

4.4 BIOLOGICAL RESOURCES

This section provides information on biological resources located in the Hemet planning area. Impacts on biological resources from implementation of the Draft General Plan are discussed in conjunction with mitigation measures to avoid, reduce, or compensate for significant impacts.

4.4.1 REGULATORY BACKGROUND

Biological resources are subject to a variety of laws and regulations as part of the environmental review process. This section provides brief descriptions of the laws and regulations that may apply to biological resources in the planning area.

FEDERAL PLANS, POLICIES, REGULATIONS, AND LAWS

Federal Endangered Species Act

The federal Endangered Species Act (ESA) provides legal protection for threatened and endangered plant and animal species and requires definitions of critical habitat and development of recovery plans for specific species. Section 7 of the ESA requires federal agencies to make a finding on the potential to jeopardize the continued existence of any listed species potentially impacted by all federal actions, including the approval of a public or private action, such as the issuance of a permit pursuant to Sections 10 and 404 of the U.S. Clean Water Act (CWA). Section 9 of the ESA prohibits the take of any endangered species. Take is defined by the ESA as "...to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct." Section 10(a) of the ESA permits the incidental take of listed species if the take is incidental to, and not the purpose of, carrying out an otherwise lawful activity.

Projects adversely affecting federally-listed threatened or endangered species are required to obtain take permission from the US Fish and Wildlife Service (USFWS) prior to project implementation. If a federal agency is involved (i.e., if a wetlands permit is required, if the project has federal funding), take permission can be obtained through ESA Section 7 consultation with the USFWS. Consultation will determine whether the project would adversely impact a protected species or designated critical habitat and identify mitigation measures that would be required to avoid or reduce impacts on the species or its habitat. Following this consultation, the USFWS issues a Biological Opinion (BO), which dictates the conditions of take that are allowed for the project. If no federal agency is involved, project applicants are required to obtain an Incidental Take Permit through Section 10 of the ESA, which requires preparation of a Habitat Conservation Plan (HCP).

In the planning area, compliance with the Federal ESA is governed by the Western Riverside County Multi-Species Habitat Conservation Plan (MSHCP). The MSHCP and associated regulatory process for signatories and special entities are discussed below.

Federal Clean Water Act

The objective of the federal Clean Water Act (CWA) is to restore and maintain the chemical, physical, and biological integrity of the Nation's waters. Section 404 of the CWA requires a project applicant to obtain a permit from the United States Army Corps of Engineers (USACE) before engaging in any activity that involves discharge of dredged or fill material into waters of the United States, including wetlands. Fill material includes material placed in waters of the United States where the material has the effect of replacing a portion of a water of the United States with dry land or changing the bottom elevation of a portion of a water of the United States. Waters of the United States include navigable waters of the United States; interstate waters; all other waters where the use, degradation, or destruction of the waters could affect interstate or foreign commerce; and relatively permanent tributaries to any of these waters. Wetlands are defined as those areas that are inundated or saturated by surface water or groundwater at a frequency and duration sufficient to support, and that under normal

circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Jurisdictional wetlands must meet three wetland delineation criteria: hydrophytic vegetation, hydric soil types, and wetland hydrology. Wetlands that meet the delineation criteria may be jurisdictional under Section 404 of CWA pending USACE and Environmental Protection Agency (EPA) review.

Section 401 of the CWA prohibits the discharge of any pollutant into the Nation's waters without a permit, and Section 402 establishes the permit program with the National Pollutant Discharge Elimination System (NPDES). The State Water Resources Control Board (SWRCB) has authority over wetlands through Section 401 of the CWA, as well as the Porter-Cologne Water Quality Control Act (Porter-Cologne Act), California Code of Regulations Section 3831(k), and California Wetlands Conservation Policy. The CWA requires that an applicant for a Section 404 permit (to discharge dredged or fill material into waters of the United States) first obtain a certificate from the appropriate state agency stating that the fill is consistent with the State's water quality standards and criteria. In California, the authority to either grant certification or waive the requirement for permits is delegated by the SWRCB to the nine regional boards. A request for certification is submitted to the regional board at the same time that an application is filed with the USACE. The regional board has 60 days to review the application and act on it. Because no USACE permit is valid under the CWA unless "certified" by the state, these boards may effectively veto or add conditions to any USACE permit.

In 2008, the USACE and EPA issued regulations governing compensatory mitigation for activities authorized by permits issued by the USACE. These regulations establish a preference for the use of mitigation banks to reduce some of the risks and uncertainties associated with compensatory mitigation.

Executive Order 11990, Protection of Wetlands (May 24, 1977)

This Executive Order establishes a national policy to avoid adverse impacts on wetlands whenever there is a practicable alternative and is intended to result in no net loss of wetland values or acres. On projects with Federal actions or approvals, impacts on wetlands must be identified in the environmental document. Alternatives that avoid wetlands must be considered. If wetland impacts cannot be avoided, then all practicable measures to minimize harm to those wetlands must be included. This must be documented in a specific Wetlands Only Practicable Alternative Finding in the final environmental document for the proposed project.

STATE PLANS, POLICIES, REGULATIONS, AND LAWS

California Endangered Species Act

The California Endangered Species Act (CESA) directs state agencies not to approve projects that would jeopardize the continued existence of an endangered or threatened species or result in the destruction or adverse modification of habitat essential to the continued existence of a species. Furthermore, CESA states that reasonable and prudent alternatives shall be developed by the California Department of Fish and Game (DFG), together with the project proponent and any state lead agency, consistent with conserving the species, while at the same time maintaining the project purpose to the greatest extent possible. A "take" of a species, under CESA, is defined as an activity that would directly or indirectly kill an individual of a species. The CESA definition of take does not include "harm" or "harass" as is included in the federal ESA. As a result, the threshold for a take under CESA may be higher than under the ESA because habitat modification is not necessarily considered take under CESA.

Sections 2081(b) and (c) of CESA allow DFG to issue an incidental take permit for a state-listed threatened and endangered species only if the following specific criteria are met:

- (1) that take is incidental to an otherwise lawful activity;
- (2) that the impacts of the authorized take have been minimized and fully mitigated;
- (3) that the permit is consistent with regulations adopted pursuant to Sections 2112 and 2114;

- (4) that the applicant has ensured adequate funding to implement minimization and mitigation measures and monitor these measures for compliance and effectiveness; and
- (5) that issuance of the permit will not jeopardize the continued existence of a state-listed species.

Should the project applicant receive authorization to take federally listed species under the federal ESA, take authorization may also be sought as a “consistency determination” from DFG under Section 2080.1 of CESA if the species is listed under both the ESA and the CESA. If DFG determines that the federal statement/permit is not consistent with CESA, or if the species is listed under CESA but not under ESA, the applicant must apply for a state incidental take permit under Section 2081(b) of the California Fish and Game Code.

Under CESA, DFG maintains a list of threatened and endangered species. In addition, DFG maintains lists of candidate species and species of special concern. Candidate species are those species under review for addition to either the list of threatened or endangered species. Species of special concern status applies to animals not listed under the federal ESA or CESA, but which nonetheless are declining at a rate that could result in listing, or have historically occurred in low numbers and known threats to their persistence currently exist. The designation is intended to result in special consideration for these animals during environmental review.

In the planning area, compliance with CESA is governed by the MSHCP. The MSHCP and associated regulatory process for signatories and special entities are discussed below.

Native Plant Protection Act (Fish and Game Code Sections 1900-1913)

California’s Native Plant Protection Act (NPPA) requires all State agencies to establish criteria for determining if a species, subspecies, or variety of native plant is endangered or rare. Provisions of the NPPA prohibit the taking of listed plants from the wild and require notification of DFG at least 10 days in advance of any change in land use which would adversely impact listed plants. This requirement allows DFG to salvage listed plant species that would otherwise be destroyed.

California Department of Fish and Game/California Native Plant Society Plant Species Designations

DFG assigns rare plant ranks through the collaborative efforts of the Rare Plant Status Review Group composed of over 300 botanical experts from government, academia, non government organizations, and the private sector and managed jointly by DFG and the California Native Plant Society (CNPS). California native plants meeting the rarity or endangerment criteria are assigned a California Rare Plant Rank (CRPR). These plants were formerly referred to as CNPS listed species; however, as of March 2010, DFG has adopted the name CRPR for the rarity and endangerment categories to eliminate the false impression that these assignments are the exclusive work of CNPS and that CNPS has had undue influence over the regulatory process. CRPR 1 and 2 species generally qualify as endangered, rare, or threatened within the definition of the CEQA Guidelines (CCR Section 15380). In general, CRPR 3 and 4 species do not meet the definition of endangered, rare, or threatened pursuant to CEQA Section 15380; however, these species may be evaluated by the lead agency on a case by case basis to determine significance criteria under CEQA.

California Fish and Game Code

Fully Protected Species

The California Fish and Game Code prohibits the incidental or deliberate take of fully protected species. DFG cannot issue a take permit for fully protected species, except under narrow conditions for scientific research or the protection of livestock; therefore, avoidance measures may be required to avoid take.

Lake and Streambed Alteration

Rivers, streams, and lakes in California are subject to regulation by DFG, pursuant to Section 1602 of the California Fish and Game Code. Activities regulated by DFG include diversions, obstructions, or changes to the natural flow or bed, channel, or bank of any river, stream, or lake. Section 1602 states that it is unlawful for any person to substantially divert or obstruct the natural flow or substantially change the bed, channel, or bank of any river, stream, or lake designated by DFG, or use any material from the streambed, without first notifying DFG of such activity. DFG defines a stream as a body of water that flows at least periodically or intermittently through a bed or channel having banks and that supports fish or other aquatic life.

Protection for Bird Nests

Section 3503 of the California Fish and Game Code states that it is unlawful to take, possess, or needlessly destroy the nest or eggs of any bird. Section 3503.5 of the California Fish and Game Code states that it is unlawful to take, possess, or destroy any raptors (e.g., hawks, owls, eagles, falcons), including their nests or eggs.

Porter-Cologne Water Quality Control Act

Under Section 401 of the CWA, an applicant for a Section 404 permit must obtain a certificate from the appropriate state agency stating that the intended dredging or filling activity is consistent with the state's water quality standards and criteria. In California, the authority to grant water quality certification is delegated by the State Water Resources Control Board to the nine Regional Water Quality Control Boards (RWQCB). Most of the planning area is under the jurisdiction of the Santa Ana RWQCB, although a small portion of the planning area is under San Diego RWQCB jurisdiction.

Each of the nine RWQCBs must prepare and periodically update basin plans for water quality control in accordance with the Porter-Cologne Act. Each basin plan sets forth water quality standards for surface water and groundwater and actions to control nonpoint and point sources of pollution. These actions are aimed at achieving and maintaining the basin plans standards. Basin plans offer an opportunity to protect wetlands through the establishment of water quality objectives. The RWQCB's jurisdiction includes federally protected waters as well as areas that meet the definition of "waters of the state." A water of the state is defined as any surface water or groundwater, including saline waters, within the boundaries of the state. The RWQCB has the discretion to take jurisdiction over areas not federally protected under Section 401 provided they meet the definition of waters of the state. Mitigation requiring no net loss of wetlands functions and values of waters of the state is typically required by the RWQCB.

REGIONAL AND LOCAL PLANS, POLICIES, REGULATIONS, AND ORDINANCES

Western Riverside County Multi-Species Habitat Conservation Plan (MSHCP)

In June of 2003, the Riverside County Board of Supervisors adopted a comprehensive MSHCP to provide a regional conservation solution to species and habitat issues that have historically threatened to stall infrastructure and land use development. The MSHCP is a multi-jurisdictional effort that includes the entire unincorporated area of western Riverside County and fourteen cities, including the City of Hemet. The MSHCP covers 146 species and addresses biological diversity within 1.26 million acres, from just west of the San Jacinto Mountains to the Orange County border. The MSHCP is designed to protect more than 30 federally-threatened and endangered species, and to conserve 510,000 acres of native habitat, of which 347,000 acres are already in public and quasi-public ownership. The MSHCP is available on the internet at <http://www.rctlma.org/mshcp>.

