

3.8 BIOLOGICAL RESOURCES

3.8.1 INTRODUCTION

The purpose of this section is to identify existing biological resources within the planning area covered by the proposed project, analyze potential biological impacts, and recommend mitigation measures to avoid or lessen the significance of any identified adverse impacts. The assessment of impacts to biological resources is a qualitative review of the existing biological resources within the City and its SOI and a determination of whether the proposed project includes adequate provisions to ensure the protection of these resources. Given the programmatic nature of the PEIR, specific impacts to individual properties or areas are not identified or known at this time.

3.8.2 ENVIRONMENTAL SETTING

The information contained in this Environmental Setting section is primarily from information contained in the City of Lake Elsinore General Plan Background Reports (see Chapter 3 – Biological Resources). This document is attached as Appendix B to this PEIR.

The City and SOI are located in the Elsinore Valley, which is generally bounded on the west by the east flank of the rugged Santa Ana Mountains and on the west by gently sloping hills. The San Jacinto River and Temescal Wash cut through the valley, converging at Lake Elsinore. The area contains a mixture of land developed for residential, commercial, industrial, recreational, and agricultural uses and undeveloped land remaining in its natural state. Approximately 16 natural vegetative communities, in addition to developed sites and agricultural uses, occur in the City and its SOI. Each of these habitats provides cover, food, and water necessary to meet biological requirements of a variety of animal species. Nineteen (19) plants and a minimum of thirty-eight (38) animals within the City and/or the SOI's habitats are accorded the "special status" designation. Wetland features within the City and/or the SOI include coastal and valley freshwater marsh, lacustrine ecosystems, and vernal pools.

The local area climate is semi-arid Mediterranean, characterized by hot summers, mild winters, and low humidity. During summer temperatures range from the 70's to 90's; in the winter cool temperatures in the 50's prevail. The warmest month of the year is August with an average maximum temperature of 98.30 degrees Fahrenheit, while the coldest month of the year is December with an average minimum temperature of 37.30 degrees Fahrenheit. Temperature variations between night and day tend to be relatively big during summer with a difference that can reach 37 degrees Fahrenheit, and moderate during winter with an average difference of 28 degrees Fahrenheit. The annual average precipitation at Lake Elsinore is 12.09 Inches. Rainfall in is fairly evenly distributed throughout the year. The wettest month of the year is February with an average rainfall of 2.96 Inches.

PLANT COMMUNITIES

Land within the City of Lake Elsinore and its SOI (“Planning Area”) include properties developed with urban uses (either paved or occupied by buildings), disturbed vacant land, natural open space and currently undisturbed vacant parcels. The General Plan Study Area also includes numerous watercourses and associated vegetation that are regulated by the U.S. Army Corps of Engineers (ACOE) and the California Department of Fish and Game (CDFG). These include Lake Elsinore itself, along with various natural creeks, washes, floodways and associated wetlands and floodways, and portions of the Cleveland National Forest. Several of the sixteen (16) natural vegetative communities identified in the Planning Area are considered “sensitive” or “special status” habitats because they are unique, have relatively limited distribution in the region, or have high wildlife value as defined by federal, State, and local government conservation programs. Many are, or correspond to, vegetation series and associations identified in the California Natural Diversity Database (CNDDDB) as “rare.” In addition to agricultural and developed lands, the native vegetative communities within the City and its SOI include:

- Coastal sage scrub
- Riversidian sage scrub
- Diegan coastal sage scrub
- Riversidian alluvial fan sage scrub
- Chaparral
- Oak Woodland
- Coast live oak woodland
- Dense Englemann oak woodland
- Riparian Forest
- Riparian Scrub
- Southern willow scrub
- Southern cottonwood-willow riparian forest
- Southern sycamore-alder riparian forest
- Coastal and valley freshwater marsh
- Open Water/Reservoir/Pond
- Vernal pools.
- Agriculture
- Residential/Urban/Exotic

The General Plan Study Area also includes a substantial amount of nonnative grassland. These vegetative communities are described below:

Coastal Sage Scrub

Coastal sage scrub is characterized by low shrubs and an absence of trees. Shrubs include either pure stands or mixtures of coarse, deciduous species that drop their leaves in response to periodic drought conditions. Coastal sage scrub occurs primarily below 914 meters (3,000 feet) above mean sea level on western slopes of mountains; on steep, south-facing, wind-exposed slopes; and in areas where the marine layer penetrates inland to foothills and canyons. Soils are typically well drained and relatively shallow. Shrubs are more widely spaced than in chaparral and do not have the characteristic rigidity or thick drought-resistant leaves of those in chaparral. Remaining dormant throughout the dry season, plants either drop their leaves or produce smaller leaves on secondary shoots, which reduces water loss. Root systems are generally shallow, and some shrubs store water in succulent leaves and stems. Other plants produce aromatic oils from the surfaces of leaves, making them less appealing to grazing animals and reducing water loss but at the cost of increased flammability during the fire season.

Typical species in this community include California sagebrush (*Artemisia californica*), long-stemmed buckwheat (*E. elongatum*), California buckwheat (*Eriogonum fasciculatum*), white sage (*Salvia apiana*), black sage (*Salvia mellifera*), bush monkeyflower (*Mimulus longiflorus*), brittlebush (*Encelia farinosa*), California bush sunflower (*Encelia californica*), coast goldenbush (*Isocoma menziesii*), laurel sumac (*Malosma laurina*), deerweed (*Lotus scoparius*), golden yarrow (*Eriophyllum confertiflorum*), coast prickly pear (*Opuntia littoralis*), and lupines (*Lupinus* spp.).

Riversidian Sage Scrub

Riversidian sage scrub typically is a fairly open vegetation community, with at least 20 percent cover by California sagebrush, California buckwheat, and Spanish brome (*Bromus madritensis*). See the description of coastal sage scrub above for additional details about plant species composition. In the City and SOI, this community occurs in many locations, often on hills and slopes adjacent to developed areas. In many locations, the herb layer of the Riversidian sage scrub is dominated by nonnative invasive forbs and grasses, which reduces the quality of these areas as potential habitat for various species. Riversidian sage scrub is considered a special-status or sensitive habitat.

Diegan Coastal Sage Scrub

Similar to Riversidian sage scrub, this community is found where moisture is more abundant. Dominant species are California sagebrush, California buckwheat, laurel sumac, lemonade berry (*Rhus integrifolia*), and white sage. This community occurs only in small patches within the existing City limits; substantially more acres of this type occur in the SOI than in the City.

Riversidian Alluvial Fan Sage Scrub

Riversidian alluvial fan sage scrub grows on sandy, rocky alluvial soils deposited by streams that experience periodic flooding. The soils in these areas are well drained to excessively drained and have low water-holding capacity and low fertility. Vegetation consists of drought-deciduous sub-shrubs and large evergreen woody shrubs adapted to these soil characteristics and capable of survival, or rapid recruitment, after intense periodic flooding and erosion.

Pioneer, intermediate, and mature stages of the alluvial fan sage scrub plant community are often distinguished. The pioneer stage has sparse vegetation and low plant diversity. The intermediate stage is characterized by dense vegetation dominated by sub-shrubs. The mature stage has dense, full-grown sub-shrubs, along with evergreen woody shrubs. Scale-broom is a shrub species found most often on alluvial soils associated with drainages. Other common shrub species of this vegetation community are often characteristic species of either Riversidian sage scrub or chaparral communities. These common sub-shrub species include coastal sagebrush, California buckwheat, chamise, brittlebush (*Encelia farinosa*), hairy yerba santa (*Eriodictyon trichocalyx*), sugarbush, birch-leaved mountain mahogany, and deerweed (*Lotus scoparius*).

Small patches of this community are present in the City in washes where the soil has been deposited and periodically scoured by flowing water from slopes above. Soils tend to be sandy and porous. Substantially more acres of this community occur in the SOI than in the City. Riversidian alluvial fan sage scrub is considered a special-status/sensitive habitat.

Chaparral

Chaparral is widely distributed on dry slopes and ridges at low and mid-elevations. It typically consists of shrubs with tough, broad leaves, although species composition may vary considerably with many different subtypes. This community also is highly adapted to periodic natural fires.

Chamise chaparral, which is the most common chaparral type in Riverside County, is dominated by chamise (*Adenostoma fasciculatum*). Southern mixed chaparral often occurs adjacent to Riversidian sage scrub and chamise chaparral but generally on sites with more moisture. Common chaparral shrubs include toyon (*Heteromeles arbutifolia*), chamise, several California lilacs (*Ceanothus megacarpus*, *C. crassifolius*, *C. cuneatus*, and *C. spinosus*), birch-leaved mountain mahogany (*Cercocarpus betuloides*), manzanita (*Arctostaphylos* spp.), and scrub oak (*Quercus berberidifolia*). Generally taller and denser than sage scrub communities, this community is found in the City primarily on the eastern slopes of the Santa Ana Mountains. It is more broadly distributed in the SOI.

Oak Woodland

Oak woodland varies from open savannas with grassy understories to fairly dense woodlands with shrubby understories. This community typically integrates with both nonnative grassland and riparian woodland. Annual rainfall is generally between 38 and 64 centimeters (15 and 25

inches), and intermittent streams may be present. The dominant trees in the Riverside area are coast live oak (*Quercus agrifolia*), with smaller amounts of Engelmann oak (*Quercus engelmannii*), black walnut (*Juglans californica*), western sycamore (*Platanus racemosa*), toyon, and blue elderberry (*Sambucus mexicana*). Smaller trees and shrubs along with herbaceous plants and grasses that form the vegetative understory include sugar bush (*Rhus ovata*), squawbush (*Rhus trilobata*), poison-oak (*Toxicodendron diversilobum*), coastal wood fern (*Dryopteris arguta*), and bracken fern (*Pteridium aquilinum*). Within the City and SOI this community is typically located near intermittent stream courses and is known to occur in the canyons on the east face of the Santa Ana Mountains.

Coast Live Oak Woodland

Coast live oak woodlands vary from closed-canopy stands of coast live oak to mixtures with conifers and broadleaf trees to open savannas. The shrub layer is poorly developed but may include toyon, laurel sumac, or blue elderberry. The herb component is typically continuous and dominated by rip-gut brome (*Bromus diandrus*) and several other introduced species. This community typically occurs on north-facing slopes and shaded ravines. Coast live oak woodland is considered a special-status/sensitive habitat. It occurs in both the City and SOI, with substantially more acres in the SOI than in the City.

Dense Englemann Oak Woodland

Dense Englemann oak woodland is a climax woodland dominated by Englemann oak (*Quercus engelmannii*), with coast live oak as an additional significant constituent. The understory is composed of typical grassland species. Canopy cover is dense. This vegetation community appears on moderately moist sites, especially in steep canyons. Dense Englemann oak woodlands are known to occur southeast of Lake Mathews between Galivan Road and Lake Mathews Drive. Dense Englemann oak woodland is considered a special-status/sensitive habitat. It occurs in the SOI but not within the City boundaries.

Riparian Forest, Woodland, and Scrub

Riparian forests and woodlands are dependent on the presence of or proximity to nonseasonal water sources. The water may be surface water or shallow groundwater. Riparian woodlands may measure a few meters in width to much broader, depending on water flow. Where nonseasonal streams flow out of the mountains and onto flatter grasslands, the riparian woodland community may be a relatively broad one, but in the higher elevations where water flows down a narrow passageway often confined by steep hillsides, this community may be very narrow. Riparian woodland may also occupy areas surrounding human-made lakes and reservoirs. Typical species of this community include willows (*Salix* spp.), western sycamore, black walnut, Fremont and black cottonwood (*Populus fremontii* and *P. trichocarpa*), white alder (*Alnus rhombifolia*), coast live oak, mule fat (*Baccharis salicifolia*), and smaller plants such as poison-oak, California blackberry, horsetails (*Equisetum* spp.), and scarlet and creek monkeyflower (*Mimulus cardinalis* and *M. guttatus*).

Riparian scrub is characterized as a scrubby streamside thicket, dominated by any of several willows, mule fat, or a mix of these. Vegetation may vary from open to impenetrable. Willows typically occur on relatively fine-grained sand and gravel bars that are close to river channels and/or groundwater. Coarser substrate soils or areas where there is relatively great depth to the water table favors dominance by mule fat. This early successional community may precede any of several riparian woodland or forest types absent severe flooding disturbance.

Riparian forest and scrub communities occur along streambeds in the City and SOI and along the shore of Lake Elsinore. Types include southern willow scrub, composed of relatively small willows and mulefat; southern cottonwood – willow riparian forest, with taller willows and cottonwoods; and southern sycamore – alder riparian woodland, composed of western sycamore, white alder, and often lower densities of willows, cottonwoods, or oaks. In general, all riparian communities are considered to be special-status/sensitive habitats.

Southern Willow Scrub

Southern willow scrub is distinguished by dense, broadleaved, winter-deciduous riparian thickets dominated by several willow species, including black willow, sandbar willow, red willow (*Salix laevigata*), and arroyo willow, with scattered Fremont cottonwood and western sycamore. Most stands are too dense to allow much understory development. Typical soils include loose, sandy, or fine gravelly alluvium deposited near stream channels during flood flows. This community requires repeated flooding to prevent succession to southern cottonwood – sycamore riparian forest. It occurs in both the City and SOI and is considered a special-status/sensitive habitat.

Southern Cottonwood – Willow Riparian Forest

Southern cottonwoods are dominated by Fremont cottonwood, black cottonwood, and several tree willows. Understories consist of shrubby willows. The dominant species require moist, bare mineral soil. Sub-irrigated and frequently overflowed lands along rivers and streams provide the necessary conditions for germination and establishment. Other typical plant species include California mugwort, mule fat, wild cucumber (*Marah macrocarpus*), western sycamore, Goodding’s black willow (*Salix gooddingii*), sandbar willow (*Salix exigua*), yellow shining willow (*Salix lasiandra*), arroyo willow (*Salix lasiolepis*), and stinging nettle (*Urtica dioica*). It occurs in the SOI and is considered to be a special status/sensitive habitat.

Southern Sycamore – Alder Riparian Woodland

Southern sycamore – alder riparian woodland is a tall, open, broadleaved, winter-deciduous streamside woodland dominated by western sycamore and white alder. These stands seldom form closed canopy forests and may appear as trees scattered in a shrubby thicket of hard drought-resistant evergreens and deciduous species. Soils consist of very rocky streambeds subject to seasonally high-intensity flooding. White alder increases in abundance on more perennial streams, while western sycamore favors more intermittent hydrographs. Other common forms of vegetation include California mugwort, coast live oak, horsetail, smilo grass

(*Piptatherum miiaceum*), California blackberry, poison-oak, blue elderberry, and stinging nettle (*Urtica dioica*). This woodland is considered to be a special-status/sensitive habitat.

Coastal and Valley Freshwater Marsh

Marsh communities are dominated by perennial, emergent flowering plants (monocots) generally up to 4 to 5 meters tall. Vegetation often forms completely closed canopies. Bulrush (*Scirpus* spp.) and cattail (*Typha* spp.) species dominate. Marsh communities are found on sites permanently inundated by fresh water and lacking significant current. Conditions of prolonged saturation permit accumulation of deep, peaty soils in this community.

