

4.3 BIOLOGICAL RESOURCES

INTRODUCTION

This section of the document discusses the biological resources that exist or historically occurred within the proposed project site. The focus of this section is on biological habitats, which support the existence of individual plant or animal species. This section also includes information on wildlife corridors and habitat fragmentation. Wildlife corridors are areas of habitat used by wildlife for seasonal or daily migration. Habitat fragmentation involves the potential for dividing sensitive habitat and thereby lessening its biological value.

This section also includes information on critical habitat and wetlands. The California Natural Diversity Database (CNDDDB) was consulted to determine the potential for sensitive species to be located on or near the project site.

EXISTING SETTING

Wildlife Species and Habitats

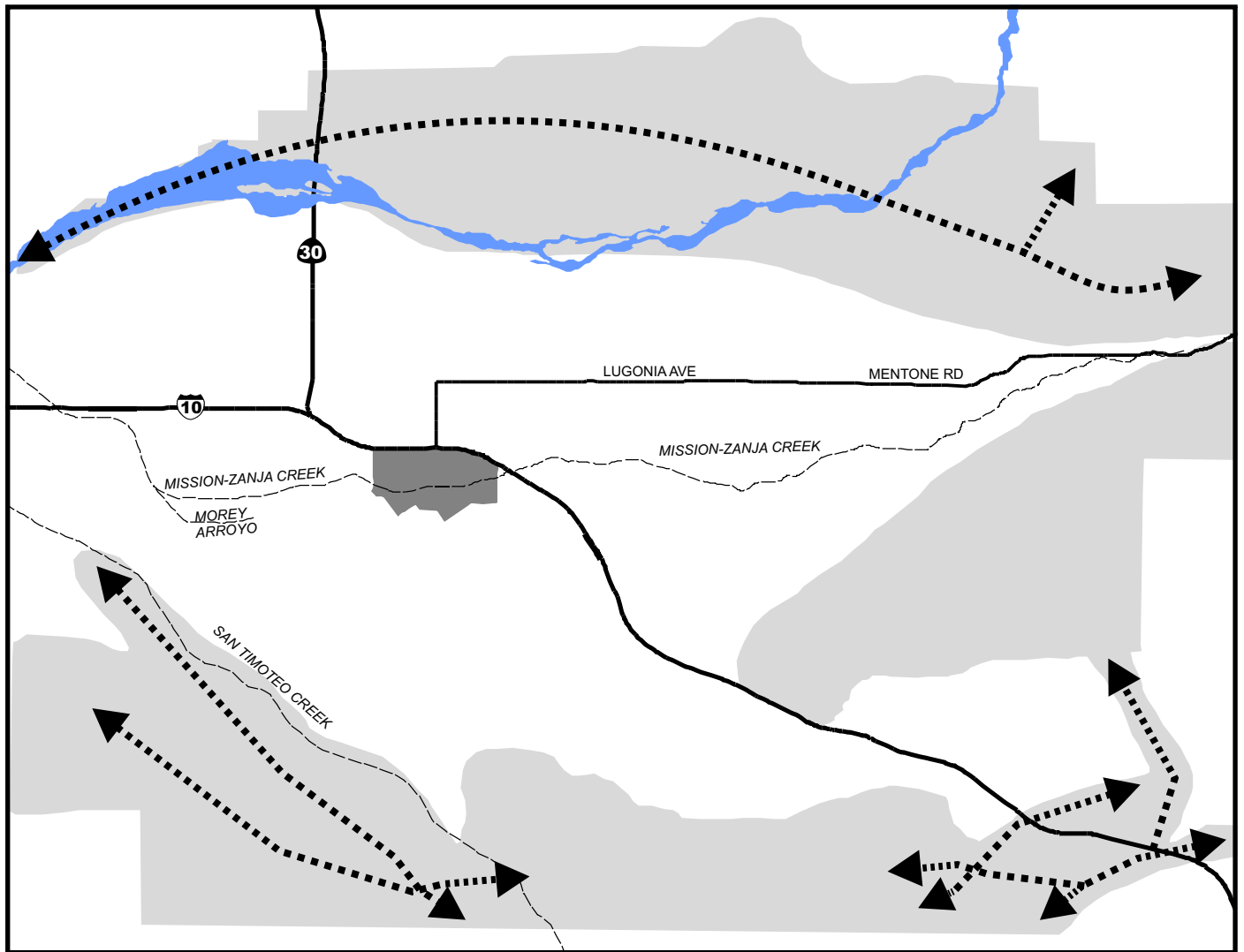
The project site is located in the San Bernardino Valley and is surrounded by natural communities and valued habitats. Most of these valued habitats are found along waterways and serve as wildlife corridors. Valued habitats include the Santa Ana River Wash and the Mill Creek Wash located two- to five miles north/northeast of the project site; and the Crafton Hills, San Timoteo Canyon, Live Oak Canyon and the Badlands located two- to four miles south/southeast of the project site. **Figure 4.3-1** illustrates the location of the biological resources surrounding the project site.¹ Although the project site is surrounded by past natural communities, the majority of land within the project site has been developed, paved, or landscaped over the past 100 years. Non-native plant species are typically supported in developed areas. Based on aerial photography and windshield-level field inspection, it is evident that there are no undisturbed natural open space/ecological areas within the project site. Additionally, the project site does not function as a wildlife corridor that supports linkages between suitable wildlife habitats.

