvation Army	County:	San Diego
Investigator:	Vanessa A. Lee and Kara A. Altvater	State:	California

Do normal circumstances exist on the site?	☒ Yes	☐ No	Community ID:	NNG
Is the site significantly disturbed (Atypical Situation)?	☐ Yes	☒ No	Transect ID:	T 13, 20ft
Is the area a potential Problem Area? (If needed, explain on reverse.)	☐ Yes	☒ No	Plot ID:	DP 76A, PP 76A

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. *Silybum marianum*	H	NI	9.		
2. *Raphanus sativus*	H	NI	10.		
3.			11.		
4.			12.		
5.			13.		
6.			14.		
7.			15.		
8.			16.		

Percentage of Dominant Species that are OBL, FACW or FAC (excluding FAC-). 0%

Remarks: No hydrophytic vegetation present.

HYDROLOGY

☒ Recorded Data (Described in Remarks):
- ☐ Stream, Lake, or Tide Gauge
- ☒ Aerial Photographs
- ☐ Other

☐ No Recorded Data Available

Field Observations:

Depth of Surface Water:	----	(in.)
Depth to free Water in Pit	----	(in.)
Depth of Saturated Soil:	----	(in.)

Wetland Hydrology Indicators:

Primary Indicators:
- ☐ Inundated
- ☐ Saturated in Upper 12 inches
- ☐ Water Marks
- ☐ Drift Lines
- ☐ Sediment Deposits
- ☐ Drainage Patterns in Wetlands

Secondary Indicators (2 or more required):
- ☐ Oxidized Root Channels in Upper 12 Inches
- ☐ Water-Stained Leaves
- ☐ Local Soil Survey Data
- ☐ FAC-Neutral Test
- ☐ Other (Explain in Remarks)

Remarks: No hydrology indicators.

SOILS

Map Unit Name
(Series and Phase): Cieneba rocky coarse sandy loam

Drainage Class: Excessively drained

Field Observations
Confirm Mapped Type? ☒ Yes ☐ No

Taxonomy (Subgroup): Typic Xerorthents

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle (Abundance/Contrast)	Texture, Concretions, Structure, etc.
0-14	---	7.5YR 3/2	---	---	Loam

Hydric Soil Indicators:

- ☐ Histosol
- ☐ Histic Epipedon
- ☐ Sulfidic Odor
- ☐ Aquic Moisture Regime
- ☐ Reducing Conditions
- ☐ Gleyed or Low-Chroma Colors
- ☐ Concretions
- ☐ High Organic Content in surface layer in Sandy Soils
- ☐ Organic Streaking in Sandy Soils
- ☐ Listed on Local Hydric Soils List
- ☐ Listed on National Hydric Soils List
- ☐ Other (Explain in Remarks)

Remarks: No hydric soil indicators.

WETLAND DETERMINATION

Hydrophytic Vegetation Present?	Yes	☐	No	☒
Wetland Hydrology Present?	Yes	☐	No	☒
Hydric Soils Present?	Yes	☐	No	☒

Is this Sampling Point Within a Wetland? Yes ☐ No ☒

Remarks: Non-native Grassland vegetation dominated by Radish and Milk Thistle. This is a potential wetland mitigation area adjacent to Southern Coast Live Oak Riparian Forest habitat.

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site:	Salvation Army	Date:	26 December 2001
Applicant/Owner:	Salvation Army	County:	San Diego
Investigator:	Vanessa A. Lee and Kara A. Altvater	State:	California

Do normal circumstances exist on the site?	☒ Yes	☐ No	Community ID:	CLORF
Is the site significantly disturbed (Atypical Situation)?	☐ Yes	☒ No	Transect ID:	T 13, 30ft
Is the area a potential Problem Area? (If needed, explain on reverse.)	☐ Yes	☒ No	Plot ID:	DP 77A, PP 77A

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. *Silybum marianum*	H	NI	9.		
2. *Raphanus sativus*	H	NI	10.		
3. *Quercus agrifolia*	T	NI	11.		
4.			12.		
5.			13.		
6.			14.		
7.			15.		
8.			16.		

Percentage of Dominant Species that are OBL, FACW or FAC (excluding FAC-). 0%

Remarks: Non-native Grassland vegetation under oak canopy. No hydrophytic vegetation present.

HYDROLOGY

☒ Recorded Data (Described in Remarks):
- ☐ Stream, Lake, or Tide Gauge
- ☒ Aerial Photographs
- ☐ Other

☐ No Recorded Data Available

Field Observations:

Depth of Surface Water:	----	(in.)
Depth to free Water in Pit	----	(in.)
Depth of Saturated Soil:	----	(in.)

Wetland Hydrology Indicators:

Primary Indicators:
- ☐ Inundated
- ☐ Saturated in Upper 12 inches
- ☐ Water Marks
- ☐ Drift Lines
- ☐ Sediment Deposits
- ☐ Drainage Patterns in Wetlands

Secondary Indicators (2 or more required):
- ☐ Oxidized Root Channels in Upper 12 Inches
- ☐ Water-Stained Leaves
- ☐ Local Soil Survey Data
- ☐ FAC-Neutral Test
- ☐ Other (Explain in Remarks)

Remarks: No hydrology indicators.

SOILS

Map Unit Name
(Series and Phase): Cieneba rocky coarse sandy loam

Drainage Class: Excessively drained

Field Observations
Confirm Mapped Type? ☒ Yes ☐ No

Taxonomy (Subgroup): Typic Xerorthents

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle (Abundance/Contrast)	Texture, Concretions, Structure, etc.
0-14	---	7.5YR 3/2	---	---	Loam

Hydric Soil Indicators:

- ☐ Histosol
- ☐ Histic Epipedon
- ☐ Sulfidic Odor
- ☐ Aquic Moisture Regime
- ☐ Reducing Conditions
- ☐ Gleyed or Low-Chroma Colors
- ☐ Concretions
- ☐ High Organic Content in surface layer in Sandy Soils
- ☐ Organic Streaking in Sandy Soils
- ☐ Listed on Local Hydric Soils List
- ☐ Listed on National Hydric Soils List
- ☐ Other (Explain in Remarks)

Remarks: No hydric soil indicators.

WETLAND DETERMINATION

Hydrophytic Vegetation Present?	Yes	☐	No	☒
Wetland Hydrology Present?	Yes	☐	No	☒
Hydric Soils Present?	Yes	☐	No	☒

Is this Sampling Point Within a Wetland? Yes ☐ No ☒

Remarks: This area of Southern Coast Live Oak Riparian Forest does not qualify as a wetland. However, the area is jurisdictional under CDFG as Adjacent Riparian habitat.

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site:	Salvation Army	Date:	26 December 2001
Applicant/Owner:	Salvation Army	County:	San Diego
Investigator:	Vanessa A. Lee and Kara A. Altvater	State:	California

Do normal circumstances exist on the site?	☒ Yes	☐ No	Community ID:	CLORF
Is the site significantly disturbed (Atypical Situation)?	☐ Yes	☒ No	Transect ID:	T 13, 40ft
Is the area a potential Problem Area? (If needed, explain on reverse.)	☐ Yes	☒ No	Plot ID:	DP 78A, PP 78A

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. *Silybum marianum*	H	NI	9.		
2. *Raphanus sativus*	H	NI	10.		
3. *Quercus agrifolia*	T	NI	11.		
4.			12.		
5.			13.		
6.			14.		
7.			15.		
8.			16.		

Percentage of Dominant Species that are OBL, FACW or FAC (excluding FAC-). 0%

Remarks: Non-native Grassland vegetation under oak canopy. No hydrophytic vegetation present.

HYDROLOGY

☒ Recorded Data (Described in Remarks):
- ☐ Stream, Lake, or Tide Gauge
- ☒ Aerial Photographs
- ☐ Other

☐ No Recorded Data Available

Field Observations:

Depth of Surface Water:	----	(in.)
Depth to free Water in Pit	----	(in.)
Depth of Saturated Soil:	----	(in.)

Wetland Hydrology Indicators:

Primary Indicators:
- ☐ Inundated
- ☐ Saturated in Upper 12 inches
- ☐ Water Marks
- ☐ Drift Lines
- ☐ Sediment Deposits
- ☐ Drainage Patterns in Wetlands

Secondary Indicators (2 or more required):
- ☐ Oxidized Root Channels in Upper 12 Inches
- ☐ Water-Stained Leaves
- ☐ Local Soil Survey Data
- ☐ FAC-Neutral Test
- ☐ Other (Explain in Remarks)

Remarks: No hydrology indicators.

SOILS

Map Unit Name
(Series and Phase): Cieneba rocky coarse sandy loam

Drainage Class: Excessively drained

Field Observations
Confirm Mapped Type? ☒ Yes ☐ No

Taxonomy (Subgroup): Typic Xerorthents

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle (Abundance/Contrast)	Texture, Concretions, Structure, etc.
0-13	---	7.5YR 3/2	---	---	Loam
13-16	---	10YR 4/3	---	---	Loam

Hydric Soil Indicators:

- ☐ Histosol
- ☐ Histic Epipedon
- ☐ Sulfidic Odor
- ☐ Aquic Moisture Regime
- ☐ Reducing Conditions
- ☐ Gleyed or Low-Chroma Colors
- ☐ Concretions
- ☐ High Organic Content in surface layer in Sandy Soils
- ☐ Organic Streaking in Sandy Soils
- ☐ Listed on Local Hydric Soils List
- ☐ Listed on National Hydric Soils List
- ☐ Other (Explain in Remarks)

Remarks: No hydric soil indicators.

WETLAND DETERMINATION

Hydrophytic Vegetation Present?	Yes	☐	No	☒
Wetland Hydrology Present?	Yes	☐	No	☒
Hydric Soils Present?	Yes	☐	No	☒

Is this Sampling Point Within a Wetland? Yes ☐ No ☒

Remarks: This area of Southern Coast Live Oak Riparian Forest does not qualify as a wetland. However, the area is jurisdictional under CDFG as Adjacent Riparian habitat.

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site:	Salvation Army	Date:	26 December 2001
Applicant/Owner:	Salvation Army	County:	San Diego
Investigator:	Vanessa A. Lee and Kara A. Altvater	State:	California

Do normal circumstances exist on the site?	☒ Yes	☐ No	Community ID:	CLORF
Is the site significantly disturbed (Atypical Situation)?	☐ Yes	☒ No	Transect ID:	T 13, 50ft
Is the area a potential Problem Area? (If needed, explain on reverse.)	☐ Yes	☒ No	Plot ID:	DP 79A, PP 79A

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. *Silybum marianum*	H	NI	9.		
2. *Raphanus sativus*	H	NI	10.		
3. *Quercus agrifolia*	T	NI	11.		
4.			12.		
5.			13.		
6.			14.		
7.			15.		
8.			16.		

Percentage of Dominant Species that are OBL, FACW or FAC (excluding FAC-). 0%

Remarks: Non-native Grassland vegetation under oak canopy. No hydrophytic vegetation present.

HYDROLOGY

☒ Recorded Data (Described in Remarks):
- ☐ Stream, Lake, or Tide Gauge
- ☒ Aerial Photographs
- ☐ Other

☐ No Recorded Data Available

Field Observations:

Depth of Surface Water:	----	(in.)
Depth to free Water in Pit	----	(in.)
Depth of Saturated Soil:	----	(in.)