The Coastal and valley freshwater marsh community is generally found in areas with slow-moving or ponded water where shallow topography is subject to prolonged saturation. One of these areas is northeast of Lake Elsinore, around a small lake that was created several years ago. It is recognized by the presence of plants that grow up through shallow water, such as cattail, bullrush, and sedge. This community occurs in the City but not the SOI and is considered a special-status/sensitive habitat.

Open Water/Reservoir/Pond

Open water/reservoir/pond areas are called lacustrine ecosystems and are characterized by inland depressions or dammed riverine channels containing standing water, including both near-shore (limnetic) and deepwater habitats (littoral). Usually, to meet this classification, each area must exceed 20 acres (8 hectares) and be deeper than 6.6 feet (2 meters). The lower San Jacinto River, Lake Elsinore, and several other ponds and creeks within the study area provide open water habitat relatively free of vegetation that supports fish, amphibians, and waterfowl. Among the warm water fishery species that provide recreational fishing in Lake Elsinore are largemouth bass, catfish, and crappie. Recent efforts to improve the water quality in Lake Elsinore have included the harvesting of carp in order to restructure the fishery composition and the installation of a series of axial flow pumps designed to increase vertical water circulation, thereby maintaining higher levels of dissolved oxygen in the water. These areas are subject to a wide range of regulations and, depending on site-specific conditions, typically are considered to be a special-status/sensitive habitat.

Vernal Pools

Vernal pools are seasonal wetlands that form in localized depressions with subsurface hardpans, allowing ponded rainwater to remain above the surface into the dry season. These seasonal wetlands create a moist environment to which a specialized group of plant species has adapted. Species composition varies among pools and among years. However, common species in vernal pools in or near the project area include woolly marbles (*Psilocarphus brevissimus*), toad rush (*Juncus bufonius*), spike rush (*Eleocharis* species), wire-stem popcorn flower (*Plagiobothrys leptocladus*), Mexican speedwell (*Veronica peregrina* ssp. *xalapensis*), annual hairgrass (*Deschampsia danthonioides*), alkali pepper-grass (*Lepidium dictyotum*), and water pygmy weed (*Crassula aquatica*); many special-status species are also present.

Agricultural Lands

Limited areas of groves, orchards, and cropland persist in the study area. These lands have little value as habitat for wildlife other than those species highly adapted to disturbance; however agricultural lands do provide habitat for burrowing owl and for non-listed prey that support listed raptor species.

Residential/Urban/Exotic

A substantial portion of the area within the Lake Elsinore SOI has been developed. Remaining natural resources in this area are now limited to ornamental trees and garden shrubs that may provide some habitat for nesting birds. Ornamental woodlands are human created woodlands using non-native trees and shrubs, which have typically been planted for aesthetic value. Groundcovers range in height from an inch to four feet. They can be woody or herbaceous; clumping or running; evergreen or deciduous. Common species of trees that occur throughout the Added Area include Lake Palms gum (*Eucalyptus* spp.), jacaranda (*Jacaranda mimosa*), and ornamental pine (*Pinus* sp.). Annual grasslands occur in vacant lots throughout the City and its SOI. These non-native annual grassland areas are disturbed (plowed/disked) or graded areas that have revegetated with opportunistic weedy species. Non-native vegetation include ruderal (e.g., weedy or non-native) species such as wild oat (*Avena fatua*), ripgut brome (*Bromus diandrus*), foxtail chess (*Bromus madritensis* ssp. *Rubens*), jimsonweed (*Datura wrightii*), red-stemmed filaree (*Erodium cicutarium*), shortpod mustard (*Hirschfeldia incana*), yellow sweet-clover (*Melilotus Indica*), casor bean (*Ricinus communis*), and Russian thistle (*Salsola tragus*). This habitat is valuable as foraging area for raptors and other avian species.

Nonnative Grassland

Nonnative grasslands are characterized by a dense to sparse cover of annual grasses with flowering culms (stems) 0.2 to 1.5 meters high. They are often associated with numerous species of showy-flowered native wildflowers, especially in years of favorable rainfall. Flowering occurs with the onset of the late-fall rains, and growth, flowering, and seed-set occur from winter through spring. With a few exceptions, the plants are dead through the summer/fall dry season, persisting as seeds. Nonnative grasslands occur on fine-textured soils that are moist during the winter rainy season and very dry during summer and fall. Adjacent communities may include oak woodland on moister, better-drained soils. Composed almost entirely of annual grasses and other herbaceous annuals, this community is dominant over a large area immediately southwest of Lake Elsinore but existing also as a mosaic interspersed with coastal sage scrub communities. Plants typical of this community include several species of brome (*Bromus* spp.), wild oat (*Avena* spp.), filaree (*Erodium* spp.), schismus (*Schismus* spp.), fescue (*Vulpia* spp.), and a variety of wildflowers such as California poppy (*Eschscholtzia californica*), phacelia (*Phacelia* spp.), and goldfields (*Lasthenia californica*).

WILDLIFE

Lake Elsinore is the permanent and seasonal home to a wide variety of birds and serves an important role as a way station on the Pacific flyway for hordes of migrating waterfowl

traveling from Alaska to South America. A short list of resident and often nesting birds include great blue herons, great egrets, night herons, osprey, white-tailed kites, western grebes, terns, gulls, black-necked stilts, avocets, killdeer, and plovers. In addition, about fifty North American white pelicans appear to reside at Lake Elsinore year-round and a number of white-faced Ibis have been regularly spotted around the lake within recent years, both species of special concern to the state. The heron nesting sites adjacent to Lake Elsinore are an integral part of the lake's natural heritage and aquatic ecosystem. Although these herons are not on the endangered or threaten species list, they are, nevertheless, locally important wildlife resources.

Lake Elsinore itself is a unique, viable, increasingly stable and more diverse fishery than any other in southern California. Prior to 2000, Lake Elsinore was choked with carp and algae. Its water quality was poor and there were often annual fish die-offs caused by algae blooms that depleted the shallow water of oxygen. However, through the efforts of the Lake Elsinore and San Jacinto Watersheds Authority and the City of Lake Elsinore, the Lake is being restored to health. Its fish biomass includes threadfin shad, large mouth bass, catfish, bluegill, crappie and wipers. Continuing programs to improve the Lake's aeration system, restore marshland and wetlands, create spawning benches and game fish rearing ponds are expected to continue the improvement of water quality and the health and diversity of the Lake's fishery. Though none of the fish that populate Lake Elsinore are listed as special status, the fish do provide food for large numbers of migrating birds, while restored marshland and wetlands associated with the Lake support important habitat for local listed and non-listed species.

A review of available literature indicates that there are potentially at least thirty-eight (38) special status species of wildlife occurring within the City of Lake Elsinore and its SOI. These include two (2) invertebrate species, one (1) amphibian species, six (6) reptiles, twenty-four (24) species of birds, and five (5) species of mammals. All are listed in **Table 3.8-1, Special Status Species Information**. Each of these species of wildlife is associated with specific vegetative habitats. For example, the Riverside Fairy Shrimp is associated with vernal pools while the California gnat catcher is associated with Riversidian Sage Scrub.

PLANTS AND WILDLIFE – SPECIAL-STATUS SPECIES

Special status biological resources include plant and wildlife species, and habitats that have been afforded special status and/or recognition by federal and/or state resource agencies, as well as private conservation organizations. In general, the principal reason an individual taxon (e.g., species, subspecies, or variety) is given such recognition is the documented or perceived decline or limitation of its population and size, or geographic range, and/or distribution resulting in most cases from habitat loss.

Special status species are native species that have been afforded special legal or management protection because of concern for their continued existence. There are several categories of protection at both federal and state levels, depending on the magnitude of threat to the continued existence and existing knowledge of population levels.

- Endangered Species: Any species which is in danger of extinction throughout all or a significant portion of its range.
- Threatened Species: Any species which is likely to become endangered within the foreseeable future throughout all or a significant portion of its range.
- Species of Special Concern: An informal designation used for some declining wildlife species that are not proposed for listing as threatened or endangered, such as the burrowing owl. This designation does not provide legal protection, but signifies that these species are recognized as sensitive by CDFG and/or the United States Fish and Wildlife Service (USFWS).
- Watch List: A new category of “Taxa to Watch” created in the CDFG’s 2008 *California Bird Species of Special Concern* report. The birds on this Watch List are 1) not on the current Special Concern list but were on previous lists and they have not been state listed under the California Endangered Species Act (CESA); 2) were previously state or federally listed and now are on neither list; or 3) are on the list of “Fully Protected” species.

Plants and animals are also identified as being “special status” species if they are on the list of biologically endangered and rare plant species maintained by the California Native Plant Society. CNPS listings pertinent to the GPU planning area include candidate (C), rare and endangered in California and throughout its range (1B), rare and endangered in California but more common elsewhere (2), may be rare but more research needed to determine true status (3), and limited distribution (4). **Table 3.8-1, Special-Status Species Information** identifies the special-status species that are known to occur or have a reasonable potential for occurrence in the City and its SOI.

Table 3.8-1, Special-Status Species Information

SPECIES COMMON/ SCIENTIFIC NAME	STATUS ¹	HABITAT AFFINITIES
PLANTS		
Chaparral sand-verbena <i>Abronia villosa</i> var. <i>aurita</i>	1B	Exposed sites with sandy soils, especially washes and dunes in chaparral, sage scrub, and alluvial scrub.
California orcutt grass <i>Orcuttia californica</i>	FE, SE, 1B, MSHCP	Vernal pools and alkaline soils and southern basaltic claypan.
Coulter’s goldfields <i>Lasthenia glabrata</i> ssp. <i>Coulteri</i>	1B, MSHCP	Coastal salt marshes, playas, valley and foothill grassland vernal pools. Alkaline soils in playas, sinks, and grasslands. Elevation: 1-1,400 meters.

SPECIES COMMON/ SCIENTIFIC NAME	STATUS ¹	HABITAT AFFINITIES
Davidson's saltscale <i>Atriplex serenans</i> var. <i>davidsonii</i>	1B, MSHCP	Alkali vernal pools, alkali annual grasslands, alkali playa, and alkali scrub components of alkali vernal plains.
Hammitt's clay-cress <i>Sibaropsis hammittii</i>	1B, MSHCP	Chaparral and valley and foothill grassland. Elevation: 700–1,100 meters.
Intermediate mariposa lily <i>Calochortus weedii</i> var. <i>intermedius</i>	1B	Rocky hill and valley landscapes with chaparral, sage scrub, or grasslands.
Little mousetail <i>Myosurus minimus</i> ssp. <i>Apus</i>	3, MSHCP	Vernal pools and poorly drained spots in moist grasslands, generally under alkaline conditions.
Long-spined spineflower <i>Chorizanthe polygonoides</i> var. <i>longispina</i>	1B, MSHCP	Chaparral, coastal scrub, meadows, valley and foothill grassland. Gabbroic clay. Elevation: 30–1,450 meters.
Many-stemmed dudleya <i>Dudleya multicaulis</i>	1B, MSHCP	Chaparral, coastal scrub, valley and foothill grassland. In heavy, often clayey soils or grassy slopes. Elevation: 0–790 meters.
Munz's onion <i>Allium munzii</i>	FE/ST/1B, MSHCP	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. Elevation: 300–1,035 meters.
Palmer's grapplinghook <i>Harpagonella palmeri</i>	4, MSHCP	Chaparral, coastal sage scrub, grasslands; clay soils.
Parry's spineflower <i>Chorizanthe parryi</i> var. <i>parryi</i>	1B	Coastal scrub, chaparral. Dry slopes and flats; sometimes at interface of two vegetation types, such as chaparral and oak woodland; dry, sandy soils. Elevation: 40–1,705 meters.
Robinson's pepper-grass <i>Lepidium virginicum</i> var. <i>robinsonii</i>	1B	Chaparral, coastal scrub. Dry soils, shrubland. Elevation: 1–945 meters.
Round-leaved filaree <i>Erodium macrophyllum</i>	2, MSHCP	Cismontane woodland, valley and foothill grassland. Clay soils. Elevation: 15–1,200 meters.

Section 3.8 – Biological Resources



SPECIES COMMON/ SCIENTIFIC NAME	STATUS ¹	HABITAT AFFINITIES
San Diego ambrosia <i>Ambrosia pumila</i>	FE, 1B, MSHCP	Chaparral, coastal scrub, valley and foothill grassland, vernal pools. In the U.S., known only from San Diego and Riverside counties. Sandy loam or clay soil. In valleys, persists where disturbance has been superficial. Elevation: 20–415 meters.
San Jacinto Valley crownscale <i>Atriples coronata</i> var. <i>notatior</i>	FE, 1B, MSHCP	Floodplains (seasonal wetlands) dominated by alkali scrub, alkali playas, vernal pools, and, to a lesser extent, alkali grasslands.
Slender-horned spineflower <i>Dodecahema leptoceras</i>	FE, SE, 1B, MSHCP	Chaparral, coastal scrub (alluvial fan sage scrub), flood deposited terraces and washes.
Small-flowered microseris <i>Microseris douglasii</i> var. <i>platycarpa</i>	4, MSHCP	Clay soils in associations with native grasslands or vernal pools.
Smooth tarplant <i>Centromadia pungens</i> ssp. <i>Laevis</i>	1B, MSHCP	Valley and foothill grassland, chenopod scrub, meadows, playas, riparian woodland, alkali meadow, alkali scrub; also in disturbed places. Elevation: 0–480 meters.
INVERTEBRATES		
Riverside fairy shrimp <i>Streptocephalus woottoni</i>	FE, MSHCP	Areas of tectonic swales/earth slump basins in grassland and coastal sage scrub. Inhabit seasonally astatic pools filled by winter/spring rains. Hatch in warm water later in the season.
Quino checkerspot butterfly <i>Euphydryas editha quino</i>	FE, MSHCP	Open areas in grasslands, forb-lands, coastal sage scrub, and chaparral, usually with low disturbance and a well-developed biological soil crust. Primary larval host plant is <i>Plantago erecta</i> .
AMPHIBIANS		
Western spadefoot <i>Spea hammondi</i>	SOC, SSC, MSHCP	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.

SPECIES COMMON/ SCIENTIFIC NAME	STATUS ¹	HABITAT AFFINITIES
REPTILES		
Coast (San Diego) horned lizard <i>Phrynosoma coronatum</i> (blainvillii)	SSC, MSHCP	Open or sparse scrub and chaparral communities. This species prefers loose, friable soil for burrowing.
Orangethroat whiptail <i>Cnemidophorus hyperythrus</i>	SSC, MSHCP	Chaparral, sage scrub and open edges of riparian areas; specialist to some degree on native termites.
Coast Western Patch-nosed Snake <i>Salvadora hexalepis virgultea</i>	SSC	Occupies desert scrub, coastal chaparral, washes, sandy flats, and rocky areas.
Coastal western whiptail <i>Aspidoscelis tigris stejnegeri</i>	SOC, MSHCP	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.
Northern red-diamond rattlesnake <i>Crotalus ruber ruber</i>	SSC, MSHCP	Chaparral, woodland, grassland, and desert areas. Occurs in rocky areas and dense vegetation. Needs rodent burrows, cracks in rocks, or surface cover objects.
Western pond turtle <i>Clemmys marmorata pallida</i>	SSC, MSHCP	Ponds, small lakes, perennial pools in drainages, marshes, slow-moving sometimes-brackish water.
BIRDS		
American bittern <i>Botaurus lentiginosus</i>	SOC, MSHCP	Freshwater marshes and vegetated borders of ponds and lakes.
Bald Eagle <i>Haliaeetus leucocephalus</i>	Federally Delisted, SE, MSHCP	Open areas, forest edges, and mountains near large lakes and rivers. Requires tall trees for nesting. Three known nest efforts in or near western Riverside County but not within the project area in the last 10 years.
Bell's sage sparrow <i>Amphispiza belli belli</i>	SOC, SWL, MSHCP	Extensive patches of chaparral less than about 2 meters in height and sage scrub shaded and relatively open at the ground layer.
Black-crowned night-heron <i>Nycticorax nycticorax</i>	MSHCP	Many types of wetlands; inland relay are large wetland areas.

