

**Appendix C Biological Resources Impact Report (Ruth
Villalobos Associates)**

Appendices

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BIOLOGICAL RESOURCES IMPACT ANALYSIS REPORT

Oak Glen Creek Specific Plan in the City of Yucaipa, San Bernardino County, California

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Prepared by:



Ruth Villalobos & Associates, Inc.
3602 Inland Empire Blvd., Suite C-310

(909) 685-5942

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INTRODUCTION

The initial specific plan, named Wilson Creek Business Park Specific Plan, the City of Yucaipa, California had a western boundary along 2nd Street. This specific plan area was surveyed and the existing biological resources onsite were described in the Biological Resources Report prepared by Cadre Environmental in 2014 and a Jurisdictional Delineation Report prepared by Vandermost Consulting Services in 2011. The specific plan boundary was subsequently expanded to include the area west of 2nd Street and the City Yard located at the corner of 2nd Street and Oak Glen Road and was renamed as the Oak Glen Creek Specific Plan. The additional areas included in the Oak Glen Specific Plan west of 2nd Street and City Yard were analyzed in the Habitat Assessment and Jurisdictional Delineation prepared by RVA in 2015 and a Focused Survey for Sensitive Plants by RVA in 2016. This report includes an impact analysis of the biological resources found within the current approximate 116-acre Oak Glen Creek Specific Plan boundary (Refer to Exhibit 1, *Location Map* and Exhibit 2, *Project Site*) and the potential impacts from build out of the Specific Plan uses, which include residential, innovation, and open space land uses, the southern extension of 2nd Street, and the Wilson III basin and associated channels, inlet and outlet structures, a component of the City's Master Plan of Drainage. The proposed Wilson III basin design includes construction of an access road and associated grading that extends outside of the Oak Glen Creek Specific Plan boundary in the northern portion of the specific plan area and south of Oak Glen Road. This access road and grading extend outside of the specific plan boundary due to design changes from the initial plan of extending the existing concrete box culvert which was redesigned to leave the channel open with a natural bottom at this location. The redesign also required an easterly shifting/realignment of the channel to make grade and meet San Bernardino County Flood Control District requirements for the maximum slope of the access road of 10%.

EXISTING VEGETATION COMMUNITIES, SENSITIVE SPECIES, AND JURISDICTIONAL RESOURCES

Vegetation Communities

Natural community names and hierarchical structure follows the California Department of Fish and Wildlife (CDFW) "List of California Terrestrial Natural Communities" and/or Holland 1986¹ classification systems, which have been refined and augmented where appropriate to better characterize the habitat types observed onsite. The native and non-native vegetation communities and disturbed habitats mapped within the Project Site are shown on Figure 4, *Vegetation Communities Map*. The approximate 116-acre Project Site (Oak Glen Creek Specific

¹ Holland, R.F. 1986. Preliminary Descriptions of the Terrestrial Natural Communities of California, State of California Resources Agency. Department of Fish and Game. Non-Game Heritage Program, Sacramento, CA.

Plan) supports 22 vegetation communities. The acreage of each habitat is summarized in Table 1, *Summary of Project Site Vegetation Communities* and a brief description follows.

Table 1. Summary of Project Site Vegetation Communities

Vegetation Communities	Acres
<i>Developed or Disturbed Lands</i>	
Disturbed/Ruderal (DIS/RUD)	25.05
Ruderal (RUD)	0.41
Ornamental (ORN)	0.05
<i>Grassland Communities</i>	
Non-native Grassland (NNG)	5.38
<i>Coastal Scrub Communities</i>	
Alluvial Fan Sage Scrub (AFSS)	27.37
Disturbed Intermediate Alluvial Fan Sage Scrub (DIRAFSS)	6.40
California Buckwheat Scrub (CBS)	10.39
California Buckwheat Scrub/Non-Native Grassland Ecotone (CBS/NNG)	0.37
Deerweed Scrub (DWS)	4.74
Deerweed Scrub/Non-Native Grassland/Sycamore Ecotone (DWS/NNG)	3.28
Mixed Sage Scrub (MSS)	6.90
<i>Chaparral Communities</i>	
Chamise Chaparral (CC)	3.96
Chamise Chaparral/Burned (CC/BURN)	3.60
Eriodictyon Chaparral (CYS)	7.04
Eriodictyon Chaparral/Non-Native Grassland Ecotone (CYS/NNG)	0.77
Northern Mixed Chaparral (NMC)	2.38
Northern Mixed Chaparral/Non-Native Grassland Ecotone (NMC/NNG)	1.50
<i>Oak Woodland Communities</i>	
Coast Live Oak Woodland (CLO)	0.10
<i>Riparian Communities</i>	
Southern Cottonwood Riparian Woodland (SCRW)	0.67
Southern Sycamore Riparian Woodland (SSRW)	2.88
Southern Willow Scrub (SWS)	0.05
Mule Fat Scrub (MFS)	0.07
Unvegetated Wash (WASH)	2.20
TOTAL	115.55

Disturbed/Ruderal (25.05 acres)

There are four areas that are currently developed that no longer support native vegetation and/or provide any suitable habitat wildlife species, the City Yard at the southeast corner of Glen Oak Road and 2nd Street, a residential home along 2nd Street just north of where Wilson Creek crosses the road, and a concrete flood control structure along the western boundary.

