

DRAFT

**GENERAL BIOLOGICAL RESOURCES
REPORT**

HEMET-RYAN AIRPORT MASTER PLAN PROJECT SITE

CITY OF HEMET

RIVERSIDE COUNTY, CALIFORNIA

LSA

April 19, 2004

DRAFT
GENERAL BIOLOGICAL RESOURCES
REPORT

HEMET-RYAN AIRPORT MASTER PLAN PROJECT SITE

CITY OF HEMET

RIVERSIDE COUNTY, CALIFORNIA

Prepared for:

Shutt Moen Associates
707 Aviation Boulevard
Santa Rosa, California 95403

Prepared by:

LSA Associates, Inc.
1650 Spruce Street, Suite 500
Riverside, California 92507
(909) 781-9310

LSA Project No. MHN430

LSA

April 19, 2004

TABLE OF CONTENTS

EXECUTIVE SUMMARY	1
INTRODUCTION	2
METHODS	2
FINDINGS AND DISCUSSION	2
EXISTING SETTING	2
WESTERN RIVERSIDE COUNTY MULTIPLE SPECIES HABITAT CONSERVATION PLAN (MSHCP)	4
JURISDICTIONAL WATERS AND WETLANDS	8
SPECIAL INTEREST SPECIES	8
RAPTOR FORAGING HABITAT	9
CRITICAL HABITAT	9
HABITAT FRAGMENTATION AND WILDLIFE MOVEMENT	9
LOCAL POLICIES OR ORDINANCES	10
IMPACTS TO MSHCP CRITERIA AREAS	10
CUMULATIVE IMPACTS	11
CONCLUSIONS	11

APPENDICES

APPENDIX A - PLANTS AND ANIMALS OBSERVED

FIGURES AND TABLES

FIGURES

1 –	Regional and Project Location	3
2 –	Biological Resources Map	5

TABLES

A –	Impacts to MSHCP Criteria Cells	10
-----	---------------------------------------	----

EXECUTIVE SUMMARY

At the request of Shutt Moen Associates, LSA Associates, Inc. (LSA) conducted a biological resources assessment for the proposed Hemet-Ryan Airport Master Plan project. The airport is located in the southwest portion of the City of Hemet immediately northeast of the intersection of Warren Road and Stetson Avenue.

The purpose of the biological resources assessment was to provide an overview-level assessment of the biological resources present, evaluate consistency with the western Riverside MSHCP, and to determine what focused sensitive species surveys or wetland/jurisdictional waters delineations may be necessary for further project review.

The project site includes lands designated for conservation under the Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP). Significant impacts to MSHCP Criteria areas and vernal pools are anticipated.

As a result of the biological resources assessment, it was determined that the following focused studies may be required for project consistency with the MSHCP:

- Function and values assessment for vernal pools that are present;
- Fairy shrimp focused survey;
- Habitat assessment and focused surveys for narrow endemic plant species;
- Burrowing owl (*Athene cunicularia hypugea*) is considered present and preconstruction surveys will be required; and
- Delineation of potential jurisdictional waters/wetlands.

INTRODUCTION

The proposed Hemet-Ryan Airport Master Plan Project as shown on the *Winchester* USGS 7.5' quadrangle is located in portions of the south half of Sections 18 and 19, Township 5 South, Range 1 West and portions of Sections 13 and 24, Township 5 South, Range 2 West. The project area is currently a local, low active, airport located in the southwest portion of the City of Hemet immediately northeast of the intersection of Warren Road and Stetson Avenue (Figure 1).

METHODS

A literature review was conducted to assist in determining the existence or potential occurrence of sensitive plant and animal species on the project site or in the vicinity of the site. Database records for the *Hemet*, *Winchester*, and *Lakeview* 7.5' USGS quadrangles were searched using the California Department of Fish and Game's (CDFG) *Rarefind* software (November 2003 update) and the California Native Plant Society's *Electronic Inventory of Rare and Endangered Vascular Plants of California* (June 3, 2003 update). The MSCHP published soil surveys and a report, *The Distribution, Status, and Conservation of Vernal Pool and Alkali Playa Wetlands of the Upper Salt Creek Drainage, Hemet, CA* (RECON 1995) were also reviewed. A reconnaissance-level field investigation of the proposed project site was conducted on foot on March 1, 2004, by LSA biologists Stanley Spencer, Denise Woodard, and Lisa Philhower. Notes were taken on general site conditions, vegetation, and habitat suitability for special interest species. A list of plant and animal species observed during the field survey is attached in Appendix A.