Section 3.8 – Biological Resources



SPECIES COMMON/ SCIENTIFIC NAME	STATUS ¹	HABITAT AFFINITIES
Burrowing owl <i>Athene cunicularia</i>	SOC, SSC, MSHCP	Requires fairly large expanses of relatively open, level, or hummocky terrain, including grasslands, agricultural fields, dairies, flood channels, and occasionally may use undisturbed areas of golf courses or airports.
Cactus wren <i>Campylorhynchus brunneicapillus</i>	SSC, MSHCP	Coastal sage scrub with thickets, patches, or tracts of large branching cacti, thorny shrubs, and small trees.
California Horned Lark <i>Eremophila alpestris actia</i>	SSC, MSHCP	Found in a variety of open habitats.
Coastal California gnatcatcher <i>Polioptila californica californica</i>	FT, SSC, MSHCP	Obligate resident of several distinct subassociations of the coastal sage scrub community.
Cooper’s hawk <i>Accipiter cooperii</i>	SWL, MSHCP	Mature forest, open woodlands, parks, and residential areas.
Double-crested cormorant <i>Phalacrocorax auritus</i>	MSHCP	Occupies diverse aquatic habitats in all seasons. Diet is primarily fishes. Tolerates only minimal disturbance at nesting colonies.
Downy woodpecker <i>Picoides pubescens</i>	MSHCP	Nests in extensive lowland riparian woodland and forest; will forage in many adjacent habitats.
Least Bell’s vireo <i>Vireo bellii pusillus</i>	FE, SE, MSHCP	Riparian habitat with some tree layer and a dense understory, often of young willows, but sometimes mule fat, blue elderberry, California rose, desert wild grape, and a variety of other shrubby species.
Loggerhead shrike <i>Lanius ludovicianus</i>	SOC, SSC, MSHCP	Open areas (e.g., grassland, rangeland, fallow agricultural fields), especially where there are scattered large shrubs, trees, or other suitable perches at moderate height.
Northern harrier <i>Circus cyaneus</i>	SSC, MSHCP	Coastal lowlands, marshes, mesic grasslands, and agricultural fields. Probably extirpated locally as a breeder.
Osprey <i>Pandion haliaetus</i>	SWL, MSHCP	Large water bodies supporting fish with surrounding or nearby suitable nest sites.
Peregrine falcon <i>Falco peregrinus</i>	Federally Delisted, State Delisted, SP, MSHCP	Open areas, mud flats with waterfowl, shorebirds. Not currently believed to breed in Riverside County.

SPECIES COMMON/ SCIENTIFIC NAME	STATUS ¹	HABITAT AFFINITIES
Southern California rufous-crowned sparrow <i>Aimophila ruficeps canescens</i>	SWL, MSHCP	Rocky slopes, especially where a relatively open shrub cover dominated by California sagebrush is interspersed with grassy areas.
Southwestern willow flycatcher <i>Empidonax traillii extimus</i>	FE, SE, MSHCP	Riparian woodlands along rivers and streams, with mature dense stands of willows, cottonwoods, and sometimes alders. Requires some inundation or soil saturation in riparian at least through May.
Tree swallow <i>Tachycineta bicolor</i>	MSHCP	During winter and migration, found in open areas, grasslands, meadows, brushlands, and near water sources.
Tricolor blackbird <i>Agelaius tricolor</i>	SOC, SSC, MSHCP	Freshwater marshes. Suitable breeding habitat includes cattails and bulrushes, as well as nonnative thistles and mustards.
White-faced ibis <i>Plegadis chihi</i>	SWL, MSHCP	Nests in large, shallow marshes with islands of emergent vegetation. Forages in a wide variety of marsh and mudflat habitats.
White-tailed kite <i>Elanus leucurus</i>	SP, MSHCP	Nests in riparian woodland edges, pasture lands and savannah, oaks, and sycamores. Forages in open areas with short grass and/or forbs.
Yellow-breasted chat <i>Icteria virens</i>	SSC, MSHCP	Nests and forages in dense, low riparian growth, including edges of woods, fencerows, dense thickets, and brambles in low wet places near streams, pond edges, or swamps and in old overgrown clearings and fields.
Yellow warbler <i>Dendroica petechia brewsteri</i>	SSC, MSHCP	Nests in mature riparian forest and woodland, foraging largely in the upperstory; more common as a spring and fall migrant in varied habitats.
MAMMALS		
Bobcat <i>Lynx rufus</i>	MSHCP	Variety of habitats, including conifer, oak, riparian, pinyon-juniper forest, chaparral; dependent on extensive open space and connectivity, with rabbits a central part of the diet.
Mountain lion <i>Puma concolor</i>	MSHCP	Variety of habitats, requires very large tracts of land with low levels of human disturbance and development.



SPECIES COMMON/ SCIENTIFIC NAME	STATUS ¹	HABITAT AFFINITIES
Northwestern San Diego pocket mouse <i>Chaetodipus fallax fallax</i>	SSC, MSHCP	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 Diego black-tailed jackrabbit <i>Lepus californicus bennettii</i>	SSC, MSHCP	Arid regions supporting short-grass habitats such as annual grassland, often adjacent to or mixed with Riversidian sage, scrub, alluvial fan scrub, Great Basin sagebrush, chaparral, disturbed habitat, or agriculture.
Stephens' kangaroo rat <i>Dipodomys stephensi</i>	FE, ST, MSHCP	Inhabits annual grassland with sparse perennial vegetation and open sage scrub in the San Jacinto Valley and adjacent areas of western Riverside County and northwestern San Diego County.

¹ Indicates federal and state listing status as of January 2011 and CNPS list for plants.

Codes and Abbreviations

CNPS: California Native Plant Society
 1B: Rare and endangered in California and throughout its range
 2: Rare and endangered in California but more common elsewhere
 4: Limited distribution
 FE = Federally listed as Endangered
 FT = Federally listed as Threatened
 SE = State-listed as Endangered
 ST = State listed as Threatened
 SP = Fully Protected species identified in the California Fish and Game Code
 SOC = Federal Species of Concern
 SSC = California Department of Fish and Game Species of Special Concern
 SWL = California Department of Fish and Game Watch List
 MSHCP = Species considered "Adequately Conserved" by MSHCP

WILDLIFE MOVEMENT

Historically, the City of Lake Elsinore and its SOI have provided connections between the nearby Santa Ana Mountains and other hillside areas and water sources or foraging areas located on or across the valley floor. There are numerous identified or potential wildlife movement corridors located in the GPU planning area, especially where development is sparse and open space or ephemeral watercourses are available. Accordingly, much of the GPU planning area has potential function as a wildlife movement corridor, including areas adjacent

to or within commercial, industrial, and residential uses. In addition, the GPU planning area provides forage and nesting sites for both locally common and rare bird species and migrating birds covered by the Migratory Birds Treaty Act (MBTA). As the GPU notes, Lake Elsinore is the permanent and seasonal home of a wide variety of birds and serves an important role as a way station on the Pacific flyway for large numbers of migrating waterfowl traveling between Alaska and South America. Jurisdictional Wetlands

The study area contains areas of undisturbed and disturbed wetlands that are considered sensitive biological resources and are regulated by California Department of Fish and Game (CDFG), Regional Water Quality Control Board (RWQCB) – Santa Ana Region (8), and the U.S. Army Corps of Engineers (ACOE) and potentially regulated by the USFWS, U.S. Environmental Protection Agency, and California Environmental Protection Agency, any one of which agencies (collectively referred to as “resource agencies” and/or “jurisdictional agencies”) may assert jurisdiction, condition, make recommendations and/or comment upon applications for development activity impacting sensitive habitats and species that are of particular concern to, or under the permitting jurisdiction of, these agencies. Wetland features in the study area include Lake Elsinore (located in the south-central portion of the City), the Temescal Wash, and the San Jacinto River which flows from the northeast to the southwest into Lake Elsinore, thence into the Temescal Wash during periods of heavy rain that can cause high water levels and peak flows. In addition, the GPU planning area contains numerous smaller ephemeral drainages, washes and ephemeral creeks as well as springs, areas of perched water and scattered vernal pools. Many of these resources are not located within MSHCP criteria cells and may or may not be associated with sensitive species and/or distinctive, high value habitat. Wetland areas are addressed by the MSHCP, by regulations issued by one or more of the above-listed resource agencies, by state or federal laws, and local ordinances, including General Plan goals and policies. Preservation of wetlands, other aquatic resources and associated habitats & species are important components of the regional ecology and the proposed project is intended to ensure the conservation and protection of these resources to extent feasible.

3RD STREET ANNEXATION AREA

The 3rd Street Annexation area contains a variety of vegetative communities. Much of the western portion of the annexation area is developed or disturbed/ruderal. Much of the eastern portion of the annexation area features Riversidian sage scrub and coastal sage scrub, which are considered sensitive biological resources by CDFG and the MSHCP. Small areas of nonnative grassland (including disturbed and undisturbed) are also located throughout the annexation area. The CNDDDB was reviewed to identify special-status plant and wildlife species that have the potential to occur within the annexation area (according to regional generalization) and the 3rd Street Annexation area was surveyed to determine which species actually could occur within the area due to the presence of adequate habitat. Species potential for presence was identified as “none,” “low,” “moderate,” or “high.” **Table 3.8-2, Special-Status Species Information - 3rd Street Annexation Area**, shows the wildlife species that have either “moderate” or “high” potential to occur on the site due to the presence of suitable habitat. Only one of the special-status species, the California horned lark, was observed on the site during the

survey. No special-status plant species were identified as having a moderate or high potential of occurring in the annexation area.

Table 3.8-2, Special-Status Species Information – 3rd Street Annexation Area

Species	Status*	Likelihood of Occurrence	Comments
Reptiles			
San Diego Coast Horned Lizard <i>Phrynosoma coronatum blainvillii</i>	SSC, MSHCP	High	Found in a wide variety of vegetation types, including coastal sage scrub, annual grassland, chaparral, oak woodland, riparian woodland, and coniferous forest.
Belding’s Orange-Throated Whiptail <i>Aspidoscelis hyperythrus beldingi</i>	SSC, MSHCP	High	Habitat types include chaparral, nonnative grassland, (Riversidian) coastal sage scrub, juniper woodland, and oak woodland.
California Legless Lizard <i>Anniella pulchra</i>	SSC	Moderate	Found in a variety of habitats, including coastal sage scrub, chaparral, oak woodland, and pine forests.
Coast Western Patch-nosed Snake <i>Salvadora hexalepis virgultea</i>	SSC	High	Occupies desert scrub, coastal chaparral, washes, sandy flats, and rocky areas.
Northern Red Diamond Rattlesnake <i>Crotalus ruber ruber</i>	SSC, MSHCP	High	Commonly associated with heavy brush with large rocks or boulders.
Birds			
White-Tailed Kite <i>Elanus leucurus</i>	SP, MSHCP	High	Found in low elevations, open grasslands, savannah-like habitats, agricultural areas, wetlands, and oak woodlands.
Northern Harrier <i>Circus cyaneus</i>	SSC, MSHCP	None (breeding) Moderate (foraging)	Frequents open wetlands, wet and lightly grazed pastures, old fields, dry uplands, upland prairies, grasslands, drained marshlands, croplands, shrub-steppe, and meadows.

Species	Status*	Likelihood of Occurrence	Comments
Sharp-Shinned Hawk <i>Accipiter striatus</i>	SSC, MSHCP	None (breeding) High (foraging)	No known breeding populations in the Western Riverside area. The species is, however, a fairly common migrant and wintering species within southern California.
Cooper's Hawk <i>Accipiter cooperii</i>	SWL, MSHCP	High	Woodland habitats.
Burrowing Owl <i>Athene cunicularia</i>	SSC, MSHCP(c)	High	Found in shortgrass prairies, grasslands, lowland scrub, agricultural lands, coastal dunes, desert floors, disturbed areas, and some open areas.
Vaux's Swift <i>Chaetura vauxi</i>	SSC	None (breeding) Moderate (foraging)	Associated only with old-growth stands of Douglas-fir.
Loggerhead Shrike <i>Lanius ludovicianus</i>	SSC, MSHCP	High	Found in open ground within areas of short vegetation, pastures with fence rows, old orchards, mowed roadsides, cemeteries, golf courses, riparian areas, open woodland, agricultural fields, desert washes, desert scrub, grassland, broken chaparral.
California Horned Lark <i>Eremophila alpestris actia</i>	SSC, MSHCP	Confirmed Present	Found in a variety of open habitats.
Coastal Cactus Wren <i>Campylorhynchus brunneicapillus couesi</i>	SSC, MSHCP	Moderate	Resident of the coastal sage scrub plant community.
Coastal California Gnatcatcher <i>Poliophtila californica californica</i>	FT, SSC, MSHCP	Moderate	Inhabits sage scrub habitat.
Western Yellow Warbler <i>Dendroica petechia brewsteri</i>	SSC, MSHCP	None (breeding) Moderate (migrant)	Found in riparian woodlands.
Ashy (Southern California) Rufous-Crowned Sparrow <i>Aimophila ruficeps canescens</i>	SWL, MSHCP	High	Found on grass-covered hillsides, coastal sage scrub, and chaparral.



Species	Status*	Likelihood of Occurrence	Comments
Bell’s Sage Sparrow <i>Amphispiza belli belli</i>	SWL, MSHCP	Moderate	Resident breeder in dry chaparral and coastal sage scrub along the coastal lowlands, inland valleys, and in the lower foothills of local mountains.
Tricolored Blackbird <i>Agelaius tricolor</i>	SSC, MSHCP	None (breeding) Moderate (foraging)	Breeds in large colonies within emergent wetlands; nesting birds feed in vicinity of colonies w/ in nonnative grasslands, crop field, etc.
Bats			
Pallid Bat <i>Antrozous pallidus</i>	SSC	Low (roosting) Moderate (foraging)	Rock crevices, caves, mine shafts, under bridges, in buildings and tree hollows.
<p>* Special-Status Definitions</p> <p>SSC = State species of special concern.</p> <p>SP = California fully protected species.</p> <p>SWL = California Watch List.</p> <p>FT = Federally threatened.</p> <p>MSHCP = Species considered “Adequately Conserved” by MSHCP.</p>			

3.8.3 REGULATORY SETTING

FEDERAL

Endangered Species Act (ESA)

The ESA (16 U.S.C. §1531 et seq.) was signed on December 28, 1973, and established a national policy that all federal agencies work toward conservation of species of wildlife, plants, and biotic communities endangered or threatened throughout all or a significant portion of their range, and the conservation of the ecosystems on which they depend. “Endangered” means any species which is in danger of extinction throughout all or a significant portion of its range. “Threatened” means any species which is likely to become an endangered species within the foreseeable future throughout all or a significant portion of its range. . All species of plants and animals, except pest insects, are eligible for listing as endangered or threatened. The ESA prohibits “take” (harm or harassment [including to pursue, hunt, shoot, wound, kill, trap, capture, or collect, or attempt to engage in any such conduct] of individuals of a protected species and, under certain circumstances, the destruction of habitat) of a federally listed Endangered or Threatened species without incidental take permits or authorization through Section 7 Consultation..