The MSHCP serves as a HCP pursuant to Section 10(a)(1)(B) of the federal ESA, as well as a Natural Communities Conservation Plan (NCCP) under the NCCP Act of 2001. Though the USFWS and DFG have authority to regulate the take of threatened and endangered species, consistent with the terms and conditions of approval of the MSHCP, the USFWS and DFG have granted "Take Authorization" for otherwise lawful actions in

exchange for the assembly and management of coordinated MSHCP Conservation Areas for 146 “covered species” (including 14 narrow endemic plant species). Of the 146 “covered species,” 118 species are considered “adequately conserved” within the MSHCP.

The primary intent of the MSHCP is to provide for the conservation of a range of plants and animals and in return, provide take coverage and mitigation for projects throughout Western Riverside County to avoid the cost and delays of mitigating biological impacts on a project-by-project basis. It allows the incidental take (for development purposes) of species and their habitat from development. The MSHCP is a comprehensive document that specifically accomplishes the following:

- ▶ Promotes the biological viability and recovery of Western Riverside County's ecosystems and Habitats and species dependent thereupon, toward a goal of reducing the need to list additional species in the future.
- ▶ Provides a comprehensive means to coordinate, standardize, streamline, and ensure closure regarding mitigation requirements of the federal ESA, CESA, National Environmental Policy Act (NEPA), CEQA, NPPA, and other applicable laws and regulations related to biological and natural resources within the Plan Area.
- ▶ Assures property owners, local governments, and other affected parties that conservation measures undertaken for species and wildlife habitat are adequately covered by the MSHCP and will satisfy mitigation requirements of the federal ESA, CESA, NEPA, CEQA, and NPPA concerning impacts to those covered species and habitats.
- ▶ Establishes and emphasizes the use of incentives to encourage property owners to voluntarily conserve habitat and species within the Plan Area as an alternative to regulatory mandates.
- ▶ Facilitates economic growth and prosperity so that it occurs in a manner consistent with the conservation of biological resources within the Plan Area.
- ▶ Provides the basis for issuance of Incidental Take permits for listed species adequately covered by the MSHCP, by the USFWS and DFG.
- ▶ Provides for issuance of Incidental Take permits for species within the Plan Area that are adequately covered by the MSHCP, both listed and unlisted species.
- ▶ Establishes consistent mitigation standards for MSHCP covered species for potential application by the USFWS under Section 7 of the federal ESA.

Implementation of the MSHCP requires coordinated actions among local jurisdictions, wildlife agencies, owners/managers of existing public/quasi-public lands, and the private sector. Generally, local jurisdictions implement the MSHCP through their normal land use, planning and approval process. Specifically, cities are required to:

1. Adopt an ordinance imposing the Local Development Mitigation Fee as analyzed in the Nexus Fee Report for the MSHCP. The ordinance must follow the model ordinance provided in Exhibit "G" to the MSHCP Implementing Agreement (IA). Hemet’s ordinance is Chapter 31 of the Hemet Municipal Code.
2. Adopt an ordinance or resolution that adopts the MSHCP and establishes procedures and requirements for the implementation of its terms and conditions. The MSHCP specifies that the ordinance or resolution must contain, at a minimum, the following conditions:
 - a. Commitment to utilize the Habitat Evaluation and Acquisition Negotiation Strategy (HANS) or appropriate alternative method to ensure compliance with the criteria.

- b. Imposition of all other terms of the MSHCP, including but not limited to requirements concerning riparian/riverine areas and vernal pools, Narrow Endemic Plant Species and appropriate surveys.
- c. Agreement to enforce all other terms and conditions of the MSHCP, Implementing Agreement and the Permits.

The MSHCP establishes Criteria Areas which represent the areas within which MSHCP Criteria will be applied and from which 153,000 acres of new conservation will be achieved to contribute toward assembly of the overall MSHCP Conservation Area. Criteria have been developed for individual cells or cell groupings and are presented for each Area Plan in the MSCHP. The Hemet planning area is within the San Jacinto Valley Area Plan and is closest to or contains portions of Criteria Area Subunits 3 and 4. Specific criteria for each Criteria Area, subunit, cell group, and cell are contained in the MSHCP.

The San Jacinto Valley Area Plan includes a target of 620– 1,000 conservation acres within the City of Hemet, which is included in a target of 11,540 – 19,465 conservation acres for the entire San Jacinto Valley Area Plan. The San Jacinto Valley Area Plan includes the following Cores and Linkages, which are described in Section 3.2.3 and MSHCP Volume II, Section A.

- ▶ A portion of Proposed Constrained Linkage 20
- ▶ All of Proposed Constrained Linkage 21
- ▶ A portion of Proposed Core 3
- ▶ A portion of Proposed Core 4
- ▶ Most of Proposed Core 5
- ▶ Most of Proposed Linkage 11
- ▶ A large portion of Proposed Linkage 14
- ▶ Eastern portion of Proposed Noncontiguous Habitat Block 5
- ▶ All of Proposed Noncontiguous Habitat Block 6
- ▶ A large portion of Proposed Noncontiguous Habitat Block 7
- ▶ A small portion of Existing Constrained Linkage C
- ▶ A small portion of Existing Core J.

The City is a participant in the MSCHP. As such, public and private development including construction of buildings, structures, infrastructure, and all alterations of the land, which are carried out by plan participants are covered for areas outside the Criteria Area. For land that is within the Criteria Area, proposals for new or altered land uses by plan participants must be evaluated to determine their effect on reserve assembly. Allowable uses must comply with plan survey and impact avoidance, minimization, and mitigation requirements.

The Property Owner Initiated HANS process applies to property which may be needed for inclusion in the MSHCP Conservation Area or subjected to other MSHCP Criteria and is implemented by the County and those cities, including Hemet, that have agreed to implement the HANS process. Under the incentive-based MSHCP program, the Western Riverside County Regional Conservation Authority (RCA), the County, cities, or various State and federal agencies may obtain interests in property needed to implement the MSHCP over time (interest may be obtained in fee, conservation easement, deed restriction, land exchange, flood control easement or other type of interest acceptable to the RCA, the County, cities, acquiring State and/or federal agency, and property owner). Fee ownership of property may not be required. If it is determined that all or a portion of property is needed for inclusion in the MSHCP Conservation Area, various incentives may be available to the property owner in lieu of or in addition to monetary compensation in exchange for the conveyance of a property interest. These incentives may include, but are not limited to, the waiver and/or reduction of certain development fees, monetary compensation for entering into an option agreement, fast track processing, density bonuses, clustering, density transfers (and property reassessment and tax credits if determined to be feasible). The incentives are intended to provide a form of compensation to property owners who convey their property. As a property interest is obtained, it becomes part of the MSHCP Conservation Area (Dudek and Associates 2003).

In the event that a permittee elects to use property currently depicted as public/quasi-public on the MSHCP Plan map in a way that alters the land use such that it would not contribute to reserve assembly, the permittee must locate and acquire or otherwise encumber replacement acreage at a minimum ratio of 1:1 replacement, taking into account direct and indirect effects of public/quasi-public lands in one location with public/quasi-public lands in another location. The permittee must make findings that the replacement acreage is biologically equivalent or superior to the existing property.

The mapping developed as part of the USACE Special Area Management Plan (SAMP) process is used to identify aquatic resources such as riparian/riverine areas, vernal pools and other jurisdictional areas that may be acquired for inclusion in the MSHCP Conservation Area. If such areas are identified, negotiations may proceed in accordance with the HANS process. Until such time as the resource agencies approve a SAMP, the existing regulatory requirements are in place.

For identified and mapped resources not necessary for inclusion in the MSHCP Conservation Area, applicable mitigation under CEQA, which may include federal and state regulatory standards related to wetland functions and values, must still be imposed by the permittees. To ensure that these standards are met, permittees must ensure that, through the CEQA process, project applicants develop project alternatives demonstrating efforts that first avoid, and then minimize direct and indirect effects to the wetlands mapped pursuant to the MSHCP and must review these alternatives with the permittee. An avoidance alternative must be selected, if feasible. If an avoidance alternative is selected, measures must be incorporated into the project design to ensure the long-term conservation of the areas to be avoided, and associated functions and values, through the use of deed restrictions, conservation easements, or other appropriate mechanisms (Dudek and Associates 2003).

If an avoidance alternative is not feasible, a practicable alternative that minimizes direct and indirect effects to riparian/riverine areas and vernal pools and associated functions and values to the greatest extent possible must be selected. Those impacts that are unavoidable must be mitigated such that the lost functions and values as they relate to covered species are replaced as set forth under the Determination of Biologically Equivalent or Superior Preservation. The determination of Biologically Equivalent or Superior Preservation must include the following information to be supplied by the applicant and reviewed by the permittee.

- ▶ Definition of the project area.
- ▶ A written project description, demonstrating why an avoidance alternative is not possible.
- ▶ A written description of biological information available for the project site including the results of resource mapping.
- ▶ Quantification of unavoidable impacts to riparian/riverine areas and vernal pools associated with the project, including direct and indirect effects.
- ▶ A written description of project design features and mitigation measures that reduce indirect effects, such as edge treatments, landscaping, elevation difference, minimization and/or compensation through restoration or enhancement.
- ▶ A finding demonstrating that although the proposed project would not avoid impacts, with proposed design and compensation measures, the project would be biologically equivalent or superior to that which would occur under an avoidance alternative without these measures, based on one or more of the following factors:
 - effects on Conserved Habitats;
 - effects on the species listed above under the heading, "Purpose"; and
 - effects on riparian Linkages and function of the MSHCP Conservation Area. (Dudek and Associates 2003)

Edge treatments shall also be addressed as part of the avoidance and minimization process for areas not to be included in the MSHCP Conservation Area. Edges are areas in proximity to sensitive habitat where land use should be reviewed to provide protection for the sensitive habitat. Consideration of edge treatments is typically required in the review of all projects under existing regulations and procedures. The application of these existing regulations and procedures can contribute to the long-term conservation of functions and values of riparian/riverine areas and vernal pools within the MSHCP Plan Area to assure maintenance of functions and values within the MSHCP Conservation Area. The extent and type of edge treatment needs to be evaluated on a project-by-project and resource-by-resource basis, but should consider the following potential indirect impacts: lighting, noise, trash/debris, urban and stormwater runoff, toxic materials, exotic plant and animal infestations, dust, trampling and unauthorized recreational use, and their relation to the functions and values of the areas to be conserved.

Stephens' Kangaroo Rat Habitat Conservation Plan (HCP)

The Riverside County Habitat Conservation Agency (RCHCA) prepared an HCP for the Stephens' Kangaroo Rat (SKR) to replace a SKR Short-Term HCP which the RCHCA and its member agencies had been implementing since 1990. Under that plan, the USFWS and DFG authorized a limited amount of incidental take subject to conservation and mitigation actions. The new permit and agreement is valid for 30 years and authorizes incidental take of SKR on RCHCA member agency lands within the plan area mapped in the HCP. The HCP area covers 533,954 acres within RCHCA member agency jurisdictions, including approximately 30,000 acres of occupied SKR habitat. The RCHCA established a regional system of ~~seven~~ eight core reserves for conservation of SKR and the ecosystem upon which it depends. The core reserves encompass ~~41,221~~ about 51,200 acres, including ~~12,460~~ 15,000 acres of SKR-occupied habitat. ~~Most land included in these reserves is presently in public ownership; some privately held properties remain in the Lake Mathews Estelle Mountain, Lake Skinner Domenigoni Valley, and San Jacinto Lake Perris reserves.~~ The land acquisition requirement under the SKR HCP has been met, and any private lands in and around the established SKR reserves are not part of a reserve. Hemet's implementing regulations for the SKR HCP are found in Sections 58-91 through 58-104 of the Hemet Municipal Code.

