

**SECTION 5.7
BIOLOGICAL RESOURCES**



5.7 BIOLOGICAL RESOURCES

This section describes biological resources within the City of San Bernardino and evaluates potential impacts to biological resources associated with implementation of the proposed project and proposes mitigation measures to reduce those impacts that are determined to be significant. A biological resources constraints analysis was prepared on January 26, 2010 by Tom Dodson & Associates; refer to Appendix D.

5.7.1 REGULATORY SETTING

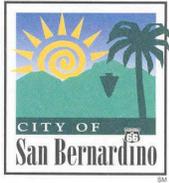
FEDERAL REGULATIONS

United States Federal Endangered Species Act

The United States Federal Endangered Species Act (FESA) provides legislation to protect Federally-listed plant and animal species. It provides legal protection, requires definition of critical habitat, and development of recovery plans for plant and animal species in danger of extinction. FESA requires all federal agencies to consider listed species in their planning efforts and to take positive actions to further the conservation of these species. Acquisition, development reviews, or the establishment of mitigation and enhancement measures can address threats to critical habitat areas. Section 9 of FESA prohibits any taking of a listed species. The definition of “take” includes to harass, harm, hunt, shoot, wound, kill, trap, capture, or collect, or attempt to engage in any such conduct. A notable component of this definition is the definition of “harm.” “Harm” in the definition of “take” means an act that actually kills or injures protected wildlife. Such acts may include significant habitat modification or degradation where it actually kills or injures wildlife by significantly impairing essential behavior patterns, including breeding, feeding, or sheltering (50 CFR 17.3). Sections 7 and 10 of FESA describe agency consultation procedures that allow the USFWS and the National Marine Fisheries Service (NMFS) to approve exceptions to the federal prohibition against take of listed species. If there is a federal nexus (i.e., another federal agency involved with a project), Section 7 of FESA requires federal interagency consultation to minimize impacts to listed species. If no other federal agency is involved, Section 10 of FESA may be used for activities connected to a single project, or for takings as small as a single specimen. Under both Sections 7 and 10, the USFWS and/or the NMFS will evaluate potential effects of the project and require specific protection measures.

Fish and Wildlife Coordination Act

The Fish and Wildlife Coordination Act (16 U.S.C. Sections 661-667e, March 10, 1994, as amended 1946, 1958, 1978, and 1995) requires that whenever waters or channels of a stream or other body of water are proposed or authorized to be modified by a public or private agency under a Federal license or permit, the Federal agency must first consult with the USFWS and/or National Oceanic and Atmospheric Administration (NOAA) Fisheries and with the head of the agency exercising administration over the wildlife resources of the State where construction will occur (in this case the California Department of Fish and Game [CDFG]), with a view to conservation of birds, fish, mammals, and all other classes of wild animals and all types of aquatic and land vegetation upon which wildlife is dependent.



Clean Water Act Section 404 and 401

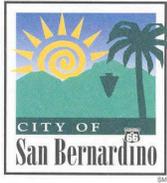
The United States Army Corps of Engineers (USACE) and the United States Environmental Protection Agency (EPA) regulate the discharge of dredged or fill material into waters of the United States, including wetlands, under Section 404 of the Clean Water Act (CWA) (33 U.S.C. 1344). Waters of the United States are defined in Title 33 CFR Part 328.3(a) and include a range of wet environments such as lakes, rivers, streams (including intermittent streams), mudflats, sandflats, wetlands, sloughs, prairie potholes, wet meadows, playa lakes, or natural ponds. The lateral limits of jurisdiction in those waters may be divided into tidal waters and non-tidal waters, and is determined depending on which type of waters are present (Title 33 CFR Part 328.4(a), (b), (c)). Activities in waters of the United States regulated under Section 404 include fill for development, water resource projects (such as dams and levees), infrastructure developments (such as highways and airports), and mining projects. Section 404 of the CWA requires a Federal license or 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).

Section 401 of the Clean Water Act (33 U.S.C. 1341) requires any applicant for a Federal license or permit to conduct any activity that may result in a discharge of a pollutant into waters of the United States to obtain a certification from the State in which the discharge originates or would originate, or, if appropriate, from the interstate water pollution control agency having jurisdiction over the affected waters at the point where the discharge originates or would originate, that the discharge will comply with the applicable effluent limitations and water quality standards. A certification obtained for the construction of any facility must also pertain to the subsequent operation of the facility. The responsibility for the protection of water quality in California rests with the State Water Resources Control Board (SWRCB) and its nine Regional Water Quality Control Boards (RWQCBs).

Rapanos

The June 19, 2006, U.S. Supreme Court decision on the *Rapanos v. United States* case has further limited the definition of “wetlands” and “waters of the United States” under the CWA. The *Rapanos* decision was a 4-1-4 decision in which four justices advocated a narrower interpretation of the Clean Water Act to hold that “waters of the United States” excludes intermittent or ephemeral streams and wetlands without a continuous surface connection to navigable waters. The USACE and EPA came out with a memorandum on June 5, 2007, in order to provide guidance in implementing the U.S. Supreme Court’s decision in the consolidated cases *Rapanos v. United States* and *Carabell v. United States* (jointly hereafter *Rapanos*), which addresses the jurisdiction over waters of the United States under the CWA. In accordance with the *Rapanos* Decision, the agencies will continue to assert jurisdiction over traditional navigable water (TNW) and all wetlands adjacent to TNWs; however, jurisdiction can be asserted over a waters, including wetlands, which are not a TNW by meeting either of the following standards:

- Relatively permanent (i.e., flows year-round, or at least seasonally) nonnavigable tributaries of TNW and wetlands with a continuous surface connection with such tributaries.



- Certain adjacent and non-navigable tributaries that are not relatively permanent. This requires a case-by-case “significant nexus” analysis to determine whether waters and their adjacent wetlands are jurisdictional. A “significant nexus” may be found where waters, including adjacent wetlands, affect chemical, physical, or biological integrity of TNWs.

STATE REGULATIONS

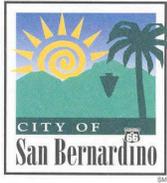
California Endangered Species Act

The State of California enacted similar laws to the FESA, the California Native Plant Protection Act (NPPA) in 1977, and the California Endangered Species Act (CESA) in 1984. The CESA expanded upon the original NPPA and enhanced legal protection for plants, but the NPPA remains part of the California Fish and Game Code. To align with the FESA, the CESA created the categories of “threatened” and “endangered” species. It converted all “rare” animals into the CESA as threatened species, but did not do so for rare plants. Thus, these laws provide the legal framework for protection of California-listed rare, threatened, and endangered plant and animal species. The CDFG implements NPPA and CESA, and its Wildlife and Habitat Data Analysis Branch maintains the CNDDDB, a computerized inventory of information on the general location and status of California’s rarest plants, animals, and natural communities. During the CEQA review process, the CDFG is given the opportunity to comment on the potential of the project to affect listed plants and animals.

The FESA provides legislation to protect Federally-listed plant and animal species. It provides legal protection, requires definition of critical habitat, and development of recovery plans for plant and animal species in danger of extinction. Impacts to listed species resulting from the implementation of a project would require the responsible agency to consult the USFWS. Formal consultations must take place with the USFWS pursuant to Section 10 of the Endangered Species Act, with the USFWS then making a determination as to the extent of impact to a particular species. If the USFWS determines that impacts to a species would likely occur, alternatives and measures to avoid or reduce impacts must be identified.