The USFWS is responsible for identifying endangered or threatened species and their critical habitats under their jurisdiction, implementing conservation programs to conserve identified species, and rendering opinions regarding impacts of proposed development and federal actions on endangered, threatened, or candidate plant and wildlife species. The U.S. National Oceanic and Atmospheric Administration (NOAA) Fisheries Service is responsible for rendering opinions regarding impacts on identified special-status anadromous¹ fish.

Executive Order 1318 and Migratory Bird Treaty Act

The Migratory Bird Treaty Act (MBTA) (16 U.S.C. 703 – 712 et seq.) implements the provisions of treaties between the United States, Great Britain, Mexico, Japan, and the Soviet Union, and authorizes the U.S. Secretary of the Interior to protect and regulate the taking of migratory birds. It establishes seasons and bag limits for hunted species and protects migratory birds, their occupied nests, and their eggs (16 USC 703; 50 CFR 10, 21).

Executive Order (EO) 13186, signed January 10, 2001, directs each federal agency taking actions that will have or are likely to have a negative impact on migratory bird populations to work with USFWS to develop a Memorandum of Understanding (MOU) to promote the conservation of migratory bird populations.

Bald and Golden Eagle Protection Act

The Bald and Golden Eagle Protection Act (16 U.S.C. 668-668c), enacted in 1940, and amended several times since then, prohibits anyone, without a permit issued by the Secretary of the Interior, from "taking" bald eagles, including their parts, nests, or eggs. The Act provides criminal penalties for persons who "take, possess, sell, purchase, barter, offer to sell, purchase or barter, transport, export or import, at any time or any manner, any bald eagle ... [or any golden eagle], alive or dead, or any part, nest, or egg thereof." The Act defines "take" as "pursue, shoot, shoot at, poison, wound, kill, capture, trap, collect, molest or disturb."

Clean Water Act

The Federal Clean Water Act was enacted as an amendment to the federal Water Pollution Control Act of 1972, which outlined the basic structure for regulating discharges of pollutants to waters of the United States. The Clean Water Act now serves as the primary federal law protecting the quality of the nation's surface waters, including lakes, rivers, and coastal wetlands, all of which pertain to the survival and viability of plants, wildlife, and ecological communities. Under Section 404 of the Clean Water Act, applicants must obtain a permit from the ACOE for all discharges of dredged or fill material into waters of the United States, including wetlands, before proceeding with a proposed activity.

The ACOE may issue either an individual permit evaluated on a case-by-case basis or a general permit evaluated at a program level for a series of related activities. General permits are

¹ Species that live their adult lives in the ocean but move into freshwater streams to reproduce or spawn (e.g., salmon).

preauthorized and are issued to cover multiple instances of similar activities expected to cause only minimal adverse environmental effects. Nationwide Permits (NWP) are a type of general permit issued to cover particular fill activities. Each NWP specifies particular conditions that must be met in order for the NWP to apply to a particular project.

Section 404 of the Clean Water Act (CWA) establishes a program to regulate the discharge of dredged or fill material into waters of the United States, including wetlands as described above. Activities in waters of the United States regulated under this program include fill for development, water resource projects (such as dams and levees), infrastructure development (such as highways and airports) and mining projects. Section 404 requires a permit before dredged or fill material may be discharged into waters of the United States, unless the activity is exempt from Section 404 regulation (e.g. certain farming and forestry activities). States also have a role in Section 404 decisions, through State program general permits, water quality certification, or program assumption.

The basic premise of the program is that no discharge of dredged or fill material may be permitted if: (1) a practicable alternative exists that is less damaging to the aquatic environment or (2) the nation's waters would be significantly degraded. In other words, when you apply for a permit, you must show that you have, to the extent practicable:

- Taken steps to avoid wetland impacts;
- Minimized potential impacts on wetlands; and

Proposed activities are regulated through a permit review process. An individual permit is required for potentially significant impacts. Individual permits are reviewed by the U.S. Army Corps of Engineers, which evaluates applications under a public interest review, as well as the environmental criteria set forth in the CWA Section 404(b)(1) Guidelines. However, for most discharges that will have only minimal adverse effects, a general permit may be suitable. General permits are issued on a nationwide, regional, or State basis for particular categories of activities. The general permit process eliminates individual review and allows certain activities to proceed with little or no delay, provided that the general or specific conditions for the general permit are met. The U.S. Army Corps of Engineers administers day-to-day program, including individual and general permit decisions; conducts or verifies jurisdictional determinations; develops policy and guidance; and enforces Section 404 provisions.

Compliance with Clean Water Act Section 404 requires compliance with several other environmental laws and regulations. The Corps cannot issue an individual permit or verify the use of a general permit until the requirements of NEPA, ESA, and the National Historic Preservation Act (see chapter 10, "Cultural Resources") have been met. In addition, the Corps cannot issue or verify any permit until a water quality certification, or a waiver of certification, has been issued pursuant to the Clean Water Act, Section 401.

Clean Water Act Section 404 Permit - ACOE

In general, to obtain a Section 404 permit, applicants must demonstrate that the discharge of dredged or fill material would not significantly degrade the nation's waters and there are no practicable alternatives less damaging to the aquatic environment. Applicants are also required to describe steps taken to minimize impacts to water bodies and wetlands and provide appropriate and practicable mitigation, such as restoring or creating wetlands, for any remaining, unavoidable impacts. Permits will not be granted for proposals that are found to be contrary to the public interest. Compliance with the Endangered Species Act and/or Section 106 of the National Historic Preservation Act may also be required before a Section 404 permit can be issued.

Section 401 Water Quality Certification – Regional Water Quality Control Board

The Federal Clean Water Act, in Section 401, specifies that states must certify that any activity subject to a permit issued by a federal agency, such as the Corps, meets all state water quality standards. In California, the State Water Resources Board and the regional water quality control boards are responsible for taking certification actions for activities subject to any permit issued by the Corps pursuant to Section 404 (or for any other Corps' permit, such as permits issued pursuant to Section 10 of the Rivers and Harbors Act of 1899). Such certification actions, also known as “401 certification” or water quality certification, include issuing a 401 certification that the activity subject to the federal permit complies with state water quality standards, issuing a 401 certification with conditions, denying 401 certification, or denying 401 certification without prejudice, should procedural matters preclude taking timely action on a 401 certification application. Should 401 certification be denied, the federal permit is deemed denied also.

Regional boards or their executive officers may issue 401 certifications. The State Board issues 401 certifications for projects that will take place in two or more regions. The regulations governing California's issuance of 401 certifications were updated in 2000, and are contained in Sections 3830 through 3869 of Title 23 of the California Code of Regulations.

Executive Order 11990 – Protection of Wetlands

Executive Order 11990 (issued in 1977) is an overall wetland policy for all agencies managing federal lands, sponsoring federal projects, or providing federal funds to state and local projects. It requires federal agencies to follow procedures for avoidance, mitigation, and preservation, with public input, before proposing new construction in wetlands. Compliance with Section 404 permit requirements may constitute compliance with the requirements of Executive Order 11990.

STATE

California Endangered Species Act

The California Endangered Species Act (CESA) (California Fish and Game Code Section 2050 et seq.) prohibits the take of any species listed by CDFG as endangered, threatened, or candidate for such listing. Take is defined in CDFG Code Section 86 as “hunt, pursue, catch, capture, or kill, or attempt to hunt pursue, catch, capture, or kill.” CDFG may authorize, by permit, the take of endangered species, threatened species, and candidate species if both of the following conditions are met: (1) the take is incidental to an otherwise lawful activity and (2) the impacts of the authorized take shall be minimized and fully mitigated. The measures required to meet this obligation shall be roughly proportional in extent to the impact of the authorized taking on the species. Where various measures are available to meet this obligation, the measures required shall maintain the applicant’s objectives to the greatest extent possible. All required measures shall be capable of successful implementation.

CDFG and USFWS Species of Concern

The CDFG has also produced a species of special concern list to serve as a species watch list. Species on this list are either of limited distribution or their habitats have been reduced substantially, such that a threat to their populations may be imminent. Species of special concern may receive special attention during environmental review, but they do not have formal statutory protection. At the federal level, USFWS also uses the label species of concern, an informal term that refers to species which might be in need of concentrated conservation actions.

As the Species of Concern designated by USFWS do not receive formal legal protection, the use of the term does not necessarily ensure that the species will be proposed for listing as a threatened or endangered species.

California Fish and Game Code Sections 3503 and 3503.5

Under Section 3503 of the California Fish and Game Code, it is unlawful to take, possess, or needlessly destroy the nest or eggs of any bird. Birds of prey are protected under the Section 3503.5 which states that it is “unlawful to take, possess, or destroy any birds in the order Falconiformes or Strigiformes (birds of prey) or to take, possess, or destroy the nest or eggs of any such bird except as otherwise provided by this code or any regulation adopted pursuant thereto.” Construction disturbance during the breeding season could result in the incidental loss of fertile eggs or nestlings, or otherwise lead to nest abandonment. Disturbance that causes nest abandonment and/or loss of reproductive effort is considered “take” by the California Fish and Game Code.

California Fish and Game Code Section 1602

The Department of Fish and Game (DFG) is responsible for conserving, protecting, and managing California’s fish, wildlife, and native plant resources. To meet this responsibility, the

Fish and Game Code (Section 1602) requires an entity to notify DFG of any proposed activity that may substantially modify a river, stream, or lake.

Notification is required by any person, business, state or local government agency, or public utility that proposes an activity that will:

- Substantially divert or obstruct the natural flow of any river, stream or lake;
- Substantially change or use any material from the bed, channel, or bank of, any river, stream, or lake; or
- Deposit or dispose of debris, waste, or other material containing crumbled, flaked, or ground pavement where it may pass into any river, stream, or lake.

The notification requirement applies to any work undertaken in or near a river, stream, or lake that flows at least intermittently through a bed or channel. This includes ephemeral streams, desert washes, and watercourses with a subsurface flow. It may also apply to work undertaken within the flood plain of a body of water.

The Department must comply with the California Environmental Quality Act (CEQA) (Pub. Resources Code, § 21000, et seq.) before it may issue a final Lake or Streambed Alteration Agreement. Issuance of a final Lake or Streambed Alteration Agreement occurs after the Department receives a draft Lake or Streambed Alteration Agreement from the applicant and the Department signs it.

California State Wetlands Conservation Policy

The Governor of California issued an executive order on August 23, 1993, that created a California State Wetlands Conservation Policy. This policy is implemented by an interagency task force that is jointly headed by the State Resources Agency and the California Environmental Protection Agency (Cal-EPA). The policy has three goals:

- To ensure no overall net loss and a long-term net gain in wetlands acreage and values in a manner that fosters creativity, stewardship, and respect for private property;
- To reduce the procedural complexity of state and federal wetlands conservation program administration; and
- To encourage partnerships that make restoration, landowner incentives, and cooperative planning the primary focus of wetlands conservation.

Porter-Cologne Water Quality Control Act

The Porter-Cologne Water Quality Control Act (Porter-Cologne Act) comports with the federal Clean Water Act. The Porter-Cologne Act, passed in 1975, provides for the development and periodic review of water quality control plans (also known as “basin plans”) that designate beneficial uses of California’s major rivers and groundwater basins and establish narrative and numerical water quality objectives for those waters. Basin plans are implemented primarily by

using the NPDES permitting system to regulate waste discharges so that water quality objectives are met.

LOCAL

City of Lake Elsinore General Plan Update

The proposed City of Lake Elsinore General Plan Update includes goals, policies and implementation programs to preserve plants, wildlife, and biological communities. For a discussion of GPU goals, policies and implementation programs applicable to biological resources, see Section 3.8.4 below.

Stephens' Kangaroo Rat Habitat Conservation Plan (SKR HCP)

The Stephens' Kangaroo Rat is a federally-listed endangered species, which is also listed as a threatened species by the State of California. The Stephens' Kangaroo Rat Habitat Conservation Plan (SKR HCP) is implemented by the Riverside County Habitat Conservation Agency (RCHCA) which was formed in 1990 for the purpose of planning, acquiring, administering, operating and maintaining land and facilities for ecosystem conservation and the creation of habitat reserves for the SKR and other endangered, threatened, and candidate species. The RCHCA is a Joint Powers Agreement agency comprised of the cities of Corona, Hemet, Lake Elsinore, Menifee, Moreno Valley, Murrieta, Perris, Riverside, Temecula, Wildomar and the County of Riverside. The City of Lake Elsinore joined the Riverside County Habitat Conservation Agency Joint Exercise Powers Agreement on May 15, 1990.

In March of 1996, the RCHCA adopted a Long-Term HCP for the SKR which was approved by the USFWS and CDFG on May 6, 1996. At the time of approval, the HCP covered approximately 533,954 acres within RCHCA-member jurisdictions, including an estimated 30,000 acres of occupied SKR habitat. The western portion of project area is located within the boundary of the adopted SKR HCP area and will be required to comply with applicable provisions of this plan.

Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP)

In 2004, the City adopted the Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP or Plan), a comprehensive multi-jurisdictional effort that focuses on conservation of 146 species and their associated habitats within western Riverside County. The Plan seeks to conserve biological resources by establishing a network of Conservation Areas (consisting of Core Reserves and Linkages) that would reserve in perpetuity open space to be maintained pursuant to the guidelines and regulations regarding land use, habitat preservation, and species conservation. Overall, the Plan area covers approximately 1.26 million acres, which is broken down into 16 area plans. The City and SOI are completely within the Elsinore Area Plan, which also encompasses the entirety of the City of Canyon Lake and additional unincorporated County land outside the City's SOI.