FINDINGS AND DISCUSSION

Existing Setting

The proposed project site encompasses approximately 137 acres located at the Hemet-Ryan Airport and extends southwest across the intersection of Warren Road and Stetson Avenue. Open fields border the airport on the west, south, and east. To the north of the proposed project site along Whittor Road lies a recreational park and a trailer park. Mapped soils in the study areas vary from saline-alkaline to strongly alkaline, and include Traver series loamy fine sands and fine sandy loams, Chino series silt loams, Grangeville series fine sandy loams, Domino series fine sandy loams and silt loams, Willows series silty clays, and Waukena loam (*Soil Survey of Western Riverside Area, California* by USDA Soil Conservation Service, 1971, Washington, D.C.).

The predominant plant community on the proposed project site is disturbed non-native annual grassland, with some elements of alkali grassland and vernal pool communities occurring in depressions and channels. Dominant plant species in the study area include pineapple weed (*Chamomilla suaveolens*), shortpod mustard (*Hirschfeldia incana*), hare barley (*Hordeum murinum*), saltgrass (*Distichlis spicata*), goldfields (*Lasthenia californica*), long-beaked filaree (*Erodium botrys*), common fiddleneck (*Amsinckia menziesii*), London rocket (*Sisymbrium irio*), and common ripgut grass (*Bromus diandrus*).

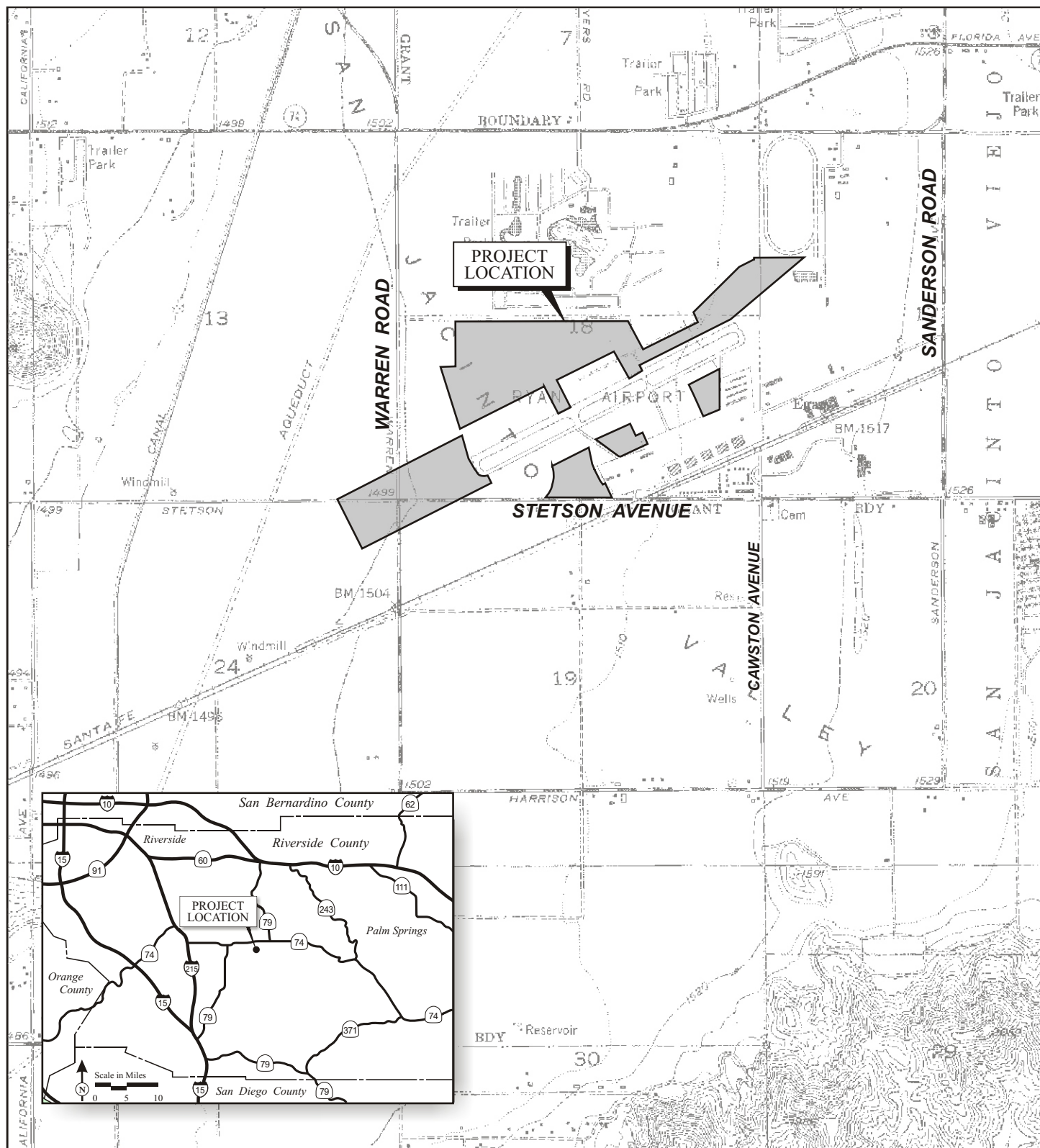
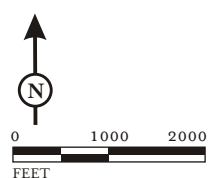