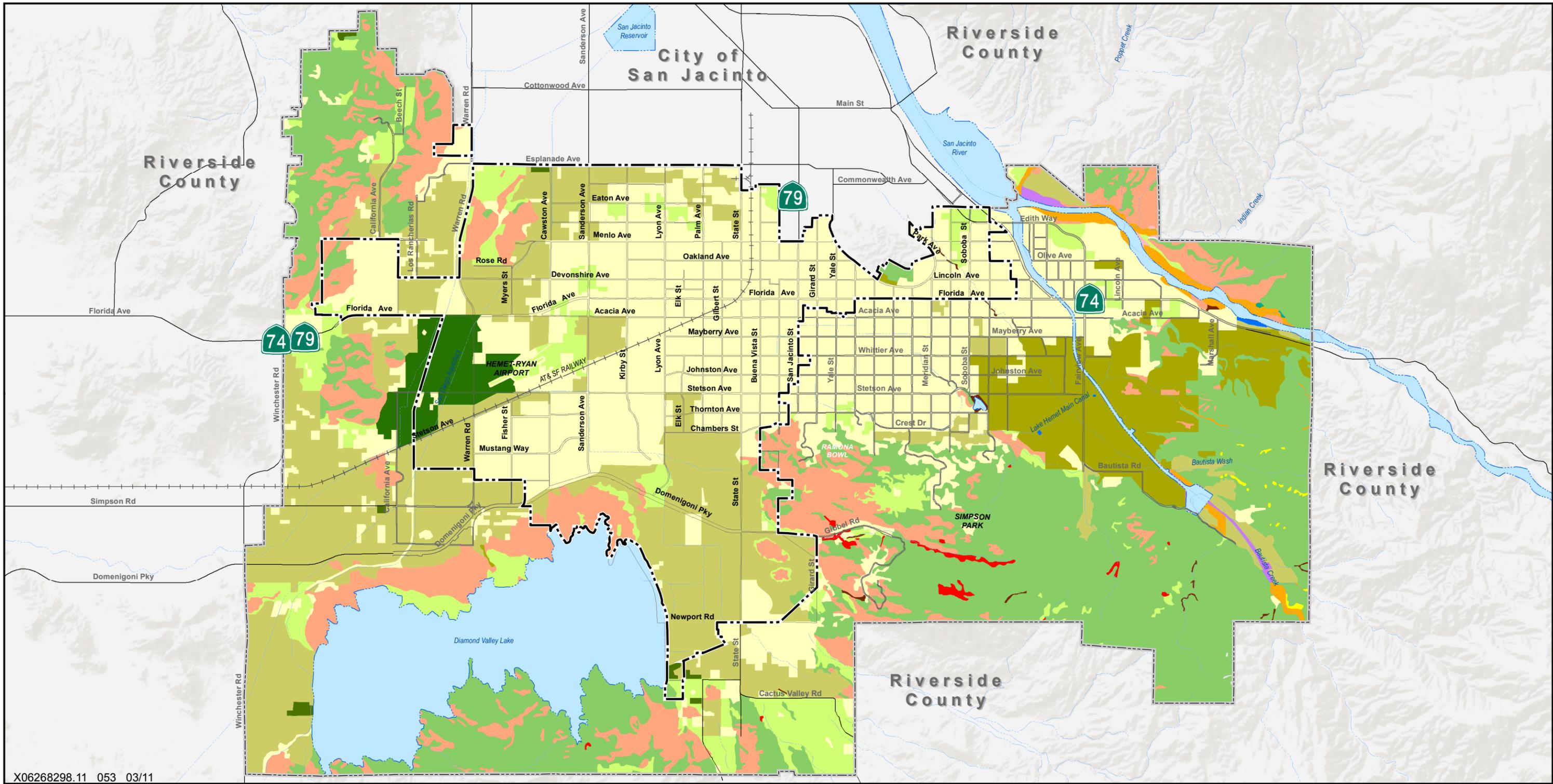
4.4.2 ENVIRONMENTAL SETTING

HABITATS AND LAND USE TYPES

The Hemet planning area encompasses an area of more than 62,000 acres at an average elevation of about 1,600 feet above sea level, with the highest point being over 2,000 feet. The planning area is dominated by a mix of urban development in the central and eastern portions and agricultural uses and open space in the western portion. The north easternmost portion consists largely of undeveloped land associated with the San Jacinto River watershed.

Urban development and extensive agricultural uses limit the extent of high quality native vegetation in the planning area. Native vegetation communities are concentrated within open space areas associated with playas and hillsides in the western portions of the planning area, as well as disturbed and undisturbed areas along the San Jacinto River. The general locations of sensitive and non-sensitive communities in and adjacent to the planning area are depicted on Exhibit 4.4-1. Table 4.4-1 provides acreages for the various vegetation communities located within the planning area.

The value of an area to wildlife depends on physical and biological factors, including the location relative to other land uses, the quality of habitat within and adjacent to the area, and the uniqueness of the habitat within a regional context. The planning area supports habitats ranging from very disturbed areas to high quality native plant communities. However, much of the habitat's value is decreased due to adjacent urban development and agricultural uses.



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Vegetation Communities

- Alkali Playa/Vernal Pool

- Chaparral
- Coast Live Oak Woodland
- Coastal Scrub
- Southern Willow Scrub
- Disturbed Alluvial
- Field Croplands
- Grove/Orchard
- Non-native Grassland
- Open Water/Reservoir/Pond
- Residential/Urban/Exotic
- Riparian Forest
- Riparian Scrub
- Riversidean Alluvial Fan Sage Scrub
- Riversidean Sage Scrub
- Dairy & Livestock Feedyards

- Hemet City Boundary
- Planning Area
- Street
- Railroad
- Creek/Canal
- River/Lake



Sources:
 Census Tiger Line Data 2005
 Riverside County TLMA 2005
 ESRI 2010

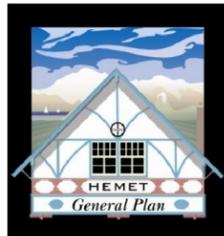
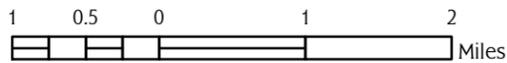


Exhibit 4.4 - 1
VEGETATION COMMUNITIES
 Hemet General Plan

Table 4.4-1 Habitat Types and Acreages	
Habitat Type	Acreage
Alkali Playa	966
Chaparral	13,885
Coast Live Oak Woodland	122
Coastal Scrub	35
Dairy & Livestock Feedyards	103
Disturbed Alluvial	155
Field Croplands	11,391
Grove/Orchard	3,238
Montane Riparian Forest	3
Nonnative Grassland	3,757
Oak Woodland	2
Open Water/Reservoir/Pond	48
Residential/Urban/Exotic	16,567
Riparian Forest	8
Riparian Scrub	59
Riversidean Alluvial Fan Sage Scrub	585
Riversidean Sage Scrub	6,213
Southern Cottonwood-Willow Riparian	1
Southern Interior Basalt Vernal Pool	23
Southern Willow Scrub	15
Sources: Riverside County MSHCP and City of Hemet, 2005; AECOM, 2011.	

Sensitive Habitats

Sensitive habitats are either unique, of relatively limited distribution in the region, of particularly high wildlife value, or provide habitat to rare or endangered species. These resources have been defined by federal, State, and local government conservation programs. The California Natural Diversity Database (CNDDDB) (DFG 2011) was used to determine the sensitivity of vegetation communities within the planning area.

Alkali playa, coast live oak woodland, montane riparian forest, Riversidean alluvial fan sage scrub, Riversidean sage scrub, riparian forest, riparian scrub, southern cottonwood-willow riparian forest, southern willow scrub, and vernal pool communities are considered sensitive habitats under CEQA and are described in detail below. Other vegetation communities occurring within the planning area include agricultural, chaparral, disturbed alluvial, nonnative grassland, open water, riparian forest, and riparian scrub. These communities are depicted in Exhibit 4.4-1, and are described in the Western Riverside County MSHCP (Dudek and Associates, Inc. 2003).

Alkali Playa

Alkali playa is typically described as high, flat areas with poorly drained soils, particularly high in salinity and/or alkalinity due to the evaporation of water that accumulates in closed underground drainages. These playas generally have a high water table with a surface soil layer made up of salt crust. ~~Due to this unique geology and~~

topography, this habitat is only suitable for select plants such as various native saltbush species (*Atriplex* spp.) and rare annual herbs including thread-leaved brodiaea (*Brodiaea filifolia*), smooth tarplant (*Centromadia pungens* ssp. *laevis*), and Coulter's goldfields (*Lasthenia glabrata* ssp. *coulteri*). Due to this unique geology, topography, and hydrology, this habitat is dominated by plants adapted for wet alkaline soils and tends to exclude species that can not tolerate either flooding or high alkalinity. Species that are found within the alkali playa include native saltbrushes (*Atriplex* spp.), seepweed (*Suaeda nigra*), alkali heath (*Frankenia salina*), native barley (*Hordeum* spp.) and species typically associated with vernal pools like hair grass (*Deschampsia danthinoides*) and little mousetail (*Myosurus minimus* var. *apus*). Rare annuals and perennials include thread-leaved brodiaea (*Brodiaea filifolia*), smooth tarplant (*Centromadia pungens* ssp. *laevis*), and Coulter's goldfields (*Lasthenia glabrata* ssp. *coulteri*). (CNPS 2011) In the planning area, approximately 966 acres of alkali playa habitat are located along the western boundary.

Coast Live Oak Woodland

Coast live oak woodland is an open to dense tree community featuring coast live oak (*Quercus agrifolia*) as the dominant overstory species, with Engelmann oak (*Quercus engelmannii*) as an occasional associate. This community can occur on mesic north-facing slopes and in canyon bottoms. This community is well-represented in the cismontane, interior valleys, and foothills of the Peninsular Ranges (Beauchamp, 1986; Barbour, 1988). The shrub understory of this community is poorly developed but may include: blue elderberry (*Sambucus mexicana*), gooseberry (*Ribes* spp.), poison oak (*Toxicodendron diversilobum*), and toyon (*Heteromeles arbutifolia*) (Beauchamp, 1986; Holland, 1986). A herbaceous stratum is usually present, including miner's lettuce (*Claytonia perfoliata* var. *perfoliata*), chickweed (*Stellaria media*), and nonnative grasses. In the planning area, coast live oak woodland occurs within the southern region, totaling approximately 122 acres.

Riversidean Alluvial Fan Sage Scrub

Riversidean alluvial fan sage scrub is a Mediterranean shrubland community that dominates washes, floodplains, and alluvial fans in southern California. This vegetation community is comprised of a number of diverse plant species, including drought-deciduous and evergreen shrubs, succulents, and desert riparian species (Sawyer and Keeler-Wolfe, 1995). Because alluvial fan sage scrub is characterized by its diversity, it can also be described as an intermediate between chaparral and sage scrub habitats, in that all three vegetation communities share similar floral components. However, the distinguishing factor is that alluvial fan sage scrub undergoes periodic scouring from frequent flooding events, creating three seral stages; pioneer, intermediate, and mature. Each seral type is distinct due to soil type, dominant floral species, vegetative cover, and elevation. In the planning area, Riversidean alluvial fan sage scrub only occurs along the San Jacinto River, totaling approximately 585 acres. DFG has designated Riversidean alluvial fan sage scrub as a "very threatened" community.

Riparian Forest

Riparian forest communities found in the planning area consist primarily of southern cottonwood-willow riparian forest, montane riparian forest, and a more general category called simply riparian forest. Riparian forest is the term applied to mixed riparian communities characterized by a dense tree canopy of any combination of the following species: valley oak (*Quercus lobata*), coast live oak (*Quercus agrifolia*), Fremont's cottonwood (*Populus fremontii*), white alder (*Alnus rhombifolia*), California bay (*Umbellularia californica*), California sycamore (*Platanus racemosa*), California walnut (*Juglans californica*), box elder (*Acer negundo*), and big-leaf maple (*Acer macrophyllum*). Riparian forests occur along perennial and intermittent stream channels and dominant tree species vary depending on hydrologic regime. For example, where stream channels support perennial flows in some years, alder species tend to disappear. Where stream channels receive only intermittent flows, willow and cottonwood are less common and sycamore, live oak, and California bay tend to move into the channel. Montane riparian forests are characterized primarily by cottonwood, sycamore, alder, and willow species and are found along higher elevation streams within the planning area. Southern cottonwood-willow riparian forest is an early successional riparian community dominated by cottonwood and willow tree, which germinate on

recently exposed alluvial soils. The riparian forest types are mid-successional communities, whereas oak-dominated communities are late-successional types. There are approximately 3 acres of montane riparian forest, 1 acre of southern cottonwood-willow riparian forest, and 8 acres of other riparian forests in the planning area.

Riparian Scrub

Riparian scrub is comprised of a combination of riparian tree and shrub species similar to the riparian forest type, but at a younger successional stage where the woody species are shrubby and immature. This immature stage may be the result of recent disturbance or the plants may be stunted due to more frequent flooding. There are approximately 59 acres of riparian scrub in the planning area.