Disturbed/Ruderal habitat is also comprised of dirt roads, lots, and abandoned sand mining sites located along Wilson Creek, and recently graded lands maintained as fire breaks in the southern portion of the Project Site. These areas are generally barren and support only a few ruderal plant species.

Ruderal (0.41 acre)

Ruderal habitat on site consists of disturbed land sparsely vegetated with mostly nonnative broad-leaved plants and a few grasses, including short-pod mustard (*Hirschfeldia incana*), red-stem filaree (*Erodium cicutarium*), southern thistle (*Salsola australis*), tocolote (*Centaurea melitensis*), tumble mustard (*Sisymbrium altissimum*), bur clover (*Medicago polymrpha*), tree tobacco (*Nicotiana glauca*), red brome (*Bromus madritensis subsp. rubens*), cheat grass (*Bromus tectorum*), and Mediterranean grass (*Schismus barbatus*). A few native species, telegraph weed (*Heterotheca grandiflora*), California croton (*Croton californicus*), and horseweed (*Conyza canadensis*), also grow in ruderal habitats within the Project Site.

Ornamental (0.05 acre)

Ornamental plantings consisting mostly of cultivated pine trees (*Pinus halepensis*) located adjacent to the fire station in the northeast corner of the Project Site.

Non-Native Grassland (5.38 acres)

Several species of non-native grasses and forbs characterize the Non-Native Grassland community found in the Project Site. Dominant non-native grasses include red brome, wild oat (*Avena fatua*), rattail fescue (*Vulpia myuros*), cheat grass, ripgut grass (*Bromus diandrus*), and foxtail barley (*Hordeum murinum*). Non-native forbs include short-pod mustard, red-stem filaree, common horehound (*Marrubium vulgare*), and smooth cat's ear (*Hypochaeris glabra*). Scattered native forbs include common sand aster (*Corethrogyne filaginifolia*), bristly golden-star (*Heterotheca sessiliflora* subsp. *echioides*), common fireweed (*Amsinckia menziesii*), doveweed (*Croton setiger*), miniature lotus (*Lotus bicolor*), slender buckwheat (*Eriogonum gracile*), and Brewer's daisy (*Erigeron breweri* var. *bisanctus*).

Riversidean Alluvial Fan Sage Scrub (27.37 acres)

Riversidean Alluvial Fan Sage Scrub is widespread along Wilson Creek and the lower portion of Oak Glen Creek in the western half of the Project Site then extending into the southwest corner of the project site. The community within the southwest corner of the site extends up the banks of the incised channel and continues outside of the drainage channel associated with Wilson Creek, likely due to the souring effect of flood waters breaching the banks of the channel during storm events. Riversidean Alluvial Fan Sage Scrub is dominated by scale-broom (*Lepidospartum squamatum*), but also supports a broad diversity of other native shrubs and forbs, including valley cholla (*Cylindropuntia californica*), deerweed (*Acmispon glaber*), hairy yerba santa (*Eriodictyon trichocalyx*), blue elderberry (*Sambucus mexicana*), California

buckwheat (*Eriogonum fasciculatum*), cotton-thorn (*Tetradymia comosa*), tarragon (*Artemisia dracunculus*), white sage (*Salvia apiana*), chaparral yucca (*Yucca whipplei*), branching phacelia (*Phacelia ramosissima*), sandwash butterweed (*Senecio flaccidus* var. *douglasii*), Pomona locoweed (*Astragalus pomonensis*), common cryptantha (*Cryptantha intermedia*), and California croton. A few non-native forbs and grasses are also present including red brome, short-pod mustard, cheat grass, rattail fescue, tocolote, Mediterranean grass, and red-stem filaree. Natural sandy openings in the scrub support a diverse assemblage of small mostly native forbs and grasses including small primrose (*Camissonia micrantha*), slender buckwheat, California filago (*Filago californica*), everlasting nest-straw (*Stylocline gnaphaloides*), slender pectocarya (*Pectocarya linearis* subsp. *ferocula*), sand pygmystonecrop (*Crassula connata*), common calyptrium (*Calyptrium monandrum*), lastarriaea (*Lastarriaea coriacea*), six weeks fescue (*Vulpia octoflora*), and the sensitive Parry's spineflower.

There is an additional 0.34-acre area of Riversidean alluvial fan sage scrub that is located outside of the specific plan boundary that is within the proposed development footprint.

Disturbed Intermediate Riversidean Alluvial Fan Sage Scrub (6.40 acres)

The majority of the northern half of the project site supports a disturbed intermediate Riversidean Alluvial Fan Sage Scrub habitat. This area has been heavily disturbed by agricultural activities associated with the residences found on the property and primarily supports non-native grasses including red brome, short-pod mustard, cheat grass and Mediterranean grass. Isolated residual components of the intermediate Riversidean Alluvial Fan Sage Scrub habitat that once occupied this area are still present. Native species still occurring onsite included: California buckwheat, blue elderberry (*Sambucus mexicanus*), and cotton-thorn.

California Buckwheat Scrub (10.39 acres)

The California Buckwheat Scrub community onsite is dominated by nearly monotypic stands of California buckwheat. Scattered cotton-thorn, white sage, and deerweed are also present. The understory is often comprised of scattered to dense exotic grasses such as wild oats, rattail fescue, and red brome. A few native and non-native forbs also grow in this habitat, including California everlasting (*Pseudognaphalium californicum*), silver puffs (*Microseris lindleyi*), common catchfly (*Silene gallica*), and tocolote.