California Department of Fish and Game Code Section 1600

Streams, lakes, and riparian vegetation as habitat for fish and other wildlife species are subject to jurisdiction by the CDFG under Sections 1600-1616 of the California Fish and Game Code. Any activity that will do one or more of the following generally require a 1602 Lake and Streambed Alteration Agreement: 1) substantially obstruct or divert the natural flow of a river, stream, or lake; 2) substantially change or use any material from the bed, channel, or bank of a river, stream, or lake; or 3) deposit or dispose of debris, waste, or other material containing crumbled, flaked, or ground pavement where it can pass into a river, stream, or lake. The term “stream”, which includes creeks and rivers, is defined in the *California Code of Regulations (CCR)* as follows: “a body of water that flows at least periodically or intermittently through a bed or channel having banks and supports fish or other aquatic life. This includes watercourses having a surface or subsurface flow that supports or has supported riparian vegetation” (14 CCR 1.72). In addition, the term stream can include ephemeral streams, dry washes, watercourses with subsurface flows, canals, aqueducts, irrigation ditches, and other means of water conveyance if they support aquatic life, riparian vegetation, or stream-dependent terrestrial wildlife. Riparian is defined as “on, or pertaining to, the banks of a stream;” therefore,



riparian vegetation is defined as “vegetation which occurs in and/or adjacent to a stream and is dependent on, and occurs because of, the stream itself.” Removal of riparian vegetation requires a Section 1602 Lake and Streambed Alteration Agreement from the CDFG.

California Department of Fish and Game Code Sections 3503 and 3513

According to 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 (except English sparrows [*Passer domesticus*] and European starlings [*Sturnus vulgaris*]). Section 3503.5 specifically protects birds in the orders Falconiformes and Strigiformes (birds-of-prey). Section 3513 essentially overlaps with the Migratory Bird Treaty Act (MBTA), prohibiting the take or possession of any migratory non-game bird. Disturbance that causes nest abandonment and/or loss of reproductive effort is considered “take” by the CDFG.

California Native Plant Society

The California Native Plant Society (CNPS) publishes and maintains an Inventory of Rare and Endangered Vascular Plants of California (Inventory) in both hard copy and electronic version. The Inventory assigns plants to the following categories:

- 1A – Presumed extinct in California;
- 1B – Rare, threatened, or endangered in California and elsewhere;
- 2 – Rare, threatened, or endangered in California, but more common elsewhere;
- 3 – Plants for which more information is needed; and
- 4 – Plants of limited distribution.

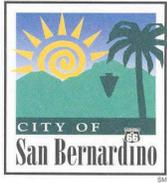
Additional endangerment codes are assigned to each taxa as follows:

- 1 – Seriously endangered in California (over 80 percent of occurrences threatened/high degree of immediacy of threat);
- 2 – Fairly endangered in California (20-80 percent occurrences threatened); and
- 3 – Not very endangered in California (less than 20 percent of occurrences threatened or no current threats known).

Plants on Lists 1A, 1B, and 2 of the CNPS Inventory consist of plants that may qualify for listing, and are given special consideration under CEQA during project review. Although plants on List 3 and 4 have little or no protection under CEQA, they are usually included in the project review for completeness.

Sensitive Vegetation Communities

Sensitive vegetation communities are natural communities and habitats that are either unique, of relatively limited distribution in the region, or of particularly high wildlife value. These resources have been defined by Federal, State, and local conservation plans, policies, or regulations. The CDFG ranks sensitive communities as “threatened” or “very threatened” and keeps records of their occurrences in its CDFG’s California Natural Diversity Database (CNDDDB). Sensitive vegetation communities are also identified by CDFG on its List of



California Natural Communities Recognized by the CNDDDB. Impacts to sensitive natural communities and habitats identified in local or regional plans, policies, and regulations, or by Federal or State agencies, must be considered and evaluated under CEQA (CCR: Title 14, Div. 6, Chap. 3, Appendix G).

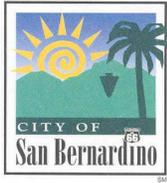
Porter-Cologne Water Quality Control Act

The Porter-Cologne Act defines waters of the State as “any surface water or groundwater, including saline waters, within the boundaries of the State.” The RWQCB protects all waters in its regulatory scope, but has special responsibility for isolated wetlands and headwaters. These waterbodies have high resource value, are vulnerable to filling, and may not be regulated by other programs, such as Section 404 of the CWA. Waters of the State are regulated by the RWQCB under the State Water Quality Certification Program, which regulates discharges of dredged and fill material under Section 401 of the CWA and the Porter-Cologne Water Quality Control Act. Projects that require a Corps permit, or fall under other Federal jurisdiction, and have the potential to impact waters of the State are required to comply with the terms of the Water Quality Certification Program. If a proposed project does not require a Federal license or permit, but does involve activities that may result in a discharge of harmful substances to waters of the State, the RWQCB has the option to regulate such activities under its State authority in the form of Waste Discharge Requirements or Certification of Waste Discharge Requirements.

Fully Protected Species & Species of Special Concern

The classification of “fully protected” was the CDFG’s initial effort to identify and provide additional protection to those animals that were rare or faced possible extinction. Lists were created for fish, amphibian and reptiles, birds, and mammals. Most of the species on these lists have subsequently been listed under CESA and/or FESA. The *Fish and Game Code* sections (fish at Section 5515, amphibian and reptiles at Section 5050, birds at Section 3511, and mammals at Section 4700) dealing with “fully protected” species states that these species “. . . may not be taken or possessed at any time and no provision of this code or any other law shall be construed to authorize the issuance of permits or licenses to take any fully protected species,” although take may be authorized for necessary scientific research. This language makes the “fully protected” designation the strongest and most restrictive regarding the “take” of these species. In 2003, the code sections dealing with fully protected species were amended to allow the CDFG to authorize take resulting from recovery activities for State-listed species.

Species of special concern are broadly defined as animals not listed under the FESA or CESA, but which are nonetheless of concern to the CDFG because they are declining at a rate that could result in listing, or historically occurred in low numbers and known threats to their persistence currently exist. This designation is intended to result in special consideration for these animals by the CDFG, land managers, consulting biologists, and others, and is intended to focus attention on the species to help avert the need for costly listing under FESA and CESA and cumbersome recovery efforts that might ultimately be required. This designation also is intended to stimulate collection of additional information on the biology, distribution, and status of poorly known at-risk species, and focus research and management attention on them. Although these species generally have no special legal status, they are given special consideration under CEQA during project review.



SAN BERNARDINO MUNICIPAL CODE

City Ordinance MC-1027, 9-8-98 and MC-682, 11-6-89 (Title 15, Chapter 15.34) prohibits the removal and destruction of more than five trees within any 36-month period from a development site or parcel of property without first being issued a permit from the Development Services Department. Per the *Municipal Code*, a permit shall not be required when a lawful order to remove the trees for health and safety purposes has been issued by a local, state, or federal government agency; nor shall a permit be required if a removal is to be accomplished by, or under the auspices of a governmental entity.

SAN BERNARDINO DEVELOPMENT CODE

The City's *Development Code*, Title 19, Land Use/Subdivision Regulations) contains a Hillside Management Overlay District that allows for low-density residential development in the City's hillside areas. Policies of this overlay district regulate protection of the hillside's topographic and natural character, environmental, and aesthetic qualities through requirements to minimize grading and erosion effects, and preservation of slope banks, ridgelines, significant rock outcroppings, natural hydrology, and native plant materials.

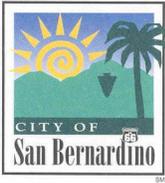
5.7.2 ENVIRONMENTAL SETTING

The Project Area is located in the central portion of the City of San Bernardino. The City of San Bernardino is surrounded by the National Forest to the north, the Cities of Highland to east, Redlands to the southeast, Loma Linda to the South, Colton to the southwest, and Rialto to the west. Local climatic conditions in the City are characterized by warm summers, mild winters, infrequent rainfall, limited daytime on shore breezes and comfortable humidity. Temperatures average about 63 degrees Fahrenheit (F). Rainfall averages 15 inches per year, with almost all rain falling between November and April. The Santa Ana River is the primary surface water resource located within the Project Area, adjacent to the Southeast Industrial Park Project Area. The Santa Ana River is the largest stream system in southern California that collects flows from the surrounding mountains and valley washes. The Santa Ana River has high habitat value and is known to support a number of special status species. The wildlife resources in the City are significant due to the large numbers of rare and declining species. Neo-tropical migrant birds depend on deciduous shrubs and trees for foraging during migration. Mature trees provide numerous cavities for cavity-dependent wildlife and the tall trees are used by nestling raptors.

