

4.4 BIOLOGICAL RESOURCES

This section analyzes potential Biological Resource impacts associated with implementation of the proposed General Plan. Information in this section has been prepared in accordance with CEQA guidelines.

4.4.1 RELEVANT POLICIES AND REGULATIONS

Federal

Federal Endangered Species Act

The Federal Endangered Species Act of 1973 (FESA) protects plants and animals that the government has listed as “Endangered” or “Threatened”. A Federally listed species is protected from unauthorized “take”, which is defined in the FESA as “harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or attempt to engage in any such conduct”. All persons are presently prohibited from taking a Federally listed species unless and until: (1) the appropriate Section 10(a) permit has been issued by the U.S. Fish and Wildlife Service (USFWS) or (2) an Incidental Take Statement is obtained as a result of formal consultation between a Federal Agency and the USFWS pursuant to Section 7 of the FESA and the implementing regulations that pertain to it (50 *Code of Federal Regulations* [CFR] 402). “Person” is defined in the FESA as an individual, corporation, partnership, trust, association, or any private entity; any officer, employee, agent, department or instrument of the Federal government; any State, Municipality, or political subdivision of the State; or any other entity subject to the jurisdiction of the United States.

Clean Water Act/River and Harbors Act

The U.S. Army Corps of Engineers (USACE) Regulatory Branch regulates activities that discharge dredged or fill materials into “Waters of the U.S.”¹ under Section 404 of the Clean Water Act (CWA) and Section 10 of the Rivers and Harbors Act. This permitting authority applies to all “Waters of the U.S.” where the material has the effect of: (1) replacing any portion of “Waters of the U.S.” with dry land or (2) changing the bottom elevation of any portion of “Waters of the U.S.”.

Section 401 of the CWA provides the Regional Water Quality Control Board (RWQCB) with the authority to regulate, through a Water Quality Certification, any proposed Federally permitted activity that may affect water quality. Among such activities are discharges of dredged or fill material permitted by the USACE pursuant to Section 404 of the CWA. Section 401 requires the RWQCB to provide “certification that there is reasonable assurance that an activity which may result in the discharge to ‘waters of the U.S.’ will not violate water quality standards”. Water Quality Certification must be based on a finding that the proposed discharge would comply with water quality standards, which contain numeric and narrative objectives that can be found in each of the nine Regional Boards’ Basin Plans.

Development allowed within any identified jurisdictional areas in the proposed General Plan Update Study Area (which includes the City of Rancho Cucamonga and its related SOI) may be subject to requirements under Sections 401 and 404 of the CWA. This includes filling; stockpiling; converting to a storm drain; modifying an existing storm drain or channel; creating a channel; stabilizing a bank; modifying road or utility transmission line crossings; or completing

¹ “Waters of the U.S.” include navigable coastal and inland waters, lakes, rivers, and streams and their tributaries; interstate waters and their tributaries; wetlands adjacent to such waters; intermittent streams; and other waters that could affect interstate commerce.

other modifications of an existing drainage, stream, or wetland. Also, both permanent and temporary impacts to jurisdictional resources are regulated activities that require permit authorization from these agencies.

Executive Order 11990

Executive Order 11990 directs Federal agencies (1) to minimize the destruction, loss, or degradation of wetlands and (2) to preserve and enhance the natural and beneficial values of wetlands in carrying out the agencies' responsibilities. Each agency shall avoid undertaking or providing assistance for new construction located in wetlands unless the head of the agency finds (1) that there is no practicable alternative to such construction and (2) that the proposed action includes all practicable measures to minimize harm to wetlands that may result from such use. In making this finding, the head of the agency may take into account economic, environmental, and other pertinent factors.

Migratory Bird Treaty Act

Pursuant to the Migratory Bird Treaty Act of 1918, Federal law prohibits the taking of migratory birds, their nests, or their eggs (16 *United States Code* [USC], Section 703), except as allowed by permit pursuant to 50 CFR 21. The statute states:

Unless and except as permitted by regulations made as hereinafter provided in this subchapter, it shall be unlawful at any time, by any means or in any manner, to pursue, hunt, take, capture, kill, attempt to take, capture, or kill...any migratory bird, any part, nest, or egg of any such bird...included in the terms of the [Migratory Bird] conventions.

In 1972, the Migratory Bird Treaty Act was amended to include protection for migratory birds of prey (e.g., raptors).

Bald and Golden Eagle Protection Act

The Bald and Golden Eagle Protection Act provides for the protection of the bald eagle (*Haliaeetus leucocephalus*) and the golden eagle (*Aquila chrysaetos*) by prohibiting, except under certain specified conditions, the taking, possession, and commerce of such birds. The 1972 amendments increased penalties for violating provisions of the Act and strengthened other enforcement measures. A 1978 amendment authorized the Secretary of the Interior to permit the taking of golden eagle nests that interfere with resource development or recovery operations.

State

California Endangered Species Act

Pursuant to the California Endangered Species Act and Section 2081 of the *California Fish and Game Code*, an Incidental Take Permit from the California Department of Fish and Game (CDFG) is required for projects that could result in the take of a State-listed Threatened or Endangered species. Under the California Endangered Species Act, "take" is defined as an activity that would directly or indirectly kill an individual of a species. If a species is listed by the Federal and State governments as Threatened or Endangered, a consistency finding in accordance with Section 2080.1 of the CESA is issued when a project is deemed consistent with an existing USFWS Biological Opinion (BO), pursuant to Section 7 of the FESA.

Porter-Cologne Act

The Porter-Cologne Act provides the State with very broad authority to regulate “Waters of the State”.² Generally, any person proposing to discharge waste into a water body that could affect its water quality must file a “Report of Waste Discharge” when there is no Federal nexus, such as under Section 404(b)(1) of the Clean Water Act. Although “waste” is partially defined as any waste substance associated with human habitation, the RWQCB interprets this to include fill discharge into water bodies.

California Fish and Game Code

“Waters of the State”

Sections 1600–1616 of the *California Fish and Game Code* protect “Waters of the State”. Activities of State and local agencies, as well as public utilities that are project proponents, are regulated by the CDFG under Section 1602 of the code; this section regulates any work that would (1) substantially divert or obstruct the natural flow of any river, stream, or lake; (2) substantially change or use any material from the bed, channel, or bank of any river, stream, or lake; or (3) deposit or dispose of debris, waste, or other material containing crumbled, flaked, or ground pavement where it may pass into any river, stream, or lake. For project activities (described above) that may affect stream channels and/or riparian vegetation regulated under Sections 1600 through 1603, CDFG authorization is required in the form of a Streambed Alteration Agreement.

Birds of Prey and Migratory Birds

Sections 3503 and 3503.5 of the *California Fish and Game Code* makes it unlawful to take, possess, or destroy the nests and eggs of birds of prey.

Section 3513 of the *California Fish and Game Code* duplicates the Federal protection of migratory birds and prohibits taking and possession of any migratory nongame bird, as designated in the Migratory Bird Treaty Act.

CDFG Review

As a trustee agency, the CDFG has jurisdiction over certain resources held in trust for the people of California. Trustee agencies are generally required to be notified of CEQA documents relevant to their jurisdiction, whether or not these agencies have actual permitting authority or approval power over aspects of the underlying project (14 *California Code of Regulations* [CCR] Section 15386). The CDFG, as a trustee agency, must be notified of CEQA documents regarding projects involving wildlife of the State as well as Rare and Endangered native plants,³ wildlife areas, and ecological reserves. As a trustee agency the CDFG cannot approve or

² The Porter-Cologne Act defines “Waters of the State” as “any surface water or groundwater, including saline waters, within the boundaries of the state” (this includes the rivers, streams, or lakes protected by Sections 1600–1616 of the *California Fish and Game Code*).

³ Section 15380 of CEQA indicates that a lead agency can consider a non-listed species (e.g., California Native Plant Society [CNPS] List 1B and 2 plants) to be Endangered, Rare, or Threatened for the purposes of CEQA if the species can be shown to meet the criteria in the definition of “Rare” or “Endangered”. A “Rare” species is one which (1) although not presently threatened with extinction, is existing in such small numbers throughout all or a significant portion of its range that it may become endangered if its environment worsens or (2) is likely to become endangered within the foreseeable future throughout all or a significant portion of its range and may be considered “threatened” by the FESA. An “Endangered” species is one whose survival and reproduction in the wild are in immediate jeopardy from one or more causes, including loss of habitat, change in habitat, overexploitation, predation, competition, disease, or other factors.

disapprove a project; however, lead and responsible agencies are required to consult with them. The CDFG, as the trustee agency for wildlife resources, shall provide the requisite biological expertise to review and comment upon environmental documents and impacts arising from buildout of the proposed General Plan Update Study Area and shall make recommendations regarding those resources held in trust for the people of California (*California Fish and Game Code*, Section 1802).

County

The County of San Bernardino Code of Ordinances (Title 8, Division 8, Chapter 88.01: Plant Protection and Management) provides regulations and guidelines for managing plant resources in the unincorporated areas of the County on property or combinations of property under private or public ownership. A Tree or Plant Removal Permit is required for the removal of regulated trees and plants. Regulated trees and plants are identified in Section 88.01.070(b) (Regulated Trees) and Section 88.01.080(b) (Regulated Riparian Plants).

Trees protected by Section 88.01.070(b) include (1) any living, native tree with a 6-inch or greater stem diameter or 19 inches in circumference measured 4.5 feet above natural grade level and (2) 3 or more palm trees in linear plantings which are 50 feet or greater in length within established windrows⁴ or parkway plantings.

Riparian plants are regulated in riparian areas located on private land within unincorporated areas of the County and on public land owned by the County, unless exempt. Section 88.01.080(b) applies to the removal of vegetation within 200 feet of the bank of a stream⁵ or in an area indicated as a protected riparian area on an overlay map or Specific Plan.

Local

The City's Tree Preservation Ordinance in the Municipal Code (Title 19, Environmental Protection - Chapter 19.08) states that eucalyptus, palm, oak, sycamore, pine, and other trees growing within the City are a natural aesthetic resource and are worthy of protection. A permit is required for the removal, relocation, or destruction of a Heritage Tree.⁶

4.4.2 EXISTING CONDITIONS

The City of Rancho Cucamonga and adjacent SOI are located on the U.S. Geological Survey's (USGS's) Mount Baldy, Cucamonga Peak, Devore, Ontario, and Guasti 7.5-minute quadrangles. The City is located in the foothills of the eastern end of the San Gabriel Mountains and west of the San Bernardino Mountains. The City's SOI extends into the San Bernardino National Forest. The topography of the City slopes downward from the foothills in the north. Elevations in the City range from 1,018 to 1,600 feet above mean sea level (msl). The northern edge of the City's SOI is at approximately 5,200 feet above msl. North of the SOI, elevations increase to Cucamonga Peak, Bighorn Peak, Ontario Peak, Sugarloaf Peak, and Mount Baldy. Soils in the proposed General Plan Update Study Area include Cieneba sandy loam

⁴ A windrow is a continuous row of trees originally planted to create a windbreak or physical separation between two uses.

⁵ "Stream" includes those shown on USGS topographic quadrangle maps as perennial or intermittent, blue or brown lines (solid or dashed), and river wash areas.

⁶ A Heritage Tree is defined as any tree, shrub, or plant meeting at least one of the following criteria: (1) eucalyptus windrows; (2) woody plants in excess of 15 feet in height and having a single trunk circumference of 15 inches or more measured 24 inches from ground level; (3) multi-trunk trees having a total circumference of 30 inches or more measured 24 inches from ground level; (4) a stand of trees the nature of which makes each dependent upon the others for survival; or (5) any other tree as may be deemed historically or culturally significant by the Planning Director because of size, condition, location, or aesthetic qualities.

(9–15 percent slopes), Cieneba-Rock Outcrop Complex, Delhi fine sand, Grangeville fine sandy loam, Grangeville fine sandy loam (saline-alkali), Greenfield sandy loam (2–9 percent slopes and 9–15 percent slopes), Hanford coarse sandy loam (2–9 percent slopes and 9–15 percent slopes), Hanford sandy loam (0–2 percent slopes), Psamments and Fluvents (frequently flooded), Ramona sandy loam (2–9 percent slopes; 9–15 percent slopes; and 15–30 percent slopes, eroded), Saugus sandy loam (30–50 percent slopes), Soboba gravelly loamy sand (0–9 percent slopes), Soboba stony loamy sand (2–9 percent slopes), Tujunga loamy sand (0–5 percent slopes), and Tujunga gravelly loamy sand (0–9 percent slopes) (USDA NRCS 2007). Numerous streams in the Santa Ana Watershed (USGS Cataloging Unit 18070203) drain from the north into the proposed General Plan Update Study Area. The western edge of the Study Area runs along Cucamonga Creek. Other creeks flowing through the City include Deer Creek, Day Creek, and Etiwanda Creek.

Open Space Areas

The proposed Land Use Plan for the proposed General Plan Update Study Area includes 6,024 acres, or approximately 25 percent of the Study Area, devoted to open space. These areas include parks, undeveloped parcels, conservation areas, and flood-control/utility corridors. Hillside residential and very low-density residential areas also contribute to the rural character in the northern portion of the Study Area.

Five conservation areas have been established to protect alluvial fan sage scrub habitat within the proposed General Plan Update Study Area. These conservation areas were created as mitigation banks for private and public works projects. They include the 760-acre North Etiwanda Preserve, the 200-acre Day Creek Preserve, the 137-acre San Sevaine Spreading Grounds, the 880-acre U.S. Forest Service Conservation Area, and the 35-acre Existing Conservation Area. In addition to alluvial fan sage scrub, these conservation areas protect habitats such as sycamore alluvial woodland, California walnut woodland, and fresh water marsh.

Methodology

BonTerra Consulting conducted a literature search to identify special status plants, wildlife, and habitats known to occur in the vicinity of the proposed General Plan Update Study Area (i.e., the USGS Mount Baldy, Cucamonga Peak, Devore, Ontario, and Guasti 7.5-minute quadrangles). Sources reviewed include (1) database searches of the California Natural Diversity Database (CNDDDB) (CDFG 2009) and the California Native Plant Society's (CNPS's) Electronic Inventory of Rare and Vascular Plants of California (CNPS 2009); (2) the *South Coast Missing Linkages Project: A Linkage Design for the San Gabriel-San Bernardino Connection* (Penrod et al. 2004); (3) the most recent Federal Register listing package and critical habitat determination for each Federally listed Endangered or Threatened species reported from the vicinity of the proposed General Plan Update Study Area; (4) the *Rancho Cucamonga General Plan Update: Draft Environmental Impact Report* (Rancho Cucamonga 2001c); and (5) other biological studies conducted within the Study Area.

BonTerra Consulting Ecologists Allison Rudalevige and Lindsay Messett conducted a windshield survey in the proposed General Plan Update Study Area. The purpose of the survey was to identify and map vegetation types within the Study Area at a planning level based on previous review of aerial photographs. The survey consisted of driving public and dirt roads throughout the proposed General Plan Update Study Area, with frequent stops to observe habitats, watercourses, plants, and wildlife at a reconnaissance level. Binoculars were used to observe habitats and wildlife beyond fences and in areas that were inaccessible. To avoid trespassing, vegetation mapping on private property was done using binoculars and aerial

photograph interpretation. Areas that could not be viewed through binoculars were not mapped. A representative list of plant and wildlife species observed during the survey is included in Appendix C.

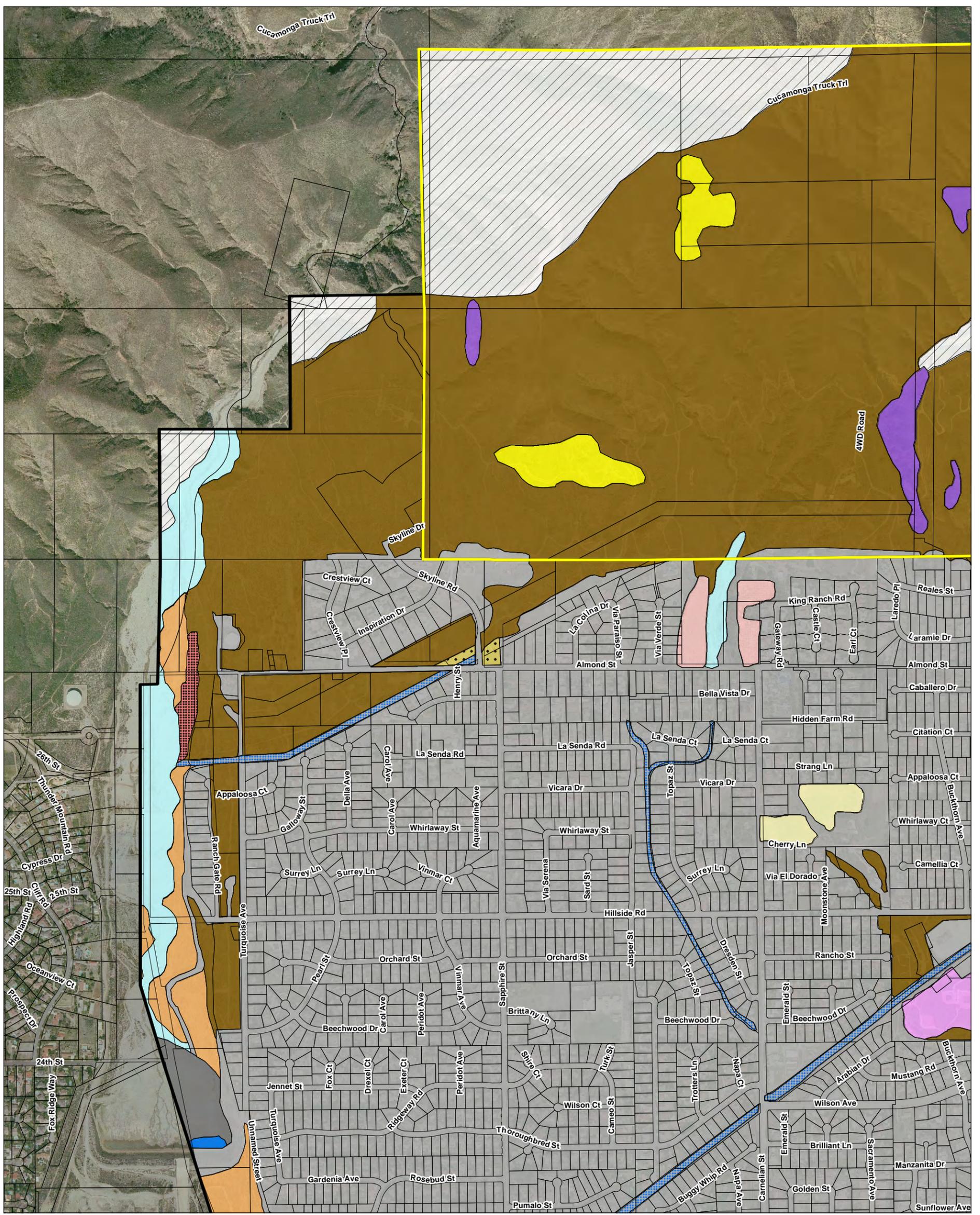
Nomenclature for vegetation types generally follows that of *A Manual of California Vegetation* (Sawyer and Keeler-Wolf 2009). Vegetation was mapped in the field on aerial photographs at a scale of 1 inch equals 600 feet (1" = 600'). Plant species were identified in the field or collected for later identification. Plants were identified using taxonomic keys in Hickman (1993), Munz (1974), Abrams (1923, 1944, 1951), and Abrams and Ferris (1960). Taxonomy follows Hickman (1993) or current scientific journals for scientific and common plant names. Taxonomy for wildlife generally follows Fisher and Case (1997) and Stebbins (2003) for amphibians and reptiles, American Ornithologists' Union (2008) for birds, and Baker et al. (2003) for mammals.