FIGURE 1

LSA



BASE MAP SOURCE: USGS 7.5' QUAD - WINCHESTER, 1979

R:\MHN430\Graphics\proj location.cdr (3/5/03)

Hemet-Ryan Airport Master Plan
Biological Resources
Regional and Project Location

Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP)

The proposed project site lies within the San Jacinto Valley Plan Area of the MSHCP. The project site is within an MSHCP designated "criteria area." Criteria areas are areas that are identified as potential conservation areas in the MSHCP. The MSHCP provides for the assembly of Conservation Areas, consisting of Core Areas and Linkages, for the conservation of Covered Species. The MSHCP Conservation Areas are assembled from Criteria Area Cells, which consist of 160-acre ¼ sections. Each criteria cell has specific conservation measures for assembly of conservation lands within that cell. A review of the MSHCP has identified that the subject property lies within portions of three Criteria Area Cells: 3792, 3793, and 3892.

Projects within and outside the MSHCP Criteria Area must be reviewed to ensure that the project complies with conservation measures for the following:

- Protected species associated with riparian/riverine/vernal pool areas;
- Protected species associated with vernal pools and the vernal pool guidelines;
- Protected narrow endemic plant species; and
- Habitat for the burrowing owl.

Riparian/Riverine Habitat. Riparian or riverine habitats are not present within the project site. No focused surveys will be required for riparian/riverine species.

Vernal Pools. Vernal pools and other depressions capable of holding standing water for several days or more cover approximately 18 acres on and adjacent to the project site (Figure 2). The largest of these (Depression A) is located along the east edge of Warren Road, and receives runoff from channels bordering the existing runways. The general area of the depressions along Warren Road was mapped as "vernal pool areas" in a report of surveys conducted by RECON (*The Distribution, Status, and Conservation of Vernal Pool and Alkali Playa Wetlands of the Upper Salt Creek Drainage, Hemet, California*, RECON, June 15, 1995, prepared for the City of Hemet).

However, all of the site was not covered by these 1995 surveys, individual pools were not mapped, and the distribution of vernal pool plant communities may have changed since the surveys were conducted.

Depression B is located north of Stetson Avenue in the south-southwest portion of the proposed project site. Depression C is located near the northeastern corner of the proposed project site. Depressions B and C appear to be topographic low points that collect runoff from their immediate vicinities. Depression D appears to collect storm runoff from its immediate vicinity as well as irrigation runoff from landscaping in a park at its west margin. Of the approximately 18 acres of vernal pools and similar depressions on and adjacent to the project site the proposed project will impact approximately 3.49 acres including approximately 2.65 acres of Depression A, 0.12 acre of Depressions B, 0.14 acre of Depression C, and 0.58 acre of Depression D (Figure 2). Under the MSHCP, a functions and values assessment will be required for to address impacts to vernal pools and similar features on the site fully.