Wetland Hydrology Indicators:

Primary Indicators:
- ☐ Inundated
- ☐ Saturated in Upper 12 inches
- ☐ Water Marks
- ☐ Drift Lines
- ☐ Sediment Deposits
- ☐ Drainage Patterns in Wetlands

Secondary Indicators (2 or more required):
- ☐ Oxidized Root Channels in Upper 12 Inches
- ☐ Water-Stained Leaves
- ☐ Local Soil Survey Data
- ☐ FAC-Neutral Test
- ☐ Other (Explain in Remarks)

Remarks: No hydrology indicators.

SOILS

Map Unit Name
(Series and Phase): Cieneba rocky coarse sandy loam

Drainage Class: Excessively drained

Field Observations
Confirm Mapped Type? ☒ Yes ☐ No

Taxonomy (Subgroup): Typic Xerorthents

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle (Abundance/Contrast)	Texture, Concretions, Structure, etc.
0-13	---	7.5YR 3/2	---	---	Loam
13-16	---	10YR 4/3	---	---	Loam

Hydric Soil Indicators:

- ☐ Histosol
- ☐ Histic Epipedon
- ☐ Sulfidic Odor
- ☐ Aquic Moisture Regime
- ☐ Reducing Conditions
- ☐ Gleyed or Low-Chroma Colors
- ☐ Concretions
- ☐ High Organic Content in surface layer in Sandy Soils
- ☐ Organic Streaking in Sandy Soils
- ☐ Listed on Local Hydric Soils List
- ☐ Listed on National Hydric Soils List
- ☐ Other (Explain in Remarks)

Remarks: No hydric soil indicators.

WETLAND DETERMINATION

Hydrophytic Vegetation Present?	Yes	☐	No	☒
Wetland Hydrology Present?	Yes	☐	No	☒
Hydric Soils Present?	Yes	☐	No	☒

Is this Sampling Point Within a Wetland? Yes ☐ No ☒

Remarks: This area of Southern Coast Live Oak Riparian Forest does not qualify as a wetland. However, the area is jurisdictional under CDFG as Adjacent Riparian habitat.

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site:	Salvation Army	Date:	26 December 2001
Applicant/Owner:	Salvation Army	County:	San Diego
Investigator:	Vanessa A. Lee and Kara A. Altvater	State:	California

Do normal circumstances exist on the site?	☒ Yes	☐ No	Community ID:	CLORF
Is the site significantly disturbed (Atypical Situation)?	☐ Yes	☒ No	Transect ID:	T 13, 60ft
Is the area a potential Problem Area? (If needed, explain on reverse.)	☐ Yes	☒ No	Plot ID:	DP 80A, PP 80A

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. *Silybum marianum*	H	NI	9.		
2. *Raphanus sativus*	H	NI	10.		
3. *Quercus agrifolia*	T	NI	11.		
4.			12.		
5.			13.		
6.			14.		
7.			15.		
8.			16.		

Percentage of Dominant Species that are OBL, FACW or FAC (excluding FAC-). 0%

Remarks: Non-native Grassland vegetation under oak canopy. No hydrophytic vegetation present.

HYDROLOGY

☒ Recorded Data (Described in Remarks):
- ☐ Stream, Lake, or Tide Gauge
- ☒ Aerial Photographs
- ☐ Other

☐ No Recorded Data Available

Field Observations:

Depth of Surface Water:	----	(in.)
Depth to free Water in Pit	----	(in.)
Depth of Saturated Soil:	----	(in.)

Wetland Hydrology Indicators:

Primary Indicators:
- ☐ Inundated
- ☐ Saturated in Upper 12 inches
- ☐ Water Marks
- ☐ Drift Lines
- ☐ Sediment Deposits
- ☐ Drainage Patterns in Wetlands

Secondary Indicators (2 or more required):
- ☐ Oxidized Root Channels in Upper 12 Inches
- ☐ Water-Stained Leaves
- ☐ Local Soil Survey Data
- ☐ FAC-Neutral Test
- ☐ Other (Explain in Remarks)

Remarks: No hydrology indicators.

SOILS

Map Unit Name
(Series and Phase): Cieneba rocky coarse sandy loam

Drainage Class: Excessively drained

Field Observations
Confirm Mapped Type? ☒ Yes ☐ No

Taxonomy (Subgroup): Typic Xerorthents

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle (Abundance/Contrast)	Texture, Concretions, Structure, etc.
0-16	---	7.5YR 3/2	---	---	Loam

Hydric Soil Indicators:

- ☐ Histosol
- ☐ Histic Epipedon
- ☐ Sulfidic Odor
- ☐ Aquic Moisture Regime
- ☐ Reducing Conditions
- ☐ Gleyed or Low-Chroma Colors
- ☐ Concretions
- ☐ High Organic Content in surface layer in Sandy Soils
- ☐ Organic Streaking in Sandy Soils
- ☐ Listed on Local Hydric Soils List
- ☐ Listed on National Hydric Soils List
- ☐ Other (Explain in Remarks)

Remarks: No hydric soil indicators.

WETLAND DETERMINATION

Hydrophytic Vegetation Present?	Yes	☐	No	☒
Wetland Hydrology Present?	Yes	☐	No	☒
Hydric Soils Present?	Yes	☐	No	☒

Is this Sampling Point Within a Wetland? Yes ☐ No ☒

Remarks: This area of Southern Coast Live Oak Riparian Forest does not qualify as a wetland. However, the area is jurisdictional under CDFG as Adjacent Riparian habitat. Remaining transect runs upslope through upland vegetation.

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site:	Salvation Army	Date:	26 December 2001
Applicant/Owner:	Salvation Army	County:	San Diego
Investigator:	Vanessa A. Lee and Kara A. Altvater	State:	California

Do normal circumstances exist on the site?	☒ Yes	☐ No	Community ID:	CLORF
Is the site significantly disturbed (Atypical Situation)?	☐ Yes	☒ No	Transect ID:	
Is the area a potential Problem Area? (If needed, explain on reverse.)	☐ Yes	☒ No	Plot ID:	DP 81A, PP 81A

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. *Malosma laurina*	S	NI	9.		
2. *Amsinckia intermedia*	H	NI	10.		
3. *Quercus agrifolia*	T	NI	11.		
4. *Bromus diandrus*	H	NI	12.		
5.			13.		
6.			14.		
7.			15.		
8.			16.		

Percentage of Dominant Species that are OBL, FACW or FAC (excluding FAC-). 0%

Remarks: No hydrophytic vegetation present. Data point is near edge of Coast Live Oak Riparian Forest canopy.

HYDROLOGY

☒ Recorded Data (Described in Remarks):
- ☐ Stream, Lake, or Tide Gauge
- ☒ Aerial Photographs
- ☐ Other

☐ No Recorded Data Available

Field Observations:

Depth of Surface Water:	----	(in.)
Depth to free Water in Pit	----	(in.)
Depth of Saturated Soil:	----	(in.)

Wetland Hydrology Indicators:

Primary Indicators:
- ☐ Inundated
- ☐ Saturated in Upper 12 inches
- ☐ Water Marks
- ☐ Drift Lines
- ☐ Sediment Deposits
- ☐ Drainage Patterns in Wetlands

Secondary Indicators (2 or more required):
- ☐ Oxidized Root Channels in Upper 12 Inches
- ☐ Water-Stained Leaves
- ☐ Local Soil Survey Data
- ☐ FAC-Neutral Test
- ☐ Other (Explain in Remarks)

Remarks: No hydrology indicators.

SOILS

Map Unit Name
(Series and Phase): Cieneba rocky coarse sandy loam

Drainage Class: Excessively drained

Field Observations
Confirm Mapped Type? ☒ Yes ☐ No

Taxonomy (Subgroup): Typic Xerorthents

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle (Abundance/Contrast)	Texture, Concretions, Structure, etc.
0-10	---	7.5YR 2.5/2	---	---	Loam
10	---	---	---	---	Rock

Hydric Soil Indicators:

- ☐ Histosol
- ☐ Histic Epipedon
- ☐ Sulfidic Odor
- ☐ Aquic Moisture Regime
- ☐ Reducing Conditions
- ☐ Gleyed or Low-Chroma Colors
- ☐ Concretions
- ☐ High Organic Content in surface layer in Sandy Soils
- ☐ Organic Streaking in Sandy Soils
- ☐ Listed on Local Hydric Soils List
- ☐ Listed on National Hydric Soils List
- ☐ Other (Explain in Remarks)

Remarks: No hydric soil indicators. Data point located on a hill with many boulders present. Presence of rock in pit does not indicate RPO non-soil.

WETLAND DETERMINATION

Hydrophytic Vegetation Present?	Yes	☐	No	☒
Wetland Hydrology Present?	Yes	☐	No	☒
Hydric Soils Present?	Yes	☐	No	☒

Is this Sampling Point Within a Wetland? Yes ☐ No ☒

Remarks: Southern Coast Live Oak Riparian Forest on slope near conference center development. Two additional pictures (PP 1 and 2) were taken in the vicinity showing upland habitat. Pictures were taken approximately 10 feet downslope looking upslope towards data point. Downslope vegetation consists of *Quercus agrifolia, Rhus ovata, Amsinckia intermedia, Rhamnus ilicifolia, Bromus sp.,* and *Cercocarpus minutiflorus.* This area of Southern Coast Live Oak Riparian Forest does not qualify as a wetland. However, the area is jurisdictional under CDFG as Adjacent Riparian habitat.

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site:	Salvation Army	Date:	26 December 2001
Applicant/Owner:	Salvation Army	County:	San Diego
Investigator:	Vanessa A. Lee and Kara A. Altvater	State:	California

Do normal circumstances exist on the site?	☒ Yes	☐ No	Community ID:	CLORF
Is the site significantly disturbed (Atypical Situation)?	☐ Yes	☒ No	Transect ID:	
Is the area a potential Problem Area? (If needed, explain on reverse.)	☐ Yes	☒ No	Plot ID:	DP 82A, PP 82A

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. *Rhus ovata*	S	NI	9.		
2. *Cercocarpus minutiflorus*	S	NI	10.		
3. *Quercus agrifolia**	T	NI	11.		
4. *Lonicera subspicata*	V	NI	12.		
5.			13.		
6.			14.		
7.			15.		
8.			16.		

Percentage of Dominant Species that are OBL, FACW or FAC (excluding FAC-). 0%

Remarks: No hydrophytic vegetation present. *Most oaks in the area appear to be hybrids with *Quercus berberidifolia*.

HYDROLOGY

☒ Recorded Data (Described in Remarks):
- ☐ Stream, Lake, or Tide Gauge
- ☒ Aerial Photographs
- ☐ Other

☐ No Recorded Data Available

Field Observations:

Depth of Surface Water:	----	(in.)
Depth to free Water in Pit	----	(in.)
Depth of Saturated Soil:	----	(in.)

Wetland Hydrology Indicators:

Primary Indicators:
- ☐ Inundated
- ☐ Saturated in Upper 12 inches
- ☐ Water Marks
- ☐ Drift Lines
- ☐ Sediment Deposits
- ☐ Drainage Patterns in Wetlands

Secondary Indicators (2 or more required):
- ☐ Oxidized Root Channels in Upper 12 Inches
- ☐ Water-Stained Leaves
- ☐ Local Soil Survey Data
- ☐ FAC-Neutral Test
- ☐ Other (Explain in Remarks)

Remarks: No hydrology indicators. Data point located approximately 15 feet outside bank of drainage. Drainage may be located off-site, and since the area including the drainage is not in the proposed development area, a data point was not performed.