Vegetation Types and Other Areas

Eighteen vegetation types and other areas not containing vegetation occur in the proposed General Plan Update Study Area (Exhibit 4.4-1, Vegetation Types; Table 4.4-1). Table 4.3-1 identifies the approximate acreage for the vegetation types and other areas in the Study Area. A representative list of plant species observed during vegetation mapping is included in Appendix C.

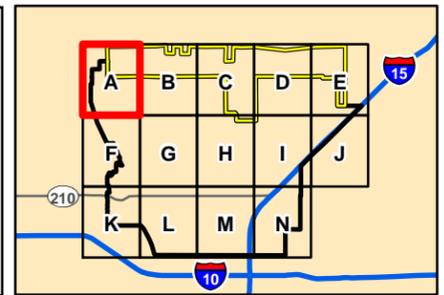
**TABLE 4.4-1
EXISTING VEGETATION TYPES AND OTHER AREAS IN THE RANCHO
CUCAMONGA PROPOSED GENERAL PLAN UPDATE STUDY AREA**

Vegetation Type or Other Area	Existing (Acres)		
	City Boundary	Sphere of Influence	Total
California Sycamore Woodland	0	20	20
Coast Live Oak Woodland	3	11	14
Coast Live Oak – California Sycamore Woodland	0	40	40
Red Willow Thicket	4	19	23
Chaparral	6	74	80
Mixed Sage Scrub	427	2,738	3,165
Scale Broom Scrub	1,454	2,324	3,778
Alluvial Wash	76	83	159
Mulefat Thickets	8	0	8
Grassland	0	70	70
Annual Brome Grassland	358	30	388
Ruderal	489	0	489
Ornamental	926	0	926
Orchard – Agriculture	293	0	293
Disturbed	229	0	229
Channel	318	30	348
Developed/Ornamental	21,018	358	21,376
Open Water	94	0	94
Not Mapped	18	257	275
Total	25,721	6,054	31,775



City Of Rancho Cucamonga	Red Willow Thicket	Grassland	Channel
Sphere of Influence	Chaparral	Annual Brome Grassland	Developed/Ornamental
Vegetation	Mixed Sage Scrub	Ruderal	Open Water
California Sycamore Woodland	Scale Broom Scrub	Ornamental	Not Mapped
Coast Live Oak Woodland	Alluvial Wash	Orchard - Agriculture	
Coast Live Oak - California Sycamore Woodland	Mule Fat Thicket	Disturbed	

Source: BonTerra Consulting 2009



Vegetation Types

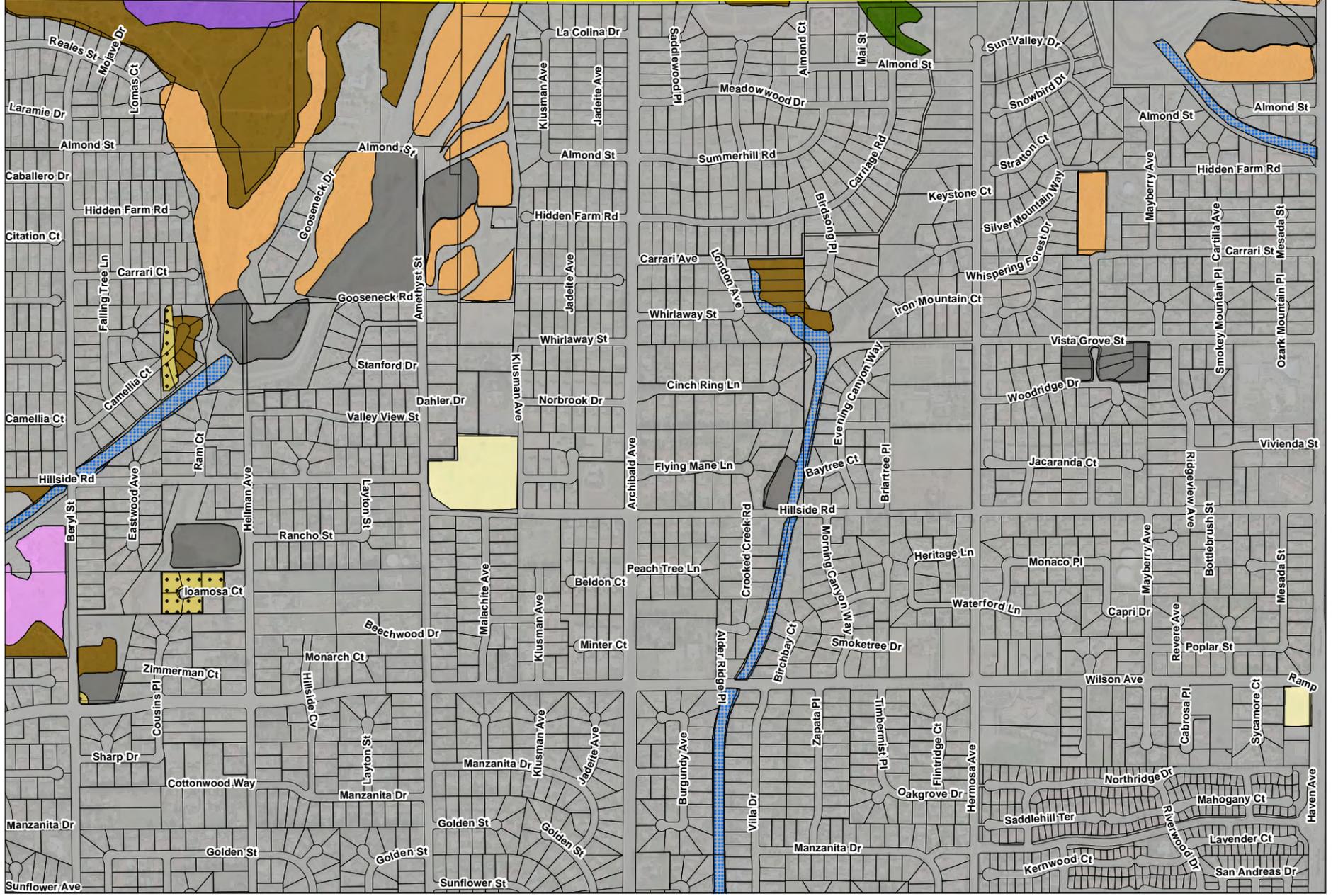
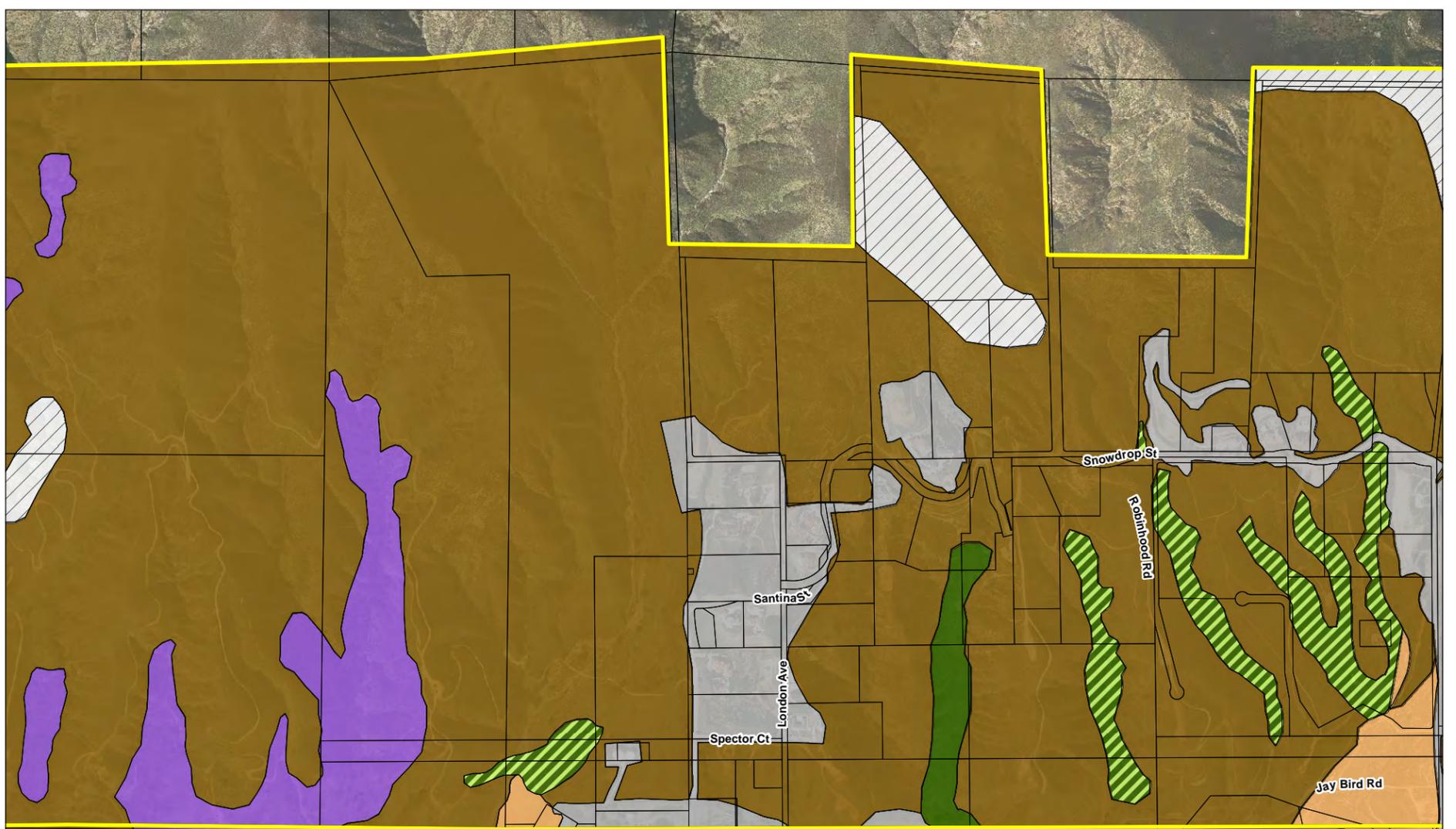
Rancho Cucamonga General Plan Update



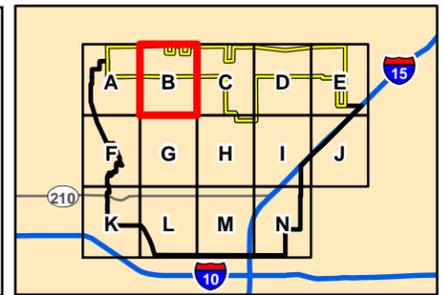
Exhibit 4.4-1A



D:\Projects\Hogle\J007\Map.mxd



City Of Rancho Cucamonga	Red Willow Thicket	Grassland	Channel
Sphere of Influence	Chaparral	Annual Brome Grassland	Developed/Ornamental
Vegetation	Mixed Sage Scrub	Ruderal	Open Water
California Sycamore Woodland	Scale Broom Scrub	Ornamental	Not Mapped
Coast Live Oak Woodland	Alluvial Wash	Orchard - Agriculture	
Coast Live Oak - California Sycamore Woodland	Mule Fat Thicket	Disturbed	



Source: BonTerra Consulting 2009

Vegetation Types

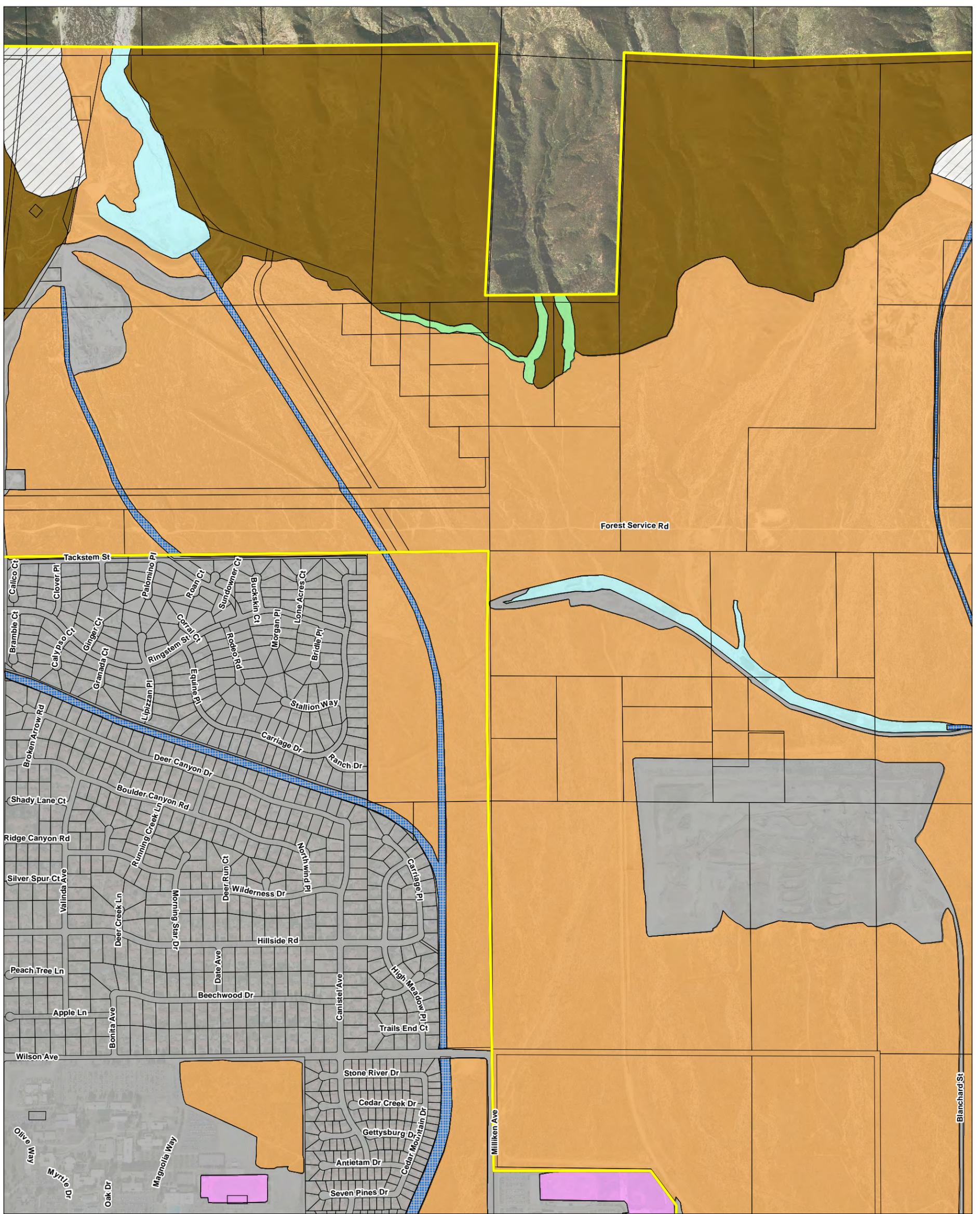
Rancho Cucamonga General Plan Update



Exhibit 4.4-1B

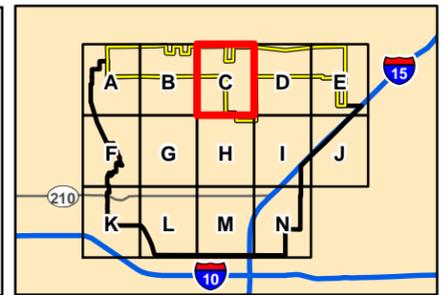


D:\Projects\Hogle\J007\veg.mxd



City Of Rancho Cucamonga	Red Willow Thicket	Grassland	Channel
Sphere of Influence	Chaparral	Annual Brome Grassland	Developed/Ornamental
Vegetation	Mixed Sage Scrub	Ruderal	Open Water
California Sycamore Woodland	Scale Broom Scrub	Ornamental	Not Mapped
Coast Live Oak Woodland	Alluvial Wash	Orchard - Agriculture	
Coast Live Oak - California Sycamore Woodland	Mule Fat Thicket	Disturbed	

Source: BonTerra Consulting 2009



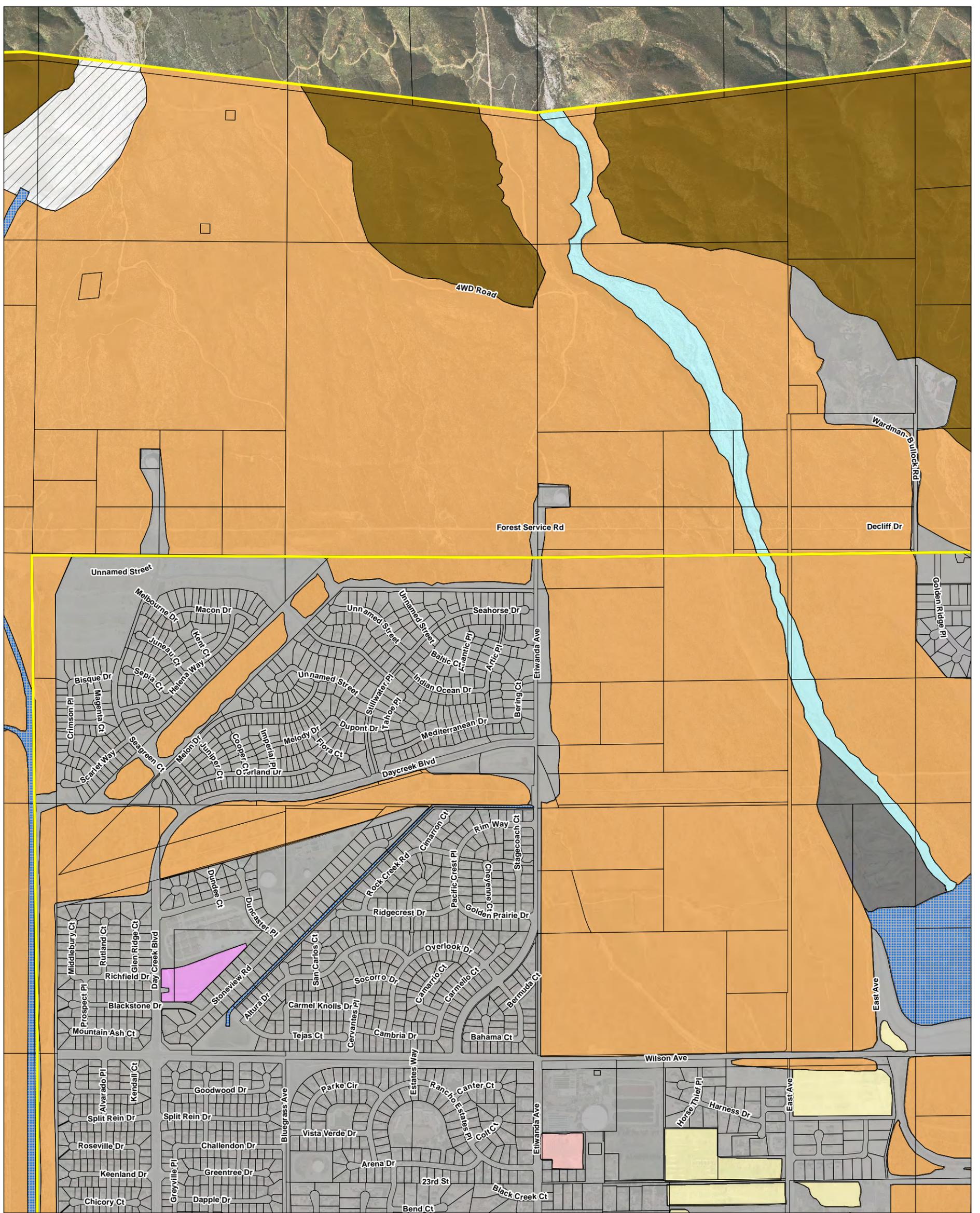
Vegetation Types
Rancho Cucamonga General Plan Update