The proposed project includes the consolidation of seven Project Areas into one Project Area. Each Project Area is bordered by and/or contains jurisdictional drainage features. Each Project Area contains unique habitat features and as such, the potential biological resources constraints are discussed below for each of the seven Project Areas.

Central City North

Town Creek (also known as Historic Warm Creek) crosses the northeast corner of Central City North. Surface evidence of this channel is difficult to find and follow in the Central City North Project Area. Within this particular Project Area, Town Creek does not contain habitat suitable of supporting any sensitive species. The remainder of Central City North is devoid of natural, native habitat. No listed species or species of



special concern have the potential to occur in the Central City North Project Area. There is potential habitat however, for perching, roosting, and nesting raptors.

Central City East

Secombe Lake State Urban Park is located in the northeast quarter of Central City East Project Area. Although, this park is situated in a highly urbanized setting, it contains aquatic habitat and terrestrial habitat capable of supporting a variety of water fowl, songbird, and raptor species. Canada geese are known to utilize the park as a stopover during their migration period. Town Creek crosses the west quarter of Central City East. At the southern corner of this development area, Town Creek is visually apparent. It crosses a maintained grassy area and has the potential to support avifauna and aquatic wildlife. An area of vacant land exists within this Project Area, located north of Secombe Lake State Urban Park and to the west of the southwest corner of 9th Street and Waterman Avenue. The vacant land is highly disturbed and holds very little habitat value, but it does have marginal potential to support burrowing owl, a State species of concern. The remainder of the Central City East is devoid of natural habitat. No listed species have the potential to occur in the Central City East Project Area.

Meadowbrook/Central City

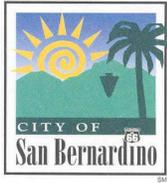
Town Creek traverses through the Meadowbrook/Central City Project Area from the north to the south. Although, this portion of the channel is surrounded by dense development, it contains aquatic habitat and vegetation capable of supporting a variety of water fowl, songbird, and raptor species. An area of vacant land is located within this Project Area, near the southwest corner of W. Rialto Avenue and N. Sierra Way. It's highly disturbed and holds very little habitat value, but it does have marginal potential to support the burrowing owl. The remainder of the Project Area is devoid of natural habitat. No listed species have the potential to occur in the Meadowbrook/Central City Project Area.

Central City South

There are five (5) jurisdictional channels that are found within or directly adjacent to the Creek Channel, Warm Creek By-Pass, and Urbita Storm Drain. The Town Creek discussion above, applies to Central City South also. Twin Creek, Lytle Creek Channel, Warm Creek By-Pass, and Urbita Storm Drain are all improved channels, yet jurisdictional channels. They hold very little habitat value and do not support any sensitive species. Scattered within the Central City South Project Area, are several parcels of vacant land that may contain suitable habitat for burrowing owl and, to a much lesser degree, may contain suitable habitat for the San Bernardino kangaroo rat.

Tri City

The Warm Creek By-Pass and McGlothlen Storm Drain border Sub Area 1 of the Tri-City Project Area to the north and east respectively. These are improved, yet jurisdictional channels. The primary biological resource issue in this Project Area is the burrowing owl. There are large areas of vacant land in the Tri-City that are already graded or are continually disturbed by routine weed abatement activities. As a result of this



disturbance, the vacant land holds little habitat value. However, regardless of the level of disturbance, the burrowing owls have been observed within and/or adjacent to this Project Area.

The Santa Ana River Channel borders Sub Area II of the Tri-City Project Area to the north; refer to the Southeast Industrial Park. An improved portion of San Timoteo Creek passes through the southwest corner of Sub Area II of the Tri-City Project Area. Although this section of San Timoteo Creek holds minimal habitat value, it is jurisdictional. The remainder of Sub Area II is already developed or graded for developed resulting in no potential habitat for sensitive species. There may be areas however, within Sub Area II where there is potential habitat for perching, roosting, and nesting raptors.

South Valle

San Timoteo Creek borders the South Valle Project Area to the northeast; refer to San Timoteo Creek discussion above. Scattered within the South Valle Project Area, are several parcels of vacant land that may contain suitable habitat for the burrowing owl.

Southeast Industrial Park

The western area of the Southeast Industrial Park Project Area is bisected by the Santa Ana River, and the eastern area is bordered by the Santa Ana River to the north. Soft-bottom sections of Twin Creek and San Timoteo Creek run through the western area and a soft-bottom portion of Mission Channel bisects the eastern section. The area of Twin Creek that occurs in this Project Area is maintained annually for flood control, but holds moderate habitat value for a number of bird species. The section of San Timoteo Creek that occurs in this Project Area often contains elements of riparian and marsh-wetland habitats near its convergence with the Santa Ana River. The portion of Mission Creek that bisects the eastern area contains aquatic, marsh, wetland, and riparian habitat types.

Santa Ana River

Specific habitat types found within the Santa Ana River Floodplain, near the Southeast Industrial Park Project Area, include Riversidean alluvial fan sage scrub (Holland community code 32720), southern cottonwood-willow riparian forest (Holland community code 61330), sandy river wash (Holland community code 11730) and southern willow scrub (Holland community code 63320). There is also aquatic habitat and a few isolated patches of marsh-wetland habitat.

Moderate strands of riparian habitat extend from the I-215 upstream to Mountainview Avenue within the Santa Ana River. The riparian habitat generally consists of open, tall, multilayered, canopy riparian woodland. The characteristic vegetative species within the riparian habitat include: Eucalyptus, Fremont cottonwood (*Populus fremontii*), black willow (*Salix goodingii*) narrow-leaved willow (*S. exigua*), arroyo willow (*S. lasiolepis*), sandbar willow (*S. hindsiana*), mule fat (*Baccharis salicifolia*), and sycamore (*Platanus recemosa*). The canopy structure of the riparian woodland has a complex architecture and its understory consists of varying layers of shrubs, herbs and vines.



Additionally, there is mule fat scrub found in discrete patches along the outer edges of the riparian woodland. The mule fat scrub is dominated by mule fat (*Baccharis salicifolia*) and typically occurs in areas that experience less frequent scour than the willow riparian woodland. Mule fat scrub often comprises an important subcomponent of the willow riparian woodland through its presence along the upper edge and within openings of the woodland.

There are expansive patches of Riversidean alluvial fan sage scrub (RAFSS) in the Santa Ana River from the I-215 upstream to Mountainview Avenue. RAFSS is a distinct habitat type of the coastal sage scrub community. It is composed of species found in both coastal sage scrub and chaparral communities. This is a relatively open vegetation type adapted to periodic disturbances, such as erosion and flooding. RAFSS is composed of an assortment of drought deciduous shrubs and large evergreen woody shrubs such as Yerba Santa (*Eriodictyon trichocalyx*), (*Artemisia Californica*), buckwheat (*Eriogonum fasciculatum*), golden currant (*Ribes aureum*), California croton (*Croton californica*), and white sage (*Salvia apiana*).