The project site is located within the Redlands 7.5-minute quadrangles. In an urbanized area, species diversity is expected to be modest and the habitat that does exist within the project site consists primarily of:






- Unattended vacant lots
- Railroad rights-of-ways
- Public parks
- Landscaped parkways and medians
- Residential back- and front-yards with shade trees and/or planted gardens
- Landscaped and planted areas adjacent to commercial development or within parking lots

The small pocket park on State Street and the area around Old City Hall contain the majority of the landscaped areas in the project site. Any wildlife species that utilize the public parks are mostly those adapted to living in an urban environment, such as birds, insects and squirrels. Native plant species are mainly limited to those few, such as California Sycamore, preserved within public parks.

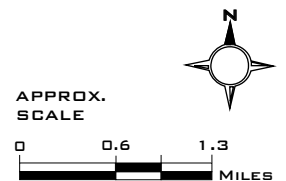
¹City of Redlands Master Environmental Assessment, 7.0 Biotic Resources, 1995.



LEGEND:

-  Proposed Specific Plan Area
-  Areas of Valued Habitat
-  Santa Ana River Wash
-  Wildlife Corridor
-  Potential Riparian Restoration (Creeks)

SOURCE: City of Redlands, 2011.



The Mission Zanja (Zanja), a twelve-mile channelized culvert, runs through the project site in an east-west direction and connects the Mission Creek with the Morey Arroyo. The majority of the Zanja that crosses the project site is channelized underground, with the exception of a portion on the eastern and western sides of the project site. On the eastern side of the project site, north of Central Avenue between Church and 9th Streets, the Zanja runs through a natural-bottomed channel with generally minimal vegetation, wildlife and habitat. On the eastern side of the project site, north of State Street between 1st Street and 230 feet west of Kendall Street, the Zanja runs through a concrete-bottomed channel with very little vegetation, wildlife and habitat. As illustrated in **Figure 4.3-1** above, the Zanja, where it flows above ground, is considered a potential riparian restoration area.

Sensitive Habitats and Special-status Species

A sensitive habitat is one that is considered rare within the region, supports sensitive plants or animals, or provides connectivity between sensitive habitats. Special-status species are considered sensitive if they have been listed as such by federal, State, or local agencies, or by one or more special interest groups, such as the California Native Plant Society (CNPS). The California Department of Fish and Game (CDFG) and the California Natural Diversity Data Base (CNDDDB, 1999) were consulted to determine if any sensitive species were within the Downtown Specific Plan Area. The CNDDDB is a computerized database that identifies historical occurrences of plants and animals listed by the CDFG and U.S. Fish and Wildlife Service (USFWS) as rare, threatened, endangered (i.e., “listed species”), or otherwise considered species of special concern. **Table 4.3-1** presents the wildlife and plant species and ecosystems (plant communities) listed on the CNDDDB as being historically identified to occur within the Redlands 7.5-minute quadrangle, the area that contains the project site.

TABLE 4.3-1: CNDDDB QUAD VIEWER LISTING FOR THE REDLANDS QUADRANGLE					
Common Name (Scientific Name)	Habitat	Listing Designation			
		Fed /a/	CA /b/	CDFG /c/	CNPS /d/
Natural Communities					
Riversidian Alluvial Fan Sage Scrub	Shrubland that occurs in washes and on gently sloping alluvial fans	N	N		
Southern Coast Live Oak Riparian Forest	Riparian woodland occurring in bottomlands and outer floodplains along larger streams and on fine-grained, rich alluvium	N	N		
Southern Sycamore Alder Riparian Woodland	Riparian woodland occurring in very rock streambeds subject to seasonally high-intensity flooding	N	N		
Animals					
American Badger (<i>Taxidea taxus</i>)	Common in large grass and sagebrush meadows and valleys with ample soil	N	N	SSC	
Burrowing Owl (<i>Athene cunicularia</i>)	Open, dry grasslands, desert, and scrublands with low-growing vegetation	N	N	SSC	
Busck's Gallmoth (<i>Carolella busckana</i>)	Coastal scrub dunes, presumed expired	N	N		
California horned lark (<i>Eremophila alpestris actia</i>)	Open grasslands along the coast and deserts near sea level to alpine dwarf-shrub habitat above treeline.	N	N	WL	
Coast Horned Lizard (<i>Phrynosoma coronatum blainvillii</i>)	Coastal sage scrub and chaparral in arid and semi arid climate conditions	N	N	SSC	