Exhibit 4.4-1C

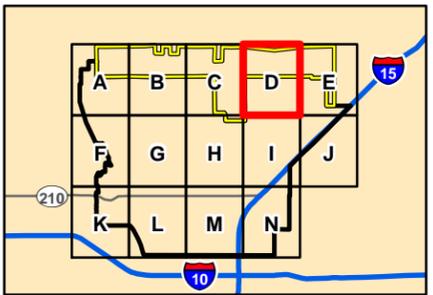


D:\Projects\Hogle\J007\veg.mxd



City Of Rancho Cucamonga	Red Willow Thicket	Grassland	Channel
Sphere of Influence	Chaparral	Annual Brome Grassland	Developed/Ornamental
Vegetation	Mixed Sage Scrub	Ruderal	Open Water
California Sycamore Woodland	Scale Broom Scrub	Ornamental	Not Mapped
Coast Live Oak Woodland	Alluvial Wash	Orchard - Agriculture	
Coast Live Oak - California Sycamore Woodland	Mule Fat Thicket	Disturbed	

Source: BonTerra Consulting 2009



Vegetation Types

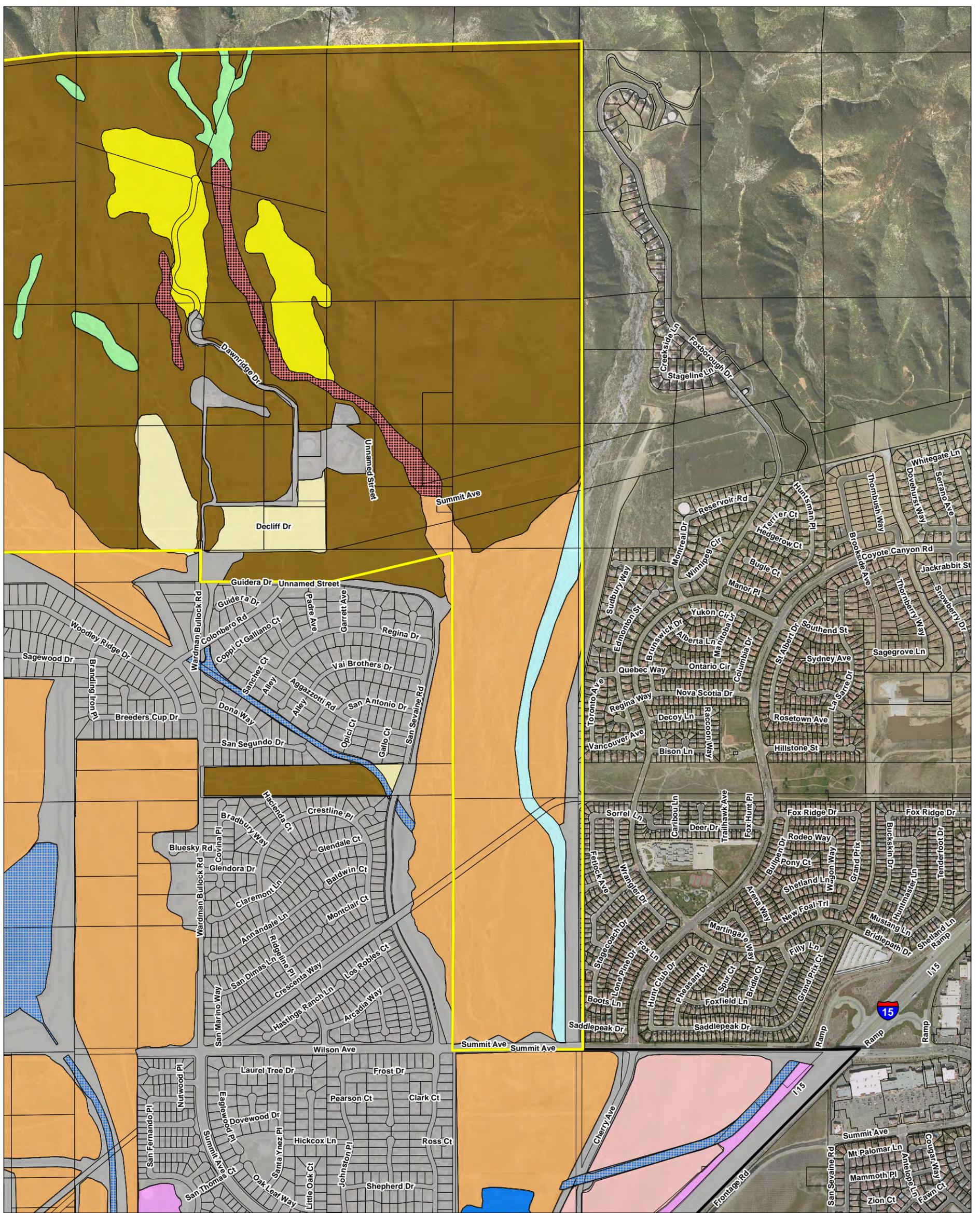
Rancho Cucamonga General Plan Update



Exhibit 4.4-1D

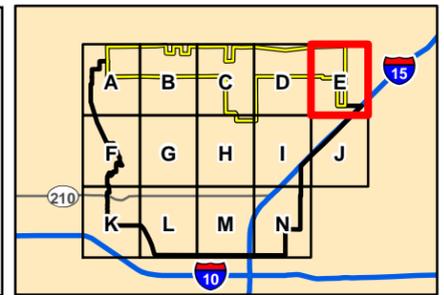


D:\Projects\Hogle\J007\Veg.mxd



City Of Rancho Cucamonga	Red Willow Thicket	Grassland	Channel
Sphere of Influence	Chaparral	Annual Brome Grassland	Developed/Ornamental
Vegetation	Mixed Sage Scrub	Ruderal	Open Water
California Sycamore Woodland	Scale Broom Scrub	Ornamental	Not Mapped
Coast Live Oak Woodland	Alluvial Wash	Orchard - Agriculture	
Coast Live Oak - California Sycamore Woodland	Mule Fat Thicket	Disturbed	

Source: BonTerra Consulting 2009



Vegetation Types

Rancho Cucamonga General Plan Update

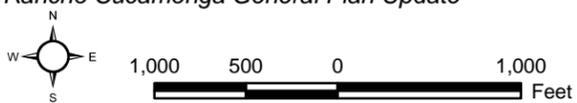
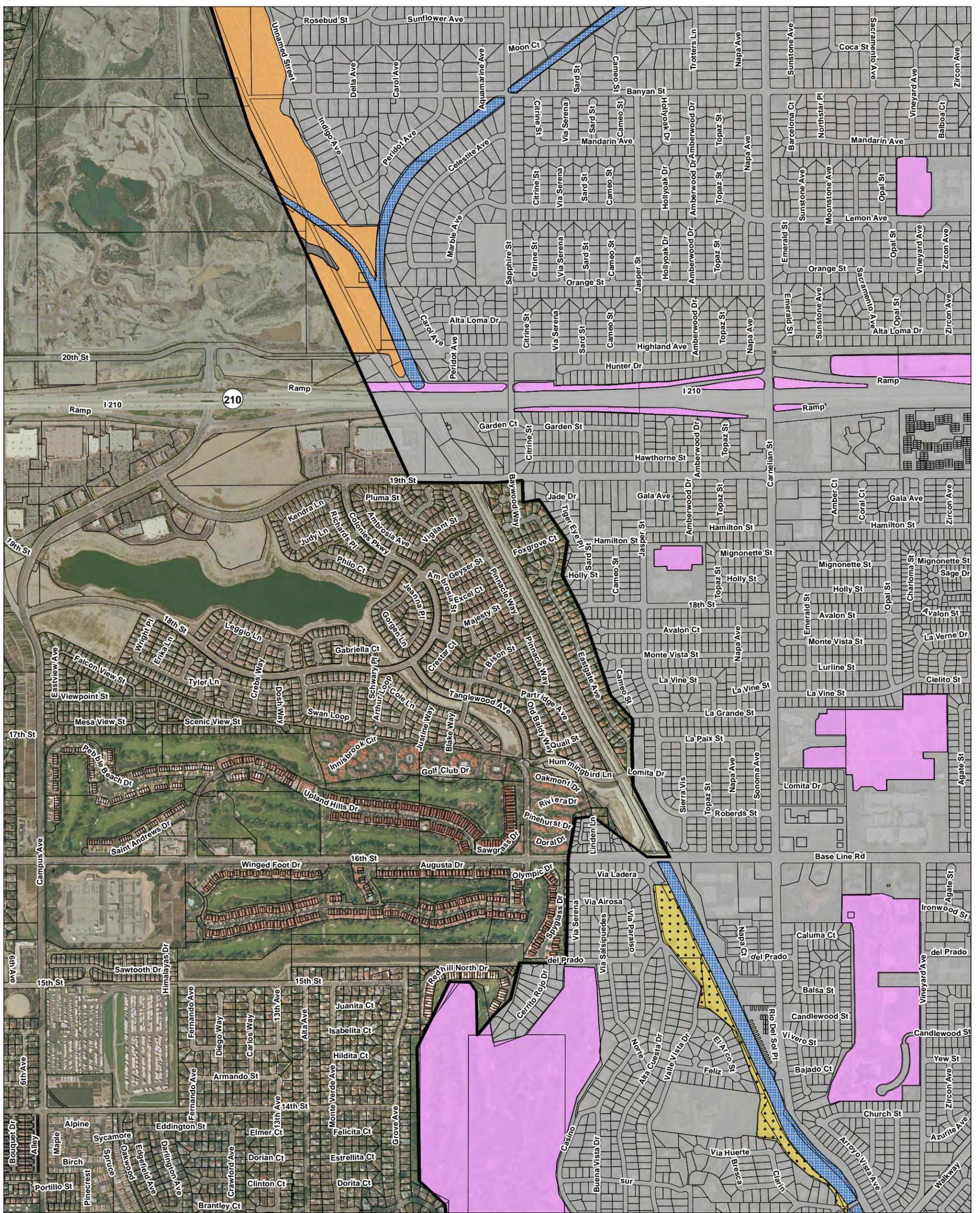


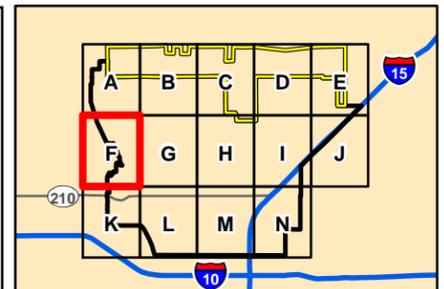
Exhibit 4.4-1E



D:\Projects\Hogle\J007\Veg.mxd



City Of Rancho Cucamonga	Red Willow Thicket	Grassland	Channel
Sphere of Influence	Chaparral	Annual Brome Grassland	Developed/Ornamental
Vegetation	Mixed Sage Scrub	Ruderal	Open Water
California Sycamore Woodland	Scale Broom Scrub	Ornamental	Not Mapped
Coast Live Oak Woodland	Alluvial Wash	Orchard - Agriculture	
Coast Live Oak - California Sycamore Woodland	Mule Fat Thicket	Disturbed	



Source: BonTerra Consulting 2009

Vegetation Types

Rancho Cucamonga General Plan Update

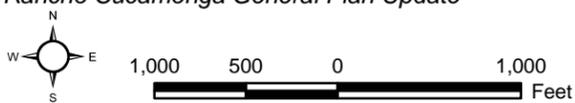
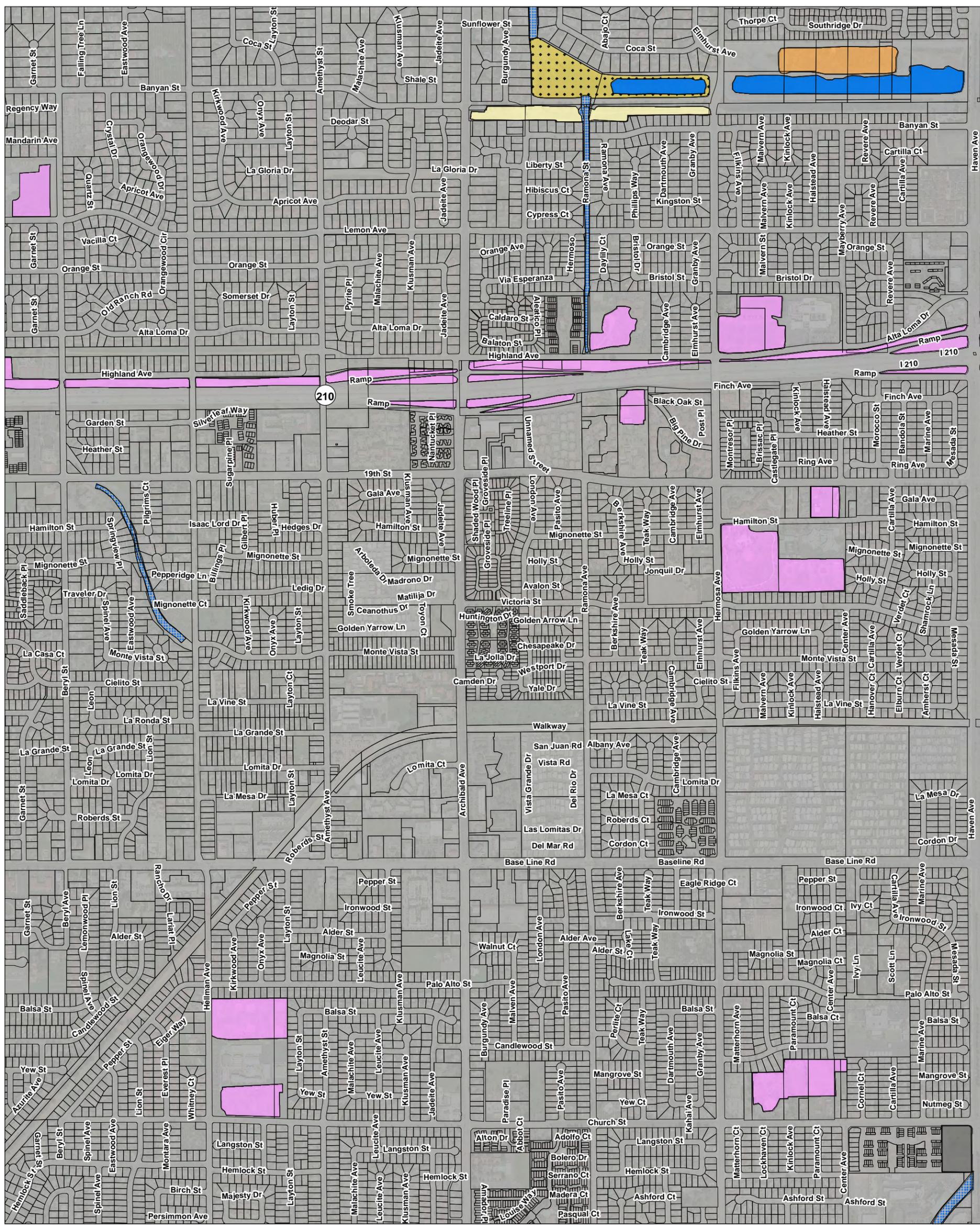


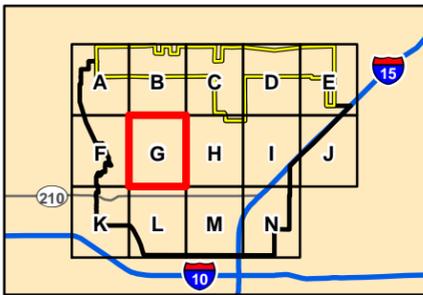
Exhibit 4.4-1F





City Of Rancho Cucamonga	Red Willow Thicket	Grassland	Channel
Sphere of Influence	Chaparral	Annual Brome Grassland	Developed/Ornamental
Vegetation	Mixed Sage Scrub	Ruderal	Open Water
California Sycamore Woodland	Scale Broom Scrub	Ornamental	Not Mapped
Coast Live Oak Woodland	Alluvial Wash	Orchard - Agriculture	
Coast Live Oak - California Sycamore Woodland	Mule Fat Thicket	Disturbed	