Riversidean Sage Scrub

Sage scrub is one of the major shrub-dominated (scrub) communities within California. This community occurs on xeric sites with shallow soils. Sage scrub species are typically drought-deciduous plants with shallow root systems. Both of these adaptations allow for the occurrence of sage scrub species on these xeric sites.

Four distinct floristic associations are found within the sage scrub formation, all occurring within distinct geographical ranges along the California coast and inland. The Riversidean association occurs along the coastal base of the Transverse and Peninsular ranges from central Los Angeles County to Baja, California (Holland, 1986). Riversidean sage scrub may be dominated by a variety of different species depending upon site specific topographic, geographic, and edaphic conditions.

In Riverside County, several sub associations of Riversidean sage scrub are distinguished based on the dominant species. Typical Riversidean sage scrub dominants include: California sagebrush (*Artemisia californica*), flat top buckwheat (*Eriogonum fasciculatum*), black sage (*Salvia mellifera*), California encelia (*Encelia californica*), and our Lord's candle (*Yucca whipplei*). In the planning area, Riversidean sage scrub occurs within the undeveloped lands, totaling approximately 6,213 acres.

Southern Willow Scrub

Southern willow scrub is a dense, broad leaved, winter deciduous riparian thicket dominated by several species of willows (*Salix sp.*) in association with mule fat (*Baccharis salicifolia*). In addition, scattered individuals of cottonwood (*Populus sp.*) and western sycamore (*Platanus racemosa*) may exist as canopy emergents. In the planning area, southern willow scrub occurs along the San Jacinto River, totaling approximately 15 acres.

Southern Interior Basalt Vernal Pool

Southern interior basalt vernal pools are ephemeral plant communities that support unusual flora and fauna due to their distinct topography, soils, and seasonal ponding regimes. During the rainy season, these pools fill up with rainwater which does not drain or percolate due to the micro-depression topography and underlying soil conditions (i.e., a shallow, basalt topsoil layer that prevents subsurface drainage). This results in the successive establishment of hydrophytic plant species throughout the pool and facultative plant species along the receding pool margins, where their location is highly dependent upon the micro-environmental climate.

The native hydrophytic plant species make up what is typically referred to as the vernal pool plant community (Throne 1976). This rare habitat is reflected by the high number of flora and fauna species that are endemic (species that have a high fidelity to a certain region or habitat) to vernal pools. These endemics represent a high proportion of California's native flora (Stone 1990). This high endemism is the result of vernal pools being a relatively recent phenomenon in geologic history and vernal pool endemics being among the most recently evolved species in the California flora (Stebbins 1976).

Some of the indicator species of vernal pools in Riverside County include: San Jacinto Valley crownscale (*Atriplex coronata* var. *notatior*), thread-leaved brodiaea (*Brodiaea filifolia*), spreading navarretia (*Navarretia fossalis*), water starwort (*Callitriche* sp.), water pygmyweed (*Crassula aquatica*), little mousetail (*Myosurus minimus* ssp. *apus*), woolly marbles (*Psilocarphus brevissimus*), and slender woollyheads (*Psilocarphus tenellus*).

In the planning area, approximately 23 acres of southern interior basalt vernal pool habitat occurs within the undeveloped lands located in the eastern portion of the planning area just west of the San Diego Aqueduct and north of the Southern Pacific Railroad. These vernal pool complexes are known as the Hemet Vernal Pool East Complexes and are designated as target conservation areas in Subunit 4, Cell Group D (Quads # 3584, 3684, 3791, and 3792) of the San Jacinto Valley Area Plan as part of the Western Riverside County MSHCP. These designated complexes are to be preserved in perpetuity according to the plans.

SPECIAL-STATUS SPECIES

Special-status plant and wildlife species are defined as species that meet one or more of the following criteria:

- ▶ Listed, proposed for listing, or candidates for listing as threatened or endangered under the federal ESA;
- ▶ Listed, or proposed for listing by the State of California as rare, threatened, or endangered under CESA;
- ▶ Included on List 1B or 2 of the DFG CRPR (formerly identified as the CNPS Inventory of Rare and Endangered Plants of California [CNPS 2008]);
- ▶ Designated as fully protected or species of special concern by DFG;

Species that otherwise meet the definition of rare, threatened, or endangered, as described in the CEQA Guidelines, Section 15380. Occurrences of special-status species are depicted on Exhibit 4.4-2.

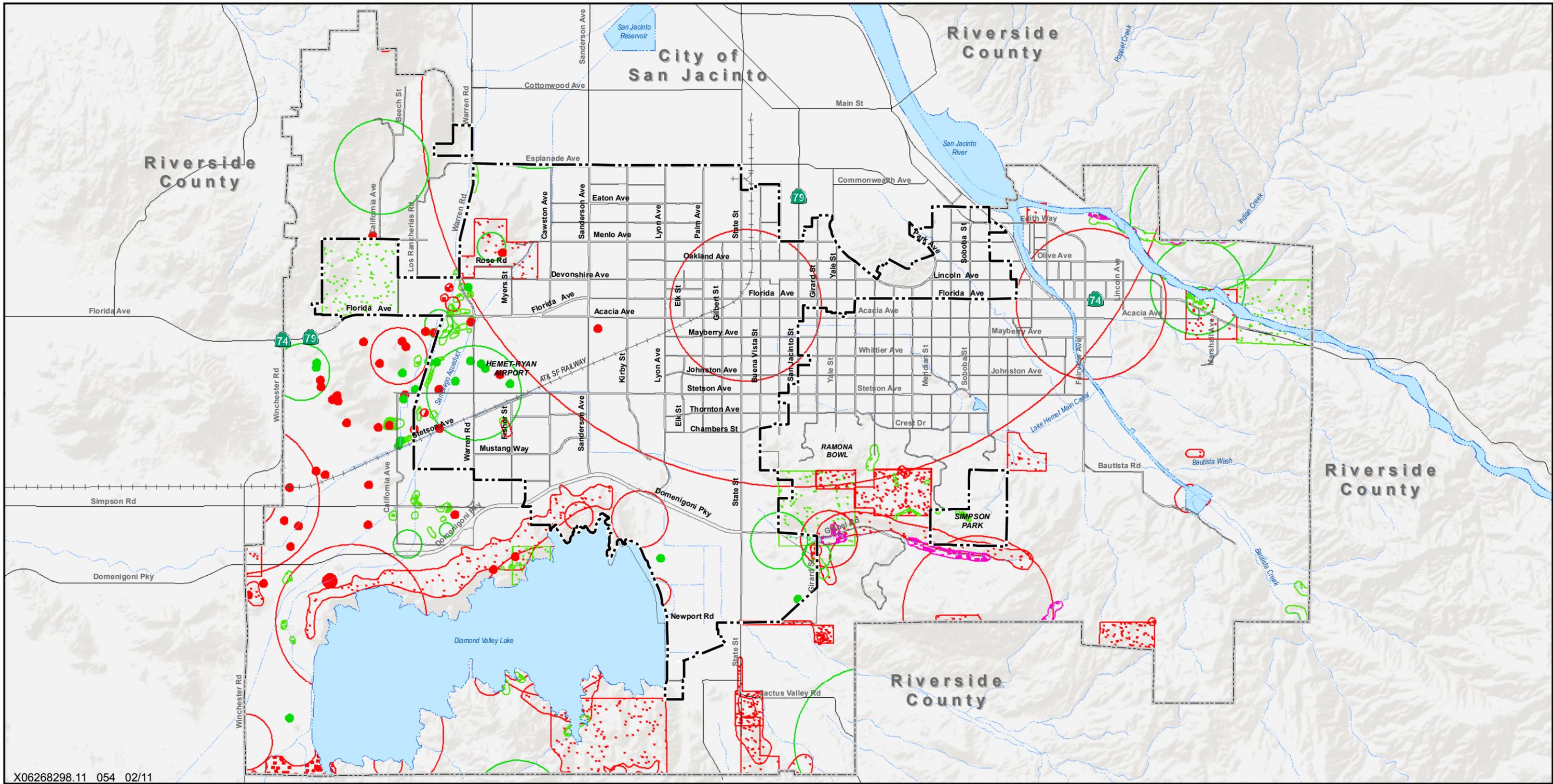
Special-Status Plants

Certain species of flora are designated as special-status based on the federal and State status of the species, as well as the CRPR designation. The potential presence of special-status plants within the planning area have been determined through review of Western Riverside County MSHCP data, which includes information culled from CNDDDB, the Riverside County GIS Database, available public literature, and recent field survey data.

Species accounts are provided below for state and federally listed plant species that have potential to occur in the planning area.

Munz's Onion is endemic to western Riverside County in heavy clay soils of chaparral, coastal scrub, cismontane woodlands, and valley and foothill grassland habitats. This species is currently known from 15 occurrences along the western Riverside County border and is threatened from future urban development projects and ongoing grazing activities. In the planning area, no populations of Munz's onion are known, but potential habitat occurs in the chaparral, coastal scrub, and grassland communities in the northwest and southeast.

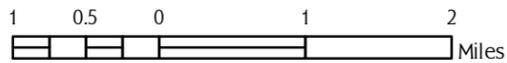
The San Jacinto Valley crownscale is endemic to western Riverside County in dry, alkaline flats in the San Jacinto River Valley. It has also been detected in alkali playas, chenopod scrub, valley and foothill grasslands, and vernal pools within the county. It is only known from ~~one~~ three fragmented populations in the San Jacinto Valley ~~at this time~~ (San Jacinto River, Hemet, and Nichols Wetlands near Lake Elsinore) and is threatened by flood control and agricultural activities. In the planning area, populations of San Jacinto Valley crownscale are known to occur in the vernal pool and alkali playa communities located in the northwestern and western portions of the planning area.



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Sources:
 Census Tiger Line Data 2005
 CNDDDB 2010
 ESRI 2010



LEGEND

- | | | | |
|----------------------|----------------------------|----------------------------------|---------------------|
| Plant (80m) | Animal (non-specific) | Aqu. Comm. (80) | Hemet City Boundary |
| Plant (specific) | Animal (circular) | Aqu. Comm. (specific) | Planning Area |
| Plant (non-specific) | Terr. Comm. (80) | Aqu. Comm. (non-specific) | Street |
| Plant (circular) | Terr. Comm. (specific) | Aqu. Comm. (circular) | Railroad |
| Animal (80m) | Terr. Comm. (non-specific) | Sensitive EO's (Commercial only) | Creek/Canal |
| Animal (specific) | Terr. Comm. (circular) | | River/Lake |

Exhibit 4.4 - 2
SPECIAL STATUS SPECIES
 Hemet General Plan

Table 4.4-2 identifies special-status plant species potentially occurring within or adjacent to the planning area.