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Coastal California Gnatcatcher (<i>Poliopitila californica californica</i>)	Coastal sage scrub located in arid washes and on mesas and slopes	FT	N	SSC	
Cooper's Hawk (<i>Accipiter cooperii</i>)	Dense stands of live oak, riparian deciduous, or other forest habitats near water used most frequently	N	N	WL	
Least Bell's vireo (<i>Vireo bellii pusillus</i>)	Low, dense riparian growth along water or along dry parts of intermittent streams.	FE	FE		
Los Angeles pocket mouse (<i>Perognathus longimembris brevinasus</i>)	Desert riparian, desert scrub, desert wash, coastal scrub, and sagebrush.	N	N	SSC	
Northwestern San Diego pocket mouse (<i>Chaetodipus fallax fallax</i>)	Coastal scrub, chamise-redshank chaparral, mixed chaparral, sagebrush, desert wash, desert scrub, desert succulent shrub, pinyon-juniper, and annual grassland	N	N	SSC	
Orange-throated whiptail (<i>Cnemidophorus hyperythrus</i>)	Low-elevation coastal scrub, chamise-redshank chaparral, mixed chaparral, and valley-foothill hardwood habitats	N	N	SSC	
Pallid Bat (<i>Antrozous pallidus</i>)	Grasslands, shrublands, woodlands, and forests. Most common in open, dry habitats with rocky areas for roosting	N	N	SSC	
Pocketed Free-Tailed Bat (<i>Nyctinomops femorosaccus</i>)	Mixed chaparral and desert scrub, roosts in cliff crevices	N	N	SSC	
San Bernardino kangaroo rat (<i>Dipodomys merriami parvus</i>)	Sagebrush and desert scrub habitats, and to a lesser extent in pinyon-juniper habitat.	FE	N	SSC	
San Diego desert woodrat (<i>Neotoma lepida intermedia</i>)	Joshua tree, pinyon-juniper, mixed and chamise-redshank chaparral, sagebrush, and most desert habitats.	N	N	SSC	
Santa Ana speckled dace (<i>Rhinichthys osculus</i> ssp. 3)	Permanent flowing streams with summer water temperatures between 62-68 degrees Fahrenheit	N	N	SSC	
Sierra Madre yellow-legged frog (<i>Rana muscosa</i>)	Populations are restricted to streams in ponderosa pine, montane hardwood-conifer, and montane riparian habitats.	FE	N	SSC	
Silvery legless lizard (<i>Anniella pulchra pulchra</i>)	Areas with sandy or loose loamy soils such as under sparse vegetation of beaches, chaparral, or pine-oak woodland; or near sycamores, cottonwoods, or oaks that grow on stream terraces	N	N	SSC	
Southwestern Willow Flycatcher (<i>Empidonax traillii extimus</i>)	Dense riparian vegetation associated with streams, rivers and other wetlands	FE	SE		

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Stephens' kangaroo rat (<i>Dipodomys stephensi</i>)	Annual and perennial grassland habitats, but may occur in coastal scrub or sagebrush with sparse canopy cover, or in disturbed areas	FE	ST		
Western Mastiff Bat (<i>Eumops perotis californicus</i>)	Rocky areas at low elevations where roosting occurs primarily in crevices	N	N	SSC	
Western yellow bat (<i>Lasiurus xanthinus</i>)	Valley foothill riparian, desert riparian, desert wash, and palm oasis habitats.	N	N	SSC	
Western yellow-billed cuckoo (<i>Coccyzus americanus occidentalis</i>)	Valley foothill and desert riparian habitats	FC	SE		
Yellow warbler (<i>Dendroica petechia brewsteri</i>)	Open to medium-density woodlands and forests with a heavy brush understory in breeding season, in migration, found in a variety of sparse to dense woodland and forest habitats.	N	N	SSC	
Yellow-breasted chat (<i>Icteria virens</i>)	Breeds locally on the coast and very locally inland, in migration, may be found in lower elevations of mountains in riparian habitat	N	N	SSC	
Plants					
California satintail (<i>Imperata brevifolia</i>)	Coastal scrub, Mojavean desert scrub, meadows and seeps, and riparian scrub	N	N		
Marsh Sandwort (<i>Arenaria paludicola</i>)	Marshes and swamps	FE	SE		1B
Nevin's barberry (<i>Berberis nevinii</i>)	Cismontane woodland , coastal scrub, and riparian scrub	FE	SE		1B
Parish's bush-mallow (<i>Malacothamnus parishii</i>)	Coastal scrub	N	N		1A
Parish's gooseberry (<i>Ribes divaricatum var. parishii</i>)	Riparian woodland	N	N		1A
Parry's spineflower (<i>Chorizanthe parryi var. parryi</i>)	Cismontane woodland , coastal scrub, and valley and foothill grassland	N	N		1B
Payson's jewel-flower (<i>Caulanthus simulans</i>)	Sandy, granitic coastal scrub	N	N		4
Plummer's Mariposa-Lily (<i>Calochortus plummerae</i>)	Sandy and rocky soils in chaparral, cismontaine woodland, coastal scrub, lower montane coniferous forest, and valley and foothill grasslands below 5,100 feet	N	N		1B
Robinson's pepper-grass (<i>Lepidium virginicum var. robinsonii</i>)	Coastal scrub	N	N		1B