Source: BonTerra Consulting 2009



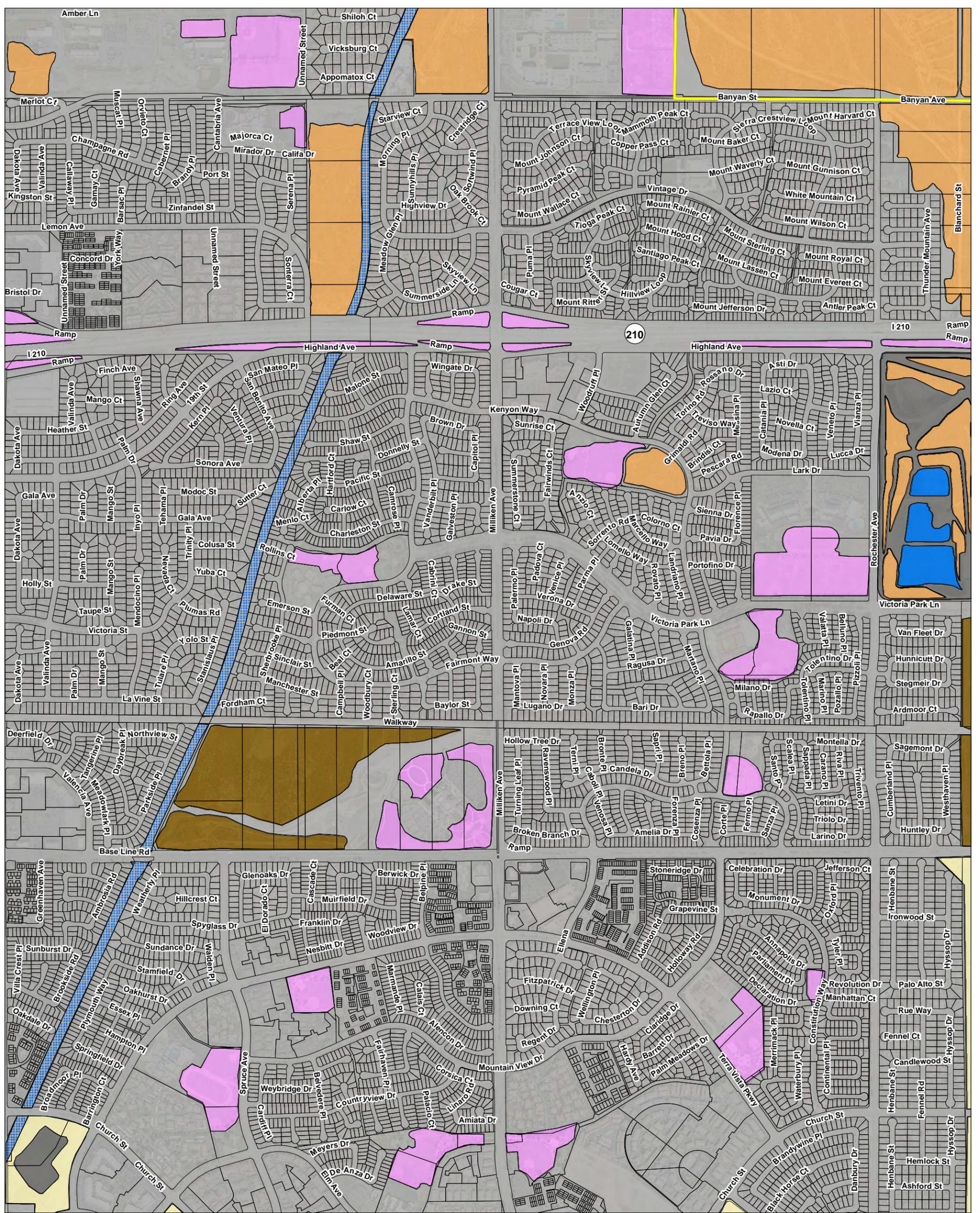
Vegetation Types

Rancho Cucamonga General Plan Update

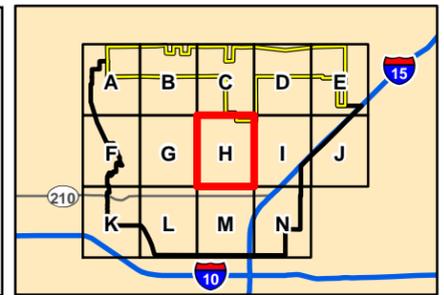


Exhibit 4.4-1G





City Of Rancho Cucamonga	Red Willow Thicket	Grassland
Sphere of Influence	Chaparral	Annual Brome Grassland
Vegetation	Mixed Sage Scrub	Ruderal
California Sycamore Woodland	Scale Broom Scrub	Ornamental
Coast Live Oak Woodland	Alluvial Wash	Orchard - Agriculture
Coast Live Oak - California Sycamore Woodland	Mule Fat Thicket	Disturbed
	Channel	Developed/Ornamental
		Open Water
		Not Mapped



Source: BonTerra Consulting 2009

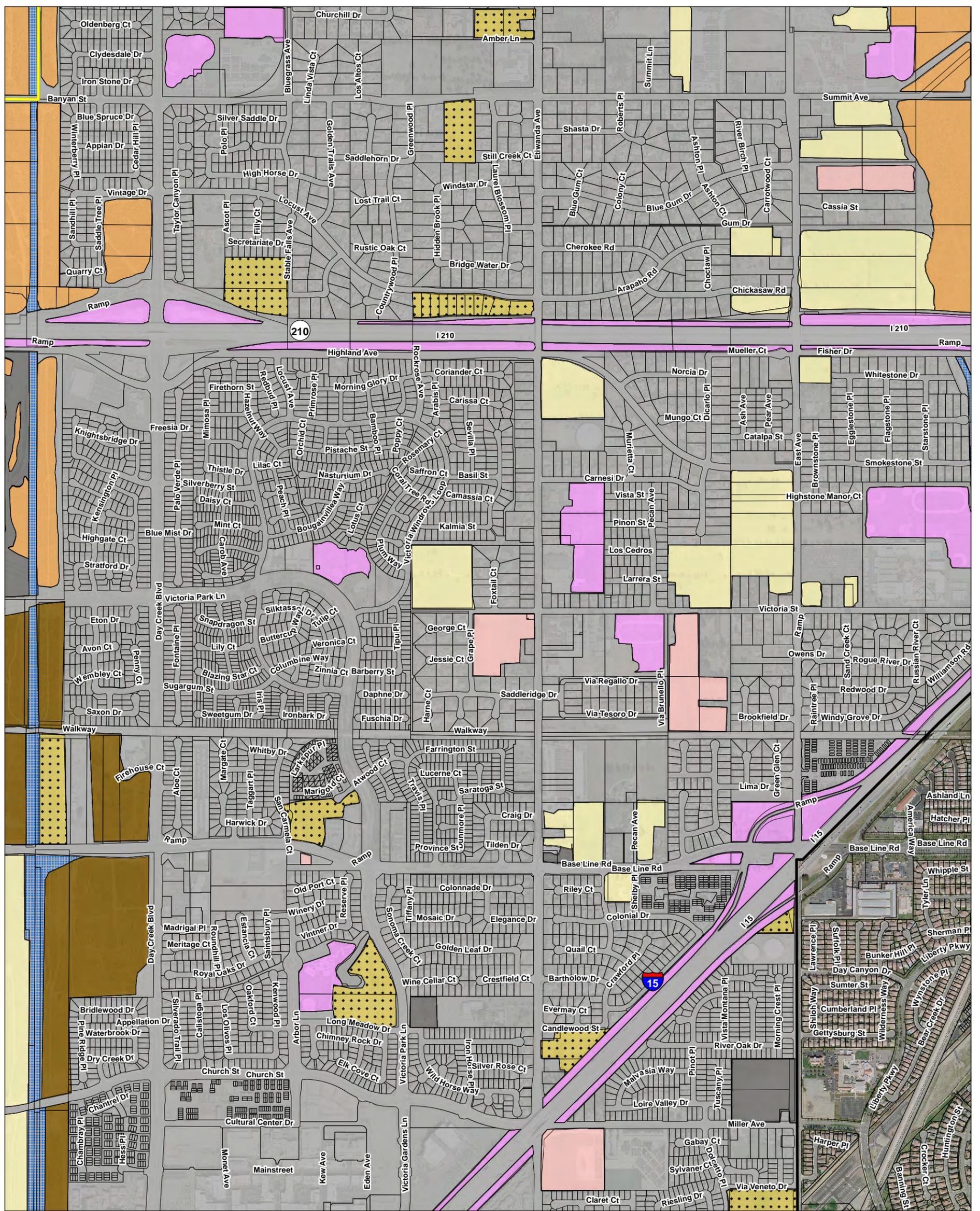
Vegetation Types

Rancho Cucamonga General Plan Update



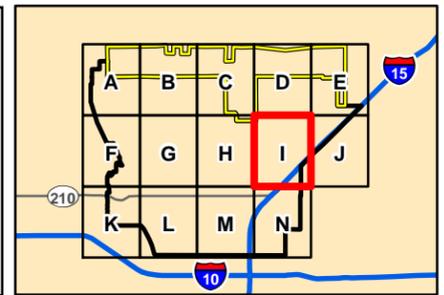
Exhibit 4.4-1H





City Of Rancho Cucamonga	Red Willow Thicket	Grassland	Channel
Sphere of Influence	Chaparral	Annual Brome Grassland	Developed/Ornamental
Vegetation	Mixed Sage Scrub	Ruderal	Open Water
California Sycamore Woodland	Scale Broom Scrub	Ornamental	Not Mapped
Coast Live Oak Woodland	Alluvial Wash	Orchard - Agriculture	
Coast Live Oak - California Sycamore Woodland	Mule Fat Thicket	Disturbed	

Source: BonTerra Consulting 2009



Vegetation Types

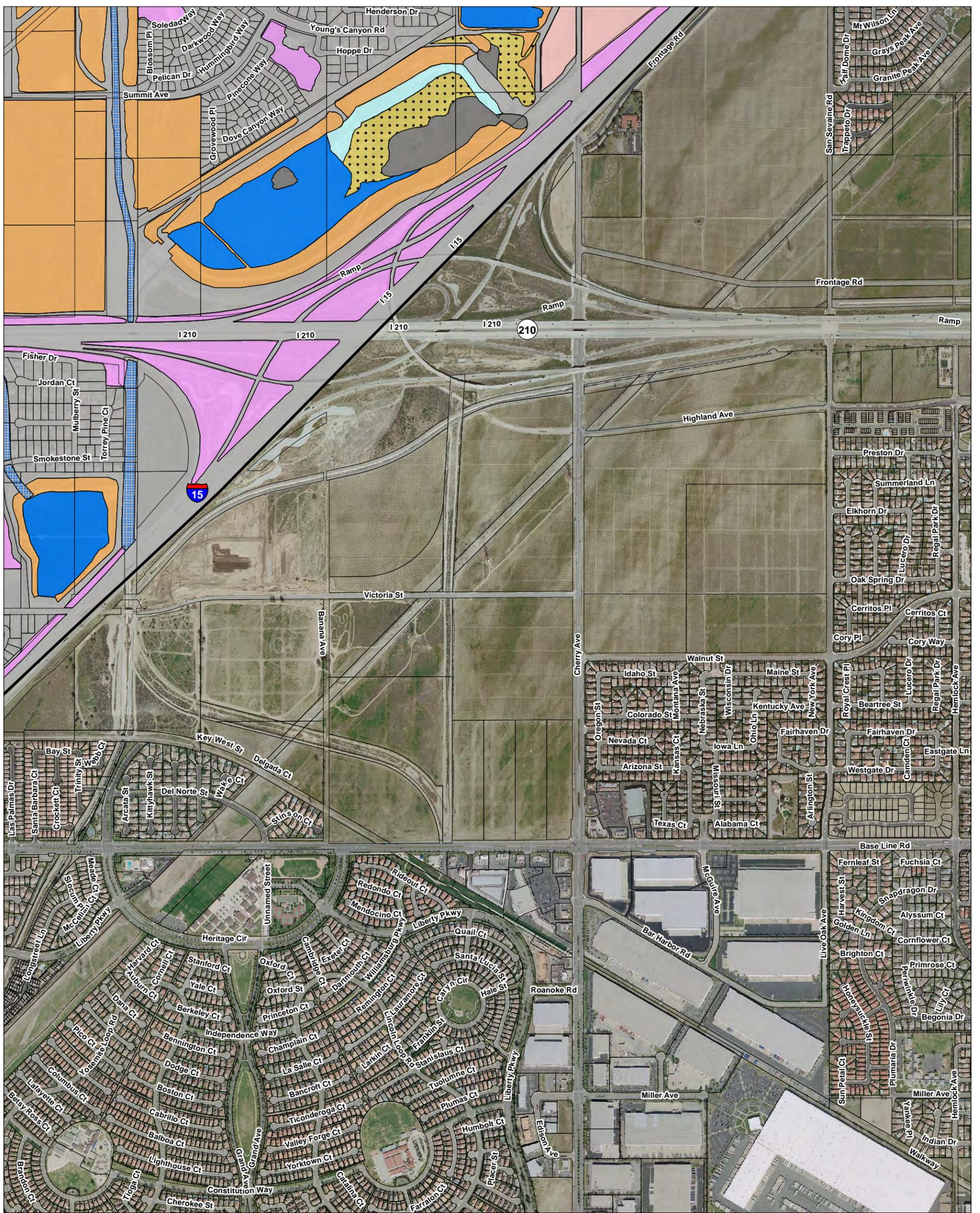
Rancho Cucamonga General Plan Update



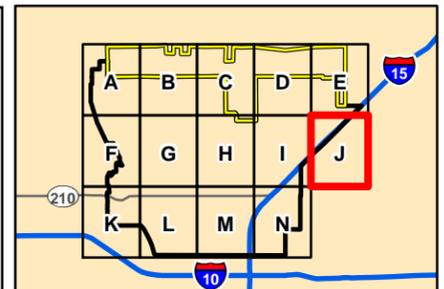
Exhibit 4.4-11



D:\Projects\Hogle\J007\veg.mxd



City Of Rancho Cucamonga	Red Willow Thicket	Grassland	Channel
Sphere of Influence	Chaparral	Annual Brome Grassland	Developed/Ornamental
Vegetation	Mixed Sage Scrub	Ruderal	Open Water
California Sycamore Woodland	Scale Broom Scrub	Ornamental	Not Mapped
Coast Live Oak Woodland	Alluvial Wash	Orchard - Agriculture	
Coast Live Oak - California Sycamore Woodland	Mule Fat Thicket	Disturbed	



Source: BonTerra Consulting 2009

Vegetation Types

Rancho Cucamonga General Plan Update

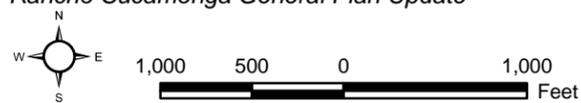
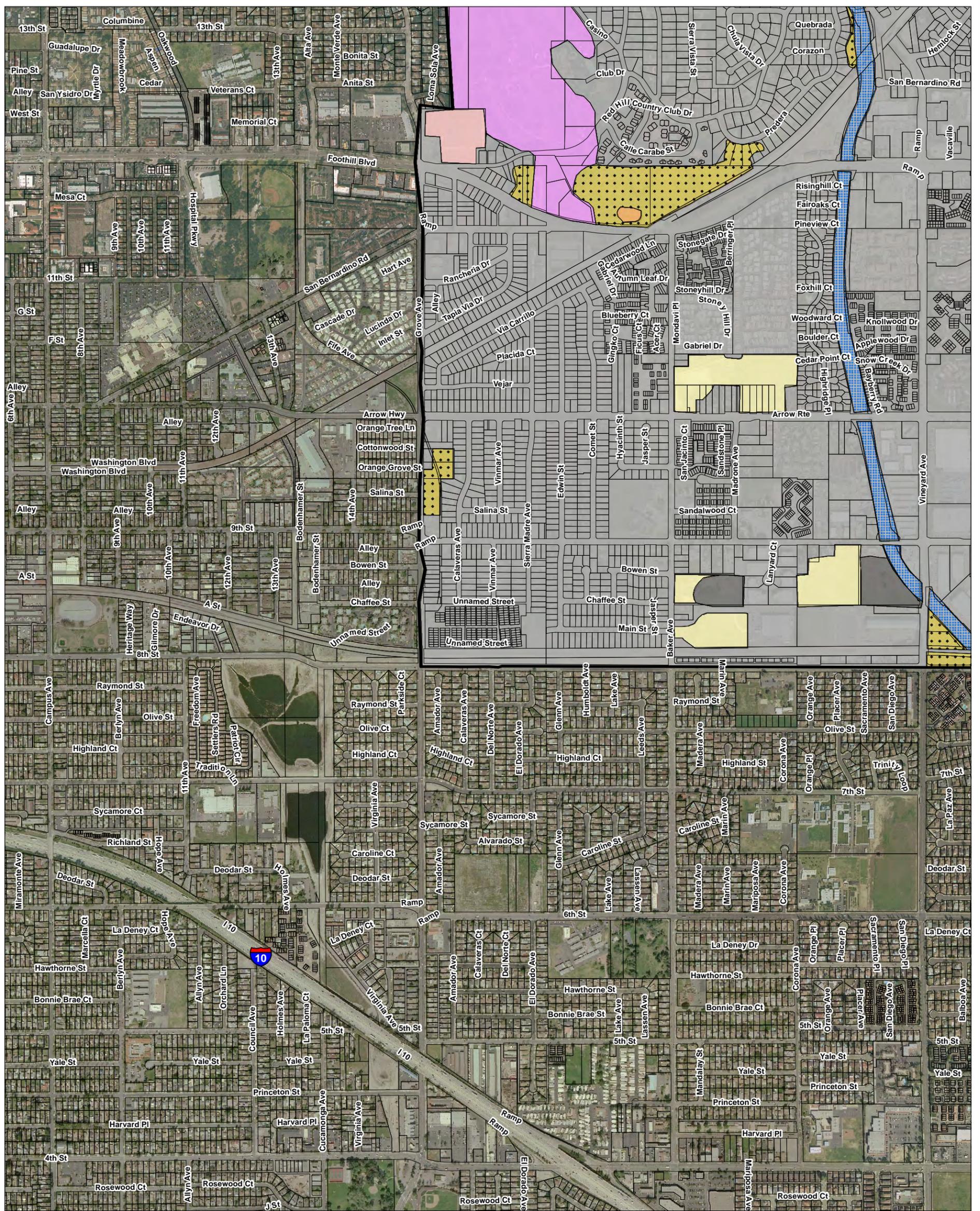
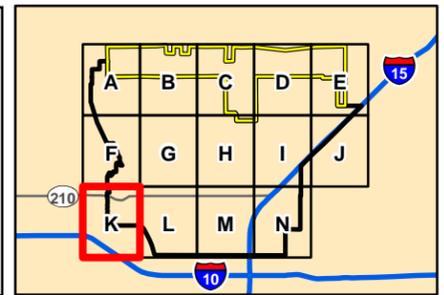


Exhibit 4.4-1J





City Of Rancho Cucamonga	Red Willow Thicket	Grassland	Channel
Sphere of Influence	Chaparral	Annual Brome Grassland	Developed/Ornamental
Vegetation	Mixed Sage Scrub	Ruderal	Open Water
California Sycamore Woodland	Scale Broom Scrub	Ornamental	Not Mapped
Coast Live Oak Woodland	Alluvial Wash	Orchard - Agriculture	
Coast Live Oak - California Sycamore Woodland	Mule Fat Thicket	Disturbed	