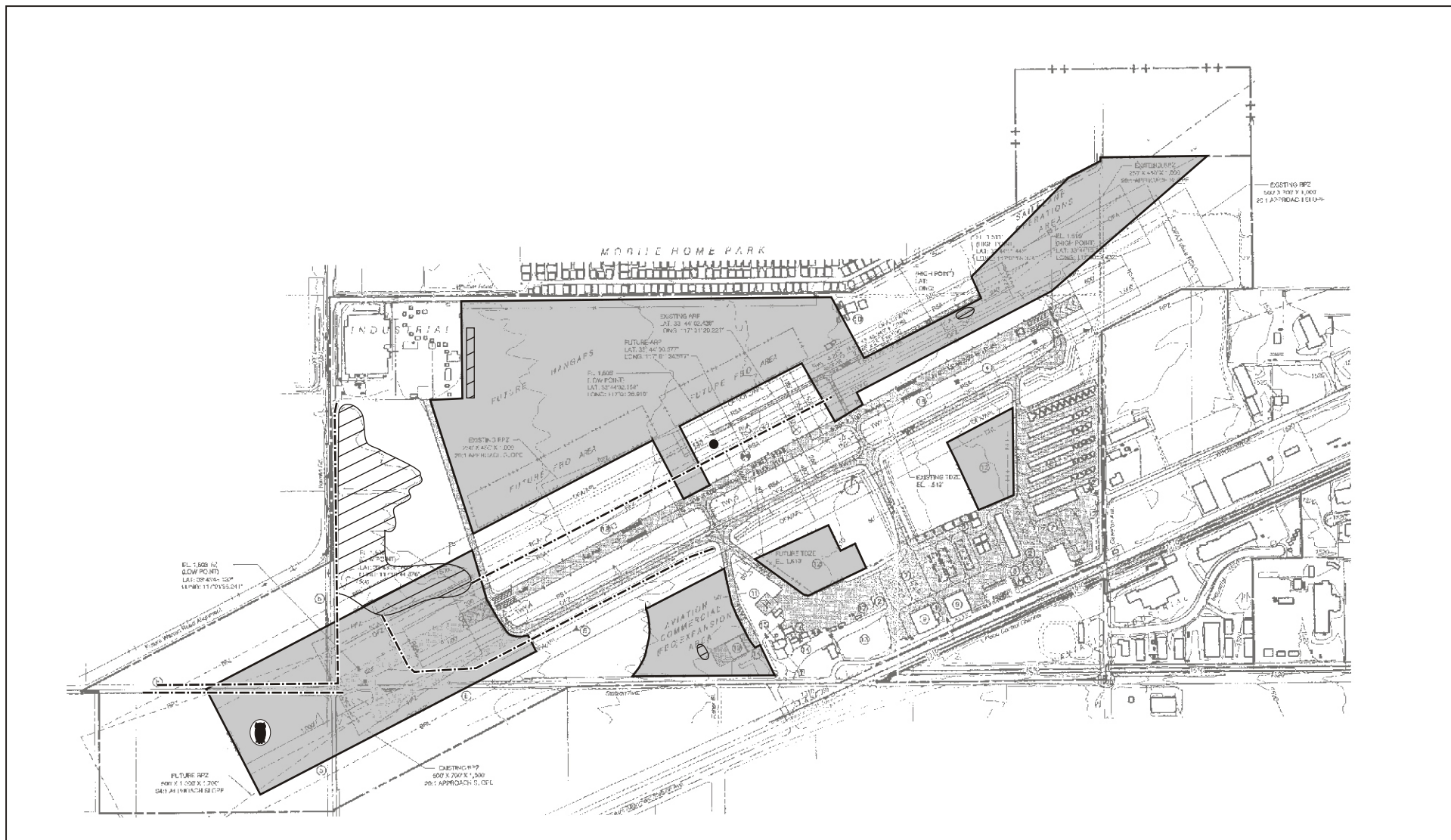
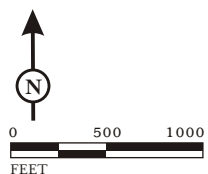


FIGURE 2

LSA



BASE MAP SOURCE:

- STUDY AREAS (ALKALI/NON-NATIVE GRASSLANDS)
- POTENTIAL WETLANDS AND VERNAL POOLS
- POTENTIAL JURISDICTIONAL DRAINAGE
- SMOOTH TARPLANT
- BURROWING OWL PAIR

*Hemet-Ryan Airport Master Plan
Biological Resources
Biological Resources Map*

The vernal pools on and adjacent to the site constitute potential habitat for Riverside fairy shrimp (*Streptocephalus woottoni*; federally listed as “endangered”) and vernal pool fairy shrimp (*Branchinecta lynchi*; federally listed as “threatened”). We recommend that a focused survey be conducted for these species following U.S. Fish and Wildlife Service (USFWS) guidelines (*Interim Survey Guidelines to Permittees for Recovery Permits under Section 10(a)(1)(A) of the Endangered Species Act for the Listed Vernal Pool Branchiopods*, April 19, 1996). A complete survey consists of either two wet season surveys within a five-year period, or a wet season survey immediately followed or preceded by a dry season survey. A wet season survey consists of several site visits to sample seasonal pools, beginning no later than two weeks after pools are initially inundated to a depth of 3 cm for 24 hours after a storm event, and generally continuing until the end of the rainy season. A dry season survey requires written permission from the USFWS, and consists of the collection and examination of soil samples from the pool basins.

Narrow Endemic Plant Species. Under the MSHCP, Narrow Endemic Plant Species Survey Areas (NESSA) are designated for 14 sensitive narrow endemic plant species. The project site is located within NESSA Species of Concern Area 3 (MSHCP Figures 6-1 and 6-2) which includes the three following narrow endemic plant species:

- Spreading navarretia (*Navarretia fossalis*)
- California Orcutt grass (*Orcuttia californica*)
- Wright’s trichocornis (*Trichocoronis wrightii* var. *wrightii*)

In addition to NESSA, the MSHCP identifies Criteria Area Species Survey Areas (CASSA). The portions of the proposed project within the CASSA include Criteria Cells 3792, 3793, and 3892. The following eleven plant species were identified within the CASSA as potentially present on the proposed project site:

- San Jacinto Valley crownscale (*Atriplex coronata* var. *notatior*)
- Parish’s brittle scale (*Atriplex parishii*)
- Davidson’s saltscale (*Atriplex serenana* var. *davidsonii*)
- Thread-leaved brodiaea (*Brodiaea filifolia*)
- Coulter’s goldfields (*Lasthenia glabrata* ssp. *coulteri*)
- Smooth tarplant (*Centromadia pungens* ssp. *laevis*)
- Little mousetail (*Myosorus minimus*)
- Spreading navarretia (*Navarretia fossalis*)
- California Orcutt grass (*Orcuttia californica*)
- Wright’s trichocoronis (*Trichocoronis wrightii* var. *wrightii*)
- Mud nama (*Nama stenocarpum*)

The field survey was conducted during the rainy season and was sufficient to conclude that suitable habitat (i.e., vernal pools and alkali grassland) is present for all of the NESSA and CASSA species identified above except mud nama. Suitable habitat for each of the species is not distributed throughout the entire site; however, the habitat is limited to those areas where appropriate conditions exist for particular species or groups of species. Based on the survey results, LSA recommends that focused surveys be performed for all of the above species, except mud nama. The smooth tarplant was found in

one location on the site (Figure 2), focused surveys for this species may reveal that it also occupies other portions of the site.

We recommend a total of three focused surveys be conducted for the NESSA and CASSA species in April or May depending on precipitation levels, in late June or early July, and in August in order to coincide with the various flowering seasons, when the species may be identified in the field. The first of the focused surveys should include identification of vernal pool indicator plant species and mapping their distributions for use in identification and delineation of vernal pools in the project area. If three or more years elapse between this report and the date of focused surveys it may be appropriate to update the habitat suitability assessment. Focused surveys may be considered invalid during years of below average rainfall.

Please note, for Area 3 NESSA and CESSA plant species, the MSHCP states that plant survey requirements shall be waived "at such time as it is confirmed by the RCA that 200 acres of land with habitat value for these species, have been contributed toward Reserve Assembly and Conservation within Subunit 1 of the Lakeview/Nuevo Area Plan or Subunit 4 of the Mead Valley Area Plan" (MSHCP Figures 6-1, 6-2). Unless survey requirements are waived for the reasons just stated, focused surveys will be required.

Burrowing Owl. Burrowing owls (*Athene cunicularia hypugea*) inhabit desert scrub, grassland, and agricultural areas, typically using burrows made by fossorial mammals, such as ground squirrels, for nesting and shelter, but they may also use man-made structures, such as concrete culverts, or openings beneath concrete or asphalt pavement or debris piles. Under Sections 3503 and 3503.5 of the California Fish and Game Code (Code), it is unlawful to take, possess, or needlessly destroy any bird of prey or the nests or eggs of any bird species (except as otherwise provided in the Code or regulations adopted pursuant thereto). Disturbance of any active bird nest during the breeding season, including any active owl burrow, would be prohibited by the Code.

A burrowing owl was observed during the March 2004 field survey (Figure 2). The proposed project site has potential habitat for burrowing owl and the species was reported in the RECON 1995 report from near the west end of the Hemet-Ryan Airport. We recommend that a focused survey be conducted for the burrowing owl prior to project development. Focused surveys would consist of four site visits conducted during the breeding season peak (April 15 through July 15). If owls are found to be utilizing burrows on the site, the CDFG may recommend avoiding ground-disturbing activities during the breeding season (February-August), using trap doors to exclude owls from burrows prior to the breeding season, or other measures to offset potential impacts to this species.

Per the MSHCP, if the site (including adjacent areas) supports three or more pairs of burrowing owls, supports greater than 35 acres of suitable habitat and is non-contiguous with MSHCP Conservation Area lands, at least 90 percent of the area with long-term conservation value and burrowing owl pairs will be conserved on-site.

Sensitive Amphibians. The project site is not within an area requiring surveys for any sensitive amphibian species covered under the MSHCP.

Sensitive Mammals. The project site is not within an area requiring surveys for any sensitive mammal species covered under the MSHCP.

Jurisdictional Waters and Wetlands

The U.S. Army Corps of Engineers (Corps) regulates discharges of dredged or fill material into *waters of the United States*. These *waters* include *wetlands* and non-wetland bodies of water that meet specific criteria, including a direct or indirect connection to interstate commerce. The Corps regulatory jurisdiction pursuant to Section 404 of the Federal Clean Water Act is founded on a connection, or *nexus*, between the water body in question and interstate commerce. This connection may be direct, through a tributary system linking a stream channel with traditional navigable waters used in interstate or foreign commerce, or may be indirect, through a nexus identified in the Corps' regulations. In order to be considered a jurisdictional *wetland* under Section 404, an area must possess three wetland characteristics: hydrophytic *vegetation*, hydric *soils*, and wetland *hydrology*. Each characteristic has a specific set of mandatory wetland criteria that must be satisfied in order for that particular wetland characteristic to be met.