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Salt marsh bird's-beak (<i>Cordylanthus maritimus</i> <i>ssp. Maritimus</i>)	Marshes and swamps	FE	SE		1B
Santa Ana River woollystar (<i>Eriastrum</i> <i>densifolium ssp.</i> <i>Sanctorum</i>)	Sandy or gravelly coastal scrub	FE	SE		1B
Slender-horned spineflower (<i>Dodecahema</i> <i>leptoceras</i>)	Cismontane woodland and sandy coastal scrub	FE	SE		1B
Smooth tarplant (<i>Centromadia pungens</i> <i>ssp. Laevis</i>)	Meadows and seeps, playas, riparian woodland, alkaline valley and foothill grassland	N	N		1B
<p>/a/ United States legal status under the Federal Endangered Species Act, FC = candidate, FE = endangered, FT = threatened, N = no special designation.</p> <p>/b/ State of California legal status, SE = endangered, ST = threatened, N = no special designation.</p> <p>/c/ California Department of Fish and Game designation and applies to animals only. SSC = species of special concern, WL = watch list.</p> <p>/d/ California Native Plant Society. 1A = presumed extinct in California, 1B = rare, threatened or endangered in California, 4 = plants of limited distribution.</p> <p>SOURCE: California Department of Fish and Game, California Natural Diversity Data Base, Available at: http://imaps.dfg.ca.gov/viewers/cnddb_quickviewer/app.asp, accessed May 24, 2010.</p>					

Due to the urban development that has occurred within the project site, there is no longer sufficient undisturbed open space for habitats that could support the designated sensitive species of plant and animals, listed in **Table 4.3-1**. The nearest known location of a special status species is located to the west of the project site, near the Mission Morey Arroyo.² There are currently no rare, endangered or threatened habitats listed by the EPA, United States Fish and Wildlife Service, or California Department of Fish and Game located on the project site.

Wetlands

The San Bernardino Valley once supported permanently flowing creeks, springs, and marshy wetlands. Over the past 150 years, these wet areas have generally been drained or filled. However, presence of several riparian areas suggests that freshwater wetlands might be found adjacent to or adjoining waterways that surround the City of Redlands.³ While the surrounding areas may contain supportive habitat for freshwater wetlands, the project site has been developed, paved, or landscaped over the past 100 years. The Zanja, which traverses the project site, is mainly channelized underground, with the exception of a portion on the eastern and western sides of the project site, and is contained within a concrete- and natural-bottomed channel. Although the Zanja contains vegetation, wildlife and habitat, the City's does not identify any areas within its boundaries as wetlands.⁴

Tree Preservation

As stated above, the majority of land within the project site has been developed, paved, or landscaped. Trees within the project site consist of landscape trees along roadways, landscaping of commercial and residential properties and the two public parks within the project site. The City of Redlands manages

²City of Redlands Master Environmental Assessment, 7.0 Biotic Resources, 1995

³*Ibid.*

⁴*Ibid.*

some 45,000 trees throughout the entire City. Approximately 850 public trees are located within the project site.⁵ The Street Tree Division of the Quality of Life Department is responsible for maintenance of public trees.

REGULATORY FRAMEWORK

Wildlife Species and Habitats

Federal Endangered Species Act. The Endangered Species Act and subsequent amendments provide for the conservation of endangered and threatened species and the ecosystems upon which they depend. Section 7 of the Endangered Species Act requires federal agencies to aid in the conservation of listed species, and to ensure that the activities of federal agencies will not jeopardize the continued existence of listed species or adversely modify designated critical habitat. At the federal level, the U.S. Fish and Wildlife Service (USFWS) and the National Oceanic and Atmospheric Administration (NOAA) are responsible for administration of the Endangered Species Act.