Source: BonTerra Consulting 2009

Vegetation Types

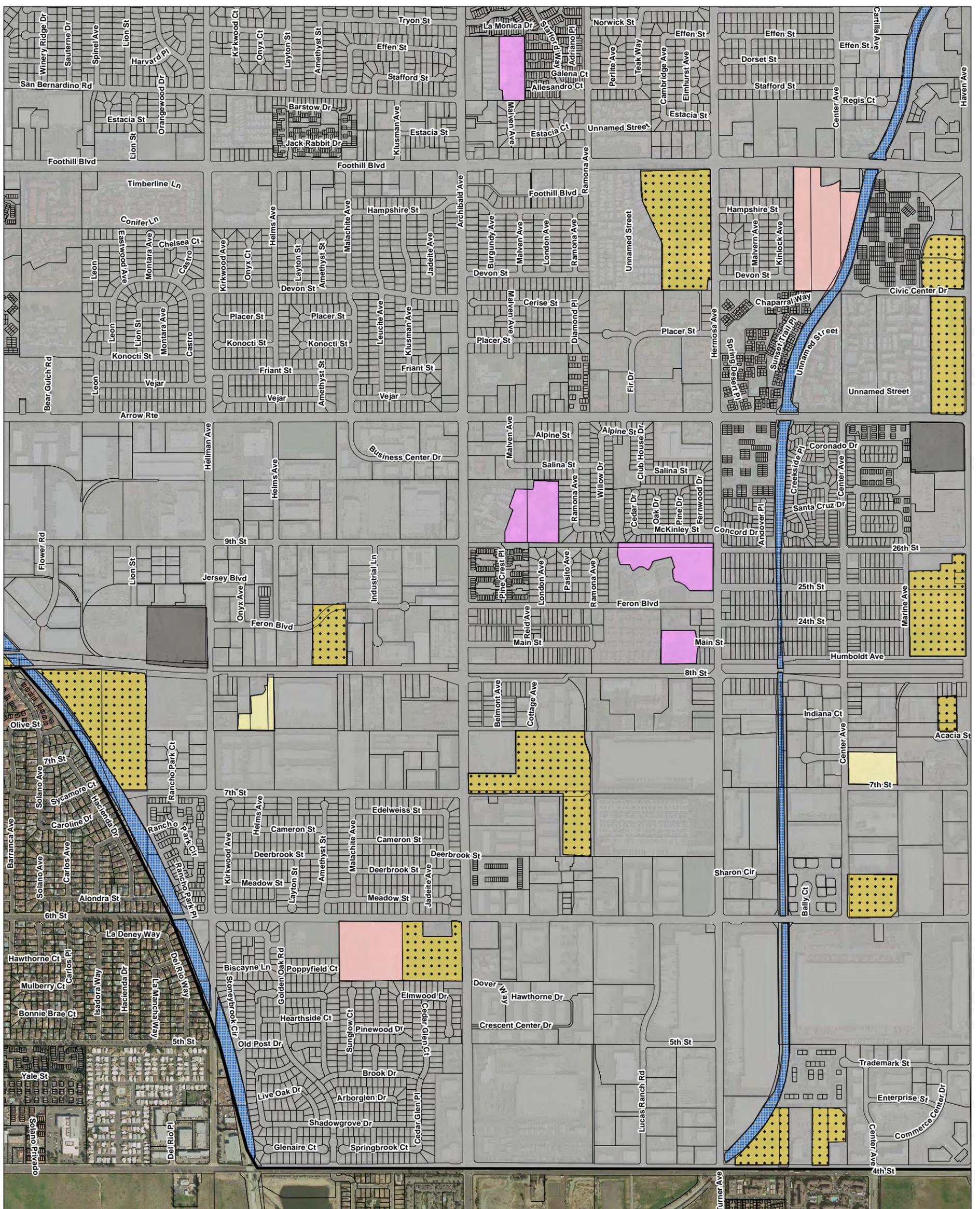
Rancho Cucamonga General Plan Update



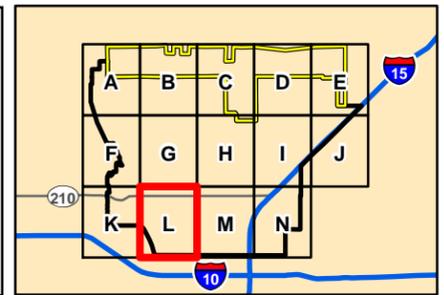
Exhibit 4.4-1K



D:\Projects\Hogle\J007\Map.mxd



City Of Rancho Cucamonga	Red Willow Thicket	Grassland	Channel
Sphere of Influence	Chaparral	Annual Brome Grassland	Developed/Ornamental
Vegetation	Mixed Sage Scrub	Ruderal	Open Water
California Sycamore Woodland	Scale Broom Scrub	Ornamental	Not Mapped
Coast Live Oak Woodland	Alluvial Wash	Orchard - Agriculture	
Coast Live Oak - California Sycamore Woodland	Mule Fat Thicket	Disturbed	



Source: BonTerra Consulting 2009

Vegetation Types

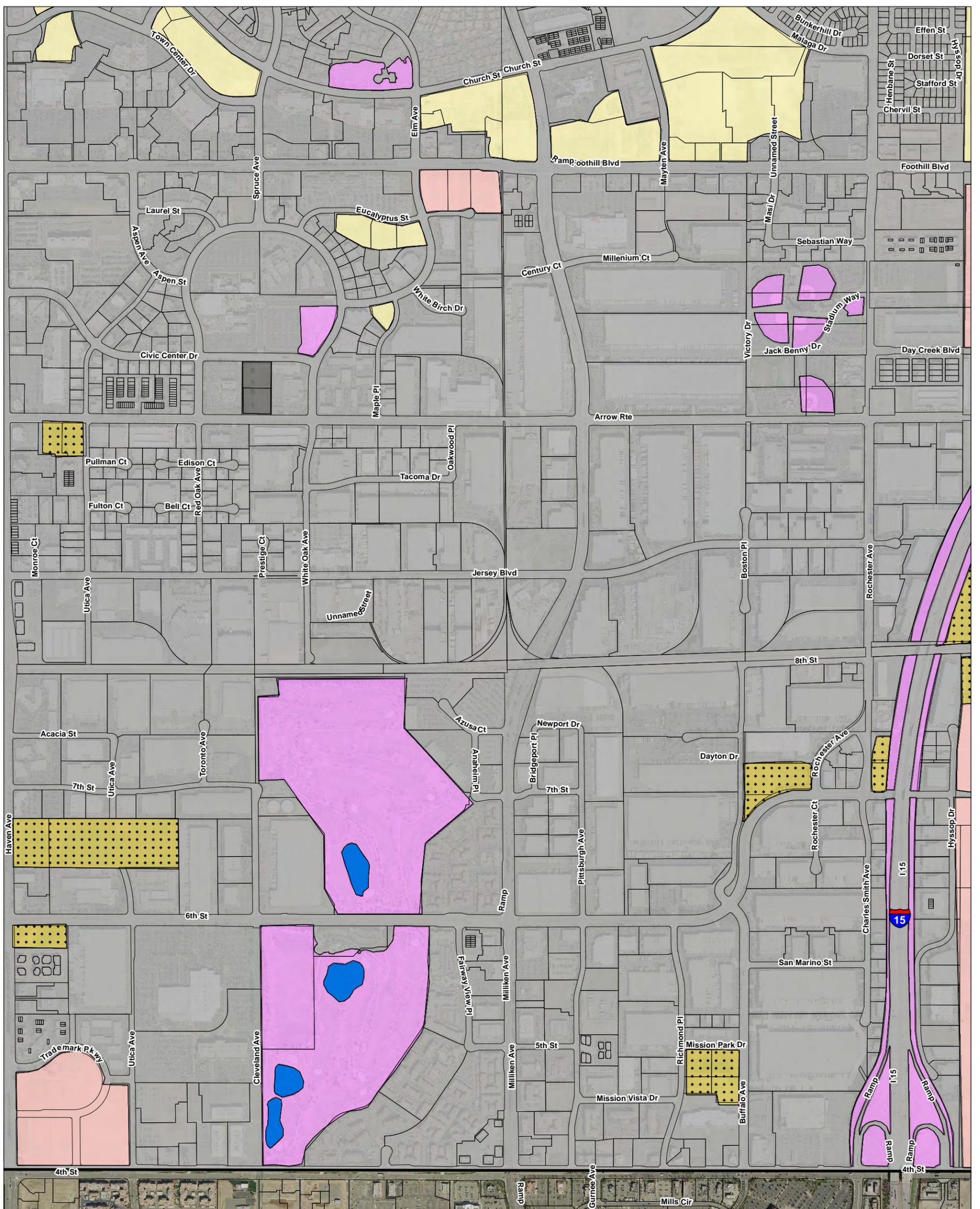
Rancho Cucamonga General Plan Update



Exhibit 4.4-1L

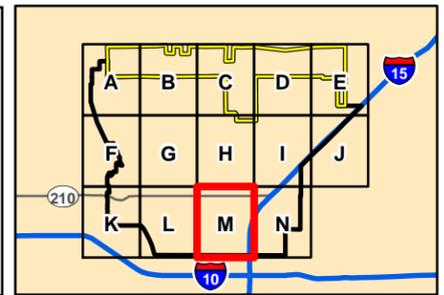


D:\Projects\Hogle\J007\veg.mxd



City Of Rancho Cucamonga	Red Willow Thicket	Grassland	Channel
Sphere of Influence	Chaparral	Annual Brome Grassland	Developed/Ornamental
Vegetation	Mixed Sage Scrub	Ruderal	Open Water
California Sycamore Woodland	Scale Broom Scrub	Ornamental	Not Mapped
Coast Live Oak Woodland	Alluvial Wash	Orchard - Agriculture	
Coast Live Oak - California Sycamore Woodland	Mule Fat Thicket	Disturbed	

Source: BonTerra Consulting 2009



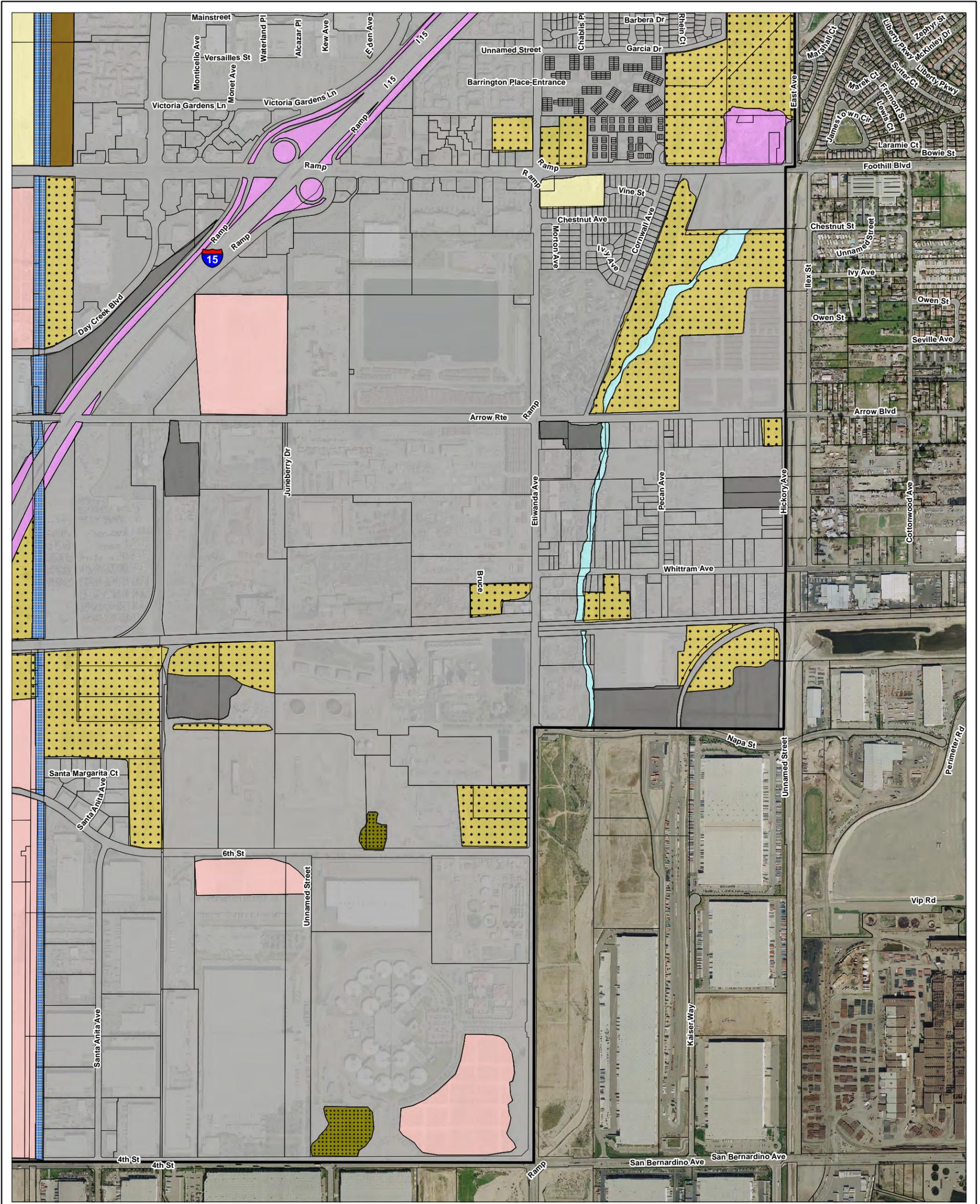
Vegetation Types
Rancho Cucamonga General Plan Update



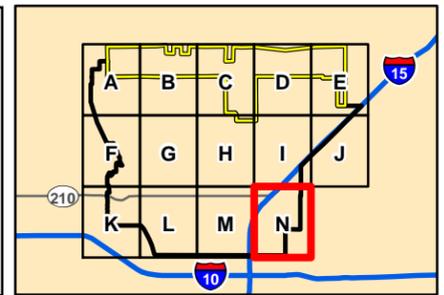
Exhibit 4.4-1M



D:\Projects\Hogle\J007\Map.mxd



City Of Rancho Cucamonga	Red Willow Thicket	Grassland	Channel
Sphere of Influence	Chaparral	Annual Brome Grassland	Developed/Ornamental
Vegetation	Mixed Sage Scrub	Ruderal	Open Water
California Sycamore Woodland	Scale Broom Scrub	Ornamental	Not Mapped
Coast Live Oak Woodland	Alluvial Wash	Orchard - Agriculture	
Coast Live Oak - California Sycamore Woodland	Mule Fat Thicket	Disturbed	



Source: BonTerra Consulting 2009

Vegetation Types

Rancho Cucamonga General Plan Update



Exhibit 4.4-1N



D:\Projects\Hogle\J007\Map.mxd

California Sycamore Woodland

California sycamore woodland occurs along the canyon bottoms in the northern portion of the proposed General Plan Update Study Area, typically in the City's SOI. This vegetation type is dominated by western sycamore (*Platanus racemosa*). Scattered sycamores occur downstream in the various drainages, and are included in the alluvial wash vegetation type. Cucamonga, Deer, Day, and Etiwanda Creeks were previously documented as containing southern sycamore-alder riparian woodland with a variety of species, including white alder (*Alnus rhombifolia*), big-leaf maple (*Acer macrophyllum*), canyon live oak (*Quercus chrysolepis*), California bay laurel (*Umbellularia californica*), western sycamore, velvet ash (*Fraxinus velutina*), black cottonwood (*Populus balsamifera* ssp. *trichocarpa*), Fremont cottonwood (*Populus fremontii*), and black willow (*Salix gooddingii*) (Rancho Cucamonga 2001c).

Coast Live Oak Woodland

Coast live oak woodland occurs along the canyon bottoms in the northern portion of the proposed General Plan Update Study Area, typically in the City's SOI. This vegetation type is dominated by coast live oak (*Quercus agrifolia*).

Coast Live Oak – California Sycamore Woodland

Coast live oak – California sycamore woodland occurs along the canyon bottoms in the northern portion of the proposed General Plan Update Study Area, typically in the City's SOI. This vegetation type is co-dominated by coast live oak and western sycamore. The understory of this vegetation type includes toyon (*Heteromeles arbutifolia*), red willow (*Salix laevigata*), and mule fat (*Baccharis salicifolia*).

Red Willow Thicket

Red willow thicket occurs in some canyon bottoms and isolated patches, typically in the City's SOI. This vegetation type is dominated by red willow. Other species present in these areas include mule fat, with some California buckwheat (*Eriogonum fasciculatum*) and California sagebrush (*Artemisia californica*).

A patch of willows at the western edge of the City extends along the edge of Cucamonga Creek. This area also contains mule fat, cattails (*Typha* sp.), and scattered laurel sumac (*Malosma laurina*).

A small patch of willow occurs near the northeastern corner of the City's SOI between Henderson and Morse canyons. Rushes (*Juncus* sp.), deergrass (*Muhlenbergia rigens*), western ragweed (*Ambrosia psilostachya*), and nightshade (*Solanum* sp.) are also present in this area. Previous documentation identifies an area dominated by sedges and rushes (coastal and valley freshwater marsh) at the confluence of Day Creek and East Etiwanda Canyon (MBA 2001). This freshwater marsh or peat bog is extremely sensitive to disturbance. Several special status plant species have been reported from this area: Nevin's barberry (*Berberis nevinii*), many-stemmed dudleya (*Dudleya multicaulis*), Hall's monardella (*Monardella macrantha* ssp. *hallii*), Pringle's monardella (*Monardella pringlei*)⁷, slender-horned spineflower (*Dodecahema leptoceras*), and San Gabriel bedstraw (*Galium grande*) (Rancho Cucamonga 2001c).

⁷ Pringle's monardella is currently considered extinct in California (CNPS List 1A) (CNPS 2009).

Chaparral

Chaparral occurs in scattered patches in the City's SOI. These areas contain shrubs that are larger than those of the mixed sage scrub that surrounds this vegetation type. These areas were inaccessible and the only species positively identified is toyon. Some areas that are currently mapped as mixed sage scrub appear to have contained chaparral species prior to a burn. Chaparral species previously identified in the proposed General Plan Update Study Area include manzanita (*Arctostaphylos* sp.), Nuttall's scrub oak (*Quercus dumosa*), ceanothus (*Ceanothus* sp.), holly-leaved cherry (*Prunus ilicifolia*), and Our Lord's candle (*Yucca whipplei*) (Rancho Cucamonga 2001c).

Mixed Sage Scrub

Mixed sage scrub occurs throughout the foothills of the proposed General Plan Update Study Area. Outside the alluvial areas, the majority of the City's SOI contain this vegetation type. Remnant patches of mixed sage scrub also occur within the City boundary. The dominant species in this vegetation type are California sagebrush, California buckwheat, deerweed (*Lotus scoparius*), white sage (*Salvia apiana*), black sage (*Salvia mellifera*), and thick-leaf yerba santa (*Eriodictyon crassifolium*). The shrub density, species composition, and species percent coverage varies by patch. Other species present, but not dominant, in these areas include telegraph weed (*Heterotheca grandiflora*), California aster (*Lessingia filaginifolia*), and brittlebush (*Encelia farinosa*). The amount of non-native vegetation also varies by patch. Some areas contain virtually no non-native species while other areas, particularly isolated patches, contain a large portion of species such as black mustard (*Brassica nigra*), tocalote (*Centaurea melitensis*), common horehound (*Marrubium vulgare*), and bromes (*Bromus* spp.).

Scale Broom Scrub

Scale broom scrub occurs in the alluvial fans of the major creeks that drain the surrounding foothills. Remnant patches of this vegetation type are also present within areas of development. The substrate is sandy with a large number of cobbles and boulders. Scale broom (*Lepidospartum squamatum*) is diagnostically present at greater than one percent coverage in this vegetation type. In addition to scale broom, this vegetation type is co-dominated by a variety of species including California buckwheat, Our Lord's candle, and mountain mahogany (*Cercocarpus betuloides*). The amount of scale broom varies. Other species observed throughout this vegetation type include mule fat, deerweed, white sage, laurel sumac, and western sunflower (*Helianthus annuus*). Individual western sycamore trees are scattered in this vegetation type.

Some portions of this vegetation type are disturbed. While the northern portions of the alluvial fan are densely vegetated, other areas contain less cover and more non-native species such as black mustard and tocalote. The scale broom scrub present around the San Sevaine Basin appears to be revegetated. The vegetation at the bottom of the flood-control basin is mostly washed out. Shrubs are present in greater density on the berms.

Alluvial Wash

Alluvial wash consists of the stream courses of the various creeks in the proposed General Plan Update Study Area. These areas are either unvegetated or contain alluvial fan sage scrub species at a lower density than that vegetation type. Flowing water is present in some washes. The substrate of alluvial washes is sandy with numerous cobbles and boulders.

Mulefat Thickets

Mulefat thickets occur in remnant patches in the proposed General Plan Update Study Area. These areas are dominated by dense areas of mulefat.

Grassland

Grasslands occur in patches in the foothills of the City's SOI. These areas contain few scattered shrubs. The species composition of some patches was not determined due to their isolation. However, they are expected to contain a mix of native and non-native grasses and forbs such as needlegrass (*Nassella* sp.), bromes, and black mustard. One patch of grassland contained over ten percent needlegrass.

Annual Brome Grassland

Annual brome grassland is mapped throughout the proposed General Plan Update Study Area. These areas are dominated by non-native species (e.g., *Bromus* spp.). The density of non-native grasses varies by parcel. Some of these areas appear to have been unvegetated prior to recent rains.