California Buckwheat Scrub/Non Native Grassland Ecotone (0.37 acres)

The California Buckwheat Scrub community forms a transitional habitat with Non-Native Grasslands on site. This ecotone habitat supports scattered buckwheat shrubs, but is otherwise dominated by dense non-native grasses, especially rattail fescue.

Deerweed Scrub (4.74 acres)

A scrub community dominated by nearly monotypic stands of deerweed is locally common in the southern portion of the property that burned in 2008. Cotton-thorn and a few other shrubs are occasionally present. The understory vegetation contains rattail fescue, tocolote, red brome, and a few native forbs such as common sand aster.

Deerweed Scrub/Non-Native Grassland/Sycamore Ecotone (3.28 acres)

The Deerweed Scrub community forms a transitional habitat with Non-Native Grasslands that also supports scattered western sycamore (*Platanus racemosa*) trees. This area also burned in 2008. Rattail grass, cheat grass, and red brome are common.

Mixed Sagebrush Scrub (6.90 acres)

This coastal scrub community is developed on upland sites with loamy soils and supports numerous shrub species including California sagebrush (*Artemisia californica*), California buckwheat, white sage, brittle bush (*Encelia farinosa*), deerweed, cottonthorn, purple nightshade (*Solanum xanti*), black sage (*Salvia mellifera*), blue elderberry, four-wing saltbush (*Atriplex canescens*), and coast prickly-pear (*Opuntia littoralis*). Numerous non-native and native forbs and grasses grow in the understory vegetation, including golden yarrow (*Eriophyllum confertiflorum*), splendid Mariposa lily (*Calochortus splendens*), and rattail fescue.

Chamise Chaparral (3.96 acres)

The Chamise Chaparral community on site is dominated by dense, monotypic stands of chamise (*Adenostoma fasciculatum*). A few native and non-native forbs and grasses are also present in the understory or along trails, which include red brome, short-pod mustard, common calyptidium, chia (*Salvia columbariae*), cheat grass, minute-flowered cryptantha (*Cryptantha micromeres*), tocolote, Mediterranean grass, and red-stem filaree.

Chamise Chaparral/Burned (3.60 acres)

The southernmost portion of Chamise Chaparral burned in 2008. The open areas between the charred shrubs support numerous forbs including California peony (*Paeonia californica*), golden ear-drops (*Dicentra chrysantha*), small primrose, slender buckwheat, everlasting nest-straw, slender pectocarya, and common calyptidium. Non-native species such as rattail fescue, tocolote, common horehound, and cheat grass are common.

Eriodictyon Chaparral (7.04 acres)

The Eriodictyon Chaparral community on site is dominated by nearly monotypic stands of hairy yerba santa. Deerweed and cotton-thorn are also present.

Eriodictyon Chaparral/Non-Native Grassland Ecotone (0.77 acre)

The Eriodictyon Chaparral community forms a transitional habitat with Non-Native Grasslands on site. This ecotone habitat supports scattered or clumped Eriodictyon trichocalyx shrubs, but is otherwise dominated by dense non-native grasses, especially rattail fescue, and occasionally also deerweed.

Northern Mixed Chaparral (2.38 acres)

The Northern Mixed Chaparral community is found on the steep north-facing slope located along the southern boundary of the Project Site. Common species of this habitat include California scrub oak (*Quercus berberidifolia*), heart-leaved bushpenstemon (*Keckiella cordifolia*), mountain mahogany (*Cercocarpus betuloides*), hollyleaved cherry (*Prunus ilicifolia*), spiny redberry (*Rhamnus crocea*), blue elderberry, southern honeysuckle (*Lonicera subspicata*), sugar bush (*Rhus ovata*), California buckwheat, and numerous forbs such as California figwort (*Scrophularia californica*), western nettle (*Hesperocnide tenella*), and royal penstemon (*Penstemon spectabilis*).

Northern Mixed Chaparral/Non Native Grassland Ecotone (1.50 acres)

The Northern Mixed Chaparral community forms a transitional habitat with non-native grasslands on site. This habitat supports a few scattered shrubs, but otherwise is dominated by dense non-native grasses, especially rattail fescue and brome grasses. A few native forbs are present including doveweed, Brewer's daisy, western ragweed (*Ambrosia psilostachya*), and blue-eyed grass (*Sisyrinchium bellum*).

Coast Live Oak Woodland (0.10 acre)

Coast Live Oak (*Quercus agrifolia* var. *agrifolia*) Woodland is uncommon on site. Understory species consist of forbs and grasses including bur-chervil (*Anthriscus caucalis*), fiesta flower (*Pholistoma auritum*), common horehound, foxtail barley, smilgrass (*Piptatherum miliaceum*), and ripgut brome. A few oak seedlings and hollyleaved cherry are also present.

Southern Cottonwood Riparian Woodland (0.67 acre)

This mixed plant community occurs along the banks of Wilson Creek within the incised channel. Fremont cottonwood (*Populus fremontii*) dominates this riparian community. Black willow (*Salix gooddingii*) trees are also present in the canopy. Mugwort (*Artemisia douglasiana*), cockle-bur (*Xanthium strumarium*), tamarisk (*Tamarix ramosissima*), tree of heaven (*Ailanthus altissima*), mule fat (*Baccharis salicifolia*), and a few *Salix* saplings form the understory vegetation.