SOILS

Map Unit Name
(Series and Phase): Vista coarse sandy loam

Drainage Class: Well drained

Field Observations
Confirm Mapped Type? ☒ Yes ☐ No

Taxonomy (Subgroup): Typic Xerochrepts

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle (Abundance/Contrast)	Texture, Concretions, Structure, etc.
0-14	---	7.5YR 4/4	---	---	Loam

Hydric Soil Indicators:

- ☐ Histosol
- ☐ Histic Epipedon
- ☐ Sulfidic Odor
- ☐ Aquic Moisture Regime
- ☐ Reducing Conditions
- ☐ Gleyed or Low-Chroma Colors
- ☐ Concretions
- ☐ High Organic Content in surface layer in Sandy Soils
- ☐ Organic Streaking in Sandy Soils
- ☐ Listed on Local Hydric Soils List
- ☐ Listed on National Hydric Soils List
- ☐ Other (Explain in Remarks)

Remarks: No hydric soil indicators.

WETLAND DETERMINATION

Hydrophytic Vegetation Present?	Yes	☐	No	☒
Wetland Hydrology Present?	Yes	☐	No	☒
Hydric Soils Present?	Yes	☐	No	☒

Is this Sampling Point Within a Wetland? Yes ☐ No ☒

Remarks: This area of Southern Coast Live Oak Riparian Forest does not qualify as a wetland. However, the area is jurisdictional under CDFG as Adjacent Riparian habitat.

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site:	Salvation Army	Date:	26 December 2001
Applicant/Owner:	Salvation Army	County:	San Diego
Investigator:	Vanessa A. Lee and Kara A. Altvater	State:	California

Do normal circumstances exist on the site?	☒ Yes	☐ No	Community ID:	CLORF
Is the site significantly disturbed (Atypical Situation)?	☐ Yes	☒ No	Transect ID:	
Is the area a potential Problem Area? (If needed, explain on reverse.)	☐ Yes	☒ No	Plot ID:	DP 83A, PP 83A

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. *Quercus berberidifolia**	S	NI	9.		
2. *Cercocarpus minutiflorus*	S	NI	10.		
3. *Hazardia squarrosa*	S	NI	11.		
4.			12.		
5.			13.		
6.			14.		
7.			15.		
8.			16.		

Percentage of Dominant Species that are OBL, FACW or FAC (excluding FAC-). 0%

Remarks: No hydrophytic vegetation present. Data point located at edge of Southern Coast Live Oak Riparian Forest canopy adjacent to chaparral vegetation. *Oak is hybrid with *Quercus englemannii*.

HYDROLOGY

☒ Recorded Data (Described in Remarks):
- ☐ Stream, Lake, or Tide Gauge
- ☒ Aerial Photographs
- ☐ Other

☐ No Recorded Data Available

Field Observations:

Depth of Surface Water:	----	(in.)
Depth to free Water in Pit	----	(in.)
Depth of Saturated Soil:	----	(in.)

Wetland Hydrology Indicators:

Primary Indicators:
- ☐ Inundated
- ☐ Saturated in Upper 12 inches
- ☐ Water Marks
- ☐ Drift Lines
- ☐ Sediment Deposits
- ☐ Drainage Patterns in Wetlands

Secondary Indicators (2 or more required):
- ☐ Oxidized Root Channels in Upper 12 Inches
- ☐ Water-Stained Leaves
- ☐ Local Soil Survey Data
- ☐ FAC-Neutral Test
- ☐ Other (Explain in Remarks)

Remarks: No hydrology indicators.

SOILS

Map Unit Name
(Series and Phase): Vista coarse sandy loam

Drainage Class: Well drained

Field Observations
Confirm Mapped Type? ☒ Yes ☐ No

Taxonomy (Subgroup): Typic Xerochrepts

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle (Abundance/Contrast)	Texture, Concretions, Structure, etc.
0-4	---	7.5YR 3/3	---	---	Loam
4-14	---	7.5YR 4/6	---	---	Loam

Hydric Soil Indicators:

- ☐ Histosol
- ☐ Histic Epipedon
- ☐ Sulfidic Odor
- ☐ Aquic Moisture Regime
- ☐ Reducing Conditions
- ☐ Gleyed or Low-Chroma Colors
- ☐ Concretions
- ☐ High Organic Content in surface layer in Sandy Soils
- ☐ Organic Streaking in Sandy Soils
- ☐ Listed on Local Hydric Soils List
- ☐ Listed on National Hydric Soils List
- ☐ Other (Explain in Remarks)

Remarks: No hydric soil indicators.

WETLAND DETERMINATION

Hydrophytic Vegetation Present?	Yes	☐	No	☒
Wetland Hydrology Present?	Yes	☐	No	☒
Hydric Soils Present?	Yes	☐	No	☒

Is this Sampling Point Within a Wetland? Yes ☐ No ☒

Remarks: This area of Southern Coast Live Oak Riparian Forest does not qualify as a wetland. However, the area is jurisdictional under CDFG as Adjacent Riparian habitat.

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site:	Salvation Army	Date:	26 December 2001
Applicant/Owner:	Salvation Army	County:	San Diego
Investigator:	Vanessa A. Lee and Kara A. Altvater	State:	California

Do normal circumstances exist on the site?	☒ Yes	☐ No	Community ID:	CLORF
Is the site significantly disturbed (Atypical Situation)?	☒ Yes	☐ No	Transect ID:	T 14, 0ft
Is the area a potential Problem Area? (If needed, explain on reverse.)	☐ Yes	☒ No	Plot ID:	DP 84A, PP 84A

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. *Quercus agrifolia*	T	NI	9.		
2.			10.		
3.			11.		
4.			12.		
5.			13.		
6.			14.		
7.			15.		
8.			16.		

Percentage of Dominant Species that are OBL, FACW or FAC (excluding FAC-). 0%

Remarks: No vegetation in immediate area of data point, possibly due to road. Coast Live Oak overhanging data point.

HYDROLOGY

☒ Recorded Data (Described in Remarks):
- ☐ Stream, Lake, or Tide Gauge
- ☒ Aerial Photographs
- ☐ Other

☐ No Recorded Data Available

Field Observations:

Depth of Surface Water:	----	(in.)
Depth to free Water in Pit	----	(in.)
Depth of Saturated Soil:	----	(in.)

Wetland Hydrology Indicators:

Primary Indicators:
- ☐ Inundated
- ☐ Saturated in Upper 12 inches
- ☐ Water Marks
- ☐ Drift Lines
- ☐ Sediment Deposits
- ☐ Drainage Patterns in Wetlands

Secondary Indicators (2 or more required):
- ☐ Oxidized Root Channels in Upper 12 Inches
- ☐ Water-Stained Leaves
- ☐ Local Soil Survey Data
- ☐ FAC-Neutral Test
- ☐ Other (Explain in Remarks)

Remarks: No hydrology indicators.

SOILS

Map Unit Name
(Series and Phase): Vista coarse sandy loam

Drainage Class: Well drained

Field Observations
Confirm Mapped Type? ☒ Yes ☐ No

Taxonomy (Subgroup): Typic Xerochrepts

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle (Abundance/Contrast)	Texture, Concretions, Structure, etc.
0-5	---	10YR 3/3	---	---	Sandy Loam

Hydric Soil Indicators:

- ☐ Histosol
- ☐ Histic Epipedon
- ☐ Sulfidic Odor
- ☐ Aquic Moisture Regime
- ☐ Reducing Conditions
- ☐ Gleyed or Low-Chroma Colors
- ☐ Concretions
- ☐ High Organic Content in surface layer in Sandy Soils
- ☐ Organic Streaking in Sandy Soils
- ☐ Listed on Local Hydric Soils List
- ☐ Listed on National Hydric Soils List
- ☐ Other (Explain in Remarks)

Remarks: No hydric soil indicators. Could not dig deeper than 5 inches most likely due to soil compaction from road.

WETLAND DETERMINATION

Hydrophytic Vegetation Present?	Yes	☐	No	☒
Wetland Hydrology Present?	Yes	☐	No	☒
Hydric Soils Present?	Yes	☐	No	☒

Is this Sampling Point Within a Wetland? Yes ☐ No ☒

Remarks: Data point immediately adjacent to main access road. Conditions may have changed due to road disturbance. However, the access road has been in place for a long while, and present conditions are considered to be "normal." This area of Southern Coast Live Oak Riparian Forest does not qualify as a wetland. However, the area is jurisdictional under CDFG as Adjacent Riparian habitat.

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site:	Salvation Army	Date:	26 December 2001
Applicant/Owner:	Salvation Army	County:	San Diego
Investigator:	Vanessa A. Lee and Kara A. Altvater	State:	California

Do normal circumstances exist on the site?	☒ Yes	☐ No	Community ID:	CLORF
Is the site significantly disturbed (Atypical Situation)?	☒ Yes	☐ No	Transect ID:	T 14, 5ft
Is the area a potential Problem Area? (If needed, explain on reverse.)	☐ Yes	☒ No	Plot ID:	DP 85A, PP 85A

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. *Quercus agrifolia*	T	NI	9.		
2			10.		
3.			11.		
4.			12.		
5.			13.		
6.			14.		
7.			15.		
8.			16.		

Percentage of Dominant Species that are OBL, FACW or FAC (excluding FAC-). 0%

Remarks: No vegetation present in drainage. Coast Live Oak overhanging data point.

HYDROLOGY

☒ Recorded Data (Described in Remarks):
- ☐ Stream, Lake, or Tide Gauge
- ☒ Aerial Photographs
- ☐ Other

☐ No Recorded Data Available

Field Observations:

Depth of Surface Water:	----	(in.)
Depth to free Water in Pit	----	(in.)
Depth of Saturated Soil:	----	(in.)

Wetland Hydrology Indicators:

Primary Indicators:
- ☐ Inundated
- ☐ Saturated in Upper 12 inches
- ☐ Water Marks
- ☐ Drift Lines
- ☐ Sediment Deposits
- ☒ Drainage Patterns in Wetlands

Secondary Indicators (2 or more required):
- ☐ Oxidized Root Channels in Upper 12 Inches
- ☐ Water-Stained Leaves
- ☐ Local Soil Survey Data
- ☐ FAC-Neutral Test
- ☐ Other (Explain in Remarks)

Remarks: Hydrology indicated by 1-foot wide drainage.

SOILS

Map Unit Name
(Series and Phase): Vista coarse sandy loam

Drainage Class: Well drained

Field Observations
Confirm Mapped Type? ☒ Yes ☐ No

Taxonomy (Subgroup): Typic Xerochrepts

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle (Abundance/Contrast)	Texture, Concretions, Structure, etc.
0	---	---	---	---	Cobble

Hydric Soil Indicators:

- ☐ Histosol
- ☐ Histic Epipedon
- ☐ Sulfidic Odor
- ☐ Aquic Moisture Regime
- ☐ Reducing Conditions
- ☐ Gleyed or Low-Chroma Colors
- ☐ Concretions
- ☐ High Organic Content in surface layer in Sandy Soils
- ☐ Organic Streaking in Sandy Soils
- ☐ Listed on Local Hydric Soils List
- ☐ Listed on National Hydric Soils List
- ☐ Other (Explain in Remarks)

Remarks: Could not dig due to cobble. Cobble width is 1 foot within drainage. It is possible that sediment deposits between cobble satisfy hydric conditions; however, this cannot be determined. In this case, soils are considered to be a natural atypical situation, and the presence of hydric soils is assumed.