Ruderal

Ruderal vegetation is mapped throughout the proposed General Plan Update Study Area. These areas contain a variety of weedy species such as black mustard, Russian thistle (*Salsola tragus*), and tocalote. Some scattered scrub species occur in some ruderal areas. The density of ruderal species varies by parcel.

Ornamental

Ornamental vegetation occurs throughout the proposed General Plan Update Study Area. This includes recreational areas (e.g., golf courses, parks, sports fields) and landscaping adjacent to the major freeways. Turf grass is a large component of the landscaping associated with the recreational areas. These areas also contain non-native trees such as gum (*eucalyptus* spp.), pine (*Pinus* spp.), or Peruvian pepper (*Schinus molle*). The vegetation adjacent to the freeways contains sage scrub species in some areas, with additional plantings of non-native species like wattle (*Acacia* sp.), Peruvian pepper, and hottentot fig (*Carpobrotus edulis*).

Orchard – Agriculture

Orchard – agriculture occurs in isolated patches throughout the proposed General Plan Update Study Area. Most of these areas are fallow grape vineyards. These areas contain a large amount of non-native species such as black mustard. This vegetation category also includes strawberry fields, citrus groves, and a tree farm.

Disturbed

Disturbed areas occur throughout the proposed General Plan Update Study Area. They consist of exposed soil with little or no vegetation. Some of these areas have been subject to grading or other earth disturbance measures.

Channel

Channels occur throughout the proposed General Plan Update Study Area. These are concrete lined and trapezoidal or vertical walled. Open water occurs in some channels while others are dry. The amount of open water present in these channels was too small to be mapped as a separate mapping unit.

Developed/Ornamental

The majority of the proposed General Plan Update Study Area is mapped as developed/ornamental. These areas consist of commercial, industrial, and residential structures and associated landscaping. Paved roads are also included in this mapping unit. Vegetation in these areas is varied and dominated by non-native, ornamental species including Peruvian pepper, pine, gum, flowering plum (*Prunus cerasifera*), and African fountain grass (*Pennisetum setaceum*).

Open Water

Open water occurs in various basins in the proposed General Plan Update Study Area. Golf course water features were also included in this mapping unit. Flowing water, while present in some creeks and channels in the proposed General Plan Update Study Area, was not mapped separately due to the relatively small area of cover.

Not Mapped

Portions of the proposed General Plan Update Study Area were not mapped. These areas occur in the foothills of the City's SOI. Unmapped areas were inaccessible at the time of the survey and not visible via binoculars from public roads. Mixed sage scrub, chaparral, grassland, or riparian woodland is expected to occur in these areas; however, this has not been confirmed.

Wildlife Habitat

A representative list of wildlife species observed during vegetation mapping, and species noted in previous studies, are listed in Appendix C. The majority of the proposed General Plan Update Study Area is currently developed. These areas contain little natural open space and would therefore provide limited habitat for wildlife species. Wildlife species may use the remnant patches of native scrub vegetation and ornamental landscaped areas such as parks and golf courses. The northern portion of the proposed General Plan Update Study Area contains large, contiguous open space that provides high quality habitat for numerous wildlife species.

Amphibians require moisture for at least a portion of their life cycle, and many require standing or flowing water for reproduction. Terrestrial species may or may not require standing water for reproduction; they survive in dry areas by aestivating (i.e., remaining beneath the soil in burrows or under logs and leaf litter, and emerging only when temperatures are low and humidity is high). Many of these species' habitats are associated with water, and they emerge to breed once the rainy season begins. Soil moisture conditions can remain high throughout the year in some habitat types depending on factors such as amount of vegetation cover, elevation, and slope aspect. One amphibian species was observed in the proposed General Plan Update Study Area: the Pacific treefrog (*Pseudacris [Hyla] regilla*). Other amphibian species previously reported from the Study Area include western toad (*Bufo boreas*) and California treefrog (*Pseudacris [Hyla] cadaverina*) (PCR 2008).

Reptilian diversity and abundance typically varies with vegetation type and character. Many species prefer only one or two vegetation types; however, most species will forage in a variety of habitats. Most reptile species that occur in open areas use rodent burrows for cover, protection from predators, and refuge during extreme weather conditions. Common reptile species observed in the proposed General Plan Update Study Area include western fence lizard (*Sceloporus occidentalis*) and side-blotched lizard (*Uta stansburiana*). Other common reptile species expected to occur include southern alligator lizard (*Elgaria multicarinata*), gopher snake (*Pituophis catenifer*), and common kingsnake (*Lampropeltis getula*).

A variety of bird species are expected to be residents of the proposed General Plan Update Study Area and to use the habitats throughout the year. Other species are present only during certain seasons. For example, the white-crowned sparrow (*Zonotrichia leucophrys*) is expected to occur during the winter season and will then migrate north in the spring to breed during the summer.

Although the same individuals may not be present year-round, the following bird species were observed during the surveys and can be considered resident: mourning dove (*Zenaida macroura*), Anna's hummingbird (*Calypte anna*), Nuttall's woodpecker (*Picoides nuttallii*), black phoebe (*Sayornis nigricans*), American crow (*Corvus brachyrhynchos*), common raven (*Corvus corax*), bushtit (*Psaltriparus minimus*), house wren (*Troglodytes aedon*), northern mockingbird (*Mimus polyglottos*), spotted towhee (*Pipilo maculatus*), California towhee (*Pipilo crissalis*), song sparrow (*Melospiza melodia*), house finch (*Carpodacus mexicanus*), and lesser goldfinch (*Carduelis psaltria*).

Since general wildlife surveys were conducted in winter 2009, summer-only residents were not observed. Summer residents that may nest in the proposed General Plan Update Study Area include black-chinned hummingbird (*Archilochus alexandri*), Pacific-slope flycatcher (*Empidonax difficilis*), ash-throated flycatcher (*Myiarchus cinerascens*), Cassin's kingbird (*Tryannus vociferans*), black-headed grosbeak (*Pheucticus melanocephalus*), blue grosbeak (*Passerina caerulea*), hooded oriole (*Icterus cucullatus*), and Bullock's oriole (*Icterus bullockii*).

Wintering species observed during the surveys include Say's phoebe (*Sayornis saya*), ruby-crowned kinglet (*Regulus calendula*), American pipit (*Anthus rubescens*), yellow-rumped warbler (*Dendroica coronata*), and white-crowned sparrow.

Raptor species observed foraging in the proposed General Plan Update Study Area include northern harrier (*Circus cyaneus*), Cooper's hawk (*Accipiter cooperii*), red-tailed hawk (*Buteo jamaicensis*), and American kestrel (*Falco sparverius*). Owls expected to occur include great horned owl (*Bubo virginianus*) and barn owl (*Tyto alba*).

Mammal species observed or detected in the proposed General Plan Update Study Area include Virginia opossum (*Didelphis virginiana*), desert cottontail (*Sylvilagus audubonii*), California ground squirrel (*Spermophilus beecheyi*), Botta's pocket gopher (*Thomomys bottae*), coyote (*Canis latrans*), common raccoon (*Procyon lotor*), and mule deer (*Odocoileus hemionus*). Other common mammal species expected to occur include bobcat (*Lynx rufus*) and striped skunk (*Mephitis mephitis*).

Wildlife Movement

Wildlife corridors link together areas of suitable habitat that are otherwise separated by rugged terrain, transitions in vegetation, or human disturbance. This is exacerbated by fragmentation of open space by urbanization, which creates isolated "islands" of wildlife habitat. In the absence of linkages that allow movement between areas of suitable habitat, various studies have

concluded that some wildlife species, especially larger and more mobile mammals, will not likely persist over time in fragmented or isolated habitat because they prohibit the immigration of new individuals and genetic information (MacArthur and Wilson 1967; Soule 1987; Harris and Gallagher 1989; Bennett 1990). Corridors mitigate the effects of this fragmentation by: (1) allowing animals to move between areas of remaining habitat, thereby permitting depleted populations to be replenished and promoting genetic exchange; (2) providing escape routes from fire, predators, and human disturbances, thus reducing the risk that catastrophic events, such as fire or disease, will result in population or local species extirpation; and (3) serving as travel routes for individual animals as they move in their home ranges in search of food, water, mates, and other necessary resources (Noss 1983; Fahrig and Merriam 1985; Simberloff and Cox 1987; Harris and Gallagher 1989).

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

- **Travel route.** A landscape feature (such as a ridgeline, drainage, canyon, or riparian strip) within a larger natural habitat area that is used frequently by animals to facilitate movement and to provide access to necessary resources (e.g., water, food, cover, den sites). The travel route is generally preferred because it provides the least amount of topographic resistance in moving from one area to another. It contains adequate food, water, and/or cover for wildlife moving between habitat areas and provides a relatively direct link between target habitat areas.
- **Wildlife corridor.** A piece of habitat, usually linear in nature, that connects two or more habitat patches that would otherwise be fragmented or isolated from one another. Wildlife corridors are usually bound by urban land areas or other areas unsuitable for wildlife. The corridor generally contains suitable cover, food, and/or water to support species and to facilitate wildlife movement while in the corridor. Larger, landscape-level corridors, often referred to as “habitat or landscape linkages”, can provide both transitory and resident habitat for a variety of species.
- **Wildlife crossing.** A small, narrow area, relatively short in length and generally constricted in nature that allows wildlife to pass under or through an obstacle or barrier that otherwise hinders or prevents movement. Crossings typically are manmade and include culverts, underpasses, drainage pipes, and tunnels to provide access across or under roads, highways, pipelines, or other physical obstacles. These often represent “choke points” along a movement corridor and may impede wildlife movement and increase the risk of predation.

It is important to note that wildlife corridors, as defined above, may not yet exist in a large open space area where there are few or no man-made or naturally occurring physical constraints to wildlife movement. Given an open space area that is both large enough to maintain viable populations of species and to provide a variety of travel routes (e.g., canyons, ridgelines, trails, riverbeds, and others), wildlife will use these “local” routes while searching for food, water, shelter, and mates and will not need to cross into other large open space areas. Based on their size, location, vegetative composition and availability of food, some of these movement areas (e.g., large drainages and canyons) are used for longer lengths of time and serve as source

areas for food, water, and cover, particularly for small- and medium-sized animals. This is especially true if the travel route is within a larger open space area. However, once open space areas become constrained and/or fragmented as a result of urban development or construction of physical obstacles (such as roads and highways), the remaining landscape features or travel routes that connect the larger open space areas become corridors as long as they (1) provide adequate space, cover, food, and water and (2) do not contain obstacles or distractions (e.g., man-made noise, lighting) that would generally hinder wildlife movement.

Ideally, a corridor should encompass a heterogeneous mix of habitats to accommodate the ecological requirements of the variety of species in any particular region. Most species typically prefer an adequate amount of vegetation cover during movement periods that serve as both a food source as well as protection from weather and potential predators. Drainages, riparian areas, and canyon bottoms typically serve as natural movement corridors because these features provide cover, food, and often water for a variety of species. Very few species will move across large expanses of open, uncovered habitat unless it is the only option available to them. For some species, habitat linkages and movement corridors should be able to support animals for a sustained period of time, not just for travel. Smaller or less mobile animals (such as rodents and reptiles) may require long periods to traverse a corridor, so the corridor must contain adequate food and cover for survival.

The majority of the proposed General Plan Update Study Area is currently developed. These areas contain little natural open space and would therefore not provide wildlife movement corridors. However, the northern portion of the proposed General Plan Update Study Area contains large, contiguous open space areas. Development within these areas could result in habitat fragmentation. This could inhibit wildlife movement, confining it to the remaining corridors of natural habitat between the areas of development.

A statewide interagency workshop was conducted in 2000 to delineate habitat linkages critical for preserving the State's biodiversity. The workshop developed a Linkage Design with the following goals: (1) to provide live-in and move-through habitat for multiple species; (2) to support metapopulations of smaller species; (3) to ensure availability of key resources; (4) to buffer against edge effects; (5) to reduce contaminants in streams; (6) to allow natural processes to operate; and (7) to allow species and natural communities to respond to climatic changes. This workshop identified 69 linkages within the South Coast Ecoregion. The San Gabriel-San Bernardino Linkage was one of 15 landscape linkages identified as crucial to maintaining ecological and evolutionary processes among large blocks of protected habitat within the South Coast Ecoregion (Penrod et al. 2004). This linkage occurs at the San Gabriel and San Bernardino Mountains divide, which includes the mountains and foothills north of and within the proposed General Plan Update Study Area. The marked elevational gradient and transition from cismontane scrub and woodland in the south to transmontane Mojave Desert in the north result in a diversity of natural communities (Penrod et al. 2004).

A group of 24 focal species that are sensitive to habitat loss and fragmentation in the area were identified. Five of these species (i.e., mountain lion, American badger, Nelson's bighorn sheep, mule deer, and Pacific kangaroo rat) were used in a landscape permeability analysis to model the relative cost for a species to move between protected core habitat or population areas. These were combined to generate a Least Cost Union (i.e., the union of the top one percent of the least cost corridors⁸ for all five species). The final Linkage Design resulting from the Least Cost Union was expanded to accommodate a species' particular requirements if it was omitted in the Least Cost Union.

⁸ "Least Cost Corridor" is defined as the best potential route for a species.

The final Linkage Design covers approximately 129,901 acres and has three roughly parallel routes to accommodate diverse species and ecosystem functions. The central branch is relatively short and largely in public ownership, but the northern and southern branches are roughly 24 miles long and include substantial private lands (Penrod et al. 2004). The northern branch provides a high desert connection dominated by xeric chaparral communities, with patches of desert scrub, juniper and Joshua tree woodlands, grassland, and riparian habitats. The central branch links a series of higher elevation forest and shrubland habitats. The southern branch encompasses coastal and alluvial fan scrub habitats and includes portions of Cucamonga, Deer, Day, Etiwanda, Morse, and San Sevaine Creeks. Natural vegetation comprises most of the Linkage Design, but urban and agricultural development covers approximately 1.8 percent of the area. As of 2004, approximately 66 percent of the Linkage Design had some level of conservation protection.

A portion of the City is within the Linkage Design area. The City's Open Space Plan includes five conservation areas established to protect alluvial fan sage scrub habitat within the proposed General Plan Update Study Area.

Special Status Biological Resources

Special Status Vegetation Types

In addition to providing an inventory of special status plant and wildlife species, the CNDDDB also provides an inventory of vegetation types that are considered special status by State and Federal resource agencies, academic institutions, and various conservation groups (such as the CNPS). Determination of the sensitivity level is based on the Nature Conservancy Heritage Program Status Ranks, which rank both species and vegetation types on a global and statewide basis according to the number and size of remaining occurrences and recognized threats (e.g., proposed developments, habitat degradation, non-native species invasion). Multiple special status vegetation types are reported in the vicinity of the proposed General Plan Update Study Area: California walnut woodland, canyon live oak ravine forest, coastal and valley freshwater marsh, scale broom scrub, Southern California arroyo chub/Santa Ana sucker stream, southern coast live oak riparian forest, and southern sycamore alder riparian woodland (CDFG 2009). Of these, canyon live oak ravine forest, Southern California arroyo chub/Santa Ana sucker stream, and southern coast live oak riparian forest have not been reported within the proposed General Plan Update Study Area.

California Walnut Woodland

California walnut woodland was not observed during general vegetation mapping of the proposed General Plan Update Study Area. However, this vegetation type has previously been reported in the City's SOI (Rancho Cucamonga 2001c). Individual Southern California black walnut trees were observed during the 2009 survey. In addition to being considered a sensitive vegetation type by the CNDDDB, the County of San Bernardino's and the City's tree preservation ordinances protect certain native trees, including Southern California black walnut trees.

Coastal and Valley Freshwater Marsh

Coastal and valley freshwater marsh was not observed during general vegetation mapping of the proposed General Plan Update Study Area. However, this vegetation type has previously been reported in the City's SOI (Rancho Cucamonga 2001c) and is within the preserve area.

Riversidian Alluvial Fan Sage Scrub

The proposed General Plan Update Study Area contains a total of 3,778 acres of scale broom scrub. This is equivalent to the Riversidian alluvial fan sage scrub in Holland [1986]. In addition to being considered a sensitive habitat by the CNDDDB, the County of San Bernardino's tree preservation ordinance protects vegetation within 200 feet of a stream.

Southern Sycamore Alder Riparian Woodland

Southern sycamore alder riparian woodland was not observed during general vegetation mapping of the proposed General Plan Update Study Area. However, this vegetation type has been reported in the City's SOI (Rancho Cucamonga 2001c). In addition to being considered a sensitive vegetation type by the CNDDDB, County of San Bernardino's tree preservation ordinance protects vegetation within 200 feet of a stream.

Other Special Status Vegetation Types

Although California sycamore woodland, coast live oak woodland, and coast live oak – California sycamore woodland are not considered sensitive by the CNDDDB, the County of San Bernardino's and City of Rancho Cucamonga's tree preservation ordinances regulate the removal of western sycamore and oak trees. Oak woodlands are also protected by State law (SB 1334-California Oak Woodland Law). The proposed General Plan Update Study Area contains a total of approximately 20 acres of California sycamore woodland, 14 acres of coast live oak woodland, and 40 acres of coast live oak – California sycamore woodland, with additional western sycamore and oak trees potentially in other vegetation types.

Red willow thickets are not considered sensitive by the CNDDDB; however, red willows meeting the size criteria of the County and City tree preservation ordinances would be protected. Red willow thickets and mulefat thickets are protected as riparian plants, if within 200 feet of a stream in unincorporated San Bernardino County. The proposed General Plan Update Study Area contains a total of 23 acres of red willow thickets and 8 acres of mulefat thickets.

Although not considered sensitive by the CNDDDB, mixed sage scrub is declining in the region and may support special status plant and wildlife species. The proposed General Plan Update Study Area contains 3,165 acres of mixed sage scrub.

Although not reported in the vicinity of the proposed General Plan Update Study Area by the CNDDDB, the CNDDDB considers various native grasslands to be sensitive. The grasslands mapped in the proposed General Plan Update Study Area may contain native species in high enough abundance to be considered special status. The Study Area contains a total of 70 acres of grassland. The annual brome grassland mapped in the Study Area would not be considered special status.

Jurisdictional Resources

Numerous named and unnamed blue line streams⁹ are identified on the USGS quadrangles in the proposed General Plan Update Study Area. The majority of these streams drain from the mountains located to the north of the City. These streams include, but are not limited to, Cucamonga Creek, Deer Creek, Day Creek, and East Etiwanda Creek. Within the City, many drainages are channelized. These areas are potentially under the jurisdiction of the USACE, the

⁹ Stream courses shown on the USGS topographic quadrangle.

RWQCB, and the CDFG. In addition, the County of San Bernardino’s tree preservation ordinance protects vegetation within 200 feet of a stream.

Special Status Plant Species

Many special status plant species are known to occur in the vicinity of the proposed General Plan Update Study Area (i.e., the Mount Baldy, Cucamonga Peak, Devore, Ontario, and Guasti USGS 7.5-minute quadrangles). These species are summarized in Table 4.4-2. The species were either “observed” within the proposed General Plan Update Study Area, “reported” by the CNDDB and/or CNPS in the vicinity of the proposed General Plan Update Study Area, or “included” in previous analyses for specific projects.