Southern Sycamore Riparian Woodland (2.88 acres)

This community occurs along Oak Glen Creek. The dominant tree species is the western sycamore, but Fremont cottonwood, red willow (*Salix laevigata*), and arroyo willow (*Salix lasiolepis*) are also present. Net-leaf hackberry (*Celtis reticulata*), California rose (*Rosa californica*), mule fat, mugwort, California buckwheat, and elderberry are found in the understory. Curly dock (*Rumex crispus*), seep monkeyflower (*Mimulus guttatus*), and water-cress (*Rorippa nasturtium-aquaticum*) grow along the banks of Oak Glen Creek.

Southern Willow Scrub (0.05 acre)

This community is uncommon on site and is dominated by red willow and arroyo willow. Mule fat, tarragon, ragweed, cockle-bur, and mugwort comprise the understory vegetation.

Mule Fat Scrub (0.07 acre)

Mule fat locally forms dense thickets along open creek banks. Willow and tree of heaven saplings, mugwort, seep monkeyflower, and curly dock are common components of this association.

Unvegetated Wash (2.20 acres)

The streambeds associated with Wilson Creek and Oak Glen Creek are frequently scoured by flood waters and are generally devoid of vegetation. Scattered seedlings are frequent, including scale-broom, mule fat, and cocklebur.

Existing Sensitive Species

Sensitive Plants

Focused surveys and floristic inventories for the area east of 2nd Street, not including the City Yard, were conducted from April through July, 2011, and February – May 2012 to determine presence/absence for the target special-status plant species that have potential to occur within the specific plan area (Rick Riefner & Associates 2012, Cadre Environmental 2012). Of the 29 plant species surveyed for (see Methods section of Cadre Biological Resources Report for the full list of target plant species), only Parry's spineflower was observed on site. For the expanded area, which includes the area west of 2nd Street and the City Yard, a focused plant survey was conducted in 2016 and specifically focused on whether any of the previously 29 sensitive species were present further downstream in Oak Glen Creek within the proposed project areas. Given that several populations of Parry's spineflower were documented just upstream of the project areas, an emphasis was placed on searching for Parry's spineflower.

The following discussion is presented in two parts: I) special-status species documented on the area east of 2nd Street; and II) special-status species documented on the area west of 2nd Street including the City Yard.

I) Special–Status Plant Species Observed On the Area East of 2nd Street

Parry's Spineflower (*Chorizanthe parryi* var. *parryi*)

Parry's spineflower is an annual herb in the Polygonaceae. It is a southern California endemic and is a California Rare Plant Rank 1B.1 (1B. a rare, threatened, or endangered species in California; 0.1 seriously threatened in California); Parry's spineflower blooms from April to June and its habitats range in elevation from 275–1220 meters above mean sea level (AMSL). Parry's spineflower occupies sandy soils in chaparral, cismontane woodland, grassland, coastal scrub, often on alluvial fans, in Los Angeles, Riverside, and San Bernardino counties.

Most of the known populations of Parry's spineflower occur in western Riverside and San Bernardino counties. Many historical populations have been extirpated owing to loss of habitat following land development and degradation of habitat by invasions of exotic grasses. Other threats include mining, altered flood regimes, and off-road vehicles.

During the 2011 project surveys, the population census and field mapping of Parry's spineflower was conducted on May 24th, June 3rd, and June 18th, 2011. The numbers of flowering plants observed were counted individually at each habitat patch location and recorded on a spreadsheet for later input into the GIS database by Cadre Environmental. The habitat patch areas, when generally larger in size than 600 sq. ft., were divided into quadrants to ensure accurate population census of each population observed on site.

In 2011, project surveys recorded 6,663 Parry's spineflower plants occupying 0.9 acre of coastal scrub, chaparral, and grassland habitats within the Project Site is shown in Exhibit 6, *Sensitive Plants*

Map. Parry's spineflower is typical of sandy-soil openings (habitat patch) in scrub vegetation. The abundance of Parry's spineflower within any given habitat patch varies greatly onsite, including widely spaced to very high concentrations of individual plants.

II) Special-status species documented on the area west of 2nd Street including the City Yard

The focused surveys covered all vegetated areas within the area west of 2nd Street and City Yard, including the intermediate Riversidean Alluvial Fan Sage Scrub habitat, both naturally occurring and disturbed, as well as the southern cottonwood riparian woodland and disturbed ruderal habitat in the northwest portion of the area west of 2nd Street. Despite extensive systematic searches, no Parry's spineflower or any of the other 28 potentially occurring sensitive plant species were observed during the 2016 sensitive plant surveys. It can be concluded that this area of the site does not support sensitive plant species, including Parry's spineflower. Sensitive plants, including Parry's spineflower, are presumed absent from the area west of 2nd Street and development of this portion of the specific plan area will not result in impacts to Parry's spineflower or other sensitive plant species.

Sensitive Wildlife

Suitable habitat for two (2) federal/state threatened/endangered wildlife species (coastal California gnatcatcher and San Bernardino kangaroo rat) and one (1) state species of special concern (burrowing owl) was identified onsite. Focused surveys for each of these species was conducted and the results are present below.