Table 4.4-2 Special-Status Plant Species Potentially Occurring in the Hemet Planning Area			
Common Name	Scientific Name	Status Designation	Distribution Notes
California beardtongue	<i>Penstemon californicus</i>	Federal: None State: None CRPR: 1B	Rocky or clay soils in openings within chaparral or chaparral-lower montane coniferous forest ecotone. Often adjacent to meadows. 1,100-2,700 m elevation.
California Orcutt grass	<i>Orcuttia californica</i>	Federal: END State: END CRPR: 1B	Vernal pools. Known only from Southern California and Baja. 15-660m elevation.
Chaparral sand-verbena	<i>Abronia villosa</i> var. <i>aurita</i>	Federal: None State: None CRPR: 1B	Chaparral, coastal scrub, sandy areas. 80-1,600 m elevation.
Coulter's goldfields	<i>Lasthenia glabrata</i> ssp. <i>coulteri</i>	Federal: None State: None CRPR: 1B	Coastal salt marshes, playas, valley and foothill grassland, vernal pools. Alkaline soils in playas, sinks, and grasslands. 1-1,400 m elevation.
Davidson's saltscale	<i>Atriplex serenana</i> var. <i>davidsonii</i>	Federal: None State: None CRPR: 1B	Coastal bluff scrub, coastal scrub. Alkaline soil. 3-250 m elevation.
Intermediate mariposa lily	<i>Calochortus weedii</i> var. <i>intermedius</i>	Federal: None State: None CRPR: 1B	Coastal scrub, chaparral, valley and foothill grassland. Dry, rocky open slopes and rock outcrops. 120-850 m elevation.
Little mousetail	<i>Myosurus minimus</i> ssp. <i>apus</i>	Federal: None State: None CRPR: 3	Vernal pools with alkaline soils. The largest population of this species in southern California is located at Slat Creek west of Hemet. 20-640 m elevation.
Long-spined spineflower	<i>Chorizanthe polygonoides</i> var. <i>longispina</i>	Federal: None State: None CRPR: 1B	Clay soils in southern needlegrass grassland and openings within coastal sage scrub and chaparral. 30-1,400 m elevation.
Mojave tarplant	<i>Deinandra mohavensis</i>	Federal: None State: END CRPR: 1B	Riparian scrub, chaparral. Low sand bars in river bed; mostly in riparian areas or in ephemeral grassy areas. 850-1,600 m elevation.
Munz's onion	<i>Allium munzii</i>	Federal: END State: THR CRPR: 1B	Chaparral, coastal scrub, cismontane woodland, pinyon-juniper woodland, valley and foothill grassland. Only in Riverside County. Heavy clay soils; grows in grasslands and openings within shrublands or woodlands. 300-1,035 m elevation.
Parish's brittlescale	<i>Atriplex parishii</i>	Federal: None State: None CRPR: 1B	Alkali meadows, vernal pools, chenopod scrub, playas. Usually on drying alkali flats with fine soils. 4-140 m elevation. <u>Plant collected only once in California since 1974 (in 1993); has been collected at three locations since 1974; Hemet, Winchester, and Ramona.</u>
Payson's Jewelflower	<i>Caulanthus simulans</i>	Federal: None State: None CRPR: 4	Coastal scrub, chaparral. Sandy, granitic soils. Only in San Diego and Riverside counties. 90-2,200 m elevation.
Robinson's pepper-grass	<i>Lepidium virginicum</i> var. <i>robinsonii</i>	Federal: None State: None CRPR: 1B	Chaparral, coastal scrub. Dry soils, shrubland. 1-945 m elevation.
Round-leaved filaree	<i>California macrophylla</i>	Federal: None State: None CRPR: 1B	Clay soils in open cismontane woodland and valley and foothill grassland. 15-1,200 m elevation.

**Table 4.4-2
Special-Status Plant Species Potentially Occurring in the Hemet Planning Area**

Common Name	Scientific Name	Status Designation	Distribution Notes
Salt Spring checkerbloom	<i>Sidalcea neomexicana</i>	Federal: None State: None CRPR: 2	Alkali playas, brackish marshes, chaparral, coastal scrub, lower montane coniferous forest, mojavean desert scrub. Alkali springs and marshes. 0-1,500 m elevation.
San Jacinto Valley Crownscale	<i>Atriplex coronata</i> var. <i>notatior</i>	Federal: END State: None CRPR: 1B	Playas, chenopod scrub, valley and foothill grassland, vernal pools. Endemic to Riverside County. Dry, alkaline flats in the San Jacinto River Valley. 400-500 m elevation.
Slender-horned spineflower	<i>Dodecahema leptoceras</i>	Federal: END State: END CRPR: 1B	Chaparral, coastal scrub (alluvial fan sage scrub), flood deposited terraces and washes.
Smooth tarplant	<i>Centromadia pungens</i> ssp. <i>laevis</i>	Federal: None State: None CRPR: 1B	Valley and foothill grassland, chenopod scrub, meadows, playas, riparian woodland. Alkali meadow, alkali scrub; also in disturbed places. 0-480 m elevation.
South Coast saltscale	<i>Atriplex pacifica</i>	Federal: None State: None CRPR: 1B	Coastal scrub, coastal bluff scrub, playas, chenopod scrub. Alkali soils. 1-500 m elevation.
Spreading navarretia	<i>Navarretia fossalis</i>	Federal: THR State: None CRPR: 1B	Assorted shallow freshwater marshes and swamps, playas, and vernal pools. Particularly San Diego hardpan and San Diego claypan vernal pools and swales. 30-1,300 m elevation.
Thread-leaved brodiaea	<i>Brodiaea filifolia</i>	Federal: END State: THR CRPR: 1B	Cismontane woodland, coastal scrub, playas, valley and foothill grassland, vernal pools. Usually associated with annual grassland and vernal pools; often surrounded by shrubland habitats. Clay soils. 35-855 m elevation.
<p>Notes:</p> <p>Federal designations: (Federal Endangered Species Act, USFWS):</p> <p>END: Federally listed, endangered THR: Federally listed, threatened Candidate: Federal Candidate</p> <p>State designations: (California Endangered Species Act, DFG)</p> <p>END: State-listed, endangered THR: State-listed, threatened SOC: State Species of Special Concern</p> <p>California Rare Plant Rank (DFG):</p> <p>1A: Plants presumed extinct in California. 1B: Plants rare and endangered in California and throughout their range. 2: Plants rare and endangered in California, but more common elsewhere. 3: More information is needed. 4: Limited distribution.</p> <p>Source: California Natural Diversity Database (CNDDB, January 2011), San Jacinto, El Casco, Lakeview, Winchester, Hemet, Blackburn Canyon, Lake Fulmor, Cabzon and Beaumont USGS quads and Final Western Riverside County Multi-Species Habitat Conservation Plan (MSHCP) (Dudek and Associates, June 2003) and species maps and lists provided at http://ecoregion.ucr.edu.</p>			

The Thread-leaved brodiaea is endemic to southern California in clay soils often associated with vernal pools and annual grasslands. It has also been detected on clay soils within cismontane woodlands, coastal scrub, playas, and valley and foothill grasslands. It is known from isolated populations in southern California and is threatened by residential development and agricultural activities. In the planning area, populations of thread-leaved brodiaea are known to occur in the vernal pool and alkali playa communities located in the ~~north~~southwest.

The slender-horned spineflower is endemic to southern California in sandy soils often associated with alluvial fans, flood deposited terraces, and washes. Communities including chaparral, coastal scrub, and alluvial fan sage scrub are suitable for this species. It is known from isolated populations in southern California and is threatened by residential development and agricultural activities. Populations of slender-horned spineflower exist along the San Jacinto River (CNPS, 2001) in the northeastern portion of the planning area.

Spreading navarretia is endemic to southern California in clay soils in vernal pools, playas, ditches, and other seasonal wetlands within historic vernal pool formations. In Riverside County, it is primarily restricted to alkali floodplains of the San Jacinto River, Mystic Lake, and Salt Creek with the majority of known populations occurring in the Upper Salt Creek drainage west of Hemet. It is known from isolated populations in southern California and is threatened by urban development and agricultural activities. In the planning area, populations of spreading navarretia are known to occur in the vernal pool and alkali playa communities located in the northwest.

California orcutt grass is endemic to southern California and Baja California in vernal pools. It is known from isolated populations in southern California and is threatened by urban development and agricultural activities. In the planning area, ~~no populations of California Orcutt grass are~~ is known to occur at Stowe Vernal Pool in the western portion of the planning area, but potential habitat occurs in the vernal pool complexes located in the northwest.

Mojave tarplant is restricted to the San Jacinto Mountains where it is found on low sand bars in river beds and along stream channels and grassy swales within riparian scrub and chaparral communities. Mojave tarplant is threatened by flood control measures, development, and grazing. In the planning area, this species is known from the Santa Rosa Hills near Ramona Bowl and Hemet Butte and from western Simpson Park (CNDDDB 2011).

Special-Status Wildlife

Sensitive wildlife known or expected to occur within the planning area include amphibians, reptiles, birds, mammals, and invertebrates. Table 4.4-3 provides information about these species including their sensitivity status and preferred habitat. In addition to the CNDDDB, the Western Riverside MSHCP (Dudek and Associates 2003) and species maps and lists provided by the University of California at Riverside were used to determine the presence/absence of sensitive species within the planning area. The MSHCP, species lists and maps were compiled from numerous surveys and records searches for species within the Western Riverside County MSHCP planning area. These data have been used to determine which sensitive species may potentially occur within the planning area; a lack of sightings within the planning area does not indicate that the species does not or will not occur. In addition, species present near the edge of the planning area can potentially expand their range or migrate into the planning area. To ensure that a comprehensive search was completed, the species search performed included a significant amount of land bordering the planning area. Below is a discussion of federal- and State-listed wildlife species with potential to occur in the planning area.

Amphibians/Reptiles

Two sensitive amphibian species that occur or are likely to occur in the planning area are the California tiger salamander (*Ambystoma californiense*) and the Sierra Madre yellow-legged frog (*Rana muscosa*). Sensitive reptiles occurring or potentially occurring within the planning area include: orange throated whiptail (*Aspidoscelis hyperythrus*), coastal western whiptail (*Aspidoscelis tigris stejnegeri*), rosy boa (*Charina trivirgata*), red-diamond rattlesnake (*Crotalus ruber*), Coast (San Diego) horned lizard (*Phrynosoma coronatum [blainvillei]*), San Diego banded gecko (*Coleonyx variegates abbotti*), and Western spadefoot toad (*Spea hammondi*).

Mammals

Stephens' kangaroo rat is listed as a federally-endangered species and a State threatened species. This species is found only in the San Jacinto Valley and adjacent areas of western Riverside County, southwestern San Bernardino County, and northwestern San Diego County. Its preferred habitat is sparsely vegetated sagebrush or

**Table 4.4-3
Special-Status Wildlife Species Potentially Occurring in the Hemet Planning Area**

Common Name	Scientific Name	Status Designation	Preferred Habitat
Birds			
Bell's sage sparrow	<i>Amphispiza belli belli</i>	Federal: FSOC State: CSC	Relatively open chaparral, especially where dominated by chamise, but also occurs in sage scrub, especially in the more arid associations of this plant community.
Burrowing owl	<i>Athene cunicularia</i>	Federal: FSOC State: CSC	Requires fairly large expanses of relatively open level terrain, including grasslands, agricultural fields, dairies and occasionally may use undisturbed edges of golf courses or airports.
Coastal California gnatcatcher	<i>Polioptila californica californica</i>	Federal: FT State: CSC	Obligate resident of several distinct sub-associations of the coastal sage scrub plant community.
Coopers hawk	<i>Accipiter cooperii</i>	Federal: None State: CSC	Open, interrupted, or marginal woodlands. Nest sites are found mainly in riparian growths of deciduous trees, in canyon bottoms or on river floodplains; also, in live oaks.
Ferruginous hawk	<i>Biteo regalis</i>	Federal: None State: CSC	Open grasslands, sagebrush flats, desert scrub, low foothills, and fringes of pinyon-juniper habitats. (wintering)
Loggerheaded shrike	<i>Lanius ludovicianus gambeli</i>	Federal: None State: CSC	Broken woodlands, savannah, pinyon-juniper, joshua tree, and riparian woodlands, desert oasis, scrub, and washes. Prefers open country for hunting, with perches for scanning, and fairly dense shrubs and brush for nesting.
Northern harrier	<i>Circus cyaneus hudsonius</i>	Federal: None State: CSC	Coastal salt and fresh-water marsh. Nest and forage in grasslands, from salt grass in desert sink to mountain cienagas. Nests on ground in shrubby vegetation, usually at marsh edge; nest built of a large mound of sticks in wet areas.
Southern California rufous-crowned sparrow	<i>Aimophila ruficeps canescens</i>	Federal: None State: CSC	Rocky slopes, especially where a relatively open shrub cover dominated by California sagebrush is interspersed with grassy areas.
White-tailed kite	<i>Elanus leucurus</i>	Federal: None State: None	Nests near wet meadows and open grasslands, dense oak, willow or other tree stands
Amphibians			
California tiger salamander	<i>Ambystoma californiense</i>	Federal: FT State: ST	Restricted to grassland and low foothills, with long-lasting vernal pools for breeding. Permanent aquatic sites used for breeding only in the absence of predatory fish. Dry season habitat sites are within reasonable distance of breeding sites, consist of small mammal burrows (especially ground squirrel) as well as man-made enclosures.
Sierra Madre yellow-legged frog	<i>Rana muscosa</i>	Federal: FE State: SE	Inhabits lakes, ponds, meadow streams, isolated pools, sunny riverbanks in the southern Sierra Nevada Mountains. In the mountains of southern California, inhabits rocky streams in narrow canyons and in the chaparral belt.
Reptiles			
Coast (San Diego) horned lizard	<i>Phrynosoma coronatum (blainvillei)</i>	Federal: None State: CSC	Open or sparse scrub and chaparral communities. This species prefers loose, friable soil for burrowing.