WETLAND DETERMINATION

Hydrophytic Vegetation Present?	Yes	☐	No	☒
Wetland Hydrology Present?	Yes	☒	No	☐
Hydric Soils Present?	Yes	☒	No	☐

Is this Sampling Point Within a Wetland? Yes ☐ No ☒

Remarks: This area of Southern Coast Live Oak Riparian Forest does not qualify as an ACOE wetland. However, the area is jurisdictional under CDFG as Adjacent Riparian habitat. The drainage is considered to be Non-wetland Waters of the U.S. (ACOE) and is also jurisdictional under the County and CDFG.

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site:	Salvation Army	Date:	26 December 2001
Applicant/Owner:	Salvation Army	County:	San Diego
Investigator:	Vanessa A. Lee and Kara A. Altvater	State:	California

Do normal circumstances exist on the site?	☒ Yes	☐ No	Community ID:	CLORF
Is the site significantly disturbed (Atypical Situation)?	☐ Yes	☒ No	Transect ID:	T 14, 10ft
Is the area a potential Problem Area? (If needed, explain on reverse.)	☐ Yes	☒ No	Plot ID:	DP 86A, PP 86A

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. *Quercus agrifolia*	T	NI	9.		
2. *Rhamnus ilicifolia*	S	NI	10.		
3. *Lolium temulentum*	H	NI	11.		
4.			12.		
5.			13.		
6.			14.		
7.			15.		
8.			16.		

Percentage of Dominant Species that are OBL, FACW or FAC (excluding FAC-). 0%

Remarks: No hydrophytic vegetation present.

HYDROLOGY

☒ Recorded Data (Described in Remarks):
- ☐ Stream, Lake, or Tide Gauge
- ☒ Aerial Photographs
- ☐ Other

☐ No Recorded Data Available

Field Observations:

Depth of Surface Water:	----	(in.)
Depth to free Water in Pit	----	(in.)
Depth of Saturated Soil:	----	(in.)

Wetland Hydrology Indicators:

Primary Indicators:
- ☐ Inundated
- ☐ Saturated in Upper 12 inches
- ☐ Water Marks
- ☐ Drift Lines
- ☐ Sediment Deposits
- ☐ Drainage Patterns in Wetlands

Secondary Indicators (2 or more required):
- ☐ Oxidized Root Channels in Upper 12 Inches
- ☐ Water-Stained Leaves
- ☐ Local Soil Survey Data
- ☐ FAC-Neutral Test
- ☐ Other (Explain in Remarks)

Remarks: No hydrology indicators.

SOILS

Map Unit Name
(Series and Phase): Vista coarse sandy loam

Drainage Class: Well drained

Field Observations
Confirm Mapped Type? ☒ Yes ☐ No

Taxonomy (Subgroup): Typic Xerochrepts

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle (Abundance/Contrast)	Texture, Concretions, Structure, etc.
0-12	---	10YR 4/4	---	---	Sandy Loam

Hydric Soil Indicators:

- ☐ Histosol
- ☐ Histic Epipedon
- ☐ Sulfidic Odor
- ☐ Aquic Moisture Regime
- ☐ Reducing Conditions
- ☐ Gleyed or Low-Chroma Colors
- ☐ Concretions
- ☐ High Organic Content in surface layer in Sandy Soils
- ☐ Organic Streaking in Sandy Soils
- ☐ Listed on Local Hydric Soils List
- ☐ Listed on National Hydric Soils List
- ☐ Other (Explain in Remarks)

Remarks: No hydric soil indicators.

WETLAND DETERMINATION

Hydrophytic Vegetation Present?	Yes	☐	No	☒
Wetland Hydrology Present?	Yes	☐	No	☒
Hydric Soils Present?	Yes	☐	No	☒

Is this Sampling Point Within a Wetland? Yes ☐ No ☒

Remarks: This area of Southern Coast Live Oak Riparian Forest does not qualify as a wetland. However, the area is jurisdictional under CDFG as Adjacent Riparian habitat.

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site:	Salvation Army	Date:	26 December 2001
Applicant/Owner:	Salvation Army	County:	San Diego
Investigator:	Vanessa A. Lee and Kara A. Altvater	State:	California

Do normal circumstances exist on the site?	☐ Yes	☒ No	Community ID:	CLORF
Is the site significantly disturbed (Atypical Situation)?	☒ Yes	☐ No	Transect ID:	T 15, 0ft
Is the area a potential Problem Area? (If needed, explain on reverse.)	☐ Yes	☒ No	Plot ID:	DP 87A, PP 87A

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. *Quercus agrifolia*	T	NI	9.		
2.			10.		
3.			11.		
4.			12.		
5.			13.		
6.			14.		
7.			15.		
8.			16.		

Percentage of Dominant Species that are OBL, FACW or FAC (excluding FAC-). 0%

Remarks: No hydrophytic vegetation present. Data point is located immediately adjacent to the main access road. Conditions have possibly changed due to road disturbance.

HYDROLOGY

☒ Recorded Data (Described in Remarks):
- ☐ Stream, Lake, or Tide Gauge
- ☒ Aerial Photographs
- ☐ Other

☐ No Recorded Data Available

Field Observations:

Depth of Surface Water:	----	(in.)
Depth to free Water in Pit	----	(in.)
Depth of Saturated Soil:	----	(in.)

Wetland Hydrology Indicators:

Primary Indicators:
- ☐ Inundated
- ☐ Saturated in Upper 12 inches
- ☐ Water Marks
- ☐ Drift Lines
- ☐ Sediment Deposits
- ☐ Drainage Patterns in Wetlands

Secondary Indicators (2 or more required):
- ☐ Oxidized Root Channels in Upper 12 Inches
- ☐ Water-Stained Leaves
- ☐ Local Soil Survey Data
- ☐ FAC-Neutral Test
- ☐ Other (Explain in Remarks)

Remarks: No hydrology indicators.

SOILS

Map Unit Name
(Series and Phase): Vista coarse sandy loam

Drainage Class: Well drained

Field Observations
Confirm Mapped Type? ☒ Yes ☐ No

Taxonomy (Subgroup): Typic Xerochrepts

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle (Abundance/Contrast)	Texture, Concretions, Structure, etc.
0-8	---	10YR 3/2	---	---	Sandy Loam

Hydric Soil Indicators:

- ☐ Histosol
- ☐ Histic Epipedon
- ☐ Sulfidic Odor
- ☐ Aquic Moisture Regime
- ☐ Reducing Conditions
- ☐ Gleyed or Low-Chroma Colors
- ☐ Concretions
- ☐ High Organic Content in surface layer in Sandy Soils
- ☐ Organic Streaking in Sandy Soils
- ☐ Listed on Local Hydric Soils List
- ☐ Listed on National Hydric Soils List
- ☐ Other (Explain in Remarks)

Remarks: Could not dig deeper than 8 inches. Possibly compacted soils from construction of road.

WETLAND DETERMINATION

Hydrophytic Vegetation Present?	Yes	☐	No	☒
Wetland Hydrology Present?	Yes	☐	No	☒
Hydric Soils Present?	Yes	☐	No	☒

Is this Sampling Point Within a Wetland? Yes ☐ No ☒

Remarks: Data point immediately adjacent to main access road. Conditions may have changed due to road disturbance. However, the access road has been in place for a long while, and present conditions are considered to be "normal." This area of Southern Coast Live Oak Riparian Forest does not qualify as a wetland. However, the area is jurisdictional under CDFG as Adjacent Riparian habitat.

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site:	Salvation Army	Date:	26 December 2001
Applicant/Owner:	Salvation Army	County:	San Diego
Investigator:	Vanessa A. Lee and Kara A. Altvater	State:	California
Do normal circumstances exist on the site?	☒ Yes ☐ No	Community ID:	CLORF
Is the site significantly disturbed (Atypical Situation)?	☐ Yes ☒ No	Transect ID:	T 15, 11ft
Is the area a potential Problem Area? (If needed, explain on reverse.)	☐ Yes ☒ No	Plot ID:	DP 88A, PP 88A

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. *Quercus agrifolia*	T	NI	9.		
2.			10.		
3.			11.		
4.			12.		
5.			13.		
6.			14.		
7.			15.		
8.			16.		

Percentage of Dominant Species that are OBL, FACW or FAC (excluding FAC-). 0%

Remarks: No hydrophytic vegetation present. Data point performed at 11 feet instead of 10 feet due to the location of a tree stump.

HYDROLOGY

☒ Recorded Data (Described in Remarks):
- ☐ Stream, Lake, or Tide Gauge
- ☒ Aerial Photographs
- ☐ Other

☐ No Recorded Data Available

Field Observations:

Depth of Surface Water:	----	(in.)
Depth to free Water in Pit	----	(in.)
Depth of Saturated Soil:	----	(in.)

Wetland Hydrology Indicators:

Primary Indicators:
- ☐ Inundated
- ☐ Saturated in Upper 12 inches
- ☐ Water Marks
- ☐ Drift Lines
- ☐ Sediment Deposits
- ☐ Drainage Patterns in Wetlands

Secondary Indicators (2 or more required):
- ☐ Oxidized Root Channels in Upper 12 Inches
- ☐ Water-Stained Leaves
- ☐ Local Soil Survey Data
- ☐ FAC-Neutral Test
- ☐ Other (Explain in Remarks)

Remarks: No hydrology indicators.

SOILS

Map Unit Name
(Series and Phase): Vista coarse sandy loam

Drainage Class: Well drained

Field Observations
Confirm Mapped Type? ☒ Yes ☐ No

Taxonomy (Subgroup): Typic Xerochrepts

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle (Abundance/Contrast)	Texture, Concretions, Structure, etc.
0-10	---	10YR 4/4	---	---	Sandy Loam

Hydric Soil Indicators:

- ☐ Histosol
- ☐ Histic Epipedon
- ☐ Sulfidic Odor
- ☐ Aquic Moisture Regime
- ☐ Reducing Conditions
- ☐ Gleyed or Low-Chroma Colors
- ☐ Concretions
- ☐ High Organic Content in surface layer in Sandy Soils
- ☐ Organic Streaking in Sandy Soils
- ☐ Listed on Local Hydric Soils List
- ☐ Listed on National Hydric Soils List
- ☐ Other (Explain in Remarks)

Remarks: No hydric soil indicators.

WETLAND DETERMINATION

Hydrophytic Vegetation Present?	Yes	☐	No	☒
Wetland Hydrology Present?	Yes	☐	No	☒
Hydric Soils Present?	Yes	☐	No	☒

Is this Sampling Point Within a Wetland? Yes ☐ No ☒

Remarks: This area of Southern Coast Live Oak Riparian Forest does not qualify as a wetland. However, the area is jurisdictional under CDFG as Adjacent Riparian habitat.

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site:	Salvation Army	Date:	26 December 2001
Applicant/Owner:	Salvation Army	County:	San Diego
Investigator:	Vanessa A. Lee and Kara A. Altvater	State:	California

Do normal circumstances exist on the site?	☒ Yes	☐ No	Community ID:	CLORF
Is the site significantly disturbed (Atypical Situation)?	☐ Yes	☒ No	Transect ID:	T 15, 17ft
Is the area a potential Problem Area? (If needed, explain on reverse.)	☐ Yes	☒ No	Plot ID:	DP 89A, PP 89A

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. *Quercus agrifolia*	T	NI	9.		
2. *Rhamnus ilicifolia*	S	NI	10.		
3.			11.		
4.			12.		
5.			13.		
6.			14.		
7.			15.		
8.			16.		