Coastal California Gnatcatcher Surveys

No coastal California gnatcatchers were documented within the Project Site during the focused protocol surveys conducted during the spring of 2012. Also, no coastal California gnatcatcher were detected within the Wilson Creek project located immediately east of the Project Site during focused surveys conducted in 2005.

Burrowing Owl Surveys

No burrowing owls were documented within or adjacent to the Project Site during the focused protocol surveys conducted during the spring of 2012. Also, no burrowing owl were detected within the Wilson Creek project located immediately east of the Project Site during focused surveys conducted in 2005.

San Bernardino Kangaroo Rat Surveys

No San Bernardino kangaroo rat, Los Angeles pocket mouse, or San Diego woodrat were captured during the focused trapping program conducted during the spring of 2012. However, the northwestern San Diego pocket mouse was captured within the Project Site. The northwestern San Diego pocket mouse (*Chaetodipus fallax fallax*) is a State Species of Special Concern (CSC).

The Project Site does not occur within or adjacent to USFWS critical habitat designation for federal listed plants or wildlife species.

Sensitive Wildlife with the Potential to Occur Onsite

During the focused surveys for sensitive wildlife, the northwestern San Diego pocket mouse was captured onsite. The northwestern San Diego pocket mouse is listed as a California Species of Special Concern (CSC). Focused surveys also reported suitable foraging habitat for Cooper's Hawk, sharp-shinned hawk, ferruginous hawk, northern harrier, white-tailed kite, prairie falcon, golden eagle, California horned lark, and southern California rufous-crowned sparrow. Other sensitive species were found to have moderate to low potential to occur onsite based on lack of suitable habitat. For the detailed results of the focused surveys and evaluation of all of the sensitive wildlife species that have a potential to occur onsite, refer to the Cadre Biological Resources Report (2014).

Jurisdictional Resources

Two drainages, each with a tributary, that meet both state and federal jurisdictional requirements were observed within the project area. Figure 3, *Jurisdictional Waters Map* shows the results of the delineation of waters of the US and waters of the State (streambeds) associated with Wilson Creek and Oak Glen Creek within the specific plan area. No wetlands were found in the project area. Table 2, Summary of Project Site Jurisdictional Resources shows the proposed acreage delineated as jurisdictional under state and federal regulations, subject to California Department of Fish and Wildlife (CDFW) and US Army Corps of Engineers (USACE) verification.

Table 2. Summary of Project Site Jurisdictional Resources

Drainage	USACE	CDFW
Wilson Creek and tributary	0.60 ac	1.11 ac
Oak Glen Creek and tributary	1.74 ac	9.42 ac
Total	2.34 ac	10.53 ac

Oak Glen Creek

Within the project site the Oak Glen drainage is dominated by upland species (buckwheat, fiddle neck, monkey flower) with occasional riparian habitat (mulefat, willow, elderberry). Tree species observed included sycamore, eucalyptus, and cottonwood. The width of Oak Glen Creek at the Ordinary High Water Mark (OHWM) near the confluence is approximately 10 feet and on average remains fairly constant through the project area. Creek width for the purposes of CDFW jurisdiction varies from 1 foot to approximately 33 feet wide to include the canopy of associated vegetation.

Investigators began the April 27, 2011 delineation by walking Oak Glen Creek starting at the confluence with Wilson Creek. Water was flowing in Oak Glen Creek. The creek bed is heavily cobbled with a sandy bed; little to no vegetation was present in the creek bed in this area, which is highly disturbed by flooding and motor vehicle access. Vegetation at the top of bank includes cottonwood, buckwheat, and nonnative grasses. Soil pits were dug in this area and no hydric soils were found.

Where the drainage narrows, vegetation begins to encroach closer to the stream. The landscape is dominated by buckwheat, sage, sycamore, and nonnative grasses. The creek becomes braided with hummocks, with the low flow channel containing the flow. Mulefat dominates near the channel and buckwheat and sycamore dominates in the upland.

Approximately 0.30 mile (1,600 feet) upstream from the confluence, Oak Glen Creek bifurcates. Water was flowing in both channels (Oak Glen tributary [Tributary 2]). As the main drainage approaches Bryant Street, it narrows and steepens, however vegetation on the banks (mulefat) extends and widens the area under CDFG jurisdiction. At Bryant Street, the earthen creek bed meets the box culvert and channel under Bryant Street; water was flowing from under Bryant Street to the main Oak Glen Creek channel.

The investigators observed that an earlier low flow course leading from the concrete channel under Bryant Street in the direction of Tributary 2 had been abandoned. There are no indicators of water flow in this old channel, the topography precluded water from flowing into the channel, and the established vegetation is stressed while the relatively young vegetation is dominated by upland species, including cholla. Investigators followed the side channel downstream and found no defined bed and bank in the upper region of this channel. While the vegetation was comprised of both upland and riparian species, there were no indicators of current water flow and the older vegetation appears to be failing. A soil pit was dug (May 20, 2011) and the soil was determined to be nonhydric. The photograph to the right shows the locations of the abandoned and current drainages.