**Table 4.4-3
Special-Status Wildlife Species Potentially Occurring in the Hemet Planning Area**

Common Name	Scientific Name	Status Designation	Preferred Habitat
Coastal western whiptail	<i>Aspidoscelis tigris stejnegeri</i>	Federal: None State: CSC	Found in deserts and semiarid areas with sparse vegetation and open areas. Also found in woodland and riparian areas. Ground may be firm soil, sandy, or rocky.
Orange throated whiptail	<i>Aspidoscelis hyperythrus</i>	Federal: None State: CSC	Inhabits low-elevation coastal scrub, chaparral, and valley-foothill hardwood habitats. Prefers washes and other sandy areas with patches of brush and rocks.
Red-diamond rattlesnake	<i>Crotalus ruber</i>	Federal: None State: CSC	Found in chaparral, woodland, grassland and desert areas. Occurs in rocky, dense vegetation, requires rodent burrows, cracks in rocks or surface cover objects.
Rosy boa	<i>Charina trivirgata</i>	Federal: FSOC State: CSC	Desert and chaparral. Prefers moderate to dense vegetation and rocky cover. Mix of brushy cover and rocky soil such as coastal canyons and hillsides, desert canyons, washes, and mountains.
San Diego banded gecko	<i>Coleonyx variegates abbotti</i>	Federal: None State: CSC	Primarily a desert species, although also occurs in habitats ranging from cismontane chaparral to arid tropical forests. Also prefers rocky outcrops in coastal scrub.
Western spadefoot Toad	<i>Spea hammondii</i>	Federal: FSOC State: CSC	Grassland, coastal sage scrub, and other habitats with open sandy gravel soils. Breeds in vernal pools and temporary ponds/pools associated with river bottoms and floodplains. Primarily a species of the lowlands, frequenting washes, floodplains of rivers, alluvial fans, and alkali flats.
Mammals			
Los Angeles pocket mouse	<i>Perognathus longimembris brevinasus</i>	Federal: None State: CSC	Restricted to lower elevation grasslands and coastal sage scrub associations in the Los Angeles Basin.
Northwestern San Diego pocket mouse	<i>Chaetodipus fallax fallax</i>	Federal: None State: CSC	Coastal scrub, chamise-redshank chaparral, mixed chaparral, sagebrush, desert wash, desert scrub, desert succulent shrub, pinyon-juniper, and annual grassland in sandy herbaceous areas, usually in association with rocks or coarse gravel.
San Bernardino kangaroo rat	<i>Dipodomys merriami parvus</i>	Federal: FE State: CSC	Occupies habitat along the San Jacinto River, where in areas of sparse vegetation, disturbed habitat, and riparian habitat. Also uses Riversidean sage scrub and grazing lands.
San Diego black-tailed jackrabbit	<i>Lepus californicus bennettii</i>	Federal: None State: CSC	Arid regions supporting short-grass habitats such as annual grassland, Riversidean sage scrub, alluvial fan sage scrub. Great Basin sagebrush, chaparral, disturbed habitat, and agriculture.
San Diego desert woodrat	<i>Neotoma lepida intermedia</i>	Federal: None State: CSC	Habitat consists of riparian scrub, chaparral, grassland, coastal sage scrub, and mulefat scrub. Moderate to dense canopies preferred. Particularly abundant in rock outcrops and rocky cliffs and slopes.
Southern grasshopper mouse	<i>Onychomys torridus ramona</i>	Federal: None State: SCS	Desert areas, especially scrub habitats with friable soils for digging. Prefers low to moderate scrub cover.

**Table 4.4-3
Special-Status Wildlife Species Potentially Occurring in the Hemet Planning Area**

Common Name	Scientific Name	Status Designation	Preferred Habitat
Stephens' kangaroo rat	<i>Dipodomys stephensi</i>	Federal: FE State: ST	Inhabits annual grassland with sparse perennial vegetation in the San Jacinto Valley and adjacent areas of western Riverside and northwestern San Diego County.
Western yellow bat	<i>Lasiurus xanthinus</i>	Federal: None State: CSC	Roots in trees, generally palms in the southern US. Found in valley foothill riparian, desert riparian, desert wash, and palm oasis habitats.
Invertebrates			
Icenogle's socalchemmis spider	<i>Socalchemmis icenoglei</i>	Federal: None State: CSC	Known only from the type locality in the vicinity of Winchester, in Riverside County.
Quino checkerspot butterfly	<i>Euphydryas editha quino</i>	Federal: FE State: None	Sunny openings within chaparral and coastal sage shrublands, need high densities of food plants <i>Plantago erecta</i> , <i>P. insularis</i> , <i>Orthocarpus purpureus</i>
Vernal pool fairy shrimp	<i>Branchinecta lynchi</i>	Federal: FT State: None	Vernal pools and ephemeral swales in the Central Valley south to Santa Barbara. Disjunct populations also found in Riverside County.
Status Codes			
Federal		State	
FE:	Federal-listed; Endangered	ST:	State-listed; Threatened
FT:	Federal-listed; Threatened	SE:	State-listed; Endangered
FPE:	Federal Proposed Endangered	CSC:	California Species of Special Concern
FPT:	Federal Proposed Threatened	FP:	Fully Protected
FSOC:	Federal Species of Concern		
FC:	Federal Candidate Species		
Source: California Natural Diversity Database (CNDDDB January 2011), San Jacinto, El Casco, Lakeview, Winchester, Hemet, Blackburn Canyon, Lake Fulmor, Cabzon and Beaumont USGS quads and Final MSHCP (Dudek and Associates, June 2003) and species maps and lists provided at http://ecoregion.ucr.edu .			

annual grasses. In the planning area, Stephens' kangaroo rat may have potential to occur in the Riversidean sage scrub, alluvial fan sage scrub, and grassland habitats in the southeast and north, including the San Jacinto River watershed.

Invertebrates

The vernal pool fairy shrimp is a rare invertebrate species that inhabits vernal pools and ephemeral swales throughout the Central Valley south to Santa Barbara. Studies have revealed that a disjunct population occurs in Riverside County on the Santa Rosa Plateau (Helm 1998). Habitat loss through grazing and housing development projects has resulted in low species populations throughout its current range. In the planning area, the vernal pool fairy shrimp has been documented from a vernal pool in the West Hemet area (CNPS 2011) and may have potential to occur in the vernal pool complexes in the northwest.

The Quino checkerspot butterfly is a federally-endangered species. It is not listed by the State. The range of this species is limited to a few populations in Riverside County and San Diego County. It inhabits openings on clay soils within or in the vicinity of shrublands, grasslands, meadows, vernal pools, and lake margins. The larvae feed on plantain (*Plantago erecta*) or owl's clover (*Castilleja exserta*) which are found in upland sage scrub/chaparral habitat. Habitat loss and displacement of larval food plants are part of the reason why this species is in danger of

extinction. In the planning area, the Quino checkerspot butterfly may have potential to occur in the open space areas of chaparral, Riversidean sage scrub, grasslands, and vernal pool habitats in the northwest and southeast.

The Icenogle's socialchemmis spider is a narrowly distributed spider, occurring in the Winchester area.

Birds

The following sensitive bird species potentially occur within the planning area: Southern California rufous-crowned sparrow (*Aimophila ruficeps canescens*), Bell's sage sparrow (*Amphispiza belli belli*), Burrowing owl (*Athene cunicularia*), Ferruginous hawk (*Buteo regalis*), Mountain plover (*Charadrius montanus*), coastal California gnatcatcher (*Polioptila californica californica*), Loggerheaded shrike (*Lanius ludovicianus gambeli*), Northern harrier (*Circus cyaneus hudsonius*) and White-tailed kite (*Elanus leucurus*).

Wetlands

Waters, wetlands (potentially including vernal pools, alkali playa, and grassland habitats), and riparian communities may also be regulated by USACE, DFG, and the RWQCB as described in Section 4.4.1, "Regulatory Framework." Major waterways within the planning area include Diamond Valley Lake, San Jacinto River, San Diego Aqueduct, Hemet Channel, Lake Hemet Main Canal, Salt Creek Flood Control Canal, Bautista Wash, and the Casa Loma Canal Aqueduct. Exhibit 4.9-1 in Section 4.9, "Hydrology and Water Quality," identifies these water resources in the planning area.

Wildlife Movement/Migration Corridors

Wildlife Corridor Definition

Wildlife movement/migration corridors link together areas of suitable wildlife habitat that are otherwise separated by rugged terrain, changes in vegetation, or human disturbances. The fragmentation of open space areas by urbanization tends to create isolated islands of wildlife habitat. Several studies have shown that in the absence of habitat linkages, which facilitate wildlife movement between adjoining open space areas, some wildlife species, especially the larger and more mobile mammals, will not likely persist over time. This is because fragmentation and/or isolation of habitat areas can prohibit the infusion of new individuals and genetic information (MacArthur and Wilson 1967; Soulé 1987; Harris and Gallagher 1989; Bennett 1990). Wildlife corridors can often mitigate the effects of this fragmentation by: (1) allowing animals to move between remaining habitats, thereby allowing depleted populations to be replenished; (2) providing escape routes from fire, predators, and human disturbances, thus reducing the risk that catastrophic events such as fire or disease will result in population or local species extinction; and (3) serving as travel routes for individual animals as they move within their home ranges in search of food, water, mates, and other needs (Noss 1983; Farhig and Merriam 1985; Simberloff and Cox 1987; Harris and Gallagher 1989).

Wildlife movement usually falls into one of three categories: (1) dispersal (defined as juvenile animals moving from natal areas and individuals extending range distributions); (2) seasonal migration; and (3) movements related to home range activities such as foraging for food or water; defending territories; or searching for mates, breeding areas, or cover). A number of terms have been used in various wildlife movement studies, such as wildlife corridor, travel route, habitat linkage, and wildlife crossing, to refer to areas in which wildlife move from one area to another. To clarify the meaning of these terms and facilitate discussion of wildlife movement in this EIR, these terms are defined as follows:

Travel route. A landscape feature such as a ridgeline, drainage, canyon, or riparian strip in a larger natural habitat area that is used frequently by animals to facilitate movement and provide access to necessary resources such as water, food, cover, and den sites. The travel route is generally preferred because it provides the least amount of topographic resistance in moving from one area to another; it contains adequate food, water, and/or cover between habitat areas; and it provides a relatively direct link between target habitat areas.

Wildlife corridor. A piece of habitat, usually linear in nature, that connects two or more habitat patches that would otherwise be fragmented or isolated from one another. Wildlife corridors are usually bounded by urban land or other areas unsuitable for wildlife. The corridor generally contains suitable cover, food, and/or water to support species and facilitate movement in the corridor. Larger, landscape-level corridors, often referred to as habitat or landscape linkages, can provide both transitory and resident habitat for a variety of species.

Wildlife crossing. A small, narrow area, relatively short in length and generally constricted, that allows wildlife to pass under or through an obstacle or barrier that otherwise hinders or prevents movement. Crossings typically include culverts, underpasses, drainage pipes, and tunnels to provide access across or under roads, highways, pipelines, or other physical obstacles that often represent choke points along a movement corridor.

Wildlife Movement in the Planning Area

In a large open space area with few or no manmade or naturally-occurring physical constraints to wildlife movement, wildlife corridors as defined above may not yet exist. Given an open space area that is both large enough to maintain viable populations of species and provide a variety of travel routes including canyons, ridgelines, trails, and riverbeds, wildlife may be able to use these local routes while searching for food, water, shelter, and mates, rather than crossing into other large open space areas. Based on their size, location, vegetative composition, and availability of food, some of these movement areas (e.g., large drainages and canyons) are used for longer periods of time and serve as source areas for food, water, and cover, particularly for small- and medium-sized animals. This is especially true if the travel route is in or contiguous with a larger open space area. However, once open space areas become constrained and/or fragmented as a result of urban development or the construction of physical obstacles, remaining landscape features that connect the larger open space areas can become corridors as long as they provide adequate space, cover, food, and water, and do not contain obstacles or distractions that would generally hinder wildlife movement.