The California Regional Water Quality Control Board (RWQCB) is responsible for the administration of Section 401 of the Clean Water Act. The project is within the jurisdiction of the Santa Ana Regional Board. Water quality certification under Section 401 of the Clean Water Act is only required as part of an application process for certain Federal licenses or permits. The applicable Federal permit in this case is a Corps 404 permit.

The CDFG, through provisions of the California Fish and Game Code (Section 1602), is empowered to issue agreements for any alteration of a river, stream or lake where fish or wildlife resources may be adversely affected. Streams (and rivers) are defined by the presence of a channel bed and banks, and at least an intermittent flow of water. CDFG regulates wetland areas only to the extent that those wetlands are part of a river, stream, or lake as defined by the CDFG.

A wetlands delineation will be required to determine whether any of these depressions or channels meet the formal criteria for wetlands or other jurisdictional waters, and to determine the extent of project impacts to any such jurisdictional areas.

Special Interest Species

In addition to the species addressed in the MSHCP, other sensitive species are known from the region. The literature review identified two additional plant species, Robinson's pepper grass (*Lepidium virginicum* var. *robinsonii*) and paniculate tarplant (*Deinandra paniculata*). Paniculate tarplant was observed during field investigation in March 2004; this plant species is identified by CNPS as a level 4 (CNPS 4 designation is for plants of limited distribution whose status is monitored by CNPS).

Additional animal species identified include one amphibian species, the western spadefoot (*Scaphiopus hammondi intermontanus*); one reptile species, the coastal western whiptail (*Cnemidophorus tigris multiscutatus*); and one bird species, the California horned lark (*Eremophila alpestris actia*) that may potentially occur on the project site, but are not covered under the MSHCP.

Vernal pools on the proposed project site may provide habitat for the western spadefoot. Marginally suitable habitat is present on the proposed project site for the coastal western whiptail. The California horned lark was observed on the proposed project site during field surveys in March 2004. The proposed project will contribute incrementally to the loss of habitat for this species; however, the impacts are not considered to be significant.

These sensitive species are of limited distribution in Southern California and ongoing development in the region is further reducing their ranges and numbers. These species have no official State or Federal listing status, but require consideration under the California Environmental Quality Act (CEQA). Although a few individuals of these species may be present, their loss is not considered a significant impact because of the already existing developed and disturbed conditions.

Raptor Foraging Habitat

The proposed project site has suitable foraging habitat for both migratory and resident raptor species. Species observed on site during field surveys were western burrowing owl (*Athene cunicularia hypugea*), northern harrier (*Circus cyaneus*), red-tailed hawk (*Buteo jamaicensis*), Swainson's hawk (*Buteo swainsoni*) and American kestrel (*Falcon sparverius*). The proposed project represents an incremental loss of foraging habitat for raptors. However, impacts to raptor foraging habitat are not considered significant because of relatively small amount of habitat that will be impacted by the proposed project.

Critical Habitat

The study area is not within designated or proposed critical habitat of any threatened or endangered species. Thus, the proposed project will have no impacts to critical habitat.

Habitat Fragmentation and Wildlife Movement

Habitat fragmentation occurs when a proposed action results in a single, unified habitat area being divided into two or more areas, such that the division isolates the two new areas from each other. Isolation of habitat occurs when wildlife cannot move freely from one portion of the habitat to another, or from one habitat type to another. Habitat fragmentation can also occur when a portion of one or more habitats is converted into another habitat, as when scrub habitats are converted into annual grassland habitat because of frequent burning. Wildlife movement includes seasonal migration along migrational corridors, as well as daily movements for foraging. Migrational corridors may include corridors for unobstructed movement of large mammals, riparian corridors providing cover for migrating birds, routes between breeding waters and upland habitat for amphibians, and roosting and feeding sites for raptors and shorebirds.

The County of Riverside has targeted several wildlife habitat areas that are important for the sustainability of plant and animal species in western Riverside County. The MSHCP designates one noncontiguous habitat block and one constrained linkage in the vicinity of and through the Hemet-Ryan Airport project area. The MSHCP has labeled these areas as Proposed Noncontiguous Habitat Block 7 and Existing Constrained Linkage B.