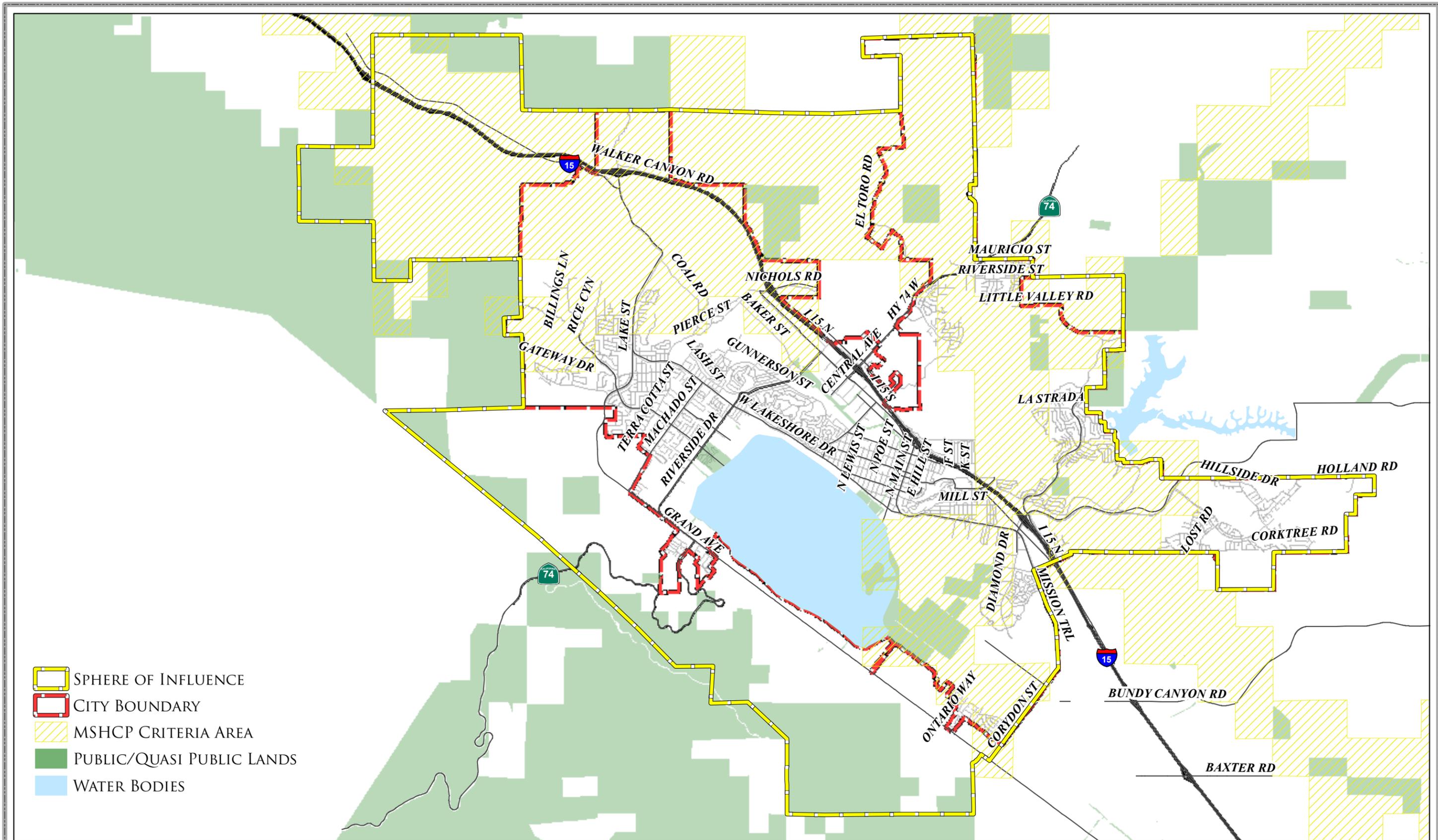
The MSHCP provides a strategy for balancing the need to conserve open space and the need to convert open space to non-open space uses while protecting the region’s economy; preserving land owner rights; providing for the long-term management of plant, fish, and wildlife species, especially those that are listed or may be listed in the future under the Federal Endangered Species Act or the California Endangered Species Act; providing and maintaining multi-use open space that would contribute to the quality of life of residents of and visitors to the plan area; and accommodating a growing population while minimizing costs to project proponents and society at large.

The MSHCP serves as the Habitat Conservation Plan pursuant to Section 10(a)(1)(B) of the federal Endangered Species Act of 1973, as well as a Natural Communities Conservation Plan (NCCP) under the NCCP Act of 2001. The MSHCP allows for the Permittees (i.e., City of Lake Elsinore, County of Riverside, the other 14 participating cities, etc.) to authorize “take” of plant and wildlife species identified within the Plan area for private and public works projects. Under the MSHCP, the U.S. Fish and Wildlife Service and California Department of Fish and Game, herein referred to as the Wildlife Agencies, have granted take authorization in exchange for the assembly and management of the MSHCP Conservation Area.

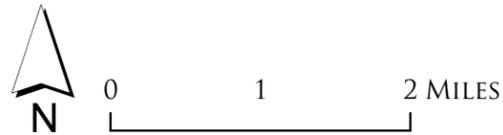
One of the conditions of the permits associated with the MSHCP is that the City and other Permittees must contribute to the MSHCP Reserve Assembly. The permits were issued based upon an ultimate Reserve System of 500,000 acres. Of that 500,000 acres, 347,000 acres are designated Public/Quasi-Public lands (**Figure 3.8-1, MSHCP Designations**) and are already conserved. The acquisition of the remaining 153,000 acres is the responsibility of the Permittees. The City is focusing on adding lands to existing and proposed cores and linkages within the Elsinore Area Plan. Refer to **Figure 3.8-2 MSHCP Criteria Cells**, which shows the cells applicable to the City and SOI. To meet the goals and objectives of the MSHCP and to comply with the permits issued on this regional Plan, acquisitions of the Reserve Assembly are anticipated over a 25-years time period, with an Adaptive Management Program including restoration and enhancement being implemented over the 75-year term of the two permits.

The objective of the approved MSHCP is to provide landowners, developers, and those who build public infrastructure with a streamlined regulatory process, certainty, and identified project mitigation. Pursuant to the MSHCP and its permits, the City reviews proposed development in the Criteria Area to determine consistency with the MSHCP. In some circumstances, development within areas described for conservation may be allowed assuming proper MSHCP processing has been completed. The City is in the process of updating its MSHCP Implementation Guidelines to assist in processing projects consistent with the Plan, including review through the Lake Elsinore Acquisition Process (LEAP) and pursuant to Section 6.0 of the MSHCP. Consistency reviews for proposed development within Criteria Cells also require a Joint Project Review with the Regional Conservation Authority. The City’s MSHCP Implementation Guidelines will also include mapping as well as develop an economically viable strategy to acquiring conservation lands. The City is also working on a Replacement Program to create mapping that will show areas that have already been conserved or exempted from the MSHCP.

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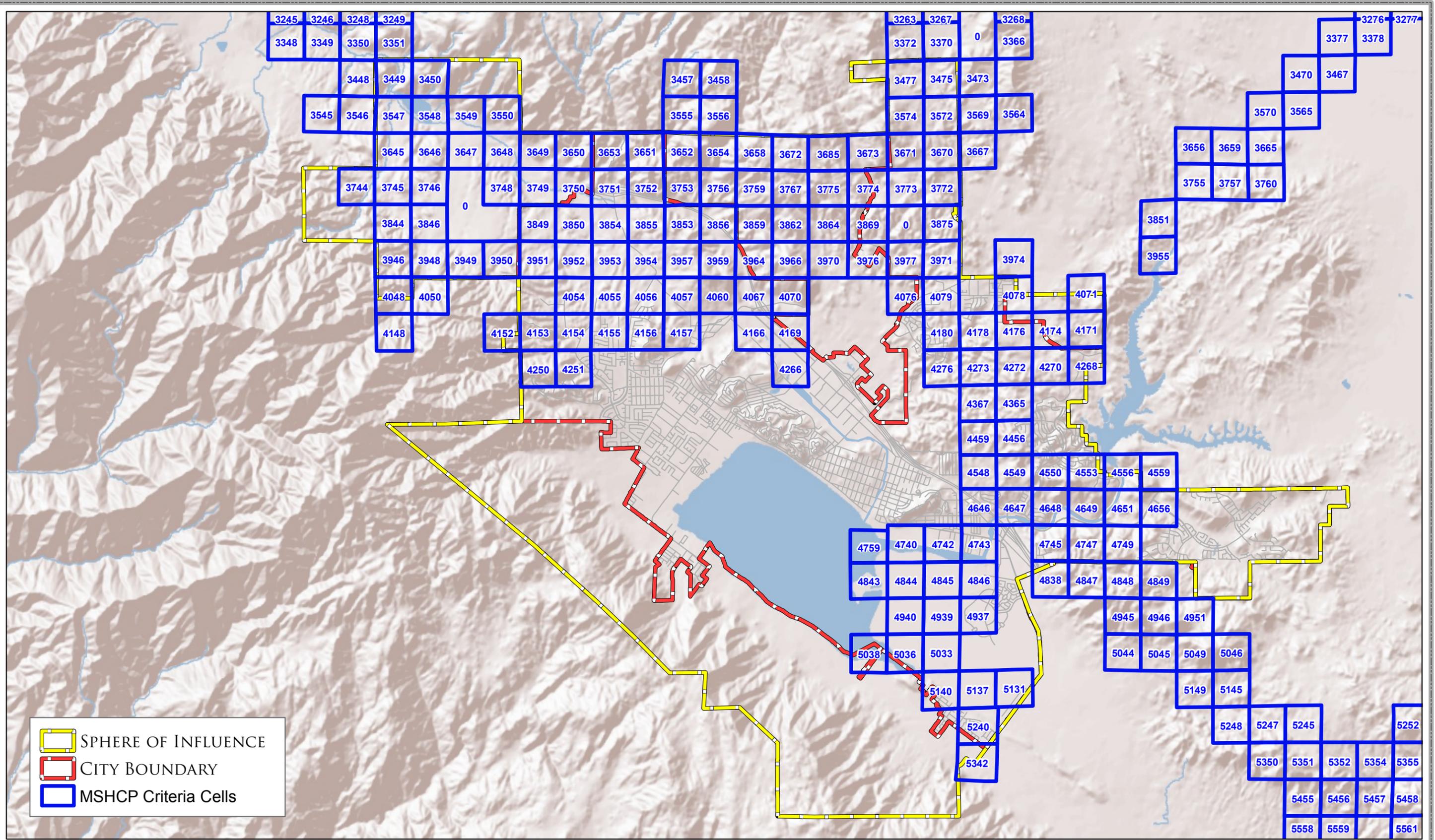


SOURCES: CITY OF LAKE ELSINORE, COUNTY OF RIVERSIDE

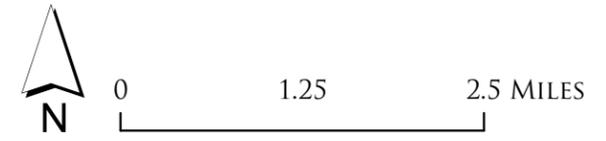


CITY OF LAKE ELSINORE
MSHCP DESIGNATIONS
FIGURE 3.8-1

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SOURCES: CITY OF LAKE ELSINORE, COUNTY OF RIVERSIDE GIS



CITY OF LAKE ELSINORE
MSHCP CRITERIA CELLS
FIGURE 3.8-2

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Lake Elsinore and San Jacinto Watersheds Program

The Lake Elsinore and San Jacinto Watershed Authority (LESJWA) is a joint powers authority charged with improving water quality and protecting wildlife habitats, primarily in Lake Elsinore, but also in Canyon Lake and the surrounding watersheds. The Lake Elsinore & San Jacinto Watersheds cover over 700 square miles, starting at the San Jacinto Mountains, running westerly through Canyon Lake and ending in Lake Elsinore. LESJWA was formed in April of 2000 after California voters passed Proposition 13, a bond measure to fund water projects throughout the state. LESJWA's efforts to address critical water quality issues in Lake Elsinore, Canyon Lake and surrounding unincorporated communities will positively affect property values, local economic conditions and recreational opportunities, thus boosting the overall quality of life in these areas. Healthy watersheds also promote wildlife and their natural habitat.

LESJWA's most recent project – the creation of floating treatment wetlands planted with wetland or garden plants combines a matrix for water filtration that also provides natural wildlife habitat restoration within Lake Elsinore, provides a feeding source for fish, and provides enhancement to areas with fluctuating water levels. The LESJWA and the City of Lake Elsinore jointly manage the Lake. Activities that directly or indirectly impact aquatic habitats and fisheries include the Back Basin Wetland Improvement project that will include the creation of spawning benches, brush shelters, additional vegetation, game fish rearing ponds, and more fish-friendly piers. In addition the LWSJWA and the City have undertaken aeration projects which now include consists of nine miles of aeration lines on the lake bottom and lake-mixing fans that circulate oxygen and projects intended to stabilize Lake water levels to prevent mass die-offs of fish.

Lake Elsinore Municipal Code (LEMC) – Title 19, Chapter 19.04

Chapter 19.04 (Habitat Conservation) of the Lake Elsinore Municipal Code addresses the City's implementation of the Stephens' Kangaroo Rat Habitat Conservation Plan in western Riverside County. Chapter 19.04 requires all applicants for development permits within the boundaries of the plan area to pay an impact and mitigation fee of \$500.00 per gross acre located within the parcel to be developed and the area disturbed by related off-site improvements except as provided in LEMC 19.04.100. No development permit for real property located within the boundaries of the plan area shall be issued or approved without the payment of the impact and mitigation fee and the submission of the biological survey as required by this chapter.

Lake Elsinore Municipal Code (LEMC) – Title 16, Chapter 16.85

Chapter 16.85 (Local Development Mitigation Fee for Funding the Preservation of Natural Ecosystems) establishes a local development mitigation fee as part of the City's implementation of the Western Riverside County Multiple Species Habitat Conservation Plan. To assist in providing revenue to acquire and preserve vegetation communities and natural areas within the City and Western Riverside County which are known to support threatened, endangered or key sensitive populations of plant and wildlife species, the City collects the local development mitigation fee for each development project or portion thereof to be constructed within the City.

Lake Elsinore Municipal Code (LEMC) – Title 14, Chapter 14.08

The purpose of this chapter is to ensure the future health, safety, and general welfare of City citizens by:

- Reducing pollutants in stormwater discharges to the maximum extent practicable;
- Regulating illegal connections and discharges to the storm drain system; and
- Regulating non-stormwater discharges to the storm drain system.

The intent of this chapter is to protect and enhance the water quality of City watercourses, water bodies, groundwater, and wetlands in a manner pursuant to and consistent with the Federal Clean Water Act (33 USC 1342). [Ord. 1004 Art. I § 2, 1995].

Lake Elsinore Municipal Code (LEMC) – Title 5, Chapter 5.116

The City has in place a palm tree preservation program, which was adopted as City Ordinance No. 1044. and codified as Chapter 5.116 of the Lake Elsinore Municipal Code. The purpose of the program is for the protection of the City’s plant life heritage for the benefit of all citizens in Lake Elsinore. The City recognizes the value of significant palm trees (Canary Island Date Palm, California Fan Palm, Windmill Palm, Mediterranean Fan Palm, Senegal Date Palm, Pindo Palm and Pygmy Palm) within the City of Lake Elsinore as natural aesthetic resources, which help define the history and character of the City. All residents who wish to remove a palm tree that exceeds five feet in height measured from the ground at the base of the trunk to the base of the crown must obtain a palm tree removal permit prior to removal of the tree.

Lake Elsinore Acquisition Process (LEAP).