Percentage of Dominant Species that are OBL, FACW or FAC (excluding FAC-). 0%

Remarks: No hydrophytic vegetation present.

HYDROLOGY

☒ Recorded Data (Described in Remarks):
- ☐ Stream, Lake, or Tide Gauge
- ☒ Aerial Photographs
- ☐ Other

☐ No Recorded Data Available

Field Observations:

Depth of Surface Water:	----	(in.)
Depth to free Water in Pit	----	(in.)
Depth of Saturated Soil:	----	(in.)

Wetland Hydrology Indicators:

Primary Indicators:
- ☐ Inundated
- ☐ Saturated in Upper 12 inches
- ☐ Water Marks
- ☐ Drift Lines
- ☐ Sediment Deposits
- ☒ Drainage Patterns in Wetlands

Secondary Indicators (2 or more required):
- ☐ Oxidized Root Channels in Upper 12 Inches
- ☐ Water-Stained Leaves
- ☐ Local Soil Survey Data
- ☐ FAC-Neutral Test
- ☐ Other (Explain in Remarks)

Remarks: Hydrology indicated by 1-foot wide drainage. Data point located at 17 feet in order to sample drainage.

SOILS

Map Unit Name
(Series and Phase): Vista coarse sandy loam

Drainage Class: Well drained

Field Observations
Confirm Mapped Type? ☒ Yes ☐ No

Taxonomy (Subgroup): Typic Xerochrepts

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle (Abundance/Contrast)	Texture, Concretions, Structure, etc.
0-3	---	---	---	---	Sand
3-8	---	10YR 3/2	---	---	Sandy Loam

Hydric Soil Indicators:

- ☐ Histosol
- ☐ Histic Epipedon
- ☐ Sulfidic Odor
- ☐ Aquic Moisture Regime
- ☐ Reducing Conditions
- ☐ Gleyed or Low-Chroma Colors
- ☐ Concretions
- ☐ High Organic Content in surface layer in Sandy Soils
- ☐ Organic Streaking in Sandy Soils
- ☐ Listed on Local Hydric Soils List
- ☐ Listed on National Hydric Soils List
- ☐ Other (Explain in Remarks)

Remarks: No hydric soil indicators.

WETLAND DETERMINATION

Hydrophytic Vegetation Present?	Yes	☐	No	☒
Wetland Hydrology Present?	Yes	☒	No	☐
Hydric Soils Present?	Yes	☐	No	☒

Is this Sampling Point Within a Wetland? Yes ☐ No ☒

Remarks: This area of Southern Coast Live Oak Riparian Forest does not qualify as an ACOE wetland. However, the area is jurisdictional under CDFG as Adjacent Riparian habitat. The drainage is considered to be Non-wetland Waters of the U.S. (ACOE) and is also jurisdictional under the County and CDFG.

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site:	Salvation Army	Date:	26 December 2001
Applicant/Owner:	Salvation Army	County:	San Diego
Investigator:	Vanessa A. Lee and Kara A. Altvater	State:	California

Do normal circumstances exist on the site?	☒ Yes	☐ No	Community ID:	CLORF
Is the site significantly disturbed (Atypical Situation)?	☐ Yes	☒ No	Transect ID:	T 15, 20ft
Is the area a potential Problem Area? (If needed, explain on reverse.)	☐ Yes	☒ No	Plot ID:	DP 90A, PP 90A

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. *Quercus agrifolia*	T	NI	9.		
2. *Rhamnus ilicifolia*	S	NI	10.		
3. *Toxicodendrum diversilobum*	S	NI	11.		
4.			12.		
5.			13.		
6.			14.		
7.			15.		
8.			16.		

Percentage of Dominant Species that are OBL, FACW or FAC (excluding FAC-). 0%

Remarks: No hydrophytic vegetation present.

HYDROLOGY

☒ Recorded Data (Described in Remarks):
- ☐ Stream, Lake, or Tide Gauge
- ☒ Aerial Photographs
- ☐ Other

☐ No Recorded Data Available

Field Observations:

Depth of Surface Water:	----	(in.)
Depth to free Water in Pit	----	(in.)
Depth of Saturated Soil:	----	(in.)

Wetland Hydrology Indicators:

Primary Indicators:
- ☐ Inundated
- ☐ Saturated in Upper 12 inches
- ☐ Water Marks
- ☐ Drift Lines
- ☐ Sediment Deposits
- ☐ Drainage Patterns in Wetlands

Secondary Indicators (2 or more required):
- ☐ Oxidized Root Channels in Upper 12 Inches
- ☐ Water-Stained Leaves
- ☐ Local Soil Survey Data
- ☐ FAC-Neutral Test
- ☐ Other (Explain in Remarks)

Remarks: No hydrology indicators.

SOILS

Map Unit Name
(Series and Phase): Vista coarse sandy loam

Drainage Class: Well drained

Field Observations
Confirm Mapped Type? ☒ Yes ☐ No

Taxonomy (Subgroup): Typic Xerochrepts

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle (Abundance/Contrast)	Texture, Concretions, Structure, etc.
0-10	---	10YR 4/4	---	---	Sandy Loam

Hydric Soil Indicators:

- ☐ Histosol
- ☐ Histic Epipedon
- ☐ Sulfidic Odor
- ☐ Aquic Moisture Regime
- ☐ Reducing Conditions
- ☐ Gleyed or Low-Chroma Colors
- ☐ Concretions
- ☐ High Organic Content in surface layer in Sandy Soils
- ☐ Organic Streaking in Sandy Soils
- ☐ Listed on Local Hydric Soils List
- ☐ Listed on National Hydric Soils List
- ☐ Other (Explain in Remarks)

Remarks: No hydric soil indicators.

WETLAND DETERMINATION

Hydrophytic Vegetation Present?	Yes	☐	No	☒
Wetland Hydrology Present?	Yes	☐	No	☒
Hydric Soils Present?	Yes	☐	No	☒

Is this Sampling Point Within a Wetland? Yes ☐ No ☒

Remarks: This area of Southern Coast Live Oak Riparian Forest does not qualify as a wetland. However, the area is jurisdictional under CDFG as Adjacent Riparian habitat.

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site:	Salvation Army	Date:	26 December 2001
Applicant/Owner:	Salvation Army	County:	San Diego
Investigator:	Vanessa A. Lee and Kara A. Altvater	State:	California

Do normal circumstances exist on the site?	☒ Yes	☐ No	Community ID:	CLORF
Is the site significantly disturbed (Atypical Situation)?	☐ Yes	☒ No	Transect ID:	T 16, 0ft
Is the area a potential Problem Area? (If needed, explain on reverse.)	☐ Yes	☒ No	Plot ID:	DP 91A, PP 91A

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. *Quercus agrifolia*	T	NI	9.		
2.			10.		
3.			11.		
4.			12.		
5.			13.		
6.			14.		
7.			15.		
8.			16.		

Percentage of Dominant Species that are OBL, FACW or FAC (excluding FAC-). 0%

Remarks: No vegetation present. Coast Live Oak overhanging data point.

HYDROLOGY

☒ Recorded Data (Described in Remarks):
- ☐ Stream, Lake, or Tide Gauge
- ☒ Aerial Photographs
- ☐ Other

☐ No Recorded Data Available

Field Observations:

Depth of Surface Water:	----	(in.)
Depth to free Water in Pit	----	(in.)
Depth of Saturated Soil:	----	(in.)

Wetland Hydrology Indicators:

Primary Indicators:
- ☐ Inundated
- ☐ Saturated in Upper 12 inches
- ☐ Water Marks
- ☐ Drift Lines
- ☐ Sediment Deposits
- ☐ Drainage Patterns in Wetlands

Secondary Indicators (2 or more required):
- ☐ Oxidized Root Channels in Upper 12 Inches
- ☐ Water-Stained Leaves
- ☐ Local Soil Survey Data
- ☐ FAC-Neutral Test
- ☐ Other (Explain in Remarks)

Remarks: No hydrology indicators.

SOILS

Map Unit Name
(Series and Phase): Cieneba rocky coarse sandy loam

Drainage Class: Excessively drained

Field Observations
Confirm Mapped Type? ☒ Yes ☐ No

Taxonomy (Subgroup): Typic Xerorthents

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle (Abundance/Contrast)	Texture, Concretions, Structure, etc.
0-4	---	10YR 6/6	---	---	Sandy Loam
4-8	---	10YR 3/3	---	---	Sandy Loam

Hydric Soil Indicators:

- ☐ Histosol
- ☐ Histic Epipedon
- ☐ Sulfidic Odor
- ☐ Aquic Moisture Regime
- ☐ Reducing Conditions
- ☐ Gleyed or Low-Chroma Colors
- ☐ Concretions
- ☐ High Organic Content in surface layer in Sandy Soils
- ☐ Organic Streaking in Sandy Soils
- ☐ Listed on Local Hydric Soils List
- ☐ Listed on National Hydric Soils List
- ☐ Other (Explain in Remarks)

Remarks: No hydric soil indicators.

WETLAND DETERMINATION

Hydrophytic Vegetation Present?	Yes	☐	No	☒
Wetland Hydrology Present?	Yes	☐	No	☒
Hydric Soils Present?	Yes	☐	No	☒

Is this Sampling Point Within a Wetland? Yes ☐ No ☒

Remarks: This area of Southern Coast Live Oak Riparian Forest does not qualify as a wetland. However, the area is jurisdictional under CDFG as Adjacent Riparian habitat.

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site:	Salvation Army	Date:	26 December 2001
Applicant/Owner:	Salvation Army	County:	San Diego
Investigator:	Vanessa A. Lee and Kara A. Altvater	State:	California

Do normal circumstances exist on the site?	☒ Yes	☐ No	Community ID:	CLORF
Is the site significantly disturbed (Atypical Situation)?	☒ Yes	☐ No	Transect ID:	T 16, 10ft
Is the area a potential Problem Area? (If needed, explain on reverse.)	☐ Yes	☒ No	Plot ID:	DP 92A, PP 92A

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. *Quercus agrifolia*	T	NI	9.		
2. *Bromus diandrus*	H	NI	10.		
3.			11.		
4.			12.		
5.			13.		
6.			14.		
7.			15.		
8.			16.		

Percentage of Dominant Species that are OBL, FACW or FAC (excluding FAC-). 0%

Remarks: No hydrophytic vegetation present.

HYDROLOGY

☒ Recorded Data (Described in Remarks):
- ☐ Stream, Lake, or Tide Gauge
- ☒ Aerial Photographs
- ☐ Other

☐ No Recorded Data Available

Field Observations:

Depth of Surface Water:	----	(in.)
Depth to free Water in Pit	----	(in.)
Depth of Saturated Soil:	----	(in.)

Wetland Hydrology Indicators:

Primary Indicators:
- ☐ Inundated
- ☐ Saturated in Upper 12 inches
- ☐ Water Marks
- ☐ Drift Lines
- ☐ Sediment Deposits
- ☒ Drainage Patterns in Wetlands

Secondary Indicators (2 or more required):
- ☐ Oxidized Root Channels in Upper 12 Inches
- ☐ Water-Stained Leaves
- ☐ Local Soil Survey Data
- ☐ FAC-Neutral Test
- ☐ Other (Explain in Remarks)

Remarks: Hydrology indicated by 1.5-foot wide drainage (measured at approximate ordinary high water mark). Streambed width is 2 feet (measured from bank to bank).