California Endangered Species Act. The California Department of Fish and Game is responsible for the administration of the California Endangered Species Act. Unlike the federal Endangered Species Act, there are no State agency consultation procedures under the California Endangered Species Act. For projects that affect both a State and federal listed species, compliance with the federal Endangered Species Act will satisfy the California Endangered Species Act if the California Department of Fish and Game determines that the federal incidental take authorization is "consistent" with the California Endangered Species Act. Projects that result in a take of a State-only listed species require a take permit under the California Endangered Species Act. The federal and/or State acts also lend protection to species that are considered rare enough by the scientific community and trustee agencies to warrant special consideration, particularly with regard to protection of isolated populations, nesting or den locations, communal roosts, and other essential habitat.

California Fish and Game Code Sections 3500 - 3705, Migratory Bird Protection. Sections 3500 through 3705 of the California Fish and Game Code regulate the taking of migratory birds and their nests. These codes prohibit the taking of nesting birds, their nests, eggs, or any portion thereof during the nesting season. Typically, the breeding/nesting season is from March 1st through August 30th. Depending on each year's seasonal factors, the breeding season can start earlier and/or end later.

Projects that are likely to result in the taking of birds protected under the Migratory Bird Treaty Act will require the issuance of take permits from the USFWS. Activities that would require such a permit would include, but not be limited to, the destruction of migratory bird nesting habitat during the nesting season when eggs or young are likely to be present. Under the act, surveys are required to determine if nests will be disturbed and, if so, a buffer area with a specified radius around the nest would be established so that no disturbance or intrusion would be allowed until the young had fledged and left the nest. If not otherwise specified in the permit, the size of the buffer area would vary with species and local circumstances (e.g. presence of busy roads), and would be based on the professional judgment of the monitoring biologist.

Wetlands

Clean Water Act. At the federal level, the Clean Water Act (CWA) (33 U.S.C. 1344) is the primary law regulating wetlands and waters. CWA regulates the discharge of dredged or fill material into waters of the United States, including wetlands. Waters of the United States include navigable waters, interstate waters, territorial seas and other waters that may be used in interstate or foreign commerce. To classify

⁵City of Redlands, *GIS/Maps*, Available at: <http://gis.cityofredlands.org/>, Accessed May 25, 2010.

wetlands for the purposes of the CWA, a three-parameter approach is used that includes the presence of hydrophytic (water-loving) vegetation, wetland hydrology, and hydric soils (soils subject to saturation/inundation). All three parameters must be present, under normal circumstances, for an area to be designated as a jurisdictional wetland under the CWA.

Section 404 of the CWA establishes a regulatory program that provides that no discharge of dredged or fill material can be permitted if a practicable alternative exists that is less damaging to the aquatic environment or if the nation's waters would be significantly degraded. The Section 404 permit program is run by the U.S. Army Corps of Engineers (ACOE) with oversight by the Environmental Protection Agency (EPA).

Executive Order for Wetland Protection. The Executive Order for the Protection of Wetlands (E.O. 11990) also regulates the activities of federal agencies with regard to wetlands. Essentially, this executive order states that a federal agency, such as the Federal Highway Administration, cannot undertake or provide assistance for new construction located in wetlands unless the head of the agency finds: 1) that there is no practicable alternative to the construction and 2) the proposed project includes all practicable measures to minimize harm.

State Agency Wetland Regulation. At the state level, wetlands and waters are regulated primarily by the Department of Fish and Game (CDFG) and the Regional Water Quality Control Boards (RWQCB). In certain circumstances, the Coastal Commission (or Bay Conservation and Development Commission) may also be involved. Sections 1600-1607 of the Fish and Game Code require any agency that proposes a project that will substantially divert or obstruct the natural flow of or substantially change the bed or bank of a river, stream, or lake to notify CDFG before beginning construction. If CDFG determines that the project may substantially and adversely affect fish or wildlife resources, a Lake or Streambed Alteration Agreement will be required. CDFG jurisdictional limits are usually defined by the tops of the stream or lake banks, or the outer edge of riparian vegetation, whichever is wider. Wetlands under jurisdiction of the ACOE may or may not be included in the area covered by a Streambed Alteration Agreement obtained from the CDFG.

The Regional Water Quality Control Boards were established under the Porter-Cologne Water Quality Control Act to oversee water quality. The RWQCB also issues water quality certifications in compliance with Section 401 of CWA. Please see Section 4.13 *Water Resources* for additional details.

Biological

Migratory Bird Treaty Act. The Migratory Bird Treaty Act (MBTA) (16 USC Sections 703–711) includes provisions for the protection of migratory birds, including the non-permitted take of migratory birds, under the authority of the USFWS and California Department of Fish and Game (CDFG). The MBTA protects over 800 species, including geese, ducks, shorebirds, raptors, songbirds, and many common species.