With the adoption of the Final Western Riverside County Multiple Species Plan (MSHCP), the City Council agreed to implement the plan utilizing the Property Owner Initiated Lake Elsinore Acquisition Process (LEAP). LEAP ensures that: 1) an early determination will be made concerning those properties that may be needed for the MSHCP Conservation Area, 2) owners of property needed for MSHCP conservation are compensated if necessary, through incentives or monetarily; 3) owners seeking land not needed for inclusion in the MSHCP Conservation Area, shall receive Take Authorization for Covered Species Adequately Conserved through the Permits issued to the City pursuant to the MSHCP.

3.8.4 GENERAL PLAN UPDATE GOALS AND POLICIES

The City of Lake Elsinore General Plan Update addresses Biological Resources in Chapter 4.0 (Resource Protection and Preservation) and in various District Plans. The goals, policies and implementation programs listed in **Table 3.8-3, General Plan Biological Resources Goals, Policies and Implementation Programs**, apply to these resources. The intent of these goals, policies and implementation programs is to enhance and preserve the City’s existing natural resources while balancing the City’s other imperatives for balanced economic growth.

Table 3.8-3, General Plan Biological Resources Goals, Policies and Implementation Programs

GENERAL PLAN GOALS, POLICIES AND IMPLEMENTATION PROGRAMS	
Chapter 4.0 - Resource Protection and Preservation (Section 4.3 - Open Space)	
Goal 3 Provide an open space layout within the City that will enhance the recreational and visual experiences of all City residents and visitors.	
Policy 3.1	Maximize the MSHCP conservation areas and other open space that is available for public use.
Policy 3.2	The City shall ensure that passive and active open space uses are incorporated into development areas.
Policy 3.3	Development on steep slopes in public or private property shall require contour grading.
Policy 3.4	Preserve the City's visual character, in particular the surrounding hillsides, which topographically define the lake region.
<u>Implementation Program</u>	The City shall consider modifying the existing grading ordinance to include contour grading or other methods and concepts that protect and enhance steep slopes, including enforcement procedures and appropriate access.
Chapter 4.0 - Resources Protection and Preservation (Section 4.2 - Biological Resources)	
Goal 1 Identify and conserve important biological habitats where feasible while balancing the economic growth and private property right interests of the City, its residents, and landowners.	
Policy 1.1.	The City shall continue to participate in the Western Riverside County Multiple Species Habitat Conservation Plan, the LEAPS program, and the Implementing Agreement; with a strategy that focuses on quality assemblage of conservation acreage beginning at the start of the conservation range.
Policy 1.2.	Evaluate the installation of barrier fencing or other buffers between MSHCP Conservation Areas and proposed public and private land uses that may be incompatible with the Conservation Areas in order to minimize illegal/unauthorized public access, domestic animal predation, or dumping in the Conservation Areas while not impeding wildlife movement.
Policy 1.3.	The City's Conceptual Reserve Design shall be developed in accordance with Section 3.2.3 of the MSHCP as amended, and may rely upon the flexibility permitted by the MSHCP where appropriate in conducting the Reserve Assembly Accounting set forth in Section 6.7 of the MSHCP.
Policy 1.4.	Encourage revegetation with native plants compatible with natural surrounding habitat where soils have been disturbed during construction, and discourage plants identified in the MSHCP as unsuitable for conservation areas.
Policy 1.5.	The City shall coordinate with the Regional Conservation Authority to have that agency acquire native habitat areas as permanent open space and allow public trail access where appropriate.
Policy 1.6.	The City shall establish a plan for a trail network intended for active or passive use within public open space areas and traversing around and through MSHCP Conservation areas where



GENERAL PLAN GOALS, POLICIES AND IMPLEMENTATION PROGRAMS	
compatible with guidelines set forth in the MSHCP and City Council MSHCP policies.	
Policy 1.7.	The City shall require all new trails, trailheads, conservation signage, interpretive centers, and maintenance facilities established within MSHCP Conservation areas to follow the Guidelines for the Siting and Design of Trails and Facilities, as set forth in Section 7.4.2 of the MSHCP.
Policy 1.8.	The City shall consult with the Regional Conservation Authority (RCA) and adjacent jurisdictions to ensure proper adherence to MSHCP guidelines and to allow for a maximum level of regional interconnection of trails systems. The City shall reduce, modify or add to the regional interconnections and linkages based on new biological analysis brought forward during the CEQA and LEAP processes.
<u>Implementation Program</u>	Through the MSHCP, LEAP and CEQA processes the City shall identify and conserve important biological habitats while balancing economic growth and property rights.
Goal 2 - Protect sensitive plant and wildlife species residing or occurring within the City	
Policy 2.1	Biological resources analyses of proposed projects shall include discussion of potential impacts to any plant or wildlife species that is officially listed as threatened or endangered by the United States Fish and Wildlife Service and/or the California Department of Fish and Game but not covered by the MSHCP.
Policy 2.2	Development or modification shall be discouraged in areas containing riparian habitat of high functions and values or corridors with 80% or more of natural native habitat that link larger patches of natural native habitat containing 80% or more native plant species. Further, development in areas described for conservation, including areas planned for riparian/riverine restoration included in the MSHCP, shall also be discouraged.
Policy 2.3	The City shall encourage the development of a Native Tree Planting and Maintenance Program that presents guidelines for selecting and locating trees to support wildlife, improve air and water quality, and reduce energy consumption.
<u>Implementation Program</u>	The City shall continue to implement the Western Riverside County MSHCP.

DISTRICT PLANS

Table 3.8-4, Potential Biological Resources Concerns within Each District Plan and the GPU Goal/Policy or the Planning Aspect that Addresses the Issue, outlines potential biological resources concerns within each District Plan and the GPU goal/policy or the planning aspect that addresses the issue. Certain biological resources issues would be addressed by both GPU goals/policies and aspects of the Land Use Plan; some would be addressed by one or the other.

Table 3.8-4, Potential Biological Resources Concerns within Each District Plan and the GPU Goal/Policy or the Planning Aspect that Addresses the Issue

DISTRICT PLAN	POTENTIAL BIOLOGICAL RESOURCES ISSUE	GPU POLICIES THAT ADDRESS BIOLOGICAL RESOURCES ISSUE
Northwest Sphere	Large amounts of currently undeveloped land with diverse mixture of habitat types will be eliminated as a result of implementation of the Land Use Plan.	<p>Biological Resources Policies 1.1-1.8 and 2.2 discuss the City’s policies for participating in the MSHCP, the LEAPS program and the Implementing Agreement, discourage development in areas described for conservation, and encourage development in areas with relatively low levels of biological functions and values.</p> <p>Biological Resources Goal 2 requires applicants to consider project impacts on plant and wildlife species.</p> <p>Goal 1 of the District Plan calls for accommodating future growth and preserving open space for the protection of natural resources.</p> <p>Policy NWS 2.3 calls for protection of conservation cores and linkages as described in the MSHCP.</p>
	The network of blueline streams throughout the City and SOI will be dredged, filled, or otherwise impacted as a result of implementation of the Land Use Plan.	<p>Biological Resources Policy 2.2 discourages development in and/or modification of riparian habitat.</p> <p>Biological Resources Policy 1.2 and Open Space Policy 3.1 state City policy for implementing the MSHCP and preserving watercourses.</p>
	Riparian habitat associated with Lee Lake and Temescal Wash may be eliminated as a result of implementation of the Land Use Plan.	<p>Biological Resources Policy 2.2 discourages development in and/or modification of riparian habitat.</p> <p>Biological Resources Policy 1.2 and Open Space Policy 3.1 state City policy for implementing the MSHCP and preserving watercourses.</p>
Alberhill	Large area of currently undeveloped land with mixture of grassland and chaparral scrub in northernmost portion of district, north of I-15, may be eliminated as a result of implementation of the Land Use Plan.	<p>Biological Resources Policies 1.1-1.8 and 2.2 discuss the City’s policies for participating in the MSHCP, the LEAPS program and the Implementing Agreement, discourage development in areas described for conservation, and encourage development in areas with relatively low levels of biological functions and values.</p> <p>Biological Resources Goal 2 requires applicants to consider project impacts on plant and wildlife species.</p>

Section 3.8 – Biological Resources



DISTRICT PLAN	POTENTIAL BIOLOGICAL RESOURCES ISSUE	GPU POLICIES THAT ADDRESS BIOLOGICAL RESOURCES ISSUE
	Patches of undeveloped chaparral scrub south of I-15 may be eliminated as a result of implementation of the Land Use Plan.	<p>Biological Resources Policies 1.1–1.8 and 2.2 discuss the City’s policies for participating in the MSHCP, the LEAPS program and the Implementing Agreement, discourage development in areas described for conservation, and encourage development in areas with relatively low levels of biological functions and values.</p> <p>Biological Resources Goal 2 requires applicants to consider project impacts on plant and wildlife species.</p> <p>District Plan Policy AH 1.2 call for preservation of vacant lands in areas with high elevations in the north, east, and southwest in order to provide an adequate amount of conserved lands and open space and wetland areas.</p>
	Network of blueline streams and riparian habitat, including within areas intended for residential development, may be eliminated as a result of implementation of the Land Use Plan.	<p>Biological Resources Policy 2.2 discourages development in and/or modification of riparian habitat.</p> <p>Biological Resources Policy 1.2 and Open Space Policy 3.1 state City policy for implementing the MSHCP and preserving watercourses.</p>
Lake View	Patch of undeveloped chaparral scrub in westernmost portion of district that is contiguous to larger area beyond the SOI, which is an MSHCP Conservation Area in the County’s jurisdiction, may be eliminated as a result of implementation of the Land Use Plan.	<p>Biological Resources Policies 1.1–1.8 and 2.2 discuss the City’s policies for participating in the MSHCP, the LEAPS program and the Implementing Agreement, discourage development in areas described for conservation, and encourage development in areas with relatively low levels of biological functions and values.</p> <p>Biological Resources Goal 2 requires applicants to consider project impacts on plant and wildlife species.</p>
	Two blueline streams running east-west through the district’s westernmost area may be eliminated as a result of implementation of the Land Use Plan.	<p>Biological Resources Policy 2.2 discourages development in and/or modification of riparian habitat.</p> <p>Biological Resources Policy 1.2 and Open Space Policy 3.1 state City policy for implementing the MSHCP and preserving watercourses.</p>
Lake View	Most of the district is	Biological Resources Policies 1.1–1.8 and 2.2 discuss

DISTRICT PLAN	POTENTIAL BIOLOGICAL RESOURCES ISSUE	GPU POLICIES THAT ADDRESS BIOLOGICAL RESOURCES ISSUE
Sphere	currently undeveloped with a mixture of chaparral scrub and upland scrub habitat types, which may be eliminated as a result of implementation of the Land Use Plan.	the City’s policies for participating in the MSHCP, the LEAPS program and the Implementing Agreement, discourage development in areas described for conservation, and encourage development in areas with relatively low levels of biological functions and values. Biological Resources Goal 2 requires applicants to consider project impacts on plant and wildlife species.
	The network of blueline streams running through the district’s northern area may be eliminated as a result of implementation of the Land Use Plan.	Biological Resources Policy 2.2 discourages development in and/or modification of riparian habitat. Biological Resources Policy 1.2 and Open Space Policy 3.1 state City policy for implementing the MSHCP and preserving watercourses.
Lake Edge	Small patch of undeveloped chaparral scrub southwest of the lake may be eliminated as a result of implementation of the Land Use Plan.	Biological Resources Policies 1.1–1.8 and 2.2 discuss the City’s policies for participating in the MSHCP, the LEAPS program and the Implementing Agreement, discourage development in areas described for conservation, and encourage development in areas with relatively low levels of biological functions and values. Biological Resources Goal 2 requires applicants to consider project impacts on plant and wildlife species. District Plan policy LE 1.5 calls for preservation of sensitive environmental habitats and physiographic features, including wetlands and beaches.
North Central Sphere	Large patch of undeveloped land in the northern portion of the district, mostly chaparral scrub with scattered areas of grassland habitat, may be eliminated as a result of implementation of the Land Use Plan.	Biological Resources Policies 1.1–1.8 and 2.2 discuss the City’s policies for participating in the MSHCP, the LEAPS program and the Implementing Agreement, discourage development in areas described for conservation, and encourage development in areas with relatively low levels of biological functions and values. Biological Resources Goal 2 requires applicants to consider project impacts on plant and wildlife species.
	The network of blueline streams traversing the	Biological Resources Policy 2.2 discourages development in and/or modification of riparian



DISTRICT PLAN	POTENTIAL BIOLOGICAL RESOURCES ISSUE	GPU POLICIES THAT ADDRESS BIOLOGICAL RESOURCES ISSUE
	<p>district may be eliminated as a result of implementation of the Land Use Plan.</p>	<p>habitat.</p> <p>Biological Resources Policy 1.2 and Open Space Policy 3.1 state City policy for implementing the MSHCP and preserving watercourses.</p> <p>Goal 1 of the District Plan requires preservation of the mountainous and open space areas.</p> <p>Policy NCS 1.1 calls for protection of existing natural open space, conservation and mountainous areas.</p>
<p>Country Club Heights</p>	<p>Small patches of undeveloped chaparral scrub and grasslands habitat may be eliminated as a result of implementation of the Land Use Plan.</p>	<p>Biological Resources Policies 1.1–1.8 and 2.2 discuss the City’s policies for participating in the MSHCP, the LEAPS program and the Implementing Agreement, discourage development in areas described for conservation, and encourage development in areas with relatively low levels of biological functions and values.</p> <p>Biological Resources Goal 2 requires applicants to consider project impacts on plant and wildlife species.</p> <p>District Plan policy CCH 2.2 requires conformance with hillside development policies to preserve the natural topography of the District.</p>
<p>Lakeland Village</p>	<p>Existing development within the district is surrounded by areas of undisturbed chaparral scrub with smaller patches of upland scrub interspersed throughout, which may be eliminated as a result of implementation of the Land Use Plan.</p>	<p>Biological Resources Policies 1.1–1.8 and 2.2 discuss the City’s policies for participating in the MSHCP, the LEAPS program and the Implementing Agreement, discourage development in areas described for conservation, and encourage development in areas with relatively low levels of biological functions and values.</p> <p>Biological Resources Goal 2 requires applicants to consider project impacts on plant and wildlife species.</p> <p>Goal 5 of the District Plan calls for expanding and connecting recreational facilities and increasing open space areas in the southern areas of the District.</p> <p>Policy LLVS 5.2 encourages the preservation of the natural topography where possible.</p> <p>Policy LLVS 5.9 calls for preservation of open space areas at the northwestern and southeastern areas of the District.</p>