**TABLE 4.4-2
SPECIAL STATUS PLANT SPECIES KNOWN TO OCCUR IN THE VICINITY
OF THE RANCHO CUCAMONGA PROPOSED GENERAL PLAN
UPDATE STUDY AREA**

Species	Status			Occurrence Information	Relationship of Plan Area to Critical Habitat
	USFWS	CDFG	CNPS		
<i>Ambrosia monogyra</i> singlewhorl burrobush	–	–	2.2	Historically reported near Rialto (1947 and 1926 records; CDFG 2009)	–
<i>Berberis nevini</i> Nevin’s barberry	FE	SE	1B.1	Reported from Cobal Canyon, less than 5 miles east of the City (CDFG 2009)	Not in final Critical Habitat (USFWS 2008a)
<i>California macrophylla</i> round-leaved filaree	–	–	1B.1	Historically reported from Claremont (1921 record; CDFG 2009)	–
<i>Calochortus clavatus</i> var. <i>gracilis</i> slender mariposa lily	–	–	1B.2	Reported from Evey Canyon, less than 4 miles east of the City (CDFG 2009)	–
<i>Calochortus plummerae</i> Plummer’s mariposa lily	–	–	1B.2	Observed at multiple locations in the City (TKC 2003; PCR 2008; CDFG 2009)	–
<i>Centromadia [Hemizonia]</i> <i>pungens</i> ssp. <i>laevis</i> smooth tarplant	–	–	1B.1	Reported by CNPS (2009).	–
<i>Chorizanthe leptotheca</i> peninsular spineflower	–	–	4.2	Included in a previous EIR as potentially occurring (TKC 2003)	–
<i>Chorizanthe parryi</i> var. <i>parryi</i> Parry’s spineflower	–	–	1B.1	Observed at multiple locations in the City (CDFG 2009)	–
<i>Chorizanthe xanti</i> var. <i>leucotheca</i> white-bracted spineflower	–	–	1B.2	Reported in the vicinity of Devore (CDFG 2009)	–
<i>Cladium californicum</i> California sawgrass	–	–	2.2	Historically observed in the western portion of the City (1918 record; CDFG 2009)	–

TABLE 4.4-2 (Continued)
SPECIAL STATUS PLANT SPECIES KNOWN TO OCCUR IN THE VICINITY
OF THE RANCHO CUCAMONGA PROPOSED GENERAL PLAN
UPDATE STUDY AREA

Species	Status			Occurrence Information	Relationship of Plan Area to Critical Habitat
	USFWS	CDFG	CNPS		
<i>Claytonia lanceolata</i> var. <i>peirsonii</i> Peirson's spring beauty	-	-	1B.1	Reported near Bighorn Peak and Timber Mountain, less than 5 miles north of the SOI (CDFG 2009).	-
<i>Dodecahema leptoceras</i> slender-horned spineflower	FE	SE	1B.1	Historically reported from the vicinity of Upland (1905 record; CDFG 2009)	No Critical Habitat has been published.
<i>Dudleya multicaulis</i> many-stemmed dudleya	-	-	1B.2	Reported north of Claremont (CDFG 2009)	-
<i>Eriastrum densifolium</i> ssp. <i>sanctorum</i> Santa Ana River woollystar	FE	SE	1B.1	Included in a previous EIR as potentially occurring (Rancho Cucamonga 2001c)	No Critical Habitat has been published.
<i>Eriogonum evanidum</i> vanishing wild buckwheat	-	-	1B.1	Reported by CNPS (2009).	-
<i>Eriogonum microthecum</i> var. <i>johnstonii</i> Johnston's buckwheat	-	-	1B.3	Reported near Cucamonga Peak, less than 4 miles north of the SOI (CDFG 2009)	-
<i>Galium grande</i> San Gabriel bedstraw	-	-	1B.2	Included in a previous EIR as potentially occurring (Rancho Cucamonga 2001c)	-
<i>Horkelia cuneata</i> ssp. <i>puberula</i> mesa horkelia	-	-	1B.1	Observed at multiple locations in the City (CDFG 2009)	-
<i>Juglans californica</i> Southern California black walnut	-	-	4.2	Observed during 2009 survey.	-
<i>Lepidium virginicum</i> var. <i>robinsonii</i> Robinson's pepper-grass	-	-	1B.2	Historically reported in the vicinity of Chino (1936 record; CDFG 2009)	-
<i>Lilium parryi</i> lemon lily	-	-	1B.2	Reported from region; location information is sensitive (CDFG 2009)	-
<i>Linanthus concinnus</i> San Gabriel linanthus	-	-	1B.2	Historically reported from Icehouse Canyon north of the SOI (1917 record; CDFG 2009)	-
<i>Lycium parishii</i> Parish's desert-thorn	-	-	2.3	Historically reported north of San Bernardino (1885 record; CDFG 2009)	-
<i>Monardella macrantha</i> ssp. <i>hallii</i> Hall's monardella	-	-	1B.3	Reported near Sunset Peak, less than 5 miles northwest of the City (CDFG 2009)	-
<i>Mucronea californica</i> California spineflower	-	-	4.2	Included in a previous EIR as potentially occurring (TKC 2003)	-

Special Status Wildlife Species

Many special status wildlife species are known to occur in the vicinity of the proposed General Plan Update Study Area (i.e., the Mount Baldy, Cucamonga Peak, Devore, Ontario, and Guasti USGS 7.5-minute quadrangles). These species are summarized in Table 4.4-3. Note that these species are listed taxonomically. The species were either “observed” within the proposed General Plan Update Study Area, “reported” by the CNDDDB in the vicinity of the Study Area, included in previous analyses for specific projects, or are potentially present due to suitable habitat within the Study Area.

**TABLE 4.4-3
SPECIAL STATUS WILDLIFE SPECIES KNOWN TO OCCUR IN THE
VICINITY OF THE RANCHO CUCAMONGA PROPOSED GENERAL PLAN
UPDATE STUDY AREA**

Species	Status		Occurrence Information	Relationship of Plan Area to Critical Habitat
	USFWS	CDFG		
Invertebrates				
<i>Callophrys mossii hidakupa</i> San Gabriel Mountains elfin butterfly	–	SA	Reported near Stoddard Peak, less than three miles northwest of the SOI (CDFG 2009)	–
<i>Diplectrona californica</i> California diplectronan caddisfly	–	SA	Reported from Claremont (CDFG 2009)	–
<i>Rhaphiomidas terminatus abdominalis</i> Delhi Sands flower-loving fly	FE	–	Reported from Fontana and Mira Loma (CDFG 2009)	No Critical Habitat has been published.
Fish				
<i>Gila orcuttii</i> arroyo chub	–	SSC	Reported from Cattle Canyon Creek and the East Fork of the San Gabriel River (CDFG 2009)	–
<i>Rhinichthys osculus</i> ssp. 3 Santa Ana speckled dace	–	SSC	Reported from Lytle Creek (Penrod et al. 2004)	–
<i>Catostomus santaanae</i> Santa Ana sucker	FT	SSC	Reported from Cattle Canyon Creek and the East Fork of the San Gabriel River (CDFG 2009)	Not within final (USFWS 2005) or newly proposed (USFWS 2009) Critical Habitat.
Amphibians				
<i>Batrachoseps gabrieli</i> San Gabriel slender salamander	–	SA	Reported from multiple locations within 6 miles of the General Plan Area (CDFG 2009)	–
<i>Rana muscosa</i> Sierra Madre yellow-legged frog	FE	SSC	Reported from Day Canyon and historically from Cucamonga and East Etiwanda Canyons (1959 records) north of the Plan Area (CDFG 2009)	The upper reaches of Day Canyon, north of the SOI are located in Unit 1, Subunit E of the Final Critical habitat (USFWS 2006)

TABLE 4.4-3 (Continued)
SPECIAL STATUS WILDLIFE SPECIES KNOWN TO OCCUR IN THE
VICINITY OF THE RANCHO CUCAMONGA PROPOSED GENERAL PLAN
UPDATE STUDY AREA

Species	Status		Occurrence Information	Relationship of Plan Area to Critical Habitat
	USFWS	CDFG		
<i>Rana aurora</i> red-legged frog	-	-	Included in a previous EIR as potentially occurring (Rancho Cucamonga 2001c)	-
<i>Taricha torosa torosa</i> Coast Range newt	-	SSC	Reported from Live Oak and Cobal Canyons east of the General Plan Area (CDFG 2009)	-
Reptiles				
<i>Phrynosoma coronatum</i> [blainvillii] population coast [San Diego] horned lizard	-	SSC	Observed in the City near Etiwanda (CDFG 2009)	-
<i>Aspidoscelis</i> [Cnemidophorus] <i>hyperythra</i> orange-throated whiptail	-	SSC	Included in a previous EIR as potentially occurring (Rancho Cucamonga 2001c)	-
<i>Aspidoscelis</i> [Cnemidophorus] <i>tigris stejnegeri</i> coastal whiptail	-	SA	Reported from San Antonio Canyon (CDFG 2009)	-
<i>Anniella pulchra pulchra</i> silvery legless lizard	-	SSC	Reported from Claremont (CDFG 2009)	-
Birds				
<i>Accipiter cooperii</i> Cooper's hawk	-	WL ^a	Observed during 2009 survey	-
<i>Accipiter striatus</i> sharp-shinned hawk	-	WL ^a	Observed in the City (TKC 2003)	-
<i>Aquila chrysaetos</i> golden eagle	-	WL, FP ^{a,b}	Observed in the City (LSA 2001; PCR 2008)	-
<i>Circus cyaneus</i> northern harrier	-	SSC ^a	Observed during 2009 survey	-
<i>Elanus leucurus</i> white-tailed kite	-	FP ^a	Observed in the City (PCR 2008)	-
<i>Haliaeetus leucocephalus</i> bald eagle	-	SE, FP ^{a,b}	Potentially Present	-
<i>Pandion haliaetus</i> osprey	-	WL ^a	Potentially Present	-
<i>Falco columbarius</i> merlin	-	WL ^b	Potentially Present	-
<i>Falco mexicanus</i> prairie falcon	-	WL ^a	Potentially Present	-
<i>Falco peregrinus anatum</i> American peregrine falcon	-	SE, FP ^a	Potentially Present	-
<i>Coccyzus americanus occidentalis</i> western yellow-billed cuckoo	FC	SE ^a	Historically reported from Chino (1931 record; CDFG 2009)	-
<i>Asio otus</i> long-eared owl	-	SSC ^a	Included in a previous EIR as potentially occurring (Rancho Cucamonga 2001c)	-

TABLE 4.4-3 (Continued)
SPECIAL STATUS WILDLIFE SPECIES KNOWN TO OCCUR IN THE
VICINITY OF THE RANCHO CUCAMONGA PROPOSED GENERAL PLAN
UPDATE STUDY AREA

Species	Status		Occurrence Information	Relationship of Plan Area to Critical Habitat
	USFWS	CDFG		
<i>Athene cunicularia</i> burrowing owl	–	SSC ^c	Observed in multiple locations in the City (LSA 2001; CDFG 2009)	–
<i>Cypseloides niger</i> black swift	–	SSC ^a	Reported from Wolfskill Falls east of the Plan Area (CDFG 2009)	–
<i>Lanius ludovicianus</i> loggerhead shrike	–	SSC ^a	Observed during 2009 survey at multiple locations	–
<i>Polioptila californica californica</i> coastal California gnatcatcher	FT	SSC	Observed in multiple locations in the City (CDFG 2009)	Not in final Critical Habitat (USFWS 2007)
<i>Dendroica petechia</i> yellow warbler	–	SSC ^a	Observed in the City (PCR 2008)	–
<i>Aimophila ruficeps canescens</i> southern California rufous-crowned sparrow	–	WL	Observed in the City (TKC 2003)	–
<i>Amphispiza belli belli</i> Bell's sage sparrow	–	WL ^a	Observed in the City (LSA 2001)	–
<i>Agelaius tricolor</i> tricolored blackbird	–	SSC ^d	Reported from the San Bernardino Flood Control Basin (CDFG 2009)	–
Mammals				
<i>Antrozous pallidus</i> pallid bat	–	SSC	Historically reported from Ontario (1951 record; CDFG 2009)	–
<i>Lasiurus cinereus</i> hoary bat	–	SA	Historically reported 1.5 miles northwest of Claremont (1940 record; CDFG 2009)	–
<i>Lasiurus xanthinus</i> western yellow bat	–	SSC ^e	Observed in the western portion of the City (CDFG 2009)	–
<i>Eumops perotis californicus</i> western mastiff bat	–	SSC	Observed in 2 locations in the City (CDFG 2009)	–
<i>Nyctinomops femorosaccus</i> pocketed free-tailed bat	–	SSC	Reported in the vicinity of San Bernardino (CDFG 2009)	–
<i>Nyctinomops macrotis</i> big free-tailed bat	–	SSC	Reported from Pomona (CDFG 2009)	–
<i>Lepus californicus bennettii</i> San Diego black-tailed jackrabbit	–	SSC	Observed in Day Canyon (CDFG 2009)	–
<i>Chaetodipus fallax fallax</i> northwestern San Diego pocket mouse	–	SSC	Observed in multiple locations in the City (CDFG 2009)	–
<i>Perognathus longimembris brevinasus</i> Los Angeles pocket mouse	–	SSC	Observed in multiple locations in the City (CDFG 2009)	–

**TABLE 4.4-3 (Continued)
SPECIAL STATUS WILDLIFE SPECIES KNOWN TO OCCUR IN THE
VICINITY OF THE RANCHO CUCAMONGA PROPOSED GENERAL PLAN
UPDATE STUDY AREA**

Species	Status		Occurrence Information	Relationship of Plan Area to Critical Habitat
	USFWS	CDFG		
<i>Dipodomys merriami parvus</i> San Bernardino kangaroo rat	FE	SSC	Observed in multiple locations near the northeastern corner of the City (CDFG 2009)	Not in final Critical Habitat (USFWS 2008b)
<i>Neotoma lepida intermedia</i> San Diego desert woodrat	–	SSC	Observed in the City (CDFG 2009)	–
<i>Ovis canadensis nelsoni</i> Nelson's bighorn sheep	–	SA	Reported near Lytle Creek and near Iron Mountain (CDFG 2009)	–
LEGEND:				
Federal (USFWS)		State (CDFG)		
FE	Endangered	SE	Endangered	
FT	Threatened	ST	Threatened	
FC	Candidate	SSC	Species of Special Concern	
		WL	Watch List	
		FP	Fully Protected	
^a Designation refers to nesting individuals ^b Designation refers to wintering individuals ^c Designation refers to burrow sites; wintering observations not considered special status for Orange County ^d Designation refers to nesting colony ^e Designation based on the draft updated mammalian species of special concern report – Indicates information that is not applicable to the species.				

4.4.3 THRESHOLDS OF SIGNIFICANCE

The criteria for determining significant impacts on biological resources were developed in accordance with the State CEQA Guidelines. Section 15065(a) of the CEQA Guidelines states that a project may have a significant effect on the environment if "...the project has the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of an endangered, rare, or threatened species". An evaluation of whether an impact on biological resources would be significant must consider both the resource itself and how that resource fits into a regional or local context. Significant impacts would be those that would diminish or result in the loss of an important biological resource or those that would obviously conflict with local, State, or Federal resource conservation plans, goals, or regulations. Impacts are sometimes locally adverse but not significant because, although they would result in an adverse alteration of existing conditions, they would not substantially diminish or result in the permanent loss of an important resource on a population- or region-wide basis.

The following significant criteria are derived from the State CEQA Guidelines. A project would result in a significant adverse impact related to biological resources if it would:

Threshold 4.3a: 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 CDFG or USFWS;

- Threshold 4.3b:** 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 CDFG or USFWS;
- Threshold 4.3c:** Have a substantial adverse effect on Federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means;
- Threshold 4.3d:** 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;
- Threshold 4.3e:** Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinances; and/or
- Threshold 4.3f:** Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or State habitat conservation plan.

4.4.4 GENERAL PLAN GOALS AND POLICIES

General Plan Goals and Policies

A number of policies in the draft Resource Conservation Element of the proposed General Plan Update address biological resource issues. Implementation of these policies would help reduce impacts to existing biological resources within the City and its SOI. Applicable goals and related policies are identified below in italics. Each policy is followed by an implementation action which identifies the programs and procedures that will be used to put General Plan goals and policies into action.

Policy RC-1.1: Preserve sensitive land resources that have significant native vegetation and/or habitat value.

Implementation Action: *Continue to consult with agencies and private organizations that have the land or other resources available to promote open space and habitat preservation and restoration.*

Policy RC-8.1: Preserve the integrity of riparian habitat areas, creek corridors, Riversidian Alluvial Fan Sage Scrub, bogs, and sensitive wildlife habitat that support biological resources.

Implementation Action: *Pursue actions that provide appropriate long-term protection of areas within the City's Sphere of Influence that contain sensitive habitat, and which are considered of unique value in enhancing the quality of the local environment.*

Policy RC-8.2: Consult with San Bernardino County and other agencies to support the preservation of streamside woodland areas along the foothills of the San Gabriel Mountains, including the North Etiwanda Preserve.

Implementation Action: *Require development proposals that include riparian or water-related communities to prepare a site-specific investigation to define the extent*

and fragility of the riparian community, determine wetland permit requirements and propose measures to mitigate any impacts on the resources stemming from land disturbance or other site development.

Policy RC-8.3: Utilize innovative measures that will allow the expansion of sensitive biological preserve areas (e.g., North Etiwanda Preserve, Day Creek Preserve, and San Sevaine Preserve) and other important habitat areas.

Implementation Action: Continue working with the County of San Bernardino, California Department of Fish and Game, and U.S. Fish and Wildlife Service to protect sensitive biological resources within the City's Planning Area through the creation of a system of preserves and open space along the foothills of the San Gabriel Mountains. Continue with the acquisition program or the creation of conservation easements to protect the biological integrity of the alluvial fan sage scrub (AFSS) to create a preserve for use as part of a mitigation land bank.

Policy RC-8.4: Acquire and/or protect open space areas that provide strategic wildlife corridors and vital connectivity between habitat areas.

Implementation Action: Continue working with the County of San Bernardino, California Department of Fish and Game, and U.S. Fish and Wildlife Service to protect sensitive biological resources within the City's Planning Area through the creation of a system of preserves and open space along the foothills of the San Gabriel Mountains. Continue with the acquisition program or the creation of conservation easements to protect the biological integrity of the alluvial fan sage scrub (AFSS) to create a preserve for use as part of a mitigation land bank.

Policy LU-8.5: Protect natural resources and sensitive habitat areas, and avoid encroachment from new hillside development.

Implementation Action: Continue to coordinate the review of hillside development proposals with Federal, State, and regional agencies with purview over natural resources and sensitive habitats.

4.4.5 STANDARD CONDITIONS OF APPROVAL

SC 4.4-1 Special status plant and wildlife species have the potential to occur within the proposed General Plan Update Study Area. Any CEQA project that involves the removal of habitat must consider if any special status species (e.g., Threatened or Endangered species, CNPS List 1B and 2 plants, or species protected under Section 15380 of CEQA) are potentially present on the project site and if the project impacts could be considered significant by the City. If potential habitat is present in an area, focused surveys shall be conducted prior to construction activities in order to document the presence or absence of a species on the project site. Botanical surveys shall be conducted during the appropriate blooming period for a species. If no special status species are found on the project site, no additional action is warranted. If special status species are found, appropriate mitigation would be required in coordination with the City.