Tree Preservation

Tree Preservation Ordinance. Chapter 12.52 of the City of Redlands Municipal Code contains the tree preservation ordinance for the City. The Trees and Tree Protection Ordinance (Ordinance No. 2554), which became law on April 20, 2004, protects public, native and specimen, and landmark trees.

- **Public Trees.** The Ordinance applies to trees that are located in a public place or area under ownership or control of the city, including, but not limited to, city streets, parkways, open space and park lands.

- **Native and Specimen Trees.** Native trees, identified by a certified arborist and on the approved list of native trees, with a trunk more than eight inches in diameter at a height of four and one-half feet above natural grade are protected under the Ordinance. Specimen trees determined to be an outstanding specimen of a desirable species are also protected.
- **Landmark Trees.** The Ordinance provides for designation of public trees as an historic resource based on its historic or cultural significance and importance to the community. The list of designated Landmark trees remains open for new designations and the Historic and Scenic Preservation Commission is responsible for consideration of nominated Landmark trees.

The City has a general policy to protect and maintain mature and healthy public trees. Protected tree removal requires a removal permit by the Quality of Life Department.

THRESHOLDS OF SIGNIFICANCE

The proposed project would have a significant impact related to biological resources if it would:

- Substantially interfere 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;
- 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, 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 federally protected wetlands as defined by Section 404 of the Clean Water Act through direct removal, filling, hydrological interruption, or other means; and/or
- Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance.

Wildlife Species and Habitats

As discussed above, although known natural communities and habitat sites are located near the project site (two- to five miles north/northeast and south/southeast), the majority of land within the project site has been developed, paved, or landscaped. There are no undisturbed natural open space/ecological areas or wildlife corridors within the project site. A small pocket park on State Street and the area around Old City Hall contain the majority of the landscaped areas in the project site. Wildlife species within the project site are mostly those adapted to living in an urban environment, such as birds, insects and squirrels. Implementation of the proposed project would not substantially interfere 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 as the project site does not function as a wildlife corridor. Therefore, the proposed project would result in less-than-significant impacts related to wildlife movement corridors.

The Zanja traverses the project site in an east-west direction and is channelized underground, with the exception of a portion on the eastern and western sides of the project site. The Zanja has been identified as an area for potential riparian restoration.⁶ The proposed project does not propose changes to alter the course of the Zanja, nor does it propose development in the vicinity of the Zanja that could interfere with potential restoration activities. Implementation of the proposed project would not have a substantially

⁶City of Redlands Master Environmental Assessment, 7.0 Biotic Resources, 1995.

adverse effect on any riparian habitat or other sensitive natural communities. Therefore, no impacts related to riparian habitats or sensitive natural communities would occur.

The majority of land within the project site has been developed, paved, or landscaped. Suitable habitat for sensitive bird species does not exist within the project site. However, some migratory avian species may use portions of the project site and adjacent areas during breeding season. Migratory avian species that may use portions of the project site for nesting during the breeding season are protected under the MBTA. Specifically, all native breeding birds (except game birds), regardless of their listing status, are protected under the MBTA. Construction-related activities would be expected to result in tree removal which could result in the disturbance of nesting migratory species covered under the MBTA. Consequently, potential impacts to MBTA-protected breeding birds and raptors are considered significant under CEQA. In addition, species such as the burrowing owl may use the project site, and are identified as species of special concern by the CDFG, as well as protected under the MBTA. Grading and excavation activities could also disturb nesting burrowing owls. If construction occurs between February 15 and August 15, this could result in an impact to migratory birds or nesting species. Therefore, without mitigation, the proposed project would result in a significant impact related to migratory birds or nesting species.

Sensitive Habitats and Special-status Species

As discussed above, due to the urban development that has occurred within the project site, there is no longer sufficient undisturbed open space for habitats which could support the designated sensitive species of plant and animals located in the Redlands 7.5-minute quadrangle. While sensitive species had been identified to exist in the project site in the past, there are no active rare, endangered or threatened habitats listed by the EPA, United States Fish and Wildlife, or California Department of Fish and Game for the project site. Implementation of the proposed project would not have a substantially adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species. Therefore, the proposed project would result in less-than-significant impacts related to candidate, sensitive, or special status species.