The proposed project site is within the designated MSHCP Proposed Noncontiguous Habitat Block 7 and along the Existing Constrained Linkage B. Proposed Noncontiguous Habitat Block 7 is made up of a complex of vernal pools west of the City of Hemet. Parcels within this habitat block contribute (in conjunction with Linkage B) the preservation of Narrow Endemic Plant Species (i.e., thread-leaved brodiaea, little mousetail, California Orcutt grass, and spreading navarretia) as well as vernal pool species (i.e., fairy shrimp). Existing Constrained Linkage B includes Salt Creek. This linkage provides habitat for species and also provides for movement of species from the Hemet area in the east, through the central region of the MSHCP planning area to Canyon Lake in the west. The proposed project site may have potentially significant impacts to these MSHCP-designated areas. Compliance with the MSHCP would mitigate impacts to the Proposed Noncontiguous Habitat Block 7 and along the Existing Constrained Linkage B.

Local Policies or Ordinances

The City of Hemet does not have any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance. Thus, no impacts to Local Policies or Ordinances are anticipated.

Impacts to MSHCP Criteria Cells

Table A summarizes the Criteria Area Cell Quadrats within the proposed project, the MSHCP conservation criteria requirements, and the project impacts to each Criteria Cell. The proposed project site is within the San Jacinto Valley Area Plan and within the Hemet Subunit 4 Criteria Area. The proposed project site is within three Criteria Cells: 3792, 3793, and 3892.

Table A – Impacts to MSHCP Criteria Cells

Criteria Area Cell (Quadrat Number)	MSHCP Conservation Amount (%) and Focus Area of Cell	Percentage to be Impacted by Proposed Project	Impacts Explanation
3792 Southeast quarter of Section 13	70%-80% in central portion of cell	Less than 5%	The proposed project will have no anticipated surface disturbance and no anticipated vegetation maintenance (e.g., tree trimming) within this cell. Therefore, the proposed project is compatible with the MSHCP conservation objectives for this cell.
3793 Southwest quarter of Section 18	55%-65% in central portion of cell	70%-80% of the cell will be impacted by the proposed project.	The proposed project proposes to construct hangers, runway extensions, commercial aviation areas, and fixed base operators (FBO) that will impact 70%-80% of the cell. Therefore the project is not compatible with the MSHCP conservation objectives for this cell.
3892 Northeast quarter of Section 24	75%-85% in northwestern portion of cell	Less than 5%	The proposed project will have no anticipated surface disturbance and no anticipated vegetation maintenance (e.g., tree trimming) within this cell. Therefore, the proposed project is compatible with the MSHCP conservation objectives for this cell.

Cumulative Impacts

According to Section 15130 of the *CEQA Guidelines*, cumulative impacts refer to incremental effects of an individual project when viewed in connection with the effects of past projects, current projects, and probable future projects. The proposed project will contribute to the loss of habitat as a result on ongoing development within the region. The MSHCP has been created as a part of the comprehensive regional planning effort to accommodate the County's anticipated growth. Thus, by participating in the MSHCP and setting aside conservation land, the proposed project will not have any adverse cumulative impacts.

CONCLUSIONS

Impacts to sensitive habitats and wildlife corridors will be offset by participating in the MSHCP. Focused surveys for the burrowing owl, narrow endemic plant species, and criteria area plants are required to determine species presence or absence. Vegetation clearing should be conducted outside of the burrowing owl breeding season (February 1-August 31) in order to avoid impacts to nesting birds (Fish and Game Code 3505 and 3505.1). All other impacts to other sensitive species will be mitigated by complying with the MSHCP. A focused jurisdictional/wetlands delineation is required to determine potential impacts to jurisdictional waters/wetlands regulated by the Corps, CDFG, and RWQCB. Impacts to Corps jurisdictional waters will be mitigated by complying with Corps, RWQCB, and CDFG permits once they have been acquired. The project will not conflict with any local ordinances. The project meets MSHCP requirements for two of three Criteria Cell Quadrats.

APPENDIX A

PLANTS AND ANIMALS OBSERVED

DICOT FLOWERING PLANTS

Amaranthaceae

*Amaranthus albus**

Amaranth family

Tumbling pigweed

Asteraceae

Baccharis salicifolia
Centromadia pungens ssp. *laevis*
*Chamomilla suaveolens**
Chloracantha spinosa
*Cirsium vulgare**
*Conyza bonariensis**
Corethrogyne filaginifolia
Deinandra paniculata
Helianthus annuus
Heterotheca grandiflora
*Hypochaeris glabra**
Isocoma menzeisii
*Lactuca serriola**
Lasthenia californica
Layia platyglossa
Psilocarphus brevissimus var. *brevissimus*
*Senecio vulgaris**
*Taraxacum officinale**
Uropappus lindleyi

Sunflower family

Mule fat
Smooth tarplant
Pineapple weed
Spiny goldenbush
Bull thistle
Flax-leaved horseweed
California aster
Paniculate tarplant
Common sunflower
Telegraph weed
Smooth cat's-ear
Goldenbush
Prickly lettuce
Goldfields
Common tidy-tips
Woolly marbles
Common groundsel
Common dandelion
Silver puffs

Boraginaceae

Amsinckia menziesii
Plagiobothrys collinus
Plagiobothrys leptocladus

Borage family

Common fiddleneck
Popcorn flower
Alkali plagiobothrys

Brassicaceae

*Brassica tournefortii**
*Capsella bursa-pastoris**
*Hirschfeldia incana**
Lepidium dictyotum var. *acutidens*
Lepidium dictyotum var. *dictyotum*
*Sisymbrium irio**

Mustard family

Wild turnip
Shepherd's purse
Shortpod mustard
Short-podded peppergrass
Short-podded peppergrass
London rocket

Caryophyllaceae

Spergularia sp.