Approximately 500 feet downstream from Bryant Street, water was observed in the side channel, Tributary No. 2. The source of the water is a blow-off pipe and well that was overflowing (Photostation 9). The well is associated with the basin immediately upstream of Bryant Street, and is it unknown if the flow is constant or intermittent. However, the volume is sufficient to support riparian habitat from this point downstream to where it joins the main channel of Oak Glen Creek. A soil pit was dug and the soils were wet to a depth of 9 inches. VCS investigators continued walking the length of Tributary 2 until it rejoined Oak Glen Creek. At this point, the investigators returned to the confluence of the two creeks, walking transects across the property looking for additional potential drainages. No potential drainages were found south of Oak Glen Creek.

Wilson Creek

Like Oak Glen Creek, Wilson Creek has sandy soils and is heavily cobbled. Water was not flowing. The creek bed is void of vegetation in this area. A very steep and, in places, vertical transition zone from the streambed to the surrounding floodplain, as well as dirt roads and development on either side of the mainstem of Wilson Creek, prohibits riparian habitat from forming in most locations. Wilson Creek is substantially wider than Oak Glen at their confluence, approximately 18 feet at the OWHM; the width of the drainage varies from 2 foot wide to approximately 32 feet wide. Due to the lack of associated riparian vegetation, creek width for both CDFG and USACE jurisdiction is based on the OWHM.

As the investigators neared the upper section of Wilson Creek within the project area, the creek narrowed and became inaccessible due to the thick growth of mulefat and willows. At Oak Glen Street, the topography became steep (2:1 slope) and the creek bed continued off the project area through a concrete channel.

Potential drainages leading to Wilson Creek were noted and the investigators walked transects across the remaining property to determine if jurisdictional waters were present. The landscape was dominated by buckwheat, deer weed, white sage, and yerba santa. While several erosional features were present on the property, only one warranted additional investigation. Investigators followed the drainage (Tributary 1) from its apparent inception at the top of the bank of the unimproved land to its confluence with Wilson Creek. Tributary 1 exhibited a defined bed and bank; the soils were sandy and nonhydric.

Non-Jurisdictional Waters

Erosional features crisscross the project area. While these features clearly convey water, they do not have a defined bed and bank nor do they exhibit evidence of recent flows. In addition, these features fail to contain drainage prior to reaching a jurisdictional drainage; therefore, they have been determined to be non-jurisdictional waters.

In addition to these ephemeral erosional features, the abandoned low flow channel from Bryant Street to the source of the water for Tributary 2 does not exhibit features characteristic of waters of the U.S. or State under the guidance of either the USACE or the CDFW. As described above, there is no defined bed and bank, no indication of flow, and no associated riparian vegetation. Therefore, it too has been determined to be non-jurisdictional.

ENVIRONMENTAL IMPACTS

The following sections include an analysis of the direct, indirect, and cumulative impacts of the proposed action on sensitive biological resources. This analysis characterizes the project-related activities that are anticipated to adversely impact the species, and when feasible, quantifies such impacts. Direct impacts are defined “as actions that may cause an immediate effect on the species or its habitat, including the effects of interrelated actions and interdependent actions”. Indirect impacts are caused by or result from the proposed actions, are later in time, and are reasonably certain to occur. Indirect impacts may occur outside of the area directly affected by the proposed action.

Cumulative impacts refer to incremental, individual environmental effects of two or more projects when considered together. These impacts taken individually may be minor but may be collectively significant. Cumulative effects include future tribal, local, or private actions that are reasonably certain to occur in the proposal vicinity considered in this report. A cumulative impact to biological resources may occur if a project has the potential to collectively degrade the quality of the environment, substantially reduce the habitat of wildlife species or cause a population to drop below self-sustaining levels, thereby threatening to eliminate a plant or animal community, or reduce the number or restrict the range of a rare or endangered plant or animal species.

Threshold of Significance

The environmental impacts relative to biological resources are assessed using impact significance criteria which mirror the policy statement contained in CEQA at Section 21001(c) of the Public Resources Code. This section reflects that the legislature has established it to be the policy of the state to:

“Prevent the elimination of fish and wildlife species due to man’s activities, ensure that fish and wildlife populations do not drop below self perpetuating levels, and preserve for future generations representations of all plant and animal communities...”

The following definitions apply to the significance criteria for biological resources.

- *“Endangered, Threatened, or Rare”*. CEQA Guideline section 15380 provides that a species is presumed to be endangered, rare, or threatened when it is listed under California endangered species regulations (14 Cal Code Regs §§670.2, 670.5) or under the federal endangered species regulations (50 CFR §§17.11- 17.12). CEQA considers a species that is not listed in this manner to be considered endangered, rare, or threatened if, pursuant to CEQA Guideline section 15380(b)(1), its survival and reproduction in the wild are “in immediate jeopardy as a result of loss of habitat, change in habitat, overexploitation, predation, competition, disease, or other factors.” Under CEQA Guideline section 15380(b)(2)(A), a species that is not threatened with extinction is considered rare if it is existing in such small numbers in all or a significant portion of its range that it may become endangered if its environment worsens. Under CEQA Guidelines section 15380(b)(2)(B), a species is also considered rare if it is likely to become endangered within the foreseeable future in all or a significant portion of its range and may be considered threatened within the meaning of the FESA (16 USC §§1531-1544).
- *“Region”* refers to the area within southern California that is within the range of the individual species.
- *“Sensitive habitat”* refers to habitat for plants and animals which, (1) plays a special role in perpetuating species utilizing the habitat on the property, and (2) without which there would be substantial danger that the population of that species would drop below self-perpetuating levels.
- *“Significant impact”*. Under the mandatory standards of significance in CEQA Guideline section 15065(a)(1), the applicant must find that the Project will have a significant effect on the environment, and require that an Environmental Impact Report (EIR) be prepared if the proposed action has the potential to 1) reduce substantially the habitat of a fish or wildlife species, 2) cause a fish or wildlife population to drop below self-sustaining levels, 3) threaten to eliminate a plant or animal community, or 4) reduce substantially the number or restrict the range of an endangered, rare, or threatened species. Also, the determination of impacts has been made according to the federal definition of “take”. FESA prohibits the “taking” of a member of an endangered or threatened wildlife species or removing, damaging, or destroying a listed plant species by any person (including private individuals and private or government entities). FESA defines “take” as “to harass, harm, pursue, hunt, shoot, would, kill, trap, capture or collect” an endangered or threatened species, or to attempt to engage in these activities.