DISTRICT PLAN	POTENTIAL BIOLOGICAL RESOURCES ISSUE	GPU POLICIES THAT ADDRESS BIOLOGICAL RESOURCES ISSUE
East Lake	Most of the district is undeveloped grassland, which may be eliminated as a result of implementation of the Land Use Plan.	<p>Biological Resources Policies 1.1–1.8 and 2.2 discuss the City’s policies for participating in the MSHCP, the LEAPS program and the Implementing Agreement, discourage development in areas described for conservation, and encourage development in areas with relatively low levels of biological functions and values.</p> <p>Biological Resources Goal 2 requires applicants to consider project impacts on plant and wildlife species.</p>
	The San Jacinto River flows through this district before emptying into Lake Elsinore, which borders the district to the west. Development planned in proximity to the River may result in elimination of riparian areas or indirect impacts to environmental resources associated with the River.	<p>Biological Resources Policy 1.2 and Open Space Policy 3.1 state City policy for implementing the MSHCP and preserving watercourses.</p> <p>District Plan Goal 1 calls for integrating future residential commercial development with the recreational and open space land use framework.</p> <p>Policy EL 1.5 calls for incorporation of open space as an integral component of the overall community.</p> <p>Policy EL2.1 calls for preservation of MSHCP, wetlands, and other valuable environmental resources consistent with the East Lake Specific Plan.</p> <p>Policy EL 2.2 requires the dedication of the wetland areas and important habitat of the Elsinore Area preserve of the MSHCP.</p> <p>Goal 4 and its associated policies of the District plan requires provision of an open space and recreational network that creates a balance between the development and the conservation and preservation of areas with unique environmental or aesthetic value.</p>
Ballpark	The district is completely developed and contains no biological resources, but it is immediately adjacent to land designated MSHCP Conservation Area within the Riverview District, through which a stretch of the San Jacinto River flows.	<p>Biological Resources Policy 2.2 discourages development in and/or modification of riparian habitat.</p> <p>Biological Resources Policy 1.2 and Open Space Policy 3.1 state City policy for implementing the MSHCP and preserving watercourses.</p>
Riverview	Small patches of	Biological Resources Policies 1.1–1.8 and 2.2 discuss



DISTRICT PLAN	POTENTIAL BIOLOGICAL RESOURCES ISSUE	GPU POLICIES THAT ADDRESS BIOLOGICAL RESOURCES ISSUE
	undeveloped grassland and chaparral scrub may be eliminated as a result of implementation of the Land Use Plan.	the City’s policies for participating in the MSHCP, the LEAPS program and the Implementing Agreement, discourage development in areas described for conservation, and encourage development in areas with relatively low levels of biological functions and values. Biological Resources Goal 2 requires applicants to consider project impacts on plant and wildlife species.
	The San Jacinto River flows through this district before emptying into Lake Elsinore, which borders the district to the west.	Biological Resources Policy 2.2 discourages development in and/or modification of riparian habitat. Biological Resources Policy 1.2 and Open Space Policy 3.1 state City policy for implementing the MSHCP and preserving watercourses.
	Other blueline streams traverse areas of the district that are presently developed.	Biological Resources Policy 2.2 discourages development in and/or modification of riparian habitat. Biological Resources Policy 1.2 and Open Space Policy 3.1 state City policy for implementing the MSHCP and preserving watercourses. District Plan Policy RV 2.1 encourages rehabilitation, redevelopment, and new development to have an orientation towards the District community amenities and natural features.
Historic	Though the district is fully developed, a blueline stream runs through the district, emptying into Lake Elsinore. Development planned in proximity to the streams may result in elimination of riparian areas or indirect impacts to environmental resources associated with the streams.	Biological Resources Policy 2.2 discourages development in and/or modification of riparian habitat. Biological Resources Policy 1.2 and Open Space Policy 3.1 state City policy for implementing the MSHCP and preserving watercourses. District Plan Policy HD 2.7 calls for creation of a relationship between development and open space in developments immediately adjacent to the Temescal Wash Floodway, the future Civic Center, and recreational areas.
Lake Elsinore Hills	Large blocks of undeveloped land throughout the district with a mixture of chaparral scrub	Biological Resources Policies 1.1–1.8 and 2.2 discuss the City’s policies for participating in the MSHCP, the LEAPS program and the Implementing Agreement, discourage development in areas

DISTRICT PLAN	POTENTIAL BIOLOGICAL RESOURCES ISSUE	GPU POLICIES THAT ADDRESS BIOLOGICAL RESOURCES ISSUE
	and grassland may be eliminated as a result of implementation of the Land Use Plan.	described for conservation, and encourage development in areas with relatively low levels of biological functions and values. Biological Resources Goal 2 requires applicants to consider project impacts on plant and wildlife species. District Plan Policy LEH 2.1 requires creation of strong links between existing uses, approved specific plans, and future developments, and the District open space and MSHCP Conservation Areas. Policy LEH 5.2 supports an extensive system of open space and MSHCP Conservation Areas to ensure a balance between development and the area’s natural environment.
	The San Jacinto River flows through this district.	Biological Resources Policy 2.2 discourages development in and/or modification of riparian habitat. Biological Resources Policy 1.2 and Open Space Policy 3.1 state City policy for implementing the MSHCP and preserving watercourses.
	A network of blueline streams runs through this district, connecting to the San Jacinto River and Lake Elsinore.	Biological Resources Policy 2.2 discourages development in and/or modification of riparian habitat. Biological Resources Policy 1.2 and Open Space Policy 3.1 state City policy for implementing the MSHCP and preserving watercourses.
Business	Small patches of undisturbed grasslands and chaparral scrub throughout the Business District may be eliminated as a result of implementation of the Land Use Plan.	Biological Resources Policies 1.1–1.8 and 2.2 discuss the City’s policies for participating in the MSHCP, the LEAPS program and the Implementing Agreement, discourage development in areas described for conservation, and encourage development in areas with relatively low levels of biological functions and values. Biological Resources Goal 2 requires applicants to consider project impacts on plant and wildlife species.
	The Temescal Wash and a few blueline streams traverse the district. Development planned in	Goal 1 of the District Plan requires that new growth respects the environmental sensitivity of the district’s natural wetlands, floodway and floodplain. District Policy BD 1.3 encourages the use of the

Section 3.8 – Biological Resources



DISTRICT PLAN	POTENTIAL BIOLOGICAL RESOURCES ISSUE	GPU POLICIES THAT ADDRESS BIOLOGICAL RESOURCES ISSUE
	proximity to the streams may result in elimination of riparian areas or indirect impacts to environmental resources associated with the streams.	floodway as a natural resource and a pedestrian corridor.
Meadowbrook Sphere	Patches of undeveloped chaparral scrub and grassland are present amidst existing development and may be eliminated as a result of implementation of the Land Use Plan.	<p>Biological Resources Policies 1.1–1.8 and 2.2 discuss the City’s policies for participating in the MSHCP, the LEAPS program and the Implementing Agreement, discourage development in areas described for conservation, and encourage development in areas with relatively low levels of biological functions and values.</p> <p>Biological Resources Goal 2 requires applicants to consider project impacts on plant and wildlife species.</p> <p>Goal 5 and its associated policies of the District Plan calls for surrounding development with open space uses and MSHCP Conservation Areas.</p>
	The San Jacinto River flows through this district before emptying into the Rainbow Reservoir. Development planned in proximity to the streams may result in elimination of riparian areas or indirect impacts to environmental resources associated with the streams.	<p>Biological Resources Policy 2.2 discourages development in and/or modification of riparian habitat.</p> <p>Biological Resources Policy 1.2 and Open Space Policy 3.1 state City policy for implementing the MSHCP and preserving watercourses.</p>
	Several blueline streams flow through this district and may be eliminated as a result of implementation of the Land Use Plan.	<p>Biological Resources Policy 2.2 discourages development in and/or modification of riparian habitat.</p> <p>Biological Resources Policy 1.2 and Open Space Policy 3.1 state City policy for implementing the MSHCP and preserving watercourses.</p>
North Peak	The district proposes development of an area that is mostly undisturbed chaparral scrub, with small patches of grassland interspersed throughout that	Biological Resources Policies 1.1–1.8 and 2.2 discuss the City’s policies for participating in the MSHCP, the LEAPS program and the Implementing Agreement, discourage development in areas described for conservation, and encourage development in areas with relatively low levels of

DISTRICT PLAN	POTENTIAL BIOLOGICAL RESOURCES ISSUE	GPU POLICIES THAT ADDRESS BIOLOGICAL RESOURCES ISSUE
	<p>may be eliminated as a result of implementation of the Land Use Plan.</p>	<p>biological functions and values.</p> <p>Biological Resources Goal 2 requires applicants to consider project impacts on plant and wildlife species.</p> <p>Goal 1 of the District Plan calls for protecting and preserving sensitive natural habitat using MSHCP and open space conservation tools.</p> <p>District Plan Policy NP 1.4 calls for clustering residential development around recreational areas and internal open space areas.</p> <p>District Plan Policies NP 2.3 and 2.5 call for integration of natural topography into the land use design and utilization of native vegetation in landscaping.</p>
	<p>Several blueline streams flow through this district and may be eliminated as a result of implementation of the Land Use Plan.</p>	<p>Biological Resources Policy 2.2 discourages development in and/or modification of riparian habitat.</p> <p>Biological Resources Policy 1.2 and Open Space Policy 3.1 state City policy for implementing the MSHCP and preserving watercourses.</p>

3.8.5 SIGNIFICANCE THRESHOLDS

The City of Lake Elsinore has not established local CEQA significance thresholds as described in Section 15064.7 of the State CEQA Guidelines. However, Appendix G of the State CEQA Guidelines indicates that impacts to biological resources may be considered potentially significant if the project would:

- have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service.
- have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or U.S. Fish and Wildlife Service.
- have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (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 native wildlife nursery sites.
- conflict with any local policies or ordinances protecting biological resources, such as tree preservation policy or ordinances.
- conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan.

3.8.6 IMPACT ANALYSIS

Individual development projects implemented pursuant to the proposed project could affect biological resources within the project area. The impacts of such individual development projects cannot be fully assessed at this time. As planning progresses for each individual project undertaken within the proposed project’s boundaries, potential biological resources issues will be considered in light of this PEIR and other relevant federal, State, and local regulations in order to determine whether potentially significant impacts to biological resources may occur.

Threshold: Would the project have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service.

Analysis

Plant and Wildlife Impacts

Implementation of the proposed project would result in permanent impacts on the various habitats present throughout the City and SOI that support candidate, sensitive, or special status plant and animal species. Habitat impacts include direct removal through clearing and development, as well as indirect encroachment by new uses placed in or adjacent to natural areas, which in turn would affect plant and wildlife species residing within the area, including special-status species. The various plant and wildlife species residing within the City and SOI include several special-status species (see **Table 3.8-1**, above.) Potential impacts would be both direct (by removing existing habitat of the resident species) and indirect (by placing new uses adjacent to this habitat, affecting wildlife species’ behavior and encroaching onto resident plants).

GPU Resource Protection and Preservation Chapter 4.0, Biological Resources Section, Goal 1 and its associated policies address the City’s participation in the MSHCP and further, document the City’s intent to make land use decisions that are compatible with the long-term survival of sensitive biological resources.

Although it is the intent of the proposed project to minimize habitat impacts, future projects permitted by the GPU Land Use Plan may result in significant impacts and could result in inconsistencies between City policy and land use decision-making and the adopted policies and goals of the MSHCP. Future projects may be allowed to alter the Conservation Area boundaries through criteria refinement, minor amendments, or other means, which would need to be resolved through project-level reviews and modifications that cannot be anticipated at a program level of analysis. In addition, future projects could impact habitats and species that are regulated by the policies and regulations of the US Army Corps of Engineers, the Regional Water Quality Control Board and/or the California Department of Fish and Game. These impacts cannot be quantified at a programmatic level of analysis.

Notwithstanding the foregoing, applicants for projects implemented pursuant to the proposed General Plan Update would be required to identify project-specific impacts as required by LEMC Chapter 19.04 (Habitat Conservation) and would be conditioned to provide mitigation for these potential impacts. In addition, future projects would be required to complete a MSHCP consistency analysis pursuant to the City's LEAP program, and the MSHCP. The consistency analysis requires site-specific biological surveys and jurisdictional delineations pursuant to existing federal, state, regional, and local regulations and ordinances. In addition, all future projects developed pursuant to the GPU Land Use Plan would need to demonstrate consistency with the applicable Goals and Policies of the GPU and its District Plans and satisfy the requirements of the City's Municipal Code before being allowed to proceed.

Application of District Plan Policies

The various District Plan areas contain a variety of biological resources and therefore specialized Goals and Policies, consistent with District resources, are also contained in the GPU. General Plan Update Goals and Policies in the various District Plans are listed in **Table 3.8-4, Potential Biological Resources Concerns within Each District Plan and the GPU Goal/Policy or the Planning Aspect that Addresses the Issue**, above.

3rd Street Annexation Area Analysis

The land uses proposed for the annexation area in the GPU include the development of the eastern portion of the annexation area with a combination of low- to medium-density residential, medium-density residential, and hillside residential uses. The density of development proposed in this portion of the annexation area would allow for preservation of large contiguous areas of Riversidian sage scrub and coastal sage scrub habitat. However, design of these developments has not yet been undertaken; therefore, the impacts cannot be quantified.

Projects proposed in the eastern portion of the 3rd Street Annexation area may involve impacts to, and mitigation requirements for, potential impacts to Riversidian sage scrub habitat.

In common with the City of Lake Elsinore and the balance of the City's SOI, project impacts to sensitive habitats, wetlands, aquatic resources, and candidate, sensitive, rare, and/or endangered species are governed by the provisions of a variety of existing ordinance, laws,

regulations, and permitting requirements enforced by federal, state, regional, county, and city agencies. Once annexed, projects proposed for the area will also be required to adhere to the Goals and Policies of the City’s GPU and the provisions of the Lake Elsinore Municipal Code regarding site-specific surveys and appropriate permitting.

Mitigation Measures

Plant and Wildlife Impacts/District Plans

MM Biological Resources 1: Project-specific analysis of plant and wildlife impacts and habitat impacts completed in accordance with the MSHCP will be required to determine the significance of impacts and identify mitigation measures to reduce the impacts of future developments on plant and wildlife species and vegetation communities to less-than-significant levels.

3rd Street Annexation

MM Biological Resources 2: Project-specific analysis of habitat impacts and impacts on special-status wildlife species completed in accordance with the MSHCP and the Resource Protection and Preservation Chapter, Biological Resources Section, Goal 1, Policies 1.1–1.8 and Policy 2.2 will be required to determine the significance of impacts and identify mitigation measures to minimize the impacts to less-than-significant levels.

Level of Significance

Sufficient safeguards are in place in the form of federal, state, regional, and local laws, ordinances, plans, and policies to ensure the maximum feasible preservation of, and minimum feasible adverse impacts upon, sensitive habitats and candidate, sensitive, and/or endangered species within the GPU planning area and to ensure project-level consistency with MSHCP as well as the requirements of other resource agencies charged with habitat and species protection. With implementation of mitigation measures MM Biological Resources 1 and MM Biological Resources 2, project impacts will be reduced to less-than-significant levels.

Threshold: Would the project have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or U.S. Fish and Wildlife Service.

Threshold: Would the project have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means.

Analysis

Future development proposed in accordance with the proposed project could result in temporary and/or permanent impacts on wetland habitat and wetland features within the City and the SOI, including Lake Elsinore, the San Jacinto River, and the Temescal Wash. Project

development could disturb wetland habitat, result in dredge/fill activities in creeks and rivers, or result in increased sedimentation to wetland features that could adversely affect the feature's viability as a biological resource as a result of site grading, and project drainage. In addition, adverse impacts could occur as a result of activities such as watercourse modification, development-required hardening of slopes adjacent to sensitive watercourses, construction of bridges and crossings, and the introduction of non-native invasive species into wetland or vernal pool habitats. Due to the programmatic level of environmental analysis conducted for this PEIR and the lack of site-specific information available, such as grading plans for potential future development projects, the full extent of potential biological impacts resulting from the implementation of the proposed project is not quantifiable at this time.