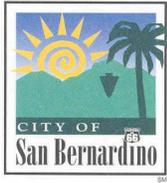
In addition to the fundamental flood control and water supply-related functions of the Santa Ana River, the watercourse serves as a wildlife habitat linkage, buffer and corridor. Habitat linkages provide links between larger habitat areas that are separated by development. Wildlife corridors are similar to linkages, but provide specific opportunities for animals to disperse or migrate between areas. A corridor can be defined as a linear landscape feature of sufficient width to allow animal movement between two comparatively undisturbed habitat fragments. Adequate cover is essential for a corridor to function as a wildlife movement area. It is possible for a habitat corridor to be adequate for one species yet, inadequate for others. Wildlife corridors are significant features for dispersal, seasonal migration, breeding, and foraging. Additionally, open space can provide a buffer against both human disturbance and natural fluctuations in resources. The Santa Ana River buffers the plants and wildlife from surrounding human disturbance. For these and other reasons, the habitat in the Santa Ana River near the Southeast Industrial Park Project Area supports a high level natural resource diversity and richness. Despite its location in the middle of a dense urban area, the Santa Ana River maintains considerable habitat value.

Special Status Species

Fifty-five special status species have been identified within the Redlands and San Bernardino South quadrangles. Of the 55 species, six State and/or federally listed species have been documented within the Santa Ana River in the vicinity of the Project Area, specifically near the Southeast Industrial Park Project Area. These species include the San Bernardino kangaroo rat (SBKR) [*Dipodomys mariami parvus*], coastal California gnatcatcher (CAGN) [*Polioptila californica californica*], least Bell's vireo (LBVI) [*Vireo bellii pusillus*], southwestern willow flycatcher (SWWF) [*Empidonax traillii extimus*], Santa Ana River woollystar [*Eristrum densifolium var santorum*], and the slenderhorned spineflower [*Dodecahema leptoceras*]. Refer to Appendix D for all sensitive species documented to occur or have occurred within the San Bernardino South and Redlands Topographic Quadrangles.

Slender-Horned Spineflower

The slender-horned spineflower is a federally-endangered, small, spreading annual in buckwheat family (Polygonaceae), with stems reaching 3-15 cm across. The size of spineflowers varies, however, depending on annual available moisture. The annual has



a basal rosette of leaves, from which rise dense flowering stalks. Slenderhorned spineflower is distinguished from other spineflowers by the presence of 6 terminal awns and 6 hooked basal awns on each involucre. The involucre in the species is a group of bracts that have been fused together to enclose approximately 3 white to pink flowers within each involucre, blooming April through June.

Within most of the seven Project Areas, slender-horned spineflower is found in sandy soil in association with mature alluvial scrub. The ideal habitat for the species appears to be a terrace or bench that receives overbank deposits every 50 to 100 years. Cryptogamic crusts are frequently present in areas occupied by slender-horned spineflower. The crusts on the soil surface are composed of associations of bryophytes, lichens, algae, and some xerophytic liverworts. Cryptogamic crusts enable soils to retain moisture and may help suppress invasion by non-native plant species.

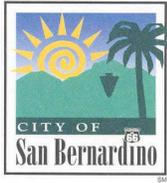
The flower is endemic to southwestern cismontane California, ranging from central Los Angeles County east to San Bernardino County, and south to southwestern Riverside County in the foothills of the Transverse and Peninsular Ranges, at 200 to 700 meters elevation. Only eight areas are still known to support slender-horned spineflower, including two localities each in Los Angeles County (Bee Canyon and Big Tujunga Wash), and two in San Bernardino County (the Santa Ana River wash and Cajon Wash) (CNDDDB 2008). Because slender-horned spineflower is an annual and a spring-bloomer, it is expected to germinate following winter precipitation. Potential dispersal agents include coyotes, deers, rabbits, and rodents. Dispersal may also occur via flood water or wind. It is threatened by urbanization, off-road vehicle use, sand and gravel mining, trampling associated with recreation, flood control measures (i.e., constriction of the floodplain, dams, etc.), and competition from non-native plant species.

Individuals are small, and thus may be difficult to locate. The species is only readily detectable in the spring between April and June when in bloom. Population size varies considerably from year to year depending upon rainfall. Although suitable habitat exists within the Project Area, slender-horned spineflower have not been found in the Santa Ana River between the I-215 and Mountainview Avenue in the last decade.

Santa Ana River Woollystar

The Santa Ana River woollystar is a perennial in the Phlox (Polemoniaceae) plant family. The species is a low shrubby perennial which can grow to one meter (3.3 feet) tall, with gray-green stems and leaves. The species blooms from June to August and produces bright blue flowers up to 1.4 inches long that occur in flower heads with about 20 blossoms each. There are three primary pollinators: giant flower-loving fly, long-tongued digger bee, and hummingbirds. The importance of a particular pollinator type appears to depend on habitat type within the floodplain. The species is associated with early- to moderate- successional alluvial scrub, and thus requires periodic flooding and silting for the creation of new habitats and colonization.

Suitable habitat is comprised of a patchy distribution of gravelly soils, sandy soils, rock mounds and boulder fields. Suitable habitat typically contains low amounts of clay, silt and micro-organic materials. These areas typically maintain a perennial plant cover of less than 50 percent. Associated perennial plants include California buckwheat



(*Eriogonum fasciculatum*), California croton (*Croton californicus*), yerba santa (*Eriodictyon trichocalyx*) and scale-broom (*Lepidospartum squamatum*).

The Santa Ana River woollystar occurs along the Santa Ana River and Lytle and Cajon Creek flood plains from the base of the San Bernardino Mountains in San Bernardino County southwest along the Santa Ana River through Riverside County into the Santa Ana Canyon of northeastern Orange County from about 150 to 580 meters. It is one of five subspecies of the perennial sub-shrub *Eriastrum densifolium*. The species is threatened by flooding, floodplain modification for flood control purposes and development; flood control management (clearing for channel maintenance and construction of flood control structures); off-road vehicle activity; grazing (resulting in heavy weed cover); farming; sand and gravel mining; and loss of habitat and competition with aggressive non-native species such as European grasses and *Arundo donax*.

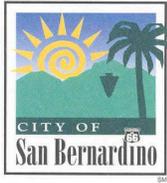
Santa Ana River woollystar occurs in the Santa Ana River between Tippecanoe Avenue and Mountainview Avenue.

San Bernardino Kangaroo Rat

There are 19 subspecies of Merriam's k-rat (*Dipodomys merriami*), three of which occur in California, including the SBKR. Of the three California subspecies, SBKR are the smallest and darkest. Of the six primary, recently, occupied locations in the San Bernardino and San Jacinto Valleys, only three sites (Santa Ana River and its tributaries, Cajon and Lytle creeks, and San Jacinto and Bautista creeks) support robust, sustaining populations of SBKR and large contiguous patches of occupied habitat. SBKR are found primarily on well drained, sandy loam substrates, characteristic of alluvial fan and floodplains, where they are able to dig simple, shallow burrows.

The historic range of the subspecies San Bernardino kangaroo rat lies west of the desert divide of the San Jacinto and San Bernardino mountains and extends from the San Bernardino Valley in San Bernardino County to the Menifee Valley in Riverside County. The subspecies currently occupies seven general locations, including the Santa Ana River, Cajon Creek Wash, City Creek, Lytle Creek Wash, and upper Etiwanda Wash in San Bernardino County, and sites in western Riverside County described below. The USFWS emergency listed the SBKR on January 27, 1998 and subsequently listed them as federally endangered later that same year on September 24, 1998 under the Endangered Species Act of 1973, as amended. The USFWS also designated critical habitat units for the SBKR on April 23, 2002, revised 2008.

The units include reaches of the Santa Ana, Lytle and Cajon creeks, San Jacinto River and Bautista creek, and the Etiwanda alluvial fan. Identified threats to the San Bernardino kangaroo rat include the loss of habitat, habitat fragmentation, urban and industrial development, highway construction, water conservation and flood control projects, gravel and sand mining, grazing, and vandalism. Additional threats to the species likely include farming and discing of habitat for weed abatement, heavy grazing, and off-road vehicles. Although the species is associated with sandy washes and drainages, habitat supporting alluvial fan sage scrub on the benches above creek channels is also important for the species.