Pink family

Sand spurry

Chenopodiaceae

Atriplex argentea
*Atriplex semibaccata**
*Atriplex suberecta**
*Salsola tragus**

Convolvulaceae

Cressa truxillensis

Crassulaceae

Crassula connata

Euphorbiaceae

Chamaesyce albomarginata
Croton setigerus

Fabaceae

*Medicago polymorpha**
*Melilotus alba**
*Trifolium hirtum**

Frankeniaceae

Frankenia salina

Geraniaceae

*Erodium brachycarpum**
*Erodium cicutarium**
*Erodium moschatum**

Lamiaceae

Trichostema lanatum

Lythraceae

*Lythrum hyssopifolium**

Malvaceae

*Malva parviflora**

Myrtaceae

Eucalyptus sp.*

Onagraceae

Epilobium pygmaeum

Saltbush family

Silverscale
Australian saltbush
Peregrine saltbush
Russian thistle

Morning-glory family

Alkali weed

Stonecrop family

Sand pigmy-stonecrop

Spurge family

Rattlesnake weed
Dove weed

Pea family

Bur-clover
White sweet-clover
Rose clover

Frankenia family

Alkali heath

Geranium family

Short-fruited filaree
Red-stemmed filaree
White-stemmed filaree

Mint family

Woolly blue-curly

Loosestrife family

Lythrum

Mallow family

Cheeseweed

Myrtle family

Eucalyptus

Evening primrose family

Smooth boisduvalia

Polygonaceae

Eriogonum gracile
*Polygonum arenastrum**
*Rumex crispus**

Scrophulariaceae

Veronica cf. *peregrina*

Buckwheat family

Slender buckwheat
Common knotweed
Curly dock

Figwort family

Purslane speedwell

MONOCOT FLOWERING PLANTS

Poaceae

*Avena barbata**
*Bromus hordeaceus**
*Bromus madritensis**
*Chloris truncata**
*Crypsis vaginiflora**
*Cynodon dactylon**
Distichlis spicata
*Hordeum murinum**
Leptochloa sp.
*Poa annua**
*Polypogon monspeliensis**
*Schismus barbatus**
*Vulpia myuros**

Grass family

Slender wild oat
Soft chess
Foxtail chess
Windmill grass
Prickle grass
Bermuda grass
Saltgrass
Hare barley
Sprangletop
Annual bluegrass
Rabbitfoot grass
Mediterranean schismus
Foxtail fescue

Typhaceae

Typha sp.

Cattail family

Cattail

BIRDS

Ardeidae

Ardea alba
Bubulcus ibis
Egretta thula

Herons, Egrets, and Bitterns

Great egret
Cattle egret
Snowy egret

Anatidae

Anas platyrhynchos

Swans, Geese, and Ducks

Mallard

Accipitridae

Buteo jamaicensis
Buteo swainsoni
Circus cyaneus

Kites, Hawks, and Eagles

Red-tailed hawk
Swainson's hawk
Northern Harrier

Falconidae

Falco sparverius

Charadriidae

Charadrius vociferus

Columbidae

*Columba livia**

Zenaida macroura

Strigidae

Athene cunicularia

Tyrannidae

Sayornis saya

Corvidae

Corvus brachyrhynchos

Corvus corax

Alaudidae

Eremophila alpestris actia

Mimidae

Mimus polyglottos

Emberizidae

Passerculus sandwichensis

Icteridae

Sturnella neglecta

Fringillidae

Carpodacus mexicanus

MAMMALS

Rabbits and Hares

Sylvilagus audubonii

Squirrels

Spermophilus beecheyi

Falcons

American kestrel

Plovers and Lapwings

Killdeer

Pigeons and Doves

Rock (feral) pigeon

Mourning dove

Typical Owls

Burrowing owl

Tyrant Flycatchers

Say's phoebe

Crows and Ravens

American crow

Common raven

Larks

California horned lark

Mimic Thrushes

Northern mockingbird

New World Sparrows

Savannah sparrow

American Orioles and Blackbirds

Western meadowlark

Finches

House finch

Desert cottontail

California ground squirrel

*Indicates non-native species.