This concept applies to many of the open space areas in the planning area, including the San Jacinto River, Santa Rosa Hills, Lakeview Mountains, and open areas surrounding Diamond Valley Lake. In addition, many canyons, streambeds, and drainages in the southeastern and northwestern portions of the planning area connect these large open space areas, creating numerous wildlife linkages. These open space areas are currently large enough to support a variety of resident wildlife species and populations. Current open space areas located between and adjacent to permanently-designated open space areas (e.g., parks and forests) have generally been constrained and reduced to the point of creating, or necessitating, movement corridors (Dudek and Associates 2003).

4.4.3 IMPACTS AND MITIGATION MEASURES

THRESHOLDS OF SIGNIFICANCE

Based on Appendix G of the State CEQA Guidelines, an impact related to biological resources is considered significant if adoption and implementation of the Draft General Plan would do any of the following:

- ▶ have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by DFG or USFWS;
- ▶ have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations, or by DFG or USFWS;
- ▶ have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the CWA (including but not limited to marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means;

- ▶ interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of nursery sites by native wildlife;
- ▶ conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance; or
- ▶ conflict with the provisions of an adopted HCP, NCCP, or other approved local, regional, or state HCP.

ANALYSIS APPROACH

The analysis of impacts is based on the likely consequences of adoption and implementation of the Draft General Plan, including future land uses consistent with the Land Use Map and Draft General Plan policies and programs. Impact analyses consider how successful implementation of these conservation policies would avoid, minimize, and/or compensate for potential adverse effects to special-status species, as well as other more common species that use the same habitats.

For biological resources impacts related to special status species, sensitive habitat, or wildlife movement, compliance with existing regulations presented in Section 4.4.1, “Regulatory Framework,” and/or implementation of Draft General Plan policies and programs listed below would result in a less-than-significant impact. Draft General Plan policies are consistent with the Western Riverside County MSHCP.

Draft General Plan policies and programs that reduce biological resource impacts include:

Policies

- ▶ **OS-1.1: Development Proposals.** Require development proposals to identify significant biological resources and to provide mitigation, including the use of adequate buffering and sensitive site planning techniques, selective preservation, provision of replacement habitats, and other appropriate measures as may be identified in habitat conservation plans or best practices related to particular resources.
- ▶ **OS-1.2: Vernal Pools.** Preserve the integrity of the vernal pool complex by ensuring adequate hydration, providing appropriate conservation buffers, and the preservation of native plants, in accordance with the requirements of the Multi-Species Habitat Conservation Plan.
- ▶ **OS-1.3: Wetland Habitats.** Require project applicants to conserve wetland habitats along the San Jacinto River, the Upper Salt Creek watershed, and elsewhere as identified where conservation serves to maintain watershed processes that enhance water quality and contribute to the hydrologic regime, and comply with Clean Water Act Section 404. Identify and, to the maximum extent possible, conserve remaining upland habitat areas adjacent to wetland and riparian areas that are critical to the feeding, hibernation, or nesting of wildlife species associated with these wetland and riparian areas.
- ▶ **OS-1.4: Resource Protection in Development Design.** Require appropriate resource protection measures to be incorporated within specific plans and subsequent development proposals. Such requirements may include the preparation of a vegetation management program that addresses landscape maintenance, fuel modification zones, management of passive open space areas, provision of corridor connections for wildlife movement, conservation of water courses, rehabilitation of biological resources displaced in the planning process, and use of project design, engineering, and construction practices that minimize impacts on sensitive species, MSHCP conservation areas, and designated critical habitats.
- ▶ **OS-1.5: Restriction of Use.** As needed to protect resources, limit recreational use in open space areas where sensitive biological resources exist.

- ▶ **OS-1.6: Habitat Conservation Plans.** Coordinate with Riverside County and other relevant agencies to implement the Western Riverside County Multiple-Species Habitat Conservation Plan, the Habitat Conservation Plan for the Stephens' Kangaroo Rat in Western Riverside County, and any other applicable habitat plan.
- ▶ **OS-1.7: Wildlife Movement Corridor.** Continue efforts to establish a wildlife movement corridor in areas such as the San Jacinto River corridor, Santa Rosa Hills, Lakeview Mountains, and the open space areas surrounding Diamond Valley Lake. As applicable, new development in these areas shall incorporate such corridors. To minimize impediments to riparian wildlife movement, new roadways over ravines, arroyos, and drainages shall maintain wildlife corridors by incorporating bridges or culverts, where practical.
- ▶ **OS-2.6: Replacement Trees.** Encourage the preservation of mature and heritage trees by requiring the replacement of any tree in the public right-of-way or with a diameter greater than 4 inches with a California-friendly or shade tree of similar size and shape or with smaller trees at a 3:1 ratio, as reasonably feasible.

Programs

- ▶ **OS-P-1: Update Zoning Standards.** Include appropriate restrictions within the Open Space zoning and the Hillside Overlay to effectively preserve the natural open space character of the City and respond to other requirements of the designations.
- ▶ **OS-P-3: Vernal Pools.** Protect Hemet's vernal pool riparian habitat by ensuring appropriate criteria cell refinement and the management of natural water courses that feed native plants and wildlife.
- ▶ **OS-P-5: Replacement Tree Ordinance.** Prepare an ordinance that establishes a specific fund in the Capital Improvement Plan (CIP) budget for urban forestry to fund the planting of new or replacement trees annually at City parks, City facilities, or in the public right-of-way. The ordinance would also require replacing any tree that has been removed on private property and having a trunk diameter greater than 4 inches with a tree of similar shape and size or with smaller trees at a 3:1 ratio, as reasonably feasible. Replacement trees shall be California-friendly trees and on the City's approved tree list
- ▶ **OS-P-8: Open Space Connections.** During project review, require provision of pedestrian, bikeway, and/or passive open space connections between open space/recreation areas and adjacent developments or publicly owned recreation areas, where appropriate.
- ▶ **OS-P-16: Conservation Planning and Agency Coordination.** Continue to participate and represent the City of Hemet in multi-species habitat conservation planning, watershed management planning, and water resource management planning efforts. Notify and consult with staff of the RWQCB, the Army Corps, the California Department of fish and Game, the U.S. Fish and Wildlife Service, and Western Riverside County Regional Conservation Authority when a proposed land development project may impact vernal pools and streambeds. Impacts to vernal pools and mitigation plans shall also be reported through the CEQA process.
- ▶ **OS-P-17: MSHCP Compliance.** Development in the city shall be required to comply with the applicable terms of the MSHCP including, but not limited to, the payment of mitigation fees, narrow endemic surveys, riparian/riverine policy, and other applicable surveys. Anyone applying for a discretionary permit for property located in an MSHCP-designated Criteria Area/Criteria Cell(s) shall submit a Habitat Evaluation and Acquisition Negotiation Strategy (HANS) Application to the City for transmittal to the Riverside Conservation Agency (RCA).
- ▶ **OS-P-18: Incentives for Conservation.** Provide incentives for land conservation in areas subject to natural floodways, floodplains and water courses. Use the MSHCP Property Owner Initiated Habitat Evaluation and Acquisition Negotiation Strategy (HANS) to promote conservation of areas subject to inclusion in the MSHCP Conservation Area.

- ▶ **OS-P-19: Vegetation Mapping.** Update the local environmental database of habitat types (e.g., Vegetation Map) for Western Riverside County in consultation with the California Department of Fish and Game, the Natural Diversity Database, the U.S. Forest Service, and other knowledgeable agencies. The City shall coordinate with Riverside County to also provide these agencies with data as needed.

IMPACT 4.4-1 Impacts to Special-Status Plant Species. *Adoption and implementation of the Draft General Plan could result in the loss or degradation of existing populations or suitable habitat of special-status plant and wildlife species. However, implementation of Draft General Plan policies and programs would require identification, preservation, and avoidance of these resources, which would result in a less-than-significant impact.*

The planning area supports suitable habitat for 23 special-status plant species, as shown in Table 4.4-2. Native vegetation communities are concentrated within open space areas associated with playas and hillsides in the western portions of the planning area, as well as disturbed and undisturbed areas along the San Jacinto River in the northeastern portion of the planning area. Other vegetation communities occurring within the planning area include agricultural, chaparral, disturbed alluvial, non-native grassland, open water, riparian forest, and riparian scrub. In addition, 29 special-status wildlife species occur within the planning area, as shown in Table 4.4-3. Plant or wildlife populations that occur in the planning area could be affected by proposed land use changes either directly or indirectly through modification of suitable habitat caused by pollutants transported by urban runoff and other means, changes in vegetation as a result of land use change and management practices, altered hydrology or land forms from grading, excavation, and construction of adjacent residential development and roadways, habitat fragmentation, and the introduction of invasive species or noxious weeds from surrounding development.

Future land uses and ground disturbance could occur as a result of development consistent with implementation of the Draft General Plan. Future development could result in loss or degradation of suitable habitat or populations of special-status species. However, Draft General Plan policies and programs include a variety of actions that would protect special-status plant species and habitat for special-status wildlife. Policy OS-1.1 would require development proposals to identify significant biological resources onsite and provide mitigation for the removal or degradation of sensitive plants. Policies OS-1.2 and OS-1.3 would preserve vernal pools and wetland habitats. Program OS-P-3 requires the preservation of vernal pool riparian habitat areas with high biological resource significance. Implementation measures may include conservation, open space, or scenic easements; transfer of development rights; or impact fees and mitigation banking. Policy OS-1.4 specifically requires that appropriate resource protection measures be incorporated into specific plans and development proposals. Policy OS-1.6 requires that the City coordinate with Riverside County in the implementation of the MSHCP and the SKR HCP.

Native plants are protected by the California Fish and Game Code (NPPA, Chapter 10 sections 1900-1913). In addition, DFG generally requires a CESA section 2081 (b) permit for incidental take of listed threatened and endangered plants from development activities. CEQA protects rare and endangered plants under section 15380 and DFG maintains the CRPR list of rare plants; CRPR list 1B and 2 plants are generally considered rare under section 15380 of the CEQA Guidelines.

According to the standards of significance listed above, a significant impact would occur if a substantial degradation in the quality of the environment or reduction of habitat would occur. A substantial degradation would occur if increased mortality or reduced reproductive success would lead to the local extirpation of, or reduction in the population below self-sustaining levels of, a species identified or published as endangered, threatened, rare, candidate, sensitive, or special-status by DFG or USFWS, and meets the definition of section 15380 (b), (c) or (d) of the CEQA guidelines.

The special-status plant species identified above are either threatened, endangered, or species of special concern. Public and private development outside of the Criteria Area and PQP Lands, including construction of buildings, structures, infrastructure and alterations of the land, carried out by permittees, participatory special entities, third parties granted take authorization, and others within the MSHCP Plan Area, are permitted under the MSHCP. This permitted development is subject to consistency with MSHCP policies that apply outside the Criteria Area

(such as policies related to Riparian and Riverine Areas and Vernal Pools, Narrow Endemic Plant Species, Additional Survey Needs and Procedures, and Funding/Fee Issues). These policies and requirements are described in detail in Section 4.4.1, “Regulatory Setting.” Compliance with CESA, CEQA, MSHCP, and SKR HCP (as applicable), as well as implementation of Draft General Plan policies and programs discussed above would mitigate for potential direct and indirect impacts on special-status plant species within the planning area. Therefore, the impact to special-status plants would be **less than significant**.

IMPACT 4.4-2 Impacts to Riparian Habitat or Sensitive Natural Communities. *Adoption and implementation of the Draft General Plan could result in the loss or degradation of riparian habitat or other sensitive natural communities considered sensitive habitats under the California Environmental Quality Act (CEQA). However, implementation of Draft General Plan policies and programs would require the preservation of sensitive communities such as vernal pools and wetlands, which would result in a less-than-significant impact.*

Riparian habitats and sensitive natural communities within the planning area include: Alkali playa, coast live oak woodland, Riversidean alluvial fan sage scrub, Riversidean sage scrub, southern willow scrub, and vernal pool communities. These are considered sensitive habitats under CEQA. West Hemet, an approximately 5,400-acre area that extends into the City’s sphere of influence on its western edge includes 1,600 acres of undeveloped area with sensitive natural habitats and 100 year floodplain. Bautista Creek/San Jacinto River drains the San Bernardino mountains and the San Jacinto mountains. These waterways and canyons support strong populations of foothill riparian and woodland species including the arroyo toad, burrowing owl, Cooper’s hawk, San Bernardino kangaroo rat, and slender horned spine flower. Additionally, removal of existing agricultural resources may result in impacts to sensitive biological species, particularly foraging birds and raptors. Protocol-level surveys have not been conducted for all suitable habitat within the planning area.