However, future projects within the City of Lake Elsinore and its SOI that impact aquatic resources and associated habitats, including wetlands, riparian habitats, marshes, rivers, washes and Lake Elsinore itself, must comply with the provisions Sections 401 and 404 of the U.S. Clean Water Act, the provisions of Section 1602 of the California Fish and Game Code, and the requirements of the California Endangered Species Act and obtain permits from the appropriate resource agencies. Future projects that may impact aquatic resources located within MSHCP Criteria Cells must also comply with the policies of that document and are subject to Riverside County Regional Conservation Authority review.

Wetlands subject to Clean Water Act Section 404 are defined as "areas that are inundated or saturated by surface or ground water 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. Wetlands generally include swamps, marshes, bogs, and similar areas." In 2001, the ACOE issued additional guidance for the delineation of jurisdictional waters and wetlands in the arid west. According to that guidance, factors for determining waters of the United States in arid and semi-arid regions were grouped into three general categories including flow regime, geomorphic feature and general indicators of surface flow. For the flow regime category, valid indicators of waters of the United States include intermittent or ephemeral surface flow with channel vegetation, intermittent or ephemeral surface flow with no channel vegetation or adjacent vegetation, intermittent or ephemeral surface flow with surrounding vegetation, but no channel vegetation, perennial surface flow and perennial, intermittent or ephemeral standing water.

In addition, the CDFG enforces the provisions of the California Endangered Species Act (CESA), which states that all native species of fishes, amphibians, reptiles, birds, mammals, invertebrates, and plants, and their habitats, threatened with extinction and those experiencing a significant decline which, if not halted, would lead to a threatened or endangered designation, will be protected or preserved. The Department works with all interested persons, agencies and organizations to protect and preserve such sensitive resources and their habitats. Since riparian, lake, marsh, and other aquatic habitats are often associated with the presence of candidate, sensitive, rare and/or endangered species, the jurisdiction of the CDFG extends beyond the boundaries of the wetland or watercourse OHM and includes the vegetation associated with the aquatic resource. However, CESA also allows for take incidental to otherwise lawful

development projects. CESA emphasizes early consultation to avoid potential impacts to rare, endangered, and threatened species and to develop appropriate mitigation planning to offset project caused losses of listed species.

Chapter 4 (Resource Protection and Preservation) of the GPU, Biological Resources Section, Goal 1 and associated policies state the City’s intention to identify and conserve important biological habitats where feasible. Individual projects implemented pursuant to the GPU will be required to demonstrate a reduction in impacts on wetlands through implementation of the Resource Protection and Preservation Chapter, Biological Resources Section, Goal 2, Policy 2.2. Adherence to the relevant GPU policies and the Land Use Plan would prevent significant impacts on wetlands. Individual environmental review conducted for future development projects will be required to identify any impacts on wetlands and, in consultation with the appropriate resource agencies and applicable regional plans, must ensure incorporation of adequate mitigation to preserve the viability of these important biological resources.

Further, the U.S. Clean Water Act Sections 401 and 404 and CDBG Code Section 1602 require that future projects, having potential impacts on aquatic and/or wetland habitats, obtain permits from the USACOE, the Santa Ana RWQCB, and the CDFG before development permits can be issued by the City of Lake Elsinore.

Nevertheless, development proposed in accordance with the proposed project has the potential to result in significant wetland impacts. Individual environmental review conducted for future development projects must identify any impacts on wetlands and, in consultation with the appropriate resource agencies, must ensure incorporation of adequate mitigation to preserve the viability of these important biological resources.

Mitigation Measures

MM Biological Resources 3: Individual environmental review conducted for future development projects will be required to identify any impacts on riparian areas and wetlands and, in consultation with the appropriate resource agencies and applicable regional plans, must ensure incorporation of adequate mitigation to preserve the viability of these important biological resources.

Level of Significance

Existing federal, State, regional and local regulatory environment as well as the implementation of the goals, policies and implementation programs of the MSHCP and the City GPU provide sufficient protection to riparian areas and wetlands within the proposed project planning area, including all District Plan areas and the 3rd Street Annexation Area. Therefore, with the implementation of mitigation measure MM Biological Resources 3, the proposed project and future development projects pursuant to proposed project will have a less-than-significant impact on riparian areas and wetlands.

Threshold: Would the project interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors or impede the use of native wildlife nursery sites.

Analysis

Lake Elsinore is the permanent and seasonal home of a wide variety of birds and serves an important role as a way station on the Pacific flyway for large numbers of migrating waterfowl traveling between Alaska and South America. A short list of resident and often nesting birds include great blue herons, great egrets, night herons, osprey, white-tailed kites, western grebes, terns, gulls, black-necked stilts, avocets, killdeer, and plovers. In addition, about fifty North American white pelicans appear to reside at Lake Elsinore year-round and their population is expanded during annual migrations to approximately 3000. A number of white-faced Ibis have been regularly spotted around the lake within recent years; both are species of special concern to the state. The heron nesting sites adjacent to Lake Elsinore are an integral part of the lake's natural heritage and aquatic ecosystem. Although these herons are not on the endangered or threaten species list, they are, nevertheless, locally important wildlife resources.

Migratory avian species that use available habitat in the City and its SOI for nesting during the breeding season are protected under the Migratory Birds Treaty Act (MBTA). Specifically, all native breeding birds (except game birds), regardless of their listing status, are protected under the MBTA. Future development pursuant to the proposed project, could result in tree removal, which could result in the disturbance of nesting migratory species covered under the MBTA or the California Fish and Game Code.

If construction activities occur outside of the breeding season (between August 15 and February 15), no mitigation would be required; however, if construction occurs between February 15 and August 15, mitigation measures MM Biological Resources 4 and MM Biological Resources 5 would reduce this impact to a less than significant level by ensuring that surveys for MBTA species and other special status species are performed during the appropriate time of year and, if necessary, buffer zones are established to protect nesting species. Accordingly, the City shall implement the following mitigation measures for all future development and/or infrastructure projects within its jurisdiction.

Implementation of the future projects permitted pursuant to the proposed project could result in the loss of established wildlife movement corridors and the loss or disturbance of nesting habitat for avian species protected by the Migratory Bird Treaty Act. However, implementation of mitigation measures MM Biological Resources 4 and MM Biological Resources 5 would reduce this impact to a less-than-significant level.

Mitigation Measures

MM Biological Resources 4: Not more than thirty days prior to construction activities that occur between February 1 and August 15 of any year, surveys for nesting bird species shall be conducted by a qualified biologist selected by the developer and approved by the City. If no

active avian nests are identified on or within 250 feet of the limits of the construction area, up to the limits of the project site, no further mitigation is necessary. Alternatively, to avoid impacts, the City may allow individual projects the option of beginning construction after the previous breeding season for bird species has ended (after August 15) and before the next breeding season begins (before February 15).

MM Biological Resources 5: If active nests for avian species are found within the construction footprint of any future project, construction activities shall be delayed within a minimum 250-foot buffer zone surrounding nests of other special-status avian species until the young have fledged. This buffer zone shall not extend beyond the project site. No action other than avoidance shall be taken without CDFG consultation.

Level of Significance

All future projects within the City’s jurisdiction, implemented pursuant to proposed project are subject to the provisions of the California Fish and Game Code, the California Endangered Species Act, and the federal Migratory Bird Treaty Act. Through compliance with the goals, policies and implementation measures of the proposed project and through compliance with the applicable provisions of the MSHCP and with implementation of mitigation measures MM Biological Resources 4 and MM Biological Resources 5, the potential for adverse impacts to migratory birds as defined by the MBTA and to wildlife corridors would be reduced to a less-than-significant level. The proposed mitigation measures shall apply to activities in all District Plan areas and in the 3rd Street Annexation Area.

Threshold: Would the project conflict with any local policies or ordinances protecting biological resources, such as tree preservation policy or ordinances.

Analysis

The City of Lake Elsinore and its SOI contain Dense Englemann oak woodland and Coast live oak woodland habitats, which are characterized by concentrations of native California oaks. Native California oaks are also scattered throughout the City and its SOI, both in and outside of MSHCP criteria cells. In addition, the City of Lake Elsinore recognizes the significant palm trees as locally important heritage tree.

The City has in place a palm tree preservation program (Chapter 5.116 of the Lake Elsinore Municipal Code). The purpose of the program is for the protection of the City’s plant life heritage for the benefit of all citizens in Lake Elsinore. The City recognizes the value of significant palm trees within the City of Lake Elsinore as natural aesthetic resources, which help define the history and character of the City. All residents who wish to remove a significant palm tree, as defined in Chapter 5.116, that exceeds five feet in height measured from the ground at the base of the trunk to the base of the crown must obtain a palm tree removal permit prior to removal of the tree. Accordingly, impacts to palm trees would be less than significant and no additional mitigation measures are required.

The City has not adopted an Oak Tree Preservation ordinance to extend protection to native oaks located outside of MSHCP Criteria Cells and Conservation Areas. Accordingly, future development may impact native California oaks. However, the MSHCP considers the Engelmann oak (*Quercus engelmannii*) to be adequate conserved through implementation of MSHCP.

Applicants for projects implemented pursuant to the proposed General Plan Update would be required to identify project-specific impacts and would be conditioned to provide mitigation for these potential impacts. In addition, all future projects developed pursuant to the GPU Land Use Plan would need to demonstrate consistency with the applicable Goals and Policies of the proposed GPU and its District Plans and satisfy the requirements of the City's Municipal Code before being allowed to proceed. The requirement for project-specific analysis of plant and wildlife impacts and habitat impacts, as set forth above in mitigation measure MM Biological Resources 1, will provide for the identification of potential impacts to native California oaks and the identification of mitigation measures to reduce the impacts of future developments on oak trees to less-than-significant levels.

Mitigation Measures

No additional mitigation is required.

Level of Significance

Implementation of the future projects permitted pursuant to the proposed project could result in the removal of significant local heritage trees such as significant palm trees and native oak trees. However, potential impacts will be mitigated to less-than-significant levels through compliance with the City's Municipal Code and with implementation of the mitigation measure MM Biological Resources 1.

Threshold: Would the project conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan

Analysis

The City of Lake Elsinore is signatory to the Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP) and is, therefore, required to review development projects having impacts on identified sensitive biological resources in conformance with all the applicable regulations and mitigation requirements of the MSHCP. The GPU establishes City policies that encourage development while remaining sensitive to biological resources concerns. Adherence to the MSHCP and coordination with the resource agencies is required by the policies of the GPU.

The County Environmental Programs Department (EPD) requires a Determination of Biologically Equivalent or Superior Preservation (DBESP) Report for impacts to Riparian/Riverine Areas/Vernal Pools as defined by the MSHCP (see MSHCP Section 6.1.2, pages 6-21 and 6-22). Projects that prepare a DBESP are also still subject to all other State and

Federal regulations related to wetland habitats, streambeds and “waters” of the US or waters of the State, in addition to the requirements of other resource agencies having jurisdiction over individual habitats and sensitive species.

Pursuant to the MSHCP and its permits, the City reviews proposed development in the Criteria Area to determine consistency with the MSHCP. In some circumstances, development within areas described for conservation may be allowed assuming proper MSHCP processing has been completed. The City is in the process of updating its MSHCP Implementation Guidelines to assist in processing projects consistent with the Plan, including review through the Lake Elsinore Acquisition Process (LEAP) and pursuant to Section 6.0 of the MSHCP. Consistency reviews for proposed development within Criteria Cells also require a Joint Project Review with the Regional Conservation Authority. Projects within the City and its SOI that are located wholly or partially within a Criteria Cell are subject to these reviews and further responsible for the implementation of project-level mitigation measures derived from the process.

Individual projects implemented pursuant to the proposed GPU Land Use Plan and District Plans would be required to identify project-specific impacts as required by LEMC Title 19.04 (*Habitat Conservation*) and would be conditioned to provide mitigation for these potential impacts. In addition, future projects would be required to complete a MSHCP consistency analysis pursuant to the City’s LEAP program, and the MSHCP. The consistency analysis requires site-specific biological surveys and jurisdictional delineations pursuant to existing federal, state, regional, and local regulations and ordinances. In addition, all future projects developed pursuant to the GPU would need to demonstrate consistency with the applicable Goals and Policies of the GPU and GPU District Plans and satisfy the requirements of the City’s Municipal Code before being allowed to proceed.

Additionally, in March of 1996, the Riverside County Habitat Conservation Agency (RCHCA) adopted a Long-Term HCP for the Stephens’ kangaroo rat (SKR) which was approved by the USFWS and CDFG on May 6, 1996. At the time of approval, the HCP covered approximately 533,954 acres within RCHCA-member jurisdictions, including an estimated 30,000 acres of occupied SKR habitat. Chapter 19.04 (*Habitat Conservation*) of the Lake Elsinore Municipal Code addresses the City’s implementation of the Stephens’ Kangaroo Rat Habitat Conservation Plan in western Riverside County. The western portion of project area is located within the boundary of the adopted SKR HCP area and will be required to comply with applicable provisions of this plan. No development permit for real property located within the boundaries of the plan area shall be issued or approved without the payment of the impact and mitigation fee and the submission of the biological survey as required by Chapter 19.04. Chapter 4 (*Resource Protection and Preservation*) of the GPU, Biological Resources Section, Goal 1 and Goal 2 and associated policies state the City’s intention to identify and conserve important biological habitats where feasible. These policies are consistent with continued implementation of Chapter 19.04 and the SKR HCP.

Individual projects implemented pursuant to the proposed GPU and its District Plans in accordance with the Resource Protection and Preservation Chapter, Biological Resources Section, Goal 1, Policies 1.1-1.8 will be required to demonstrate their avoidance of significant

impacts associated with areas described for conservation in the MSHCP Conservation Areas. Future projects may be allowed to alter the Conservation Area boundaries through criteria refinement, minor amendments, or other means, but would be required to do so in conformance with all regulations and mitigation requirements of the MSHCP.

Inasmuch as the proposed project includes goals, policies and implementation programs that implement the MSHCP and support implementation of the SKR HCP, the proposed project does not conflict with the provisions of an adopted habitat conservation plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan.

Mitigation Measures

No additional mitigation is required.

Level of Significance

The proposed project is consistent with implementation of MSHCP and SKR HCP and therefore will have a less-than-significant impact upon the provisions of an adopted habitat conservation plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan.

3.8.7 LEVEL OF SIGNIFICANCE AFTER MITIGATION

With implementation of the goals and policies of the GPU, applicable local ordinances, regional plans, and the rules and regulations enforced by the resource agencies cited herein, together with the mitigation measures outlined above, potential impacts on biological resources within the City and SOI would be mitigated to a less-than-significant level.

3.8.8 REFERENCES

In addition to other reference documents, the following references were used in the preparation of this section of the EIR:

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Western Riverside County Regional Conservation Authority, *Multiple Species Habitat Conservation Plan Annual Report 2009*, June 2010. (Available at <http://www.wrc-rca.org/library.asp?jump=190>; accessed on June 21, 2011.)