Impacts to Jurisdictional Resources, Vegetation Communities, and Sensitive Species

The Oak Glen Creek Specific land uses include innovation, open space, and residential uses as seen in Exhibit 6, *Specific Plan Map*. The proposed project site impact area is defined by portions of the site that are proposed to be developed and include the southerly extension of 2nd Street, the residential planning areas, the innovation planning areas, and a flood control facility referred to as the Wilson III Basin and associated structures within the open space planning area. The impact area totals approximately 90 acres

of the project site. The other approximately 25 acres of the project site will be avoided and conserved as open space and natural habitat.

Jurisdictional Resources

The proposed impact area would affect a total of 2.34 acres of Waters of the US and 10.53 acres of Waters of the State as shown in Exhibit 7, *Jurisdictional Waters Impacts*. Below is a table that summarizes the impacts to on site jurisdictional resources.

Table 3. Impacts to Jurisdictional Resources

Jurisdiction	Total Resource	Impacts	Avoided
USACE	2.34 acres	1.86 acres	0.48 acres
CDFW	10.53 acres	6.98 acres	3.55 acres

Vegetation Communities

The proposed impact area would affect a total of 89.54 acres of mapped vegetation types within the Oak Glen Creek Specific Plan Boundary and an additional 0.34 acre outside of the Oak Glen Creek Specific Plan Boundary. The proposed Wilson III basin design includes construction of an access road and associated grading that extends outside of the Oak Glen Creek Specific Plan boundary in the northern portion of the specific plan area and south of Oak Glen Road. This area is approximately 0.34 acre and contains riversidean alluvial fan sage scrub habitat (see Exhibit 8, *Vegetation Communities Impacts*). Below is a table that summarizes the impacts from the total project activities to the vegetation communities within and outside of the Oak Glen Creek Specific Plan Boundary.

Table 4. Impacts to Vegetation Communities

Vegetation Communities	Total	Impacts
<i>Developed or Disturbed Lands</i>		
Disturbed/Ruderal (DIS/RUD)	25.05 ac	21.65 ac
Ruderal (RUD)	0.41 ac	0.41 ac
Ornamental (ORN)	0.05 ac	0 ac
<i>Grassland Communities</i>		
Non-native Grassland (NNG)	5.38 ac	4.18 ac
<i>Coastal Scrub Communities</i>		
Alluvial Fan Sage Scrub (AFSS)	27.37 ac	25.19 ac
Disturbed Intermediate Alluvial Fan Sage Scrub (DIRAFSS)	6.40 ac	6.40 ac
California Buckwheat Scrub (CBS)	10.39 ac	8.50 ac
California Buckwheat Scrub/Non-Native Grassland Ecotone (CBS/NNG)	0.37 ac	0.37 ac
Deerweed Scrub (DWS)	4.74 ac	4.39 ac
Deerweed Scrub/Non-Native Grassland/Sycamore Ecotone (DWS/NNG)	3.28 ac	2.68 ac

Mixed Sage Scrub (MSS)	6.90 ac	2.51 ac
Chaparral Communities		
Chamise Chaparral (CC)	3.96 ac	1.98 ac
Chamise Chaparral/Burned (CC/BURN)	3.60 ac	3.60 ac
Eriodictyon Chaparral (CYS)	7.04 ac	2.88 ac
Eriodictyon Chaparral/Non-Native Grassland Ecotone (CYS/NNG)	0.77 ac	0.24 ac
Northern Mixed Chaparral (NMC)	2.38 ac	0.95 ac
Northern Mixed Chaparral/Non-Native Grassland Ecotone (NMC/NNG)	1.50 ac	0.11 ac
Oak Woodland Communities		
Coast Live Oak Woodland (CLO)	0.10 ac	0 ac
Riparian Communities		
Southern Cottonwood Riparian Woodland (SCRW)	0.67 ac	0.67 ac
Southern Sycamore Riparian Woodland (SSRW)	2.88 ac	1.70 ac
Southern Willow Scrub (SWS)	0.05 ac	0.05 ac
Mule Fat Scrub (MFS)	0.07 ac	0.07 ac
Unvegetated Wash (WASH)	2.20 ac	1.95 ac
TOTAL		90.47 ac

Sensitive Species

The northwestern San Diego pocket mouse is the only sensitive wildlife species that was observed onsite and is listed as a California Species of Special Concern. The project activities would impact approximately 90 acres of habitat potentially suitable for the northwestern San Diego pocket mouse. Approximately 25 acres of the project site with potentially suitable habitat for northwestern San Diego pocket mouse will be avoided and conserved as open space and natural habitat.