These habitats could be affected by proposed land use changes either directly or indirectly through modification of suitable habitat caused by pollutants transported by urban runoff and other means, changes in vegetation as a result of land use change and management practices, altered hydrology or landforms from grading, excavation, and construction of adjacent residential development and roadways, habitat fragmentation, and the introduction of invasive species or noxious weeds from surrounding development.

Successful implementation of the policies and programs of the Draft General Plan would identify potential occurrences of special- status plant species and areas considered suitable habitat for these species within the planning area and avoid, minimize, and/or compensate for potential adverse effects to these species. Policy OS-1.1 would require development proposals to identify significant biological resources and provide mitigation specific to the project site. Policy OS-1.4 would require resource protection measures to be included in specific plans and development proposals. Policy OS-1.2 would specifically protect vernal pool complexes by ensuring adequate hydration and the preservation of native plants. Policy OS-1.3 would ensure that future projects conserve wetland habitats, maintain watershed processes that enhance water quality and contribute to the hydrologic regime, comply with the Clean Water Act Section 404, and identify and conserve upland habitat areas adjacent to wetland and riparian areas.

Compliance with MSHCP requirements (summarized above in Section 4.4.1, “Regulatory Setting,”) would ensure that sensitive riparian habitat be avoided in the context of new development pursuant to the Draft General Plan. However, should the development of riparian/riverine areas or vernal pools be necessary, a determination of a biologically equivalent alternative or superior preservation shall be made by the permittee to ensure replacement of any lost functions and values of habitat as it relates to covered species identified in the MSHCP. Therefore, implementation of the Draft General Plan is unlikely to result in substantial adverse effects to riparian habitat and sensitive natural communities. This impact is considered **less than significant**. No mitigation measures are required.

IMPACT 4.4-3 Impacts to Federally-Protected Wetlands. *Adoption and implementation of the Draft General Plan could result in the loss or degradation of federally-protected wetlands or vernal pools. However, implementation of Draft General Plan policies and programs would require the preservation of sensitive communities such as vernal pools and wetlands, which would result in a less-than-significant impact.*

The planning area supports riparian and wetland plant communities that likely qualify for protection under state and/or federal regulations. Major water bodies and waterways within the planning area include Diamond Valley Lake, San Jacinto River, San Diego Aqueduct, Hemet Channel, Lake Hemet Main Canal, Salt Creek Flood Control Canal, Bautista Wash, and the Casa Loma Canal Aqueduct. Habitats in these waterways include patches of riparian and wetland habitats found along canals and waterways. Delineation of wetland and aquatic habitats that would be considered jurisdictional waters of the United States under Section 404 of the CWA or waters of the state under the Porter-Cologne Water Quality Control Act has not been conducted for the entire planning area.

Vernal pools (approximately 23 acres) are located on the western side of the planning area.

Federally-protected wetlands could be affected by proposed land use changes either directly or indirectly through modification of suitable habitat caused by pollutants transported by urban runoff and other means, changes in vegetation as a result of land use change and management practices, altered hydrology or landforms from grading, excavation, and construction of adjacent residential development and roadways, habitat fragmentation, and the introduction of invasive species or noxious weeds from surrounding development.

Successful implementation of Draft General Plan policies and programs would identify and protect wetland habitat or vernal pools and avoid, minimize, and/or compensate for potential adverse effects to these habitats. Policy OS-1.2 requires the City to preserve the integrity of vernal pool complexes by ensuring adequate hydration and through preservation of native plants. Program OS-P-3 would protect Hemet's vernal pool riparian habitat by requiring consistency with the Western Riverside County MSHCP through ensuring appropriate criteria cell refinement. Policy OS-1.1 would require development proposals to identify significant biological resources and provide mitigation specific to the project site. Specifically, Policy OS-1.3 would require project applicants to conserve wetland habitat along the San Jacinto River and conserve remaining upland habitat areas adjacent to wetland and riparian areas.

Draft General Plan policies described above are designed to avoid potential loss and other adverse effects to areas of protected habitat within the planning area. The policies also require evaluation of potential effects and development and implementation of plans to fully mitigate unavoidable effects in a manner acceptable to the applicable resource agencies. Successful implementation of these policies would avoid, minimize, and/or compensate for potential adverse effects to protected habitats. Therefore, implementation of the Draft General Plan is unlikely to result in substantial adverse effects to federally and state protected wetlands, vernal pools, and/or state protected riparian vegetation. This impact is considered **less than significant**. No mitigation measures are required.

IMPACT 4.4-4 Impacts to Movement of Wildlife. *Adoption and implementation of the Draft General Plan could impede wildlife movement within the planning area. However, compliance with the MSHCP and implementation of Draft General Plan policies and programs would require the establishment of wildlife movement corridors and open space connections. The impact on wildlife movement would be less than significant.*

Within the planning area, connections between permanently-designated open space areas (e.g., parks and forests) have generally been constrained and reduced to the point of creating, or necessitating, movement corridors (Dudek and Associates 2003). What remains are several open space areas, including the San Jacinto River, Santa Rosa Hills, Lakeview Mountains, and areas surrounding Diamond Valley Lake that allow for wildlife movement in the absence of defined corridors or protected open space. In addition, many canyons, streambeds, and drainages in the southeastern and northwestern portions of the planning area connect these large open space areas, creating numerous wildlife linkages. Based on their size, location, vegetative composition, and availability of food, some

of these movement areas (e.g., large drainages and canyons) are used for longer periods of time and serve as source areas for food, water, and cover, particularly for small- and medium-sized animals. These open space areas are currently large enough to support a variety of resident wildlife species and populations.

Wildlife movement is affected when physical constraints impede the ability of wildlife to search for food, water, shelter, and mates. In addition, when urban development fragments open space or creates obstacles or distractions, it compromises the quality of wildlife corridors and further hinders wildlife movement. Both the Western Riverside County MSHCP and the SKR HCP identify core habitat areas, larger open space conservation areas, and wildlife corridors and linkages in the planning area. The SKR HCP mitigates impacts from development on the SKR by establishing a network of preserves and a system for managing and monitoring them to preserve approximately 50% of the SKR-occupied habitat remaining in the HCP area. The Lake Skinner Core Reserve is located south of Hemet.

Implementation of the Draft General Plan would result in further protection for existing open spaces and wildlife corridors. Any proposed project within the planning area would need to comply with the Western Riverside County HCP and the SKR HCP (Policy OS-1.6). Policy OS-1.4 would require resource protection measures to be included in specific plans and development proposals. This may also include the provision of corridor connections for wildlife movement. Policy OS-1.7 would continue the City's efforts to establish a wildlife movement corridor for the San Jacinto River, Santa Rosa Hills, Lakeview Mountains, and open space areas surrounding Diamond Valley Lake. Compliance with the MSHCP and implementation of Draft General Plan policies would ensure that known wildlife corridors would be preserved and new wildlife corridors in sensitive areas would be established. Therefore, impacts to wildlife corridors and wildlife movement would be minimized, and the impact would be **less than significant**. No mitigation measures are required.

IMPACT 4.4-5 Conflicts with Local Policies or Ordinances. *Implementation of the Draft General Plan would require the City to coordinate with Riverside County and other agencies to implement applicable plans for the protection of biological resources. In addition, implementation of the Draft General Plan would require that the City adopt a Tree Replacement Ordinance to protect important trees within the city. There would be a less-than-significant impact.*

The Draft General Plan includes a variety of policies and programs which are intended to support the conservation and protection of biological resources. Policy OS-1.1 and OS-1.4 require consideration of biological resources in development proposals, including mitigation and site planning techniques to reduce impacts. Policies OS-1.2 and OS-1.3 and Program OS-P-3 would protect vernal pool complexes and wetland habitats by conserving upland habitat areas and ensuring adequate hydration. Policy OS-1.5 would require recreational use to be limited in open space areas where necessary to preserve sensitive biological resources. Policy OS-1.6 and Program OS-P-16 call for continued involvement in habitat conservation activities, including implementation of HCPs. Policy OS-1.7 calls for continued efforts to establish wildlife movement corridor connections in the planning area.

Program OS-P-1 requires the City to amend zoning regulations to effectively preserve the open space character of the open space and hillside areas. Draft General Plan Policy OS-2.6 and Program OS-P-5 require adoption of a tree replacement ordinance. The City would establish a specific fund in the Capital Improvement Plan (CIP) budget for urban forestry to fund the planting of new or replacement trees annually at parks, City facilities, or in the public right-of-way. The ordinance would also require the replacement of any tree on public property with a trunk diameter greater than four inches with a tree of similar shape and size or with smaller trees at a 3:1 ratio, as reasonably feasible... Replacement trees should be categorized as California-friendly or on the City's approved tree list. Successful implementation of this program would avoid, minimize, and/or compensate for potential adverse effects to trees.

Although the City is a participant in several broader plans and programs to protect biological resources, including the Western Riverside MSHCP and the SKR HCP, the City does not have any local policies or ordinances for the protection of biological resources. Therefore, implementation of the Draft General Plan would not result in a

conflict with any local policies or ordinances to protect biological resources. On the contrary, implementation of the Draft General Plan would create several policies and programs to require preservation of habitat, vernal pool hydration, maintaining open space and wildlife movement corridors, and integrate biological resource planning into evaluation of projects. This impact would be **less than significant**. No mitigation measures are required.

IMPACT 4.4-6 Conflicts with West Riverside County Multi-species Habitat Conservation Plan (MSHCP) or Stephens' Kangaroo Rat Habitat Conservation Plan (SKR HCP). *Both the MSHCP and SKR HCP identify conservation areas within the planning area. Implementation of the Draft General Plan could result in development pressure on or around these conservation areas, but compliance with Draft General Plan policies and programs would reduce impacts. This impact would be less than significant.*

The planning area is located entirely within the San Jacinto Valley Area Plan of the Western Riverside County MSHCP. Eight cells are located south of Florida Road and east of Warren Road that have specified conservation targets (i.e., percent open space). Each cell is 160 acres, conservation targets range between 45% and 85%. Existing land use within these cells is vacant open space; however, substantial commercial, residential, and industrial uses are located adjacent to the cells. The Draft General Plan designates these areas as Mixed Use (MU), Industrial (I), Airport (ARPT), and Open Space (OS) with an environmental management area overlay. In addition, eight cells located north of Esplanade Avenue are outside of the city limits but within the planning area. These cells are designated Hillside Residential (10 acre minimum parcel size), and the Draft General Plan would apply the environmental management overlay to these cells.

The Western Riverside County MSHCP guides habitat preservation, plant and animal species conservation, and open space planning in western Riverside County, including portions of the planning area. It provides a comprehensive means to coordinate, standardize, streamline, and ensure closure regarding mitigation requirements of the federal ESA, CESA, NEPA, CEQA, California CNPPA, and other applicable laws and regulations related to biological and natural resources within the MSHCP Plan Area, including portions of the Hemet planning area. The SKR HCP provides for establishment, expansion, and ongoing management of permanent reserves in a manner which will ensure the continued existence of SKR in the HCP area of western Riverside County. Reserve management methods as well as mitigation and monitoring measures to be implemented by RCHCA are outlined in the SKR HCP. These two documents govern the incidental taking of species, outline how sensitive habitat should be preserved and managed, and describe mitigation for the taking of species and habitat loss.

Policy OS-1.6 requires that the City coordinate with Riverside County and other agencies in the implementation of the Western Riverside County MSHCP, the SKR HCP, and any other applicable habitat plan. Implementation of this policy would ensure that the measures included in those plans are adhered to; that critical habitat for sensitive species, as well as the species themselves, would be protected; and that potential losses would be minimized and mitigated. Program OS-P-16 requires the City to participate and represent the Hemet in multi-species habitat conservation planning efforts. Program OS-P-17 reinforces these compliance requirements within the General Plan. Implementation of Draft General Plan policies and programs would require continued consistency with these plans. Therefore, implementation of the Draft General Plan would not conflict with the Western Riverside County MSHCP or the SKR HCP. This impact is considered **less than significant**. No mitigation measures are required.