Wetlands

As discussed above, while areas surrounding the project site may contain supportive habitat for freshwater wetlands, the project site and areas immediately adjacent have been developed, paved, or landscaped over the past 100 years. The Zanja, which traverses the project site, is mainly channelized underground, with the exception of a portion on the eastern and western sides of the project site, and is contained within a concrete- and natural-bottomed channel. Although the Zanja contains vegetation, wildlife and habitat, the City's Master Environmental Assessment identifies no areas within the City as wetlands. However, the proposed project does not include provisions for development on or near the soft-bottom portion of the Zanja and would not interfere with any future restoration projects. Nonetheless, indirect impacts such as runoff from construction of project could result in significant impacts to the Zanja. Therefore, without mitigation, the proposed project would result in a significant impact related to wetlands.

Tree Preservation

The majority of land within the project site has been developed, paved, or landscaped. Trees within the project site consist of landscape trees along roadways, landscaping of commercial and residential properties and the two public parks within the project site. The City of Redlands Trees and Tree Protection Ordinance protects public, native and specimen, and landmark trees. Under the Ordinance a permit is required for pruning or removal of protected trees. The Ordinance also requires sufficient guards or protections to prevent injury to protected trees during construction, repair, alteration, relocation

or removal of any buildings or structures within the City. Development projects under the proposed project would be required to comply with the City's Trees and Tree Protection Ordinance. Therefore, the proposed project would result in less-than-significant impacts related to tree preservation.

MITIGATION MEASURES

The City of Redlands shall ensure the following measures are implemented as appropriate for individual development projects associated with the proposed project.

Migratory Birds

BR1 For projects developed under the proposed project, the City shall require that not more than thirty days prior to construction activities that occur between February 1 and August 15, surveys for nesting special-status avian species and raptors shall be conducted by a qualified biologist selected by the developer(s), and approved by the City, on the affected portion of the site following USFWS and/or CDFG guidelines. The results of the surveys shall be submitted to the United States Fish and Wildlife Service and/or the California Department of Fish and Game, as well as the City of Redlands. If no active avian nests are identified on or within 500 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 developer can begin construction after the previous breeding season for local raptors and other special status species has ended (after August 15) and before the next breeding season begins (before February 15).

BR2 For projects developed under the proposed project, the City shall require that if active nests for special-status avian species or raptor nests are found within the construction footprint, construction activities shall be delayed within a minimum 500-foot buffer zone surrounding active raptor nests and 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.

BR 3 For projects developed under the proposed project, the City shall require the following measures related to burrowing owl nesting habitat:

1. Prior to construction activity, focused pre-construction surveys shall be conducted for burrowing owls where suitable habitat is present within the construction areas. Surveys shall be conducted no less than 14 days and no more than 30 days prior to commencement of construction activities and surveys shall be conducted in accordance with CDFG burrowing owl survey protocol.
2. If unoccupied burrows are found during the non-breeding season, the developer(s) may collapse the unoccupied burrows, or otherwise obstruct their entrances to prevent owls from entering and nesting in the burrows. This measure would prevent inadvertent impacts during construction activities.
3. If no occupied burrows are found in the survey area, a letter report documenting survey methods and findings shall be submitted to the City and CDFG for review and approval, and no further mitigation is necessary.
4. If occupied burrows are found, impacts on the burrows shall be avoided by providing a buffer of 165 feet during the non-breeding season (September 1 through February 14) or 250 feet during the breeding season (February 15 through August 15). The size of the buffer area may be adjusted if a qualified biologist and CDFG determine it would not be likely to have

adverse effects on the owls. No project activity shall commence within the buffer area until a qualified biologist confirms that the burrow is no longer occupied. If the burrow is occupied by a nesting pair, a minimum of 7.5 acres of foraging habitat contiguous to the burrow shall be maintained until the breeding season is over.

5. If disturbance of occupied burrows is unavoidable, on site passive relocation techniques approved by CDFG shall be used to encourage owls to move to alternative burrows outside of the impact area. However, no occupied burrows shall be disturbed during the nesting season unless a qualified biologist verifies through non-invasive methods that juveniles from the occupied burrows are foraging independently and are capable of independent survival. Mitigation for foraging habitat for relocated pairs shall follow guidelines provided in the California Burrowing Owl Consortium's April 1995 Burrowing Owl Survey Protocol and Mitigation Guidelines, which ranges from 7.5 to 19.5 acres per pair.

Wetlands

BR 4 For projects developed under the proposed project the City shall ensure that project applicant's comply with Section 402 of the Clean Water Act and National Pollutant Discharge Elimination System (NPDES) standards during and following construction to ensure that dirt, construction materials, pollutants or other human associated materials are not discharged into the Zanja. A certification from the Regional Water Quality Control Board will be required prior to project construction.

LEVEL OF IMPACT AFTER MITIGATION

Wildlife Species and Habitats

Impacts related to wildlife species and habitats were determined to be significant without mitigation. Mitigation Measures **BR1** through **BR3** would reduce the impacts to less than significant.