A sustaining population of SBKR occurs in the channel and upper benches of the Santa Ana River between Tippecanoe Avenue and Mountainview Avenue.

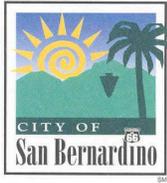
Southwestern Willow Flycatcher

The southwestern willow flycatcher (SWWF) is a small passerine bird measuring approximately 5.7 inches in length. It has a grayish-green back and wings, whitish throat, a light gray-olive breast, and pale yellowish belly. It has two visible white wing bars and a faint or absent eye ring. The call consists of a repeated “whit” and their song is a sneezy “fitz-bew.” The southwestern willow flycatcher is currently one of the four recognized subspecies of the willow flycatcher. The flycatcher is a neotropical migrant that breeds in the southwestern United States from mid-April to early-September. In the fall, it migrates south to its wintering grounds in portions of South America, Central America and Mexico.

A rapid decrease in the numbers of SWWF in California and other southwestern states prompted the USFWS to designate it as a Category 1 candidate species in 1991. One year later in 1992, the California Fish and Game Commission listed the species as endangered, under the California Endangered Species Act (CESA) of 1970. On July 23, 1993 the southwestern willow flycatcher was proposed for listing as endangered by the USFWS and was then listed as Federally endangered on February 27, 1995, under the Endangered Species Act (ESA) of 1973. The USFWS designated critical habitat for the species on July 22, 1997. The habitat includes 18 units with a total of 599 miles of river in California, New Mexico, and Arizona. In California, critical habitat was designated along portions of the Santa Ana River, San Luis Rey River, San Diego River, Santa Margarita River, Tijuana River, and south fork of the Kern River. On May 11, 2001, the critical habitat designation from 1997 was struck down by the U.S. 10th Circuit Court of Appeals who required further economic analysis. A recovery plan was finalized by USFWS in March of 2003. Critical habitat designations for the species were re-proposed and finalized in June 2004.

The SWWF breeds in dense riparian habitats along rivers, streams, and other wetlands. They have been documented to establish territories in elevations ranging from sea level to 8,500 feet. Plant species closely associated with the flycatcher include willows (*Salix* spp.), box elder (*Acer negundo*), seepwillow (*Baccharis* spp.), with an overstory of cottonwood (*Populus fremontii*) (62 FR 39129). Occupied habitat is generally dominated by shrubs and trees 13 to 23 feet or more in height, which provide dense lower and mid-story vegetation approximately 13 feet aboveground. The dense vegetation is often interspersed with open water, small openings, or sparse vegetation, creating a mosaic that is not uniformly dense.

Although the habitat within the Santa Ana River between the I-215 and Mountainview Avenue is suitable for the species, there is no published documentation of SWWF occurring in the vicinity of the Project Area within the last decade. SWWF are highly sensitive to disturbance and are not expected to occur in the immediate vicinity of the Southeast Industrial Park Project Area portion of the Project. The stream area habitat conditions are indicative of heavy, unauthorized recreational use.



Coastal California Gnatcatcher

The coastal California gnatcatcher (CAGN) is a small blue-gray songbird. It has dark blue-gray feathers on its back and grayish-white feathers on its underside. The wings have a brownish wash to them. Its long tail is mostly black with white outer tail feathers. They have a thin, small bill, and the males have a black cap during the summer which is absent during the winter. The gnatcatcher typically occurs in or near sage scrub habitat, which includes the following plant communities: Diegan coastal sage scrub, maritime succulent scrub, Riversidean sage scrub, Riversidean alluvial fan sage scrub, southern coastal bluff scrub, Venturan coastal sage scrub, and coastal sage-chaparral scrub. CAGN also use chaparral, grassland, and riparian habitats where they occur adjacent to sage scrub. These non-sage scrub habitats are used for dispersal. Gnatcatchers are persistent nest builders and often attempt multiple broods, which is suggestive of a high reproductive potential.

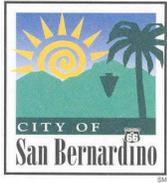
Historically, CAGN occurred from southern Ventura County southward through Los Angeles, Orange, Riverside, San Bernardino, and San Diego counties, and into Baja California, Mexico. The amount of coastal sage scrub available to gnatcatchers has continued to decrease during the period after the listing of the species. It is estimated that up to 90 percent of coastal sage scrub vegetation has been lost as a result of development and land conversion.

The habitat within and adjacent to the Santa Ana River floodplain is suitable for dispersal of juvenile coastal California gnatcatchers, but it is not suitable to support breeding pairs.

Least Bell's Vireo

The least Bell's vireo (LBVI) is a small, olive-gray migratory songbird that nests and forages almost exclusively in riparian woodland habitats. Bell's vireos, as a group, are highly territorial and are almost exclusively insectivorous. Least Bell's vireo nesting habitat typically consists of well developed overstory, understory, and low densities of aquatic and herbaceous cover. The understory frequently contains dense sub-shrub or shrub thickets. These thickets are often dominated by plants such as narrow-leaf willow, mule fat, young individuals of other willow species such as arroyo willow or black willow, and one or more herbaceous species. LBVI generally begin to arrive from their wintering range in southern Baja California and establish breeding territories by mid-March to late-March. A large majority of breeding vireos apparently depart their breeding grounds by the third week of September and only a very few have been found wintering in the United States.

The explanations for the drastic decline of the species are various; however the two prevailing factors are habitat loss and brown-headed cowbird (brood parasitism). The small passerine species constructs open cup nests low in the riparian canopy, which may cause them be more vulnerable to brood parasitism compared to larger passerines that nest higher in the canopy. The loss and degradation of riparian habitats have both occurred due to urban and agricultural development, fire, water diversion and impoundment, channelization, livestock grazing, off-road vehicle use and recreation, replacement of native habitats by introduced plant species, and hydrological changes resulting from these and other land uses. LBVI was first proposed for listing as



endangered by the USFWS on May 3, 1985, and was subsequently listed as federally endangered on May 2, 1986. Critical habitat units were designated by the USFWS on February 2, 1994 and included reaches of ten streams in six counties in southern California and the surrounding approximately 38,000 acres. The critical habitat units exist in the Santa Ynez River, Santa Clara River, Santa Ana River, Santa Margarita River, San Luis Rey River, Sweetwater River, San Diego River, Tijuana River, Coyote Creek, and Jumul-Dulzura Creek.

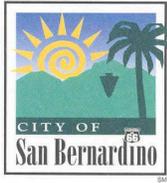
Although LBVI use a variety of riparian plant species for nesting, it appears that the structure of the vegetation is more important than other factors, such as species composition or the age of the stand. Vireos forage in riparian and adjacent chaparral habitats up to 984 feet from the nest, and use both high and low scrub layers as foraging substrate.

There are numerous records of the LBVI in the Santa Ana River between the Interstate 215 freeway and the Waterman Avenue bridge crossing over the Santa Ana River. When the population in this area is dense and resources limited, LBVI have been located in small habitat patches upstream in the Santa Ana River, on the south side of the channel near the confluence of Mission Creek with the Santa Ana River. Currently, the willow/ cottonwood habitat in the Santa Ana River between the I-215 and Mountainview Avenue displays a canopy structure considered suitable for LBVI. As a general rule, suitable vireo habitat is at least 0.5 acres in size with dense clumps of vegetation consisting of two to three story canopy structure. The vegetative cover should be at least 50 percent and may include non-riparian woody vegetation, as long as riparian vegetation is present. The likelihood of LBVI using this area for foraging or nesting is related to the densities found downstream. The preference for the species would be to locate in the dense stands of willow cottonwood habitat, but they will use less dense habitat if there is no room for them elsewhere.