SOILS

Map Unit Name
(Series and Phase): Cieneba rocky coarse sandy loam

Drainage Class: Excessively drained

Field Observations
Confirm Mapped Type? ☒ Yes ☐ No

Taxonomy (Subgroup): Typic Xerorthents

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle (Abundance/Contrast)	Texture, Concretions, Structure, etc.
0	---	---	---	---	Cobble

Hydric Soil Indicators:

- ☐ Histosol
- ☐ Histic Epipedon
- ☐ Sulfidic Odor
- ☐ Aquic Moisture Regime
- ☐ Reducing Conditions
- ☐ Gleyed or Low-Chroma Colors
- ☐ Concretions
- ☐ High Organic Content in surface layer in Sandy Soils
- ☐ Organic Streaking in Sandy Soils
- ☐ Listed on Local Hydric Soils List
- ☐ Listed on National Hydric Soils List
- ☐ Other (Explain in Remarks)

Remarks: Width of cobble is 1.5 feet within drainage. It is possible that sediment deposits between cobble satisfy hydric conditions; however, this cannot be determined. In this case, soils are considered to be a natural atypical situation, and the presence of hydric soils is assumed.

WETLAND DETERMINATION

Hydrophytic Vegetation Present?	Yes	☐	No	☒
Wetland Hydrology Present?	Yes	☒	No	☐
Hydric Soils Present?	Yes	☒	No	☐

Is this Sampling Point Within a Wetland? Yes ☐ No ☒

Remarks: This area of Southern Coast Live Oak Riparian Forest does not qualify as an ACOE wetland. However, the area is jurisdictional under CDFG as Adjacent Riparian habitat. The drainage is considered to be Non-wetland Waters of the U.S. (ACOE) and is also jurisdictional under the County and CDFG.

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site:	Salvation Army	Date:	26 December 2001
Applicant/Owner:	Salvation Army	County:	San Diego
Investigator:	Vanessa A. Lee and Kara A. Altvater	State:	California

Do normal circumstances exist on the site?	☒ Yes	☐ No	Community ID:	CLORF
Is the site significantly disturbed (Atypical Situation)?	☐ Yes	☒ No	Transect ID:	T 16, 20ft
Is the area a potential Problem Area? (If needed, explain on reverse.)	☐ Yes	☒ No	Plot ID:	DP 93A, PP 93A

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. *Quercus agrifolia*	T	NI	9.		
2. *Toxicodendron diversilobum*	H	NI	10.		
3.			11.		
4.			12.		
5.			13.		
6.			14.		
7.			15.		
8.			16.		

Percentage of Dominant Species that are OBL, FACW or FAC (excluding FAC-). 0%

Remarks: No hydrophytic vegetation present.

HYDROLOGY

☒ Recorded Data (Described in Remarks):
- ☐ Stream, Lake, or Tide Gauge
- ☒ Aerial Photographs
- ☐ Other

☐ No Recorded Data Available

Field Observations:

Depth of Surface Water:	----	(in.)
Depth to free Water in Pit	----	(in.)
Depth of Saturated Soil:	----	(in.)

Wetland Hydrology Indicators:

Primary Indicators:
- ☐ Inundated
- ☐ Saturated in Upper 12 inches
- ☐ Water Marks
- ☐ Drift Lines
- ☐ Sediment Deposits
- ☐ Drainage Patterns in Wetlands

Secondary Indicators (2 or more required):
- ☐ Oxidized Root Channels in Upper 12 Inches
- ☐ Water-Stained Leaves
- ☐ Local Soil Survey Data
- ☐ FAC-Neutral Test
- ☐ Other (Explain in Remarks)

Remarks: No hydrology indicators.

SOILS

Map Unit Name
(Series and Phase): Cieneba rocky coarse sandy loam

Drainage Class: Excessively drained

Field Observations
Confirm Mapped Type? ☒ Yes ☐ No

Taxonomy (Subgroup): Typic Xerorthents

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle (Abundance/Contrast)	Texture, Concretions, Structure, etc.
0	---	---	---	---	Rocks

Hydric Soil Indicators:

- ☐ Histosol
- ☐ Histic Epipedon
- ☐ Sulfidic Odor
- ☐ Aquic Moisture Regime
- ☐ Reducing Conditions
- ☐ Gleyed or Low-Chroma Colors
- ☐ Concretions
- ☐ High Organic Content in surface layer in Sandy Soils
- ☐ Organic Streaking in Sandy Soils
- ☐ Listed on Local Hydric Soils List
- ☐ Listed on National Hydric Soils List
- ☐ Other (Explain in Remarks)

Remarks: Could not dig due to presence of large rocks. This data point is located upslope from the drainage, and the rocks are not considered an RPO non-soil that would qualify the area as a County RPO wetland.

WETLAND DETERMINATION

Hydrophytic Vegetation Present?	Yes ☐	No ☒		
Wetland Hydrology Present?	Yes ☐	No ☒		
Hydric Soils Present?	Yes ☐	No ☒	Is this Sampling Point Within a Wetland?	Yes ☐ No ☒

Remarks: This area of Southern Coast Live Oak Riparian Forest does not qualify as a wetland. However, the area is jurisdictional under CDFG as Adjacent Riparian habitat.

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site:	Salvation Army	Date:	26 December 2001
Applicant/Owner:	Salvation Army	County:	San Diego
Investigator:	Vanessa A. Lee and Kara A. Altvater	State:	California

Do normal circumstances exist on the site?	☒ Yes	☐ No	Community ID:	CLORF
Is the site significantly disturbed (Atypical Situation)?	☐ Yes	☒ No	Transect ID:	T 17, 0ft
Is the area a potential Problem Area? (If needed, explain on reverse.)	☐ Yes	☒ No	Plot ID:	DP 94A, PP 94A

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. *Quercus agrifolia*	T	NI	9.		
2.			10.		
3.			11.		
4.			12.		
5.			13.		
6.			14.		
7.			15.		
8.			16.		

Percentage of Dominant Species that are OBL, FACW or FAC (excluding FAC-). 0%

Remarks: No vegetation present at data point. Coast Live Oak tree overhanging data point.

HYDROLOGY

☒ Recorded Data (Described in Remarks):
- ☐ Stream, Lake, or Tide Gauge
- ☒ Aerial Photographs
- ☐ Other

☐ No Recorded Data Available

Field Observations:

Depth of Surface Water:	----	(in.)
Depth to free Water in Pit	----	(in.)
Depth of Saturated Soil:	----	(in.)

Wetland Hydrology Indicators:

Primary Indicators:
- ☐ Inundated
- ☐ Saturated in Upper 12 inches
- ☐ Water Marks
- ☐ Drift Lines
- ☐ Sediment Deposits
- ☐ Drainage Patterns in Wetlands

Secondary Indicators (2 or more required):
- ☐ Oxidized Root Channels in Upper 12 Inches
- ☐ Water-Stained Leaves
- ☐ Local Soil Survey Data
- ☐ FAC-Neutral Test
- ☐ Other (Explain in Remarks)

Remarks: No hydrology indicators.

SOILS

Map Unit Name
(Series and Phase): Cieneba rocky coarse sandy loam

Drainage Class: Excessively drained

Field Observations
Confirm Mapped Type? ☒ Yes ☐ No

Taxonomy (Subgroup): Typic Xerorthents

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle (Abundance/Contrast)	Texture, Concretions, Structure, etc.
0-14	---	10YR 4/4	---	---	Sandy Loam

Hydric Soil Indicators:

- ☐ Histosol
- ☐ Histic Epipedon
- ☐ Sulfidic Odor
- ☐ Aquic Moisture Regime
- ☐ Reducing Conditions
- ☐ Gleyed or Low-Chroma Colors
- ☐ Concretions
- ☐ High Organic Content in surface layer in Sandy Soils
- ☐ Organic Streaking in Sandy Soils
- ☐ Listed on Local Hydric Soils List
- ☐ Listed on National Hydric Soils List
- ☐ Other (Explain in Remarks)

Remarks: No hydric soil indicators.

WETLAND DETERMINATION

Hydrophytic Vegetation Present?	Yes ☐	No ☒		
Wetland Hydrology Present?	Yes ☐	No ☒		
Hydric Soils Present?	Yes ☐	No ☒	Is this Sampling Point Within a Wetland?	Yes ☐ No ☒

Remarks: Data point located at edge of main access road. This area of Southern Coast Live Oak Riparian Forest does not qualify as a wetland. However, the area is jurisdictional under CDFG as Adjacent Riparian habitat.

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site:	Salvation Army	Date:	26 December 2001
Applicant/Owner:	Salvation Army	County:	San Diego
Investigator:	Vanessa A. Lee and Kara A. Altvater	State:	California

Do normal circumstances exist on the site?	☒ Yes	☐ No	Community ID:	CLORF
Is the site significantly disturbed (Atypical Situation)?	☒ Yes	☐ No	Transect ID:	T 17, 10ft
Is the area a potential Problem Area?	☐ Yes	☒ No	Plot ID:	DP 95A, PP 95A
(If needed, explain on reverse.)				

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. *Quercus agrifolia*	T	NI	9.		
2. *Juncus dubius*	H	FACW	10.		
3.			11.		
4.			12.		
5.			13.		
6.			14.		
7.			15.		
8.			16.		

Percentage of Dominant Species that are OBL, FACW or FAC (excluding FAC-). 50%

Remarks: Hydrophytic vegetation criteria not satisfied.

HYDROLOGY

☒ Recorded Data (Described in Remarks):
- ☐ Stream, Lake, or Tide Gauge
- ☒ Aerial Photographs
- ☐ Other

☐ No Recorded Data Available

Field Observations:

Depth of Surface Water:	----	(in.)
Depth to free Water in Pit	----	(in.)
Depth of Saturated Soil:	----	(in.)

Wetland Hydrology Indicators:

Primary Indicators:
- ☐ Inundated
- ☐ Saturated in Upper 12 inches
- ☐ Water Marks
- ☐ Drift Lines
- ☐ Sediment Deposits
- ☒ Drainage Patterns in Wetlands

Secondary Indicators (2 or more required):
- ☐ Oxidized Root Channels in Upper 12 Inches
- ☐ Water-Stained Leaves
- ☐ Local Soil Survey Data
- ☐ FAC-Neutral Test
- ☐ Other (Explain in Remarks)

Remarks: Hydrology indicated by 2-foot wide drainage (measured at approximate ordinary high water mark). Streambed width is 3 feet (measured from bank to bank).

SOILS

Map Unit Name
(Series and Phase): Cieneba rocky coarse sandy loam

Drainage Class: Excessively drained

Field Observations
Confirm Mapped Type? ☒ Yes ☐ No

Taxonomy (Subgroup): Typic Xerorthents

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle (Abundance/Contrast)	Texture, Concretions, Structure, etc.
0	---	---	---	---	Cobble

Hydric Soil Indicators:

- ☐ Histosol
- ☐ Histic Epipedon
- ☐ Sulfidic Odor
- ☐ Aquic Moisture Regime
- ☐ Reducing Conditions
- ☐ Gleyed or Low-Chroma Colors
- ☐ Concretions
- ☐ High Organic Content in surface layer in Sandy Soils
- ☐ Organic Streaking in Sandy Soils
- ☐ Listed on Local Hydric Soils List
- ☐ Listed on National Hydric Soils List
- ☐ Other (Explain in Remarks)

Remarks: Could not dig due to cobble. Cobble width is 2 feet within drainage. It is possible that sediment deposits between cobble satisfy hydric conditions; however, this cannot be determined. In this case, soils are considered to be a natural atypical situation, and the presence of hydric soils is assumed.