Parry's spineflower plants were the only sensitive plant species that was observed onsite during the focused plant surveys and is listed as California Rare Plant Rank 1B.1 (1B. a rare, threatened, or endangered species in California; 0.1 seriously threatened in California); see Exhibit 9, *Sensitive Plants Impacts*. The table below summarizes the impacted and avoided acres of Parry's spineflower found onsite. The project activities would impact approximately 0.70 acre of mapped Parry's spineflower. Approximately 0.24 acre of mapped Parry's spineflower will be avoided and conserved as open space and natural habitat.

Table 5. Impacts to Parry's Spineflower

Parry's Spineflower	Acres
Not Impacted	0.24
Impacted	0.70
Total	0.94

CEQA Environmental Checklist

a) *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 CDFW or USFWS?*

Less than Significant with Mitigation Incorporated. Although no threatened or endangered plant or wildlife species were identified onsite during focused survey efforts, the Project Site represents suitable foraging habitat for the following sensitive bird species: Cooper's hawk (State Watch List (SWL)), sharp-shinned hawk (SWL), ferruginous hawk (SWL), northern harrier (CSC), white-tailed kite (State Fully Protected (SFP)), prairie falcon (SWL), golden eagle (SFP/SWL), California horned lark (SWL), and southern California rufous-crowned sparrow (SWL). Impacts to onsite foraging habitat for these species would be considered adverse, but would not appreciably affect the overall population of these species given the large amount of similar suitable foraging habitat in the vicinity of the Project Site and region. Implementation of the proposed specific plan will result in the conservation of approximately 25 acres of onsite foraging habitat for these birds as open space and natural habitat. Therefore, these impacts would be considered less than significant.

Although the burrowing owl was not detected onsite during focused survey efforts, a 14-day burrowing owl take avoidance survey is recommended to be conducted prior to the initiation of ground-disturbing activities to ensure protection for this species and compliance with the conservation goals as outlined by the CDFW (**BIO-MM1**). The survey will be conducted in compliance with CDFW guidelines (CDFW 2012). A report of the findings prepared by a qualified biologist shall be submitted to CDFW and the City of Yucaipa prior to initiation of ground disturbing activities.

Sensitive plant surveys resulted in the detection of 6,663 Parry's spineflower individuals occupying 0.94 acre of coastal scrub, chaparral, and grassland habitats within the Project Site as shown in Exhibit 9, *Sensitive Plants Impacts*. Project-related impacts will result in the removal of 0.70 acre of onsite habitat occupied by Parry's spineflower as shown in Exhibit 9, *Sensitive Plants Impacts*. California Rare Plant Rank 1B (formerly List 1B) are those plants classified as rare, threatened, or endangered in California and elsewhere. All of the plants constituting CRPR 1B meet the definitions of Sec. 1901, Chapter 10 (Native Plant Protection Act) or Secs. 2062 and 2067 (California Endangered Species Act) of the California Department of Fish and Wildlife Code, and are eligible for state listing. It is mandatory that they be fully considered during preparation of environmental documents relating to CEQA. Impacts to this species would be considered significant. Therefore, the development of a sensitive plant species mitigation plan (**BIO-MM2**) is recommended to be undertaken prior to Project initiation and is required mitigation to reduce impacts to less than significant levels.

The northwestern San Diego pocket mouse (CSC) is the only special status wildlife species observed onsite. Impacts to these individuals would be considered adverse, but would not appreciably affect the overall population of this species given the large amount of similar suitable habitat in the vicinity of the Project Site and beyond. Implementation of the proposed specific plan will result in the conservation of approximately 25 acres of potentially suitable habitat for northwestern San Diego pocket mouse as open space and natural habitat. Project related impacts to this species are considered less than significant.

No active bird/raptor nests were documented within or immediately adjacent to the Project Site. However, the onsite vegetation communities represent suitable nesting habitat for common, as well as sensitive resident and migratory bird/raptor species with the potential to occur within the Project Site.

The loss of an active nest of common or sensitive bird species would be considered a violation of the CDFW Code, Section 3503, 3503.5, 3513, and the federal MBTA. Therefore, the loss of any bird species nest is considered a potentially significant impact. The implementation of **BIO-MM3**, as described below, will reduce this impact to less than significant with mitigation incorporated.

Noise levels in and around the Project Site would temporarily increase over present levels during project construction. During construction, temporary noise impacts have the potential to disrupt foraging, nesting, and roosting, of passerines, raptors, and bats known and/or expected to occur within/adjacent to the Project Site. These impacts are considered adverse, but not significant for most bird species, because the work would be temporary and localized, and the construction activities would not impact a substantial population of bird species. In addition, initial clearing of vegetation communities will be conditioned to occur outside of the nesting/breeding season to avoid impacts to nesting birds. However, passerines and raptors would potentially incur temporary short-term impacts from construction noise if nesting occurs in the vicinity of the proposed action. This impact would be considered potentially significant. Implementation of **BIO-MM4** would reduce