Critical Habitat

Critical habitat is designated by USFWS for some threatened and endangered species. At this time, no critical habitat has been designated for slender-horned spinyfin or Santa Ana River woolly-star. No portions of the Project Area is located within designated critical habitat for LBVI, CAGN, SWWF, or SBKR.

The Santa Ana sucker (SASU) [*Catostomus santaanae*] is a native fish found only in a handful of rivers in Southern California. Their range is extremely restricted; they are native only to the Los Angeles, San Gabriel, Santa Ana, and Santa Clara River systems in southern California. They now only live in the upper portion of the Los Angeles and San Gabriel drainages, and the lower part of the Santa Ana River, downstream of La Cadena Avenue, near the Rialto Drain. Although the species does not occur in the Project Area, it is worth mentioning that critical habitat for the SASU was published January 4, 2005. This rule was litigated and a revised SASU critical habitat designation is mandated to be issued in 2010. According to the USFWS the revised proposal will encompass areas of the Santa Ana River within the Project Area between I-215 and Tippecanoe Avenue.



Jurisdictional Waters

Several jurisdictional channels and drainages are identified in the Project Area. These channels include:

1. Town Creek (improved and natural sections)
2. Warm Creek By-Pass (improved)
3. McGlothlen Storm Drain (improved)
4. Lytle Creek Channel (improved)
5. Urbita Storm Drain (improved)
6. Twin Creek Channel (improved and soft-bottom channelized sections)
7. Santa Ana River (natural)
8. Mission Creek (natural)
9. San Timoteo Creek (improved and soft-bottom sections)

All of these water courses are considered waters of the U.S. and waters of the State, and are subject to the Clean Water Act. The channels as well as Seccombe Lake are also subject to the *California Fish and Game Code*.

5.7.3 SIGNIFICANCE THRESHOLD CRITERIA

The environmental analysis in this section is patterned after the Initial Study Checklist recommended by the *CEQA Guidelines*, as amended, and used by the City of San Bernardino in its environmental review process, and is contained in Appendix A of the EIR. The Initial Study includes questions relating to biological resources. The issues presented in the Initial Study Checklist have been utilized as thresholds of significance in this section. Accordingly, a project may create a significant environmental impact if it causes one or more of the following to occur:

- 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, costal, 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 the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan (refer to Section 8.0, Effects Found Not To Be Significant).

Based on these significance standards, the effects of the proposed project have been categorized as either “no impact,” a “less than significant impact,” or a “potentially significant impact.” Mitigation measures are recommended for potentially significant impacts. If a potentially significant impact cannot be reduced to a less than significant level through the application of mitigation, it is categorized as a significant unavoidable impact.

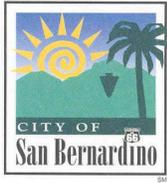
5.7.4 PROJECT IMPACTS AND MITIGATION MEASURES

◆ IMPLEMENTATION OF THE PROPOSED PROJECT COULD EFFECT SPECIES IDENTIFIED AS A CANDIDATE, SENSITIVE, OR SPECIAL STATUS SPECIES.

Level of Significance Before Mitigation: Potentially Significant Impact.

Impact Analysis: The proposed project, which includes the consolidation of seven Project Areas into one Project Area, is located in the central portion of the City of San Bernardino. The majority of the Project Area includes highly disturbed land with little habitat value for sensitive species. However, potential biological resource constraints have been identified in portions of each of the seven Project Areas. Each Project Area is bordered by and/or contains jurisdictional drainage features and shows some potential for nesting raptors and nesting birds. The Santa Ana River is the primary surface water resource located within the Project Area, adjacent to the Southeast Industrial Park Project Area. The Santa Ana River has high habitat value and is known to support a number of special status species. According to the Biological Resources Constraints Analysis, 55 special status species have been identified within the Redlands and San Bernardino South quadrangles. Of the 55 species, six State and/or federally listed species have been documented within the Santa Ana River in the vicinity of the Project Area, specifically near the Southeast Industrial Park Project Area. These species include the San Bernardino kangaroo rat (SBKR) [*Dipodomys mariami parvus*], coastal California gnatcatcher (CAGN) [*Polioptila californica californica*], least Bell’s vireo (LBVI) [*Vireo bellii pusillus*], southwestern willow flycatcher (SWWF) [*Empidonax traillii extimus*], Santa Ana River woollystar [*Eristrum densifolium var santorum*], and the slenderhorned spineflower [*Dodecahema leptoceras*]. The wildlife resources in the City are significant due to the large numbers of rare and declining species. Neo-tropical migrant birds depend on deciduous shrubs and trees for foraging during migration. Mature trees provide numerous cavities for cavity-dependent wildlife and the tall trees are used by nestling raptors. Nesting birds, bird nests, and bird eggs are provided protection under the federal Migratory Bird Treaty Act (MBTA) Sections 703-712, and the California Department of Fish and Game (CDFG) Code Sections 3503, 3503.5, and 3513. To avoid impacts to birds nesting in trees, Mitigation Measure BIO-1 requires that a raptor specialist be retained before construction activities begin to determine if any nests exist or are active, and details actions to ensure nests are not disturbed, thus reducing impacts to a less than significant level.

Future development within the Project Area may warrant habitat evaluations to determine the need for detailed or focused surveys for certain species such as the burrowing owl. Additionally, future development in the Project Area may also require compliance with water quality discharges during development and after development, and if any future development



required modifications to a jurisdictional channel, then regulatory permits would be required. These potential impacts would be mitigated through Mitigation Measures BIO-2 and BIO-3 to a less than significant level.

In addition, the Land Use Element and Natural Resources and Conservation Element of the *General Plan* provide information on natural and biological resources, such as threatened or endangered species. The Land Use Element includes policies to prevent further loss of species such as the Santa Ana River woollystar and Slender-horned spineflower and to develop recommendations for preservation and enhancement of their habitats. The Natural Resources and Conservation Element also includes policies to conserve and enhance San Bernardino's biological resources. With adherence to the *General Plan* goals and policies, and Mitigation Measures BIO-1 and BIO-2, impacts would be reduced to a less than significant level.

Goals and Policies in the General Plan:

LAND USE ELEMENT

Goal 2.6 Control development and the use of land to minimize adverse impacts on significant natural, historic, cultural, habitat, and hillside resources.

Policy 2.6.1 Hillside development and development adjacent to natural areas shall be designed and sited to maintain the character of the City's significant open spaces and historic landmarks to preserve natural features and habitat.

Policy 2.6.2 Balance the preservation of plant and wildlife habitats with the need for new development through site plan review and enforcement of the California Environmental Quality Act (CEQA).

Policy 2.6.3 Capitalize on the recreation and environmental resources offered by the Santa Ana River and Cajon Wash by requiring the dedication and development of pedestrian and greenbelt linkages.

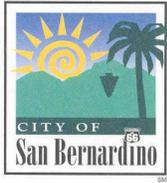
NATURAL RESOURCES AND CONSERVATION ELEMENT

Goal 12.1 Conserve and enhance San Bernardino's biological resources.

Policy 12.1.1 Acquire and maintain current information regarding the status and location of sensitive biological elements (species and natural communities) within the planning area.

Policy 12.1.2 Site and develop land uses in a manner that is sensitive to the unique characteristics and that minimizes the impacts on sensitive biological resources.

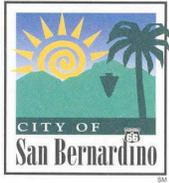
Policy 12.1.3 Require that all proposed land uses in the "Biological Resource Management Areas" (BRM), be subject to review by the Environmental Review Committee (ERC).