WETLAND DETERMINATION

Hydrophytic Vegetation Present?	Yes	☐	No	☒
Wetland Hydrology Present?	Yes	☒	No	☐
Hydric Soils Present?	Yes	☒	No	☐

Is this Sampling Point Within a Wetland? Yes ☐ No ☒

Remarks: This area of Southern Coast Live Oak Riparian Forest does not qualify as an ACOE wetland. However, the area is jurisdictional under CDFG as Adjacent Riparian habitat. The drainage is considered to be Non-wetland Waters of the U.S. (ACOE) and is also jurisdictional under the County and CDFG.

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site:	Salvation Army	Date:	26 December 2001
Applicant/Owner:	Salvation Army	County:	San Diego
Investigator:	Vanessa A. Lee and Kara A. Altvater	State:	California

Do normal circumstances exist on the site?	☒ Yes	☐ No	Community ID:	CLORF
Is the site significantly disturbed (Atypical Situation)?	☐ Yes	☒ No	Transect ID:	T 17, 15ft
Is the area a potential Problem Area? (If needed, explain on reverse.)	☐ Yes	☒ No	Plot ID:	DP 96A, PP 96A

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. *Quercus agrifolia*	T	NI	9.		
2. *Toxicodendrum diversilobum*	H	NI	10.		
3.			11.		
4.			12.		
5.			13.		
6.			14.		
7.			15.		
8.			16.		

Percentage of Dominant Species that are OBL, FACW or FAC (excluding FAC-). 0%

Remarks: No hydrophytic vegetation present. Data point taken at 15-foot mark rather than the 20-foot mark due to high abundance of Poison Oak beyond 15-foot mark.

HYDROLOGY

☒ Recorded Data (Described in Remarks):
- ☐ Stream, Lake, or Tide Gauge
- ☒ Aerial Photographs
- ☐ Other

☐ No Recorded Data Available

Field Observations:

Depth of Surface Water:	----	(in.)
Depth to free Water in Pit	----	(in.)
Depth of Saturated Soil:	----	(in.)

Wetland Hydrology Indicators:

Primary Indicators:
- ☐ Inundated
- ☐ Saturated in Upper 12 inches
- ☐ Water Marks
- ☐ Drift Lines
- ☐ Sediment Deposits
- ☐ Drainage Patterns in Wetlands

Secondary Indicators (2 or more required):
- ☐ Oxidized Root Channels in Upper 12 Inches
- ☐ Water-Stained Leaves
- ☐ Local Soil Survey Data
- ☐ FAC-Neutral Test
- ☐ Other (Explain in Remarks)

Remarks: No hydrology indicators.

SOILS

Map Unit Name
(Series and Phase): Cieneba rocky coarse sandy loam

Drainage Class: Excessively drained

Field Observations
Confirm Mapped Type? ☒ Yes ☐ No

Taxonomy (Subgroup): Typic Xerorthents

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle (Abundance/Contrast)	Texture, Concretions, Structure, etc.
0-12	---	10YR 3/2	---	---	Sandy Loam

Hydric Soil Indicators:

- ☐ Histosol
- ☐ Histic Epipedon
- ☐ Sulfidic Odor
- ☐ Aquic Moisture Regime
- ☐ Reducing Conditions
- ☐ Gleyed or Low-Chroma Colors
- ☐ Concretions
- ☐ High Organic Content in surface layer in Sandy Soils
- ☐ Organic Streaking in Sandy Soils
- ☐ Listed on Local Hydric Soils List
- ☐ Listed on National Hydric Soils List
- ☐ Other (Explain in Remarks)

Remarks: No hydric soil indicators.

WETLAND DETERMINATION

Hydrophytic Vegetation Present?	Yes	☐	No	☒
Wetland Hydrology Present?	Yes	☐	No	☒
Hydric Soils Present?	Yes	☐	No	☒

Is this Sampling Point Within a Wetland? Yes ☐ No ☒

Remarks: This area of Southern Coast Live Oak Riparian Forest does not qualify as a wetland. However, the area is jurisdictional under CDFG as Adjacent Riparian habitat.