Sensitive Habitats and Special-status Species

Impacts related to sensitive habitats and special-status species were determined to be less than significant without mitigation.

Wetlands

Impacts related to wetlands were determined to be significant without mitigation. Mitigation Measure **BR4** would reduce the impacts to less than significant.

Tree Preservation

Impacts related to tree preservation were determined to be less than significant without mitigation.

CUMULATIVE IMPACTS

Unless otherwise identified below, the geographic context for the analysis of cumulative biological impacts includes the "Region" as defined by the southeastern portion of San Bernardino County and northwestern portion of Riverside County, approximately 30 miles east, south and west of the project site, and extending north to peaks of the San Bernardino Mountain Range. The analysis accounts for all anticipated cumulative growth within this geographic area as represented by full implementation of the Counties of San Bernardino and Riverside General Plans for the identified areas, as well as the City of Redlands General Plan.

New development proposed under the proposed project would not result in the direct loss of open space or vegetation. Further, the purpose of the Downtown General Plan and Specific Plan No. 45 Amendments is to focus development in the Downtown area which has been developed for more than 100 years. By focusing development in areas that do not contain open space and/or vegetation, this relieves some of the pressure for development on the outlining areas of Redlands which do contain natural habitats.

Wildlife Species and Habitats

As illustrated in **Figure 4.3-1**, above, San Bernardino County and the City of Redlands support a number of wildlife movement corridors. With continued conversion of natural habitat to human use, the availability and accessibility of wildlife movement corridors could dwindle below levels necessary to maintain linkages between suitable wildlife habitats. However, as described above, the proposed project would focus development in urban areas and away from natural habitats. Although it is possible that development would continue to occur outside the downtown area, and some of this development would contribute to a cumulative loss of habitat, the proposed project would not. Therefore, the proposed project would not result in a cumulatively considerable contribution to the loss of natural habitat. Cumulative impacts related to wildlife corridors would be less than significant.

With respect to migratory birds, the MBTA fully protects migratory avian species, including sensitive species such as burrowing owls, during the breeding season by the establishment of a federal prohibition. Development proposed under the proposed project and cumulative projects will be required to comply with the law established by the MBTA. Therefore, impacts would be less than significant.

Sensitive Habitats and Special-status Species

Conversion of open space to urban development will result in an overall loss of existing habitat throughout the City of Redlands and the region as a whole. Consequently, this loss of habitat will result in the loss of sensitive wildlife species native to the region and their habitat, including those species listed under State and federal ESAs and those individuals identified by State and federal resource agencies as Species of Concern, Fully Protected, or Sensitive. Although more mobile species might be able to survive these changes in their environment by moving to new areas, less mobile species could simply be locally extirpated. The availability and accessibility of remaining foraging and natural habitats in this ecosystem would dwindle with continued conversion of natural habitat to human use. Remaining natural areas may not be able to support additional plant or animal populations above their current carrying capacities. Therefore, cumulative development would result in a regionally significant cumulative impact on special status species and their habitats.

As discussed above, the project site does not contain sufficient undisturbed open space areas for habitats which could support the designated sensitive species of plant and animals located in the Redlands 7.5-minute quadrangle. While sensitive species had been identified to exist in the project site in the past, there are no active rare, endangered or threatened habitats listed by the EPA, United States Fish and Wildlife, or California Department of Fish and Game for the project site. Therefore, no significant overall cumulative impact would occur, and the proposed project would not result in a cumulatively considerable contribution to the loss of special status species or sensitive habitats.

Wetlands

As discussed above, while the surrounding areas may contain supportive habitat for freshwater wetlands, the project site has been developed, paved, or landscaped over the past 100 years. The Zanja, which traverses the project site, is mainly channelized underground, with the exception of a portion on the eastern and western sides of the project site, and is contained within a concrete- and natural-bottomed channel. The Zanja contains minimal vegetation and wildlife habitat, however, the City's Master

Environmental Assessment identifies no areas within the City as wetlands. The proposed project does not include development plans for the Zanja and would not interfere with any future restoration projects. Therefore, the proposed project would not contribute to a cumulatively adverse effect on the loss wetlands.

Tree Preservation

The geographic context for the analysis of cumulative impacts for compliance with local policies and/or ordinances protecting biological resources is the City of Redlands. As discussed above, The City of Redlands Trees and Tree Protection Ordinance protects public, native and specimen, and landmark trees. Under the Ordinance a permit is required for pruning or removal of protected trees. New developments proposed under the Downtown General Plan and Specific Plan No. 45 Amendments and cumulative projects will be required to comply with the City of Redlands Trees and Tree Protection Ordinance. Therefore, the proposed project would not have a considerable contribution to conflicts with local plans or policies and the cumulative impact related to tree preservation would be less than significant.