- Policy 12.1.4 Require that development in the BRM:
- a. Submit a report prepared by a qualified professional(s) that addresses the proposed project's impact on sensitive species and habitat, especially those that are identified in State and Federal conservation programs;
 - b. Identify mitigation measures necessary to eliminate significant adverse impacts to sensitive biological resources;
 - c. Define a program for monitoring, evaluation the effectiveness of, and ensuring the adequacy of the specified mitigation measures; and
 - d. Discuss restoration of significant habitats.
- Goal 12.2 Protect riparian corridors to provide habitat for fish and wildlife.**
- Policy 12.2.1 Prohibit development and grading within fifty (50) feet of riparian corridors, as identified by a qualified biologist, unless no feasible alternative exists.
- Policy 12.2.2 Generally permit the following uses within riparian corridors:
- a. Education and research, excluding buildings and other structures;
 - b. Passive (non mechanized) recreation;
 - c. Trails and scenic overlooks on public land(s);
 - d. Fish and wildlife management activities;
 - e. Necessary water supply projects;
 - f. Resource consumptive uses as provided for in the Fish and Game Code and Title 14 of the California Administrative Code;
 - g. Flood control projects where no other methods are available to protect the public safety; and
 - h. Bridges when supports are not in significant conflict with corridor resources; and pipelines.
- Policy 12.2.3 Pursue voluntary open space or conservation easements to protect sensitive species or their habitats.
- Policy 12.2.4 Development adjacent to riparian corridors shall:
- a. Minimize removal of vegetation;
 - b. Minimize erosion, sedimentation, and runoff by appropriate protection or vegetation and landscape;
 - c. Provide for sufficient passage of native and anadromous fish as specified by the California Department of Fish and Game;
 - d. Minimize wastewater discharges and entrapment; and
 - e. Prevent groundwater depletion or substantial interference with surface and subsurface flows; and provide for natural vegetation buffers.



- Policy 12.2.5 Permit modification of the boundaries of the designated riparian corridors based on field research and aerial interpretation data as part of biological surveys.
- Goal 12.3 Establish open space corridors between and to protected wildlands.**
- Policy 12.3.1 Identify areas and formulate recommendations for the acquisition of property, including funding, to establish a permanent corridor contiguous to the National Forest via Cable Creek and/or Devil Canyon. The City shall consult with various federal, state and local agencies and City departments prior to the adoption of any open space corridor plan.
- Policy 12.3.2 Seek to acquire real property rights of open space corridor parcels identified as being suitable for acquisition.
- Policy 12.3.3 Establish the following habitat types as high-priority for acquisition as funds are available:
- a. Habitat of endangered species;
 - b. Alluvial scrub vegetation;
 - c. Riparian vegetation dominated by willow, alder, sycamore, or native oaks; and
 - d. Native walnut woodlands.
- Policy 12.3.4 Preserve and enhance the natural characteristics of the Santa Ana River, City Creek, and Cajon Creek as habitat areas.
- Policy 12.3.5 Delineate the habitats of the Santa Ana River Sucker (*Catostomus santaanae*) and Pacific Speckled Dace (*Rhinichthys osculus* spp.); develop recommendations for preservation and enhancement of these habitats; and develop standards for development of adjacent lands.
- Policy 12.3.6 Prevent further loss of existing strands of Santa Ana River Woolly-star (*Eriastrum densifolium* ssp. *Sanctorum*) and Slender-horned spineflower (*Dodecahema leptoceras*).
- Policy 12.3.7 Require that mineral extraction (sand and gravel) projects submit a survey for rare plants prepared by a qualified botanist which shall be prepared in accordance with the Department of Fish and Game's Guidelines for Assessing the Effects of Proposed Developments on Rare and Endangered Plants and Communities.
- Policy 12.3.8 Require that mineral extraction projects mitigate impacts to endangered plants according to the Mitigation Policy and Guidelines Regarding Impacts to Rare, Threatened and Endangered Plants developed by the California Native Plant Society Scientific Advisory Committee.



Policy 12.3.9 Restrict off-road vehicle recreation in sensitive habitat areas of Cajon and Lytle Creeks.

Mitigation Measures:

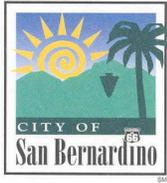
BIO-1 A qualified biologist shall conduct a pre-construction nesting bird survey no more than three days prior to the commencement of ground-disturbing activities on the site. In the event breeding birds and their active nests are discovered on the project site during construction, impacts to nesting locations shall be minimized by the construction contractor pursuant to the California Fish and Game Code and the Federal Migratory Bird Treaty Act.

Where an active bird nest is located by a qualified biologist, a 300-foot buffer (or 500-foot buffer for raptors and special-status bird species) shall be established around it until the qualified biologist deems the nest inactive and there is no evidence of a second attempt to use the nest. The buffer area shall be delineated with orange construction fencing, and a qualified biologist shall verify the installation. Most birds breed between the months of February and September; therefore, if construction occurs outside of this time frame, there is a lower probability that breeding birds would be impacted by construction-related activities.

BIO-2 A qualified biologist with a CDFG Scientific Collection permit and Memorandum of Understanding shall conduct a series of 30-day preconstruction surveys for the burrowing owl and San Bernardino kangaroo rat. The project applicant shall consult with the CDFG regarding measures for reducing or avoiding impacts to these species. The project applicant shall, if required by the CDFG, prepare a relocation plan, which shall be approved by the CDFG. If the aforementioned species are observed prior to construction, CDFG may require that the species be relocated by a qualified biologist to an approved site with suitable habitat present. Survey and relocation methods shall be approved by the CDFG prior to commencement of grading. Future development shall comply with all applicable requirements of the CDFG.

BIO-3 As applicable, future development shall be subject to the regulations set forth by regulatory agencies as part of the jurisdictional permitting process. The ACOE and CDFG shall require project applicants to explore alternatives to avoid or reduce impacts and shall also require mitigation for all unavoidable impacts. The ACOE has a “no net loss” policy that requires that any unavoidable impacts to stream values and functions be replaced. In addition, the RWQCB shall add restrictions to control runoff from the site, require on the site treatment of runoff to improve water quality, and impose Best Management Practices on the construction. All of the features of the project that shall address water quality issues shall be explained within the Water Quality Management Plan and Stormwater Pollution Prevention Plan.

Level of Significance After Mitigation: Less Than Significant Impact.



◆ **IMPLEMENTATION OF THE PROPOSED PROJECT COULD HAVE AN ADVERSE EFFECT ON RIPARIAN HABITAT OR OTHER SENSITIVE NATURAL COMMUNITIES.**

Level of Significance Before Mitigation: Potentially Significant Impact.

Impact Analysis: Specific habitat types found within the Santa Ana River Floodplain, near the Southeast Industrial Park Project Area, include Riversidean alluvial fan sage scrub, southern cottonwood-willow riparian forest, sandy river wash, and southern willow scrub. Moderate strands of riparian habitat and expansive patches of Riversidean alluvial fan sage scrub extend from the I-215 upstream to Mountainview Avenue within the Santa Ana River.

In addition to the fundamental flood control and water supply-related functions of the Santa Ana River, the watercourse serves as a wildlife habitat linkage, buffer and corridor. The Santa Ana River buffers the plants and wildlife from surrounding human disturbance. For these and other reasons, the habitat in the Santa Ana River near the Southeast Industrial Park Project Area supports a high level natural resource diversity and richness. Despite its location in the middle of a dense urban area, the Santa Ana River maintains considerable habitat value. At the time individual development applications are submitted, the City will assess development proposals for potential impacts to significant natural resources pursuant to CEQA and associated State and Federal regulations and City ordinances. Future development in areas with riparian habitat shall be evaluated on a project-by-project basis, in accordance with CDFG and USFWS requirements, to ensure impacts to riparian habitats are addressed. Policy 2.6.2 encourages the balance of preservation of plant and wildlife habitats with the need for new development through site plan review and enforcement of CEQA. Compliance with the *General Plan* goals and policies and Mitigation Measure BIO-3 reduce impacts to a less than significant level.