Appendix 13

Intensified Wetland Delineation Photos

Photo Point 1A. Data Point 1A

Photo Point 2A. Data Point 2A, Transect 1

Photo Point 3A. Data Point 3A, Transect 1

Photo Point 4A. Data Point 4A, Transect 1

Photo Point 5A. Data Point 5A, Transect 1

Photo Point 6A. Data Point 6A, Transect 1

Photo Point 7A. Data Point 7A, Transect 1

Photo Point 8A. Data Point 8A, Transect 1

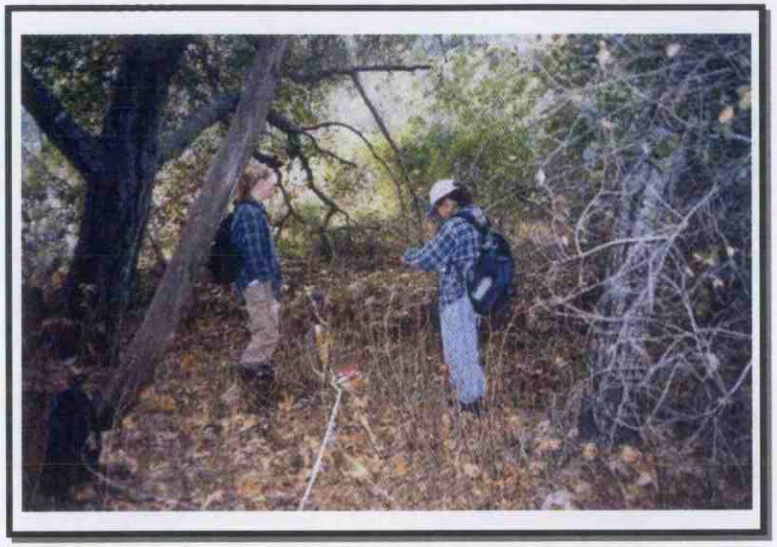


Photo Point 9A. Data Point 9A, Transect 1

Photo Point 10A. Data Point 10A, Transect 1

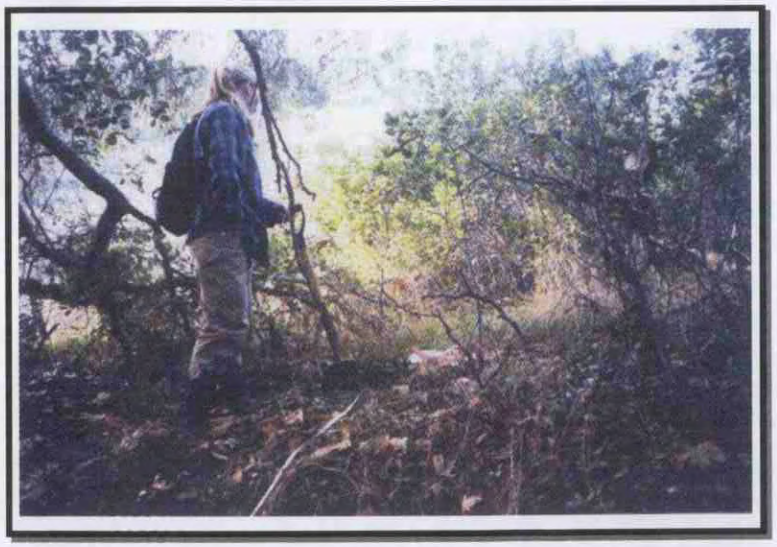


Photo Point 11A. Data Point 11A, Transect 1

Photo Point 12A. Data Point 12A, Transect 1

Photo Point 13A. Data Point 13A, Transect 2

Photo Point 14A. Data Point 14A, Transect 2

Photo Point 15A. Data Point 15A, Transect 2

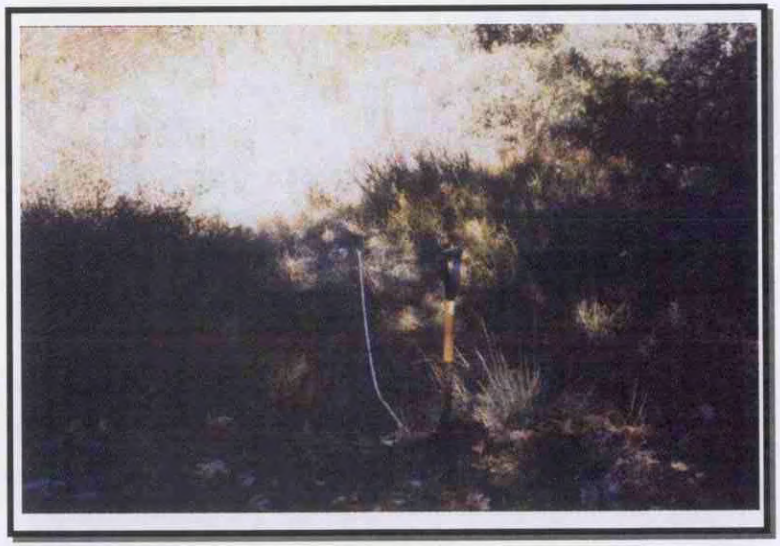


Photo Point 16A. Data Point 16A, Transect 3

Photo Point 17A. Data Point 17A, Transect 3

Photo Point 18A. Data Point 18A, Transect 3

Photo Point 19A. Data Point 19A, Transect 4

Photo Point 20A. Data Point 20A, Transect 4

Photo Point 21A. Data Point 21A, Transect 4

Photo Point 22A. Data Point 22A, Transect 5

Photo Point 23A. Data Point 23A, Transect 5

Photo Point 24A. Data Point 24A, Transect 5

Photo Point 25A. Data Point 25A, Transect 6

Photo Point 26A. Data Point 26A, Transect 6

Photo Point 27A. Data Point 27A, Transect 6

Photo Point 28A. Data Point 28A, Transect 6

Photo Point 29A. Data Point 29A, Transect 6

Photo Point 30A. Data Point 30A, Transect 6

Photo Point 31A. Data Point 31A, Transect 6

Photo Point 32A. Data Point 32A, Transect 6

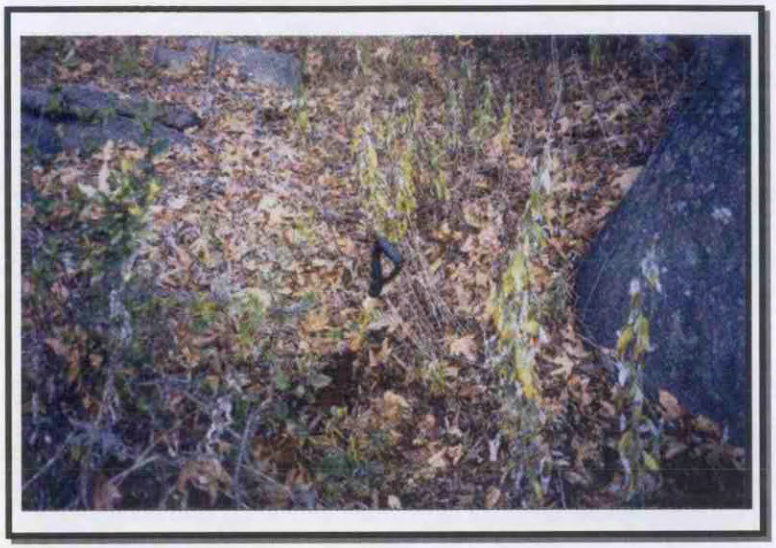


Photo Point 33A. Data Point 33A

Photo Point 34A. Data Point 34A

Photo Point 35A. Data Point 35A, Transect 7

Photo Point 36A. Data Point 36A, Transect 7

Photo Point 37A. Data Point 37A, Transect 7

Photo Point 38A. Data Point 38A, Transect 8

Photo Point 39A. Data Point 39A, Transect 8

Photo Point 40A. Data Point 40A, Transect 8

Photo Point 41A. Data Point 41A, Transect 8

Photo Point 42A. Data Point 42A, Transect 9

Photo Point 43A. Data Point 43A, Transect 9

Photo Point 44A. Data Point 44A, Transect 9

Photo Point 45A. Data Point 45A, Transect 9

Photo Point 46A. Data Point 46A, Transect 9

Photo Point 47A. Data Point 47A, Transect 9

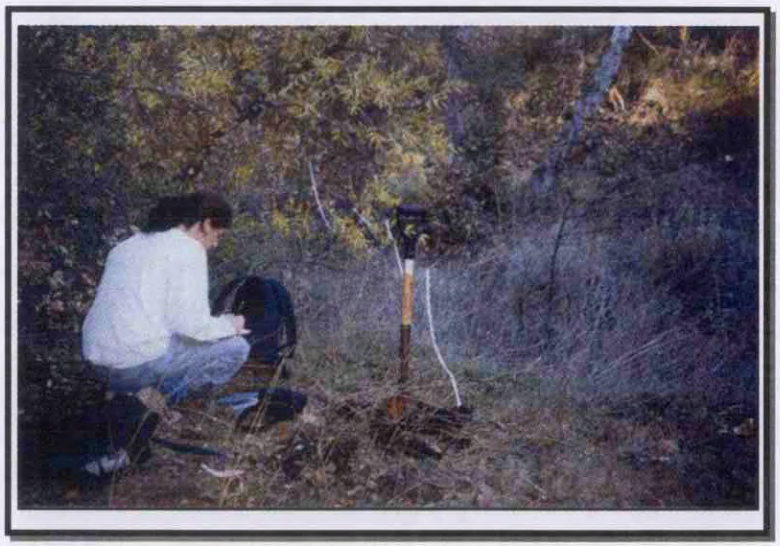


Photo Point 48A. Data Point 48A, Transect 10

Photo Point 49A. Data Point 49A, Transect 10

Photo Point 50A. Data Point 50A, Transect 10

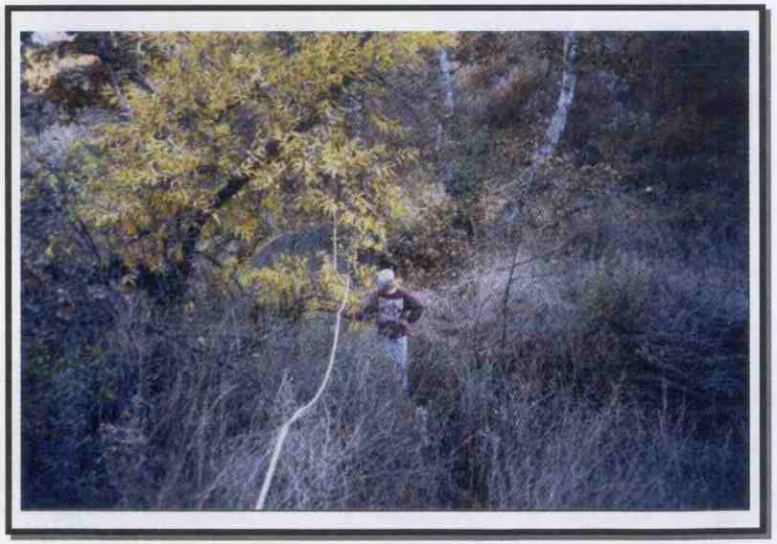


Photo Point 51A. Data Point 51A, Transect 10

Photo Point 52A. Data Point 52A, Transect 10

Photo Point 53A. Data Point 53A, Transect 10

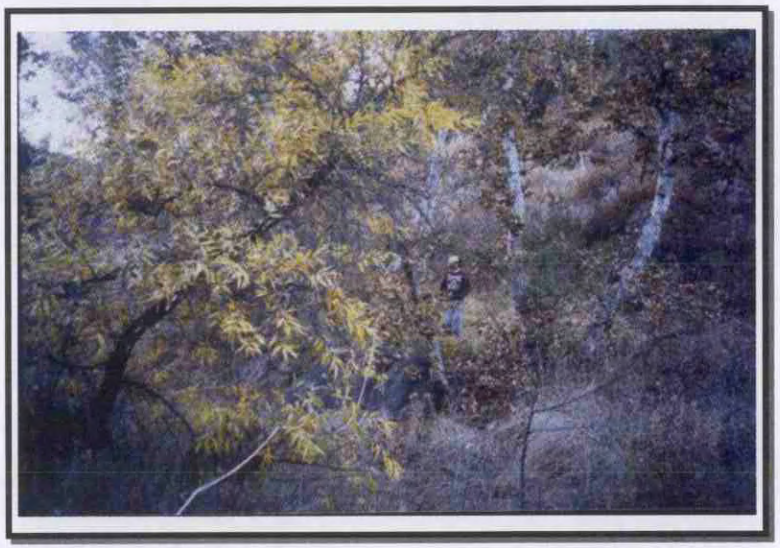


Photo Point 54A. Data Point 54A, Transect 10

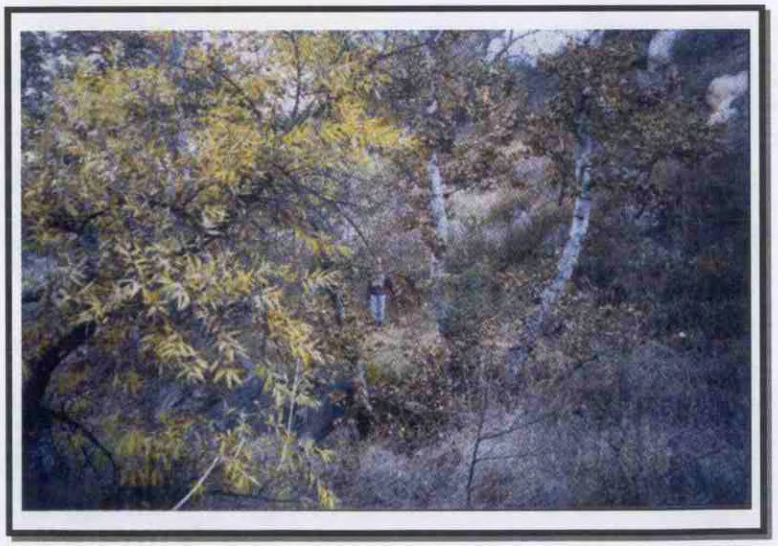


Photo Point 55A. Data Point 55A, Transect 10

Photo Point 56A. Data Point 56A, Transect 11

Photo Point 57A. Data Point 57A, Transect 11

Photo Point 58A. Data Point 58A, Transect 11

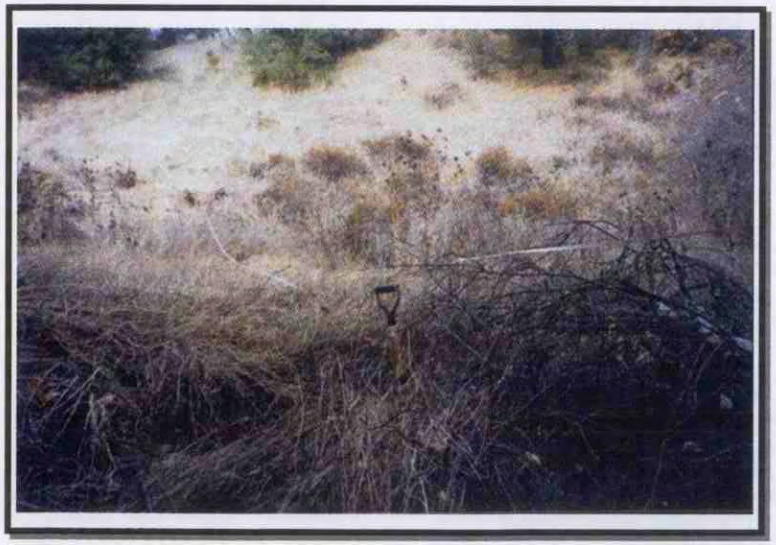


Photo Point 59A. Data Point 59A, Transect 11

Photo Point 60A. Data Point 60A, Transect 11

Photo Point 61A. Data Point 61A, Transect 11

Photo Point 62A. Data Point 62A, Transect 11

Photo Point 63A. Data Point 63A, Transect 11

Photo Point 64A. Data Point 64A, Transect 11 (film was partially exposed)

Photo Point 65A. Data Point 65A, Transect 11 (film was partially exposed)

Not Available

Photo Point 66A. Data Point 66A, Transect 11 (film was exposed)

Not Available

Photo Point 67A. Data Point 67A (film was exposed)

Not Available

Photo Point 68A. Data Point 68A (film was exposed)

Photo Point 69A. Data Point 69A, Transect 12

Photo Point 70A. Data Point 70A, Transect 12 (film was partially exposed)

Photo Point 71A. Data Point 71A, Transect 12 (film was partially exposed)

Photo Point 72A. Data Point 72A, Transect 12

Photo Point 73A. Data Point 73A, Transect 12

Photo Point 74A. Data Point 74A, Transect 13

Photo Point 75A. Data Point 75A, Transect 13

Photo Point 76A. Data Point 76A, Transect 13

Photo Point 77A. Data Point 77A, Transect 13

Photo Point 78A. Data Point 78A, Transect 13

Photo Point 79A. Data Point 79A, Transect 13

Photo Point 80A. Data Point 80A, Transect 13

Photo Point 81A. Data Point 81A

Photo Point 82A. Data Point 82A

Photo Point 83A. Data Point 83A

Photo Point 84A. Data Point 84A, Transect 14

Photo Point 85A. Data Point 85A, Transect 14

Photo Point 86A. Data Point 86A, Transect 14

Photo Point 87A. Data Point 87A, Transect 15

Photo Point 88A. Data Point 88A, Transect 15

Photo Point 89A. Data Point 89A, Transect 15

Photo Point 90A. Data Point 90A, Transect 15

Photo Point 91A. Data Point 91A, Transect 16

Photo Point 92A. Data Point 92A, Transect 16

Photo Point 93A. Data Point 93A, Transect 16

Photo Point 94A. Data Point 94A, Transect 17

Photo Point 95A. Data Point 95A, Transect 17

Photo Point 96A. Data Point 96A, Transect 17

Photo Point 97A. View of upland vegetation near Data Point 81A.

Photo Point 98A. View of upland vegetation near Data Point 81A.