SC 4.4-2 Any project within the proposed General Plan Update Study Area that impacts a Federally listed species shall be required to secure take authorization through Section 7 or Section 10 of the Federal Endangered Species Act (FESA) prior to project implementation. Compensation for impacts to the listed species and their

habitat shall be mitigated at a ratio no less than one to one (one acre restored for every acre impacted). Project applicants shall be required to plan, implement, monitor, and maintain the mitigated habitat according to the requirements of the Biological Opinion (Section 7) or Habitat Conservation Plan (Section 10) for the project. Prior to issuance of the first action and/or permit which would allow for site disturbance (e.g., grading permit), a detailed mitigation plan shall be prepared by a qualified biologist for approval by the City of Rancho Cucamonga and the USFWS, and shall include: (1) the responsibilities and qualifications of the personnel to implement and supervise the plan; (2) site selection; (3) site preparation and planting implementation; (4) a schedule; (5) maintenance plan/guidelines; (6) a monitoring plan; and (7) long-term preservation requirements.

SC 4.4-3 Any project within the proposed General Plan Update Study Area that impacts a State-listed Threatened or Endangered species shall be required to obtain take authorization (through an Incidental Take Permit) pursuant to the California Endangered Species Act (CESA) and Section 2081 of the California Fish and Game Code. If the species is also listed under the FESA, a consistency finding per Section 2080.1 of CESA is issued when a project receives the USFWS Biological Opinion. Compensation for impacts to the listed species and their habitat shall be mitigated at a ratio no less than one to one (one acre restored for every acre impacted). Project applicants shall be required to plan, implement, monitor, and maintain the mitigated habitat according to the requirements of the 2080 CEQA process. Prior to issuance of the first action and/or permit which would allow for site disturbance (e.g., grading permit), a detailed Mitigation Plan shall be prepared by a qualified Biologist for approval by the City of Rancho Cucamonga and the California Department of Fish and Game (CDFG), and shall include: (1) the responsibilities and qualifications of the personnel to implement and supervise the plan; (2) site selection; (3) site preparation and planting implementation; (4) a schedule; (5) a maintenance plan/guidelines; (6) a monitoring plan; and (7) long-term preservation requirements.

SC 4.4-4 To avoid conflicts with Migratory Bird Treaty Act and Bald/Golden Eagle Protection Act, construction activities involving vegetation removal shall be conducted between September 16 and March 14. If construction occurs inside the peak nesting season (between March 15 and September 15), a pre-construction survey (or possibly multiple surveys) by a qualified biologist are recommended prior to construction activities to identify any active nesting locations. If the biologist does not find any active nests within the project site, the construction work shall be allowed to proceed. If the biologist finds an active nest within the project site and determines that the nest may be impacted, the biologist shall delineate an appropriate buffer zone around the nest; the size of the buffer zone shall depend on the affected species and the type of construction activity. Any active nests observed during the survey shall be mapped on an aerial photograph. Only construction activities (if any) that have been approved by a biological monitor shall take place within the buffer zone until the nest is vacated. The biologist shall serve as a construction monitor when construction activities take place near active nest areas to ensure that no inadvertent impacts on these nests occur. Results of the pre-construction survey and any subsequent monitoring shall be provided to the CDFG and the City.

SC 4.4-5 To avoid conflict with Sections 3503, 3503.5, and 3513 of the California Fish and Game Code, the Standard Condition outlined above for the Migratory Bird Treaty

Act (SC 4.4-4) shall be implemented. The Migratory Bird Treaty Act mirrors the requirements for CDFG code relative to the protection of migratory birds and prohibits taking and possession of any migratory nongame bird, as designated in the Migratory Bird Treaty Act.

SC 4.4-6 A jurisdictional delineation shall be conducted if a project will impact jurisdictional resources. Permits from the U.S. Army Corps of Engineers (USACE) and Regional Water Quality Control Board (RWQCB) shall be required for impacts on areas within these agencies' jurisdiction. Acquisition and implementation of the permits may require mitigation. Compensation for impacts to jurisdictional resources shall be mitigated at a ratio no less than one to one (one acre restored for every acre impacted). Project applicants shall be required to plan, implement, monitor, and maintain the mitigated jurisdictional resource according to the requirements of USACE and RWQCB approval requirements. Prior to issuance of the first action and/or permit that would allow for site disturbance (e.g., grading permit), a detailed mitigation plan shall be prepared by a qualified Biologist for approval by the City of Rancho Cucamonga and the appropriate resource agencies, and shall include: (1) the responsibilities and qualifications of the personnel to implement and supervise the plan; (2) site selection; (3) site preparation and planting implementation; (4) a schedule; (5) maintenance plan/guidelines; (6) a monitoring plan; and (7) long-term preservation requirements.

SC 4.4-7 The Porter-Cologne Act and Sections 1600–1616 of the *California Fish and Game Code* protect “Waters of the State”. Agreements (Streambed Alteration Agreements) from the CDFG shall be required for impacts on areas within the CDFG jurisdiction. Acquisition and implementation of the agreement may require mitigation. Compensation for impacts to CDFG resources shall be mitigated at a ratio no less than one to one (one acre restored for every acre impacted). Project applicants shall be required to plan, implement, monitor, and maintain the mitigation areas according to CDFG requirements. Prior to issuance of the first action and/or permit which would allow for site disturbance (e.g., grading permit), a detailed mitigation plan shall be prepared by a qualified biologist for approval by the City of Rancho Cucamonga and CDFG, and shall include: (1) the responsibilities and qualifications of the personnel to implement and supervise the plan; (2) site selection; (3) site preparation and planting implementation; (4) a schedule; (5) maintenance plan/guidelines; (6) a monitoring plan; and (7) long-term preservation requirements.

SC 4.4-8 The County of San Bernardino's Code of Ordinances (Title 8, Division 8, Chapter 88.01 – Plant Protection and Management) provides regulations and guidelines for the management of plant resources in the unincorporated areas of the County on property or combinations of property under private or public ownership. Prior to the removal of a protected tree or plant within the unincorporated SOI, a removal permit shall be obtained.

SC 4.4-9 The City's Tree Preservation Municipal Code (Title 19, Environmental Protection – Chapter 19.08) states that eucalyptus, palm, oak, sycamore, pine and other trees growing within the City are a natural aesthetic resource and are worthy of protection. Prior to removal of a Heritage Tree within the City limits, a Tree Removal Permit shall be obtained from the Planning Director and replacement trees may be required consistent with the City code.

4.4.6 ENVIRONMENTAL IMPACTS

Special Status Species

Threshold 4.4a: **Would the proposed General Plan Update 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 CDFG or USFWS?**

The proposed General Plan Update Study Area contains habitat types that are known or have the potential to support several species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the CDFG or the USFWS (See Tables 4.4-2 and 4.4-3). The majority of suitable habitat for special status species is located within the City's SOI. The SOI is primarily considered "Open Space" in the General Plan Update, which includes open space with 0.1 dwelling units per acre allowed and conservation areas and flood control/utility corridor with no dwelling units per acre allowed.

Implementation of the proposed General Plan Update could potentially result in impacts on special status plant and wildlife species if they occur on site. Potential impacts on these species shall be evaluated on a project-specific basis by identifying the habitats within the proposed General Plan Update Study Area and the species that are known to occupy these habitat types. Per SC 4.4-1, any CEQA project that involves the removal of habitat must consider if any special status species is potentially present on a project site and if the project impacts could be considered significant. If potential habitat is present, focused surveys shall be conducted to document the presence or absence of a species on the project site.

Special Status Plants

Several special status plant species are known to occur or have the potential to occur with the proposed General Plan Update Study Area, including those listed as Threatened, Endangered, or CNPS List 1 and List 2 species. Impacts on these species may be considered significant if a project's impacts would result in a substantial loss to the regional population of the special status plant species.

As required under Policy RC-1.1, the City will implement actions that preserve sensitive land resources with significant native vegetation and/or habitat value, which could offset impacts to special status resources. The City will continue to liaison with agencies and private organizations that have the land or other resources available to promote open space and habitat preservation and restoration.

Policy RC-8.1 also requires the City to implement actions that result in the preservation of the integrity of riparian habitat areas, creek corridors, Riverside Alluvial Fan Sage Scrub, bogs, and sensitive wildlife habitat that supports biological resources. The City shall pursue these actions that provide appropriate long-term protection of areas within the City's SOI that contain sensitive habitat, and which are considered of unique value in enhancing the quality of the local environment.

Under Policy RC-8.2, the City is required to consult with the County and other agencies to support the preservation of streamside woodland areas along the foothills of the San Gabriel Mountains, including the North Etiwanda Preserve. The City shall continue to work with the County of San Bernardino to protect these sensitive biological resources.

Additionally, Policy RC-8.3 requires the City to utilize innovative measures that will allow the expansion of sensitive biological preserve areas (e.g., North Etiwanda Preserve, Day Creek Preserve, and San Sevaine Preserve) and other important habitat areas. The City shall continue to work with the County of San Bernardino, the CDFG, and the USFWS to protect sensitive biological resources within the City's Planning Area through the creation of a system of preserves and open space along the foothills of the San Gabriel Mountains that will become part of a larger Multiple Species Habitat Conservation Plan (MSHCP) for the County of San Bernardino. The City shall also continue with the acquisition program or the creation of conservation easements to protect the biological integrity of the alluvial fan sage scrub to create a preserve for use as part of a mitigation land bank.

Any project within the General Plan area that impacts a State or Federally listed Threatened or Endangered species shall be required to obtain take authorization through the CESA and/or FESA prior to project implementation (refer to SC 4.4-2 and SC 4.4-3). Compensation for impacts to the listed species and their habitat shall be mitigated at a ratio no less than one to one (one acre restored for every acre impacted). In addition, special status plant species that are not listed as Threatened or Endangered shall also be evaluated to determine if the City considers project impacts to be significant. If impacts are found to be significant, appropriate mitigation would be required in coordination with the City.

General Habitat Loss and Wildlife Loss

Implementation of the proposed General Plan Update could result in the loss of native habitat that provides nesting, foraging, roosting, and denning opportunities for a variety of wildlife species. In addition, implementation of the proposed General Plan Update could result in the loss of non-native habitats (non-native grassland, ruderal, ornamental, flood-control channel, and disturbed) that provide lower-quality wildlife habitat. However, these non-native habitats may provide limited nesting, foraging, roosting, and denning opportunities for some species.

Removing or altering habitats within the proposed General Plan Update Study Area would result in the loss of small mammals, reptiles, amphibians, and other slow-moving animals that live in an impact area. More mobile wildlife species that are now using proposed General Plan Update Study Area would be forced to move into the remaining areas of open space, which would consequently increase competition for available resources in those areas. This situation would result in the loss of individuals that cannot successfully compete.

Policy LU-8.5 requires the City to continue to coordinate the review of hillside development proposals with Federal, State, and regional agencies that have purview over natural resources and sensitive habitats. This policy will encourage early involvement of the agencies in the planning process relative to the preservation of sensitive resources.

Special Status Wildlife

Several special status wildlife species are known to occur or have the potential to occur within the proposed General Plan Update Study Area, including those listed as Threatened or Endangered. Impacts on these species may be considered significant if a project's impacts would result in a substantial loss to the regional population of the species.

Any project within the General Plan area that impacts a State or Federally listed Threatened or Endangered species will be required to secure Take Authorization through the CESA and/or FESA prior to project implementation. Compensation for impacts to the listed species and their habitat shall be mitigated at a ratio no less than one to one (one acre restored for every acre impacted). In addition, special status wildlife species that are not listed as Threatened or

Endangered will also be evaluated to determine if project impacts would be considered significant by the City. If impacts are found to be significant, appropriate mitigation would be required in coordination with the City.

To avoid conflicts with the Migratory Bird Treaty Act; the Bald and Golden Eagle Protection Act; and Sections 3503, 3503.5, and 3513 of the *California Fish and Game Code*, construction activities involving vegetation removal should be conducted between September 16 and March 14 (refer to SC 4.4-4 and SC 4.4-5). If construction occurs inside the peak nesting season (between March 15 and September 15), a pre-construction survey (or possibly multiple surveys) by a qualified Biologist are recommended prior to construction activities in order to identify any active nesting locations. Appropriate measures shall be implemented to ensure that no inadvertent impacts on avian species occur.

Impact 4.4a: Buildout of the proposed General Plan Update Study Area has the potential to impact special status species; however, compliance with General Plan policies RC-1.1, RC-8.1, RC 8.2, RC-8.3, and LU-8.5, and Standard Conditions SC 4.4-1, SC 4.4-2, SC 4.4-3, SC 4.4-4, and SC 4.4-5 would ensure that impacts would be less than significant; no mitigation is required.

Riparian Habitat and Jurisdictional Areas

Threshold 4.4b: Would the proposed General Plan Update have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, and regulations or by the CDFG or USFWS?

Threshold 4.4c: Would the proposed General Plan Update have a substantial adverse effect on Federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?

Implementation of the proposed General Plan Update would result in the loss of areas potentially under the jurisdiction of the CDFG and/or USACE.

A jurisdictional delineation should be conducted if the a proposed project will impact jurisdictional resources (refer to SC 4.4-6). Permits/agreements from the USACE, the RWQCB, and the CDFG will be required for impacts on areas within these agencies' jurisdictions. Acquisition and implementation of the permits may require mitigation (refer to SC 4.4-7). Compensation for impacts to jurisdictional resources shall be mitigated at a ratio no less than one to one (one acre restored for every acre impacted).

In addition to the potential for jurisdictional wetland areas, the following special status vegetation types have been reported within the proposed General Plan Update Study Area: California walnut woodland, coastal and valley freshwater marsh, scale broom scrub, southern sycamore alder riparian woodland, and coast live oak woodland. As required under Policy RC-1.1, the City will implement actions that preserve sensitive land resources having significant native vegetation and/or habitat value, which could offset impacts to special status resources. Policy RC-8.1 also requires the City to implement actions that result in the preservation of the integrity of riparian habitat areas, creek corridors, Riverside Alluvial Fan Sage Scrub, bogs, and sensitive wildlife habitat that supports biological resources. The City shall pursue these actions that provide appropriate long-term protection of areas within the City's SOI that contain sensitive

habitat and which are considered of unique value in enhancing the quality of the local environment.

Additionally, and as required by Policy RC-8.2, the City is required to consult with the County and other agencies to support the preservation of streamside woodland areas along the foothills of the San Gabriel Mountains, including the North Etiwanda Preserve. The City will require development proposals that include riparian or water-related communities to prepare a site-specific investigation to define the extent and fragility of the riparian community, determine wetland permit requirements, and propose measures to mitigate any impacts on the resources stemming from land disturbance or other site development.

Impacts 4.4b and 4.4c: Proposed development projects within the City have the potential to impact protected wetland areas and other significant natural communities; however, compliance with General Plan policies RC-1.1, RC-8.1, and RC-8.2, and Standard Conditions SC 4.4-6 and SC 4.4-7 would ensure that potential impacts would be less than significant; no mitigation is required.

Wildlife Movement

Threshold 4.4d: Would the proposed General Plan Update 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?

The proposed General Plan Update Study Area is primarily located in an urban area that does not contain large, contiguous natural open space areas. The remnant patches of natural open space within the City boundaries are largely unconnected. However, wildlife may potentially move through the north/south trending tributaries in the northern portion of the proposed General Plan Update Study Area. The SOI areas along the foothills of the San Gabriel Mountains do contain some large, contiguous open space areas. Anticipated future build out of the proposed General Plan Update Study Area may result in fragmentation of unprotected areas in the northern portion of the City and the SOI, thus inhibiting wildlife movement between remaining open space areas. As described in Policy RC-8.4, however, the City is required to acquire and/or protect open space areas that provide strategic wildlife corridors and that provide vital connectivity between habitat areas. Therefore, buildout of the proposed General Plan Update Study Area would result in a less than significant impact related to wildlife movement assuming compliance with this General Plan policy.

The proposed General Plan Update Study Area does not contain known native wildlife nursery sites; therefore, buildout of the proposed General Plan Update Study Area would not result in an impact; no mitigation is required.

Impact 4.4d: Buildout of the proposed General Plan Update Study Area has the potential to disrupt wildlife movement through the loss of open space corridors; however, compliance with General Plan Policy RC-8.4 would ensure that potential impacts would be less than significant; no mitigation is required.

Biological Resource Policies

Threshold 4.4e: Would the proposed General Plan Update conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinances?

Future buildout of the proposed General Plan Update Study Area is expected to result in the loss of trees or plants that are protected by City and County codes. Specifically, the projects pursuant to the proposed General Plan Update could involve clearing, grading, and construction of structures on currently undeveloped lands which may contain individuals or groups of a protected tree or plant as defined by City and County codes. Assuming compliance with SC 4.4-8 and SC 4.4-9, a permit shall be obtained for the removal or destruction of any protected plants, thereby ensuring that any impacts would be less than significant; no mitigation is required.

Impact 4.4e: Buildout of the proposed General Plan Update Study Area has the potential to result in removal of trees and plants protected by local and County ordinances. However, compliance with County and City codes (SC 4.4-8 and SC 4.4-9, respectively), would ensure that these impacts would be less than significant; no mitigation is required.

Habitat Conservation Plans/Natural Community Conservation Plans

Threshold 4.4f: Would the proposed General Plan Update conflict with the provisions of an adopted Habitat Conservation Plan (HCP), Natural Community Conservation Plan (NCCP), or other approved local, regional, or State habitat conservation plan?

Neither the City nor the SOI lie within an adopted HCP, NCCP, or other approved local, regional, or State habitat conservation plan area; therefore, buildout of the proposed General Plan Update Study Area would not conflict with the provisions of an adopted plan. No impact would occur; no mitigation is required.

Impact 4.4f: The General Plan Study Area is not located within an adopted HCP, NCCP, or other approved local, regional, or State habitat conservation plan. No impact would occur; no mitigation is required.

4.4.7 CUMULATIVE IMPACTS

The proposed General Plan Update Study Area is predominantly surrounded by urban development to the south, east, and west. Future projects within these areas would occur within areas that do not contain significant biological resources. However, lands to the north of the SOI exist largely as undeveloped open space that is under the jurisdiction of the U.S. Forest Service (USFS). Pursuant to the USFS mission of sustaining the health, diversity, and productivity of the nation's forests and grasslands, development is limited within this area; therefore, future impacts to biological resources would also be limited and would not constitute significant impacts. Because the General Plan Study Area is relatively isolated from other areas containing significant biological resources that would also be subject to future development, the potential impacts related to build out of the proposed General Plan Update Study Area would not contribute to a cumulatively significant impact. Additionally, impacts related to buildout of the proposed General Plan Update Study Area are anticipated to be less than significant assuming compliance with proposed General Plan policies and existing standard conditions.

4.4.8 MITIGATION MEASURES

With implementation of the policies in the proposed General Plan Update and compliance with the standard conditions, no significant adverse impacts on biological resources are expected. Thus, no mitigation measures are required.

4.4.9 LEVEL OF SIGNIFICANCE AFTER MITIGATION

Special Status Species

Less Than Significant.

Riparian Habitat and Jurisdictional Areas

Less Than Significant.

Wildlife Movement

Less Than Significant.

Biological Resource Policies

Less Than Significant.

Habitat Conservation Plans/Natural Community Conservation Plans

Less Than Significant.

Cumulative Impacts

Less Than Significant.