General Plan Goals and Policies: Refer to the goals and policies identified above.

Mitigation Measures: Refer to Mitigation Measure BIO-3. No additional mitigation measures are required.

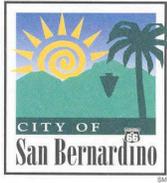
Level of Significance After Mitigation: Less Than Significant Impact.

◆ **IMPLEMENTATION OF THE PROPOSED PROJECT COULD HAVE AN ADVERSE EFFECT ON FEDERALLY PROTECTED WETLANDS AS DEFINED BY SECTION 404 OF THE CLEAN WATER ACT.**

Level of Significance Before Mitigation: Potentially Significant Impact.

Impact Analysis: Each Project Area is bordered by and/or contains jurisdictional drainage features and shows some potential for nesting raptors and nesting birds. The Santa Ana River is the primary surface water resource located within the Project Area, adjacent to the Southeast Industrial Park Project Area. The Santa Ana River has high habitat value and is known to support a number of special status species. Several jurisdictional channels and drainages are identified in the Project Area. These channels include:

1. Town Creek (improved and natural sections)
2. Warm Creek By-Pass (improved)



3. McGlothlen Storm Drain (improved)
4. Lytle Creek Channel (improved)
5. Urbita Storm Drain (improved)
6. Twin Creek Channel (improved and soft-bottom channelized sections)
7. Santa Ana River (natural)
8. Mission Creek (natural)
9. San Timoteo Creek (improved and soft-bottom sections)

All of these water courses are considered waters of the U.S. and waters of the State are subject to the Clean Water Act. The channels as well as Secombe Lake are subject to the California Fish and Game Code. The western area of the Southeast Industrial Park Project Area is bisected by the Santa Ana River, and the eastern portion is bordered by the Santa Ana River to the north. Soft-bottom sections of the Twin Creek and San Timoteo Creek run through the western area and a soft-bottom section of Mission Channel bisects the eastern area. The section of San Timoteo Creek that occurs in the Project Area often contains elements of riparian and/or marsh-wetland habitat near its confluence with the Santa Ana River. The section of Mission Creek that bisects the eastern area contains aquatic, marsh, wetland, and riparian habitat types. However, no listed federal, state, or local wetlands inventories are present within the Project Area. Implementation of the proposed project would not adversely impact the Santa Ana River. The *General Plan* Natural Resources and Conservation Element includes a policies to preserve and enhance the natural characteristics of the Santa Ana River as well as to delineate the habitats. Compliance with the *General Plan* goals and policies and Mitigation Measure BIO-3 reduce impacts to a less than significant level.

General Plan Goals and Policies: Refer to the goals and policies identified above.

Mitigation Measures: Refer to Mitigation Measure BIO-3. No additional mitigation measures are required.

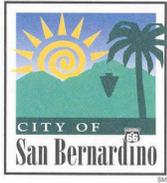
Level of Significance After Mitigation: Less Than Significant Impact.

- ◆ **IMPLEMENTATION OF THE PROPOSED PROJECT COULD INTERFERE WITH THE MOVEMENT OF NATIVE RESIDENT OR MIGRATORY FISH, OR WITH WILDLIFE CORRIDORS.**

Level of Significance Before Mitigation: Potentially Significant Impact.

Impact Analysis: In addition to the fundamental flood control and water supply-related functions of the Santa Ana River, the watercourse serves as a wildlife habitat linkage, corridor and buffer. The Santa Ana River buffers the plants and wildlife from surrounding human disturbance. The habitat in the Santa Ana River adjacent to the Southeast Industrial Park Project Area supports a high level natural resource diversity and richness. Despite its central location within a dense urban area, the Santa Ana River maintains considerable habitat value.

The SASU is a native fish found only in a handful of rivers in southern California. Their range is extremely restricted. The fish are native only to the Los Angeles, San Gabriel, Santa Ana, and Santa Clara River systems in southern California. Currently, they only live in the upper portion of the Los Angeles and San Gabriel drainages, and the lower portion of the Santa Ana River,



downstream of La Cadena Avenue, near the Rialto Drain. Although the specie does not occur in the Project Area, critical habitat for the SASU was published January 4, 2005. The rule was litigated and a revised SASU critical habitat designation is mandated to be issued in 2010. According to the USFWS, the revised proposal will encompass areas of the Santa Ana River within the Project Area between I-215 and Tippecanoe Avenue. Future development within the Project Area may warrant habitat evaluations to determine the need for detailed or focused surveys for SASU. Additionally, future development in the Project Area would require compliance with water quality discharges during development and after development, and if any future development required modifications to a jurisdictional channel, then regulatory permits would be required. The *General Plan* Natural Resources and Conservation Element includes goals and policies to protect riparian corridors to provide habitat for fish and wildlife. Policy 12.2.1 prohibits development and grading within 50 feet of riparian corridors, as identified by a qualified biologist, unless no feasible alternative exists. Policy 12.2.3 pursues voluntary open space or conservation easements to protect sensitive species or their habitats. Further policies provide regulations and restrictions for development adjacent to riparian corridors. With adherence to the *General Plan* goals and policies, and Mitigation Measure BIO-3, impacts would be reduced to a less than significant level.

General Plan Goals and Policies: Refer to the goals and policies identified above.

Mitigation Measures: Refer to Mitigation Measure BIO-3. No additional mitigation measures are required.

Level of Significance After Mitigation: Less Than Significant Impact.

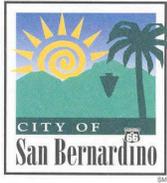
5.7.5 CUMULATIVE IMPACTS AND MITIGATION MEASURES

◆ IMPLEMENTATION OF THE PROPOSED PROJECT COULD RESULT IN CUMULATIVELY CONSIDERABLE IMPACTS RELATED TO BIOLOGICAL RESOURCES.

Level of Significance Before Mitigation: Potentially Significant Impact.

Impact Analysis: Future development in the City of San Bernardino and surrounding cities could result in the loss of biological resources. The City of San Bernardino is an urbanized city surrounded by other urban cities. The proposed project, which includes the consolidation of seven Project Areas into one Project Area, is located in the central portion of the City of San Bernardino. Similarly to the City of San Bernardino, neighboring communities have converted much of their natural occurring habitats to urban land uses, which do not readily support sensitive plant or wildlife species. Given the built out nature of the City of San Bernardino and surrounding cities, and that the future development sites have already been subject to extensive ground disturbance and/or development, implementation of the proposed project would not have a cumulatively significant impact on local or regional biological resources.

General Plan Goals and Policies: Refer to the goals and policies identified above.



Mitigation Measures: Refer to Mitigation Measures BIO-1 through BIO-3. No additional mitigation measures are required.

Level of Significance After Mitigation: Less Than Significant Impact.

5.7.6 SIGNIFICANT UNAVOIDABLE IMPACTS

Biological resource impacts associated with implementation of the proposed project would be less than significant with compliance with the *General Plan* goals and policies, and the recommended mitigation measures. Therefore, no significant unavoidable biological resources impacts would occur as a result of the proposed project.

5.7.7 SOURCES CITED

Biological Resources Constraints Analysis for the San Bernardino Redevelopment Project Area Merger – Area A, prepared by Tom Dodson & Associates, dated January 26, 2010.

City of San Bernardino General Plan, Chapter 2, Land Use Element, prepared by The Planning Center, dated November 1, 2005.

City of San Bernardino General Plan, Chapter 12, Natural Resources and Conservation Element, prepared by The Planning Center, dated November 1, 2005.

Final San Bernardino General Plan Update and Associated Specific Plans Environmental Impact Report, prepared by The Planning Center, dated September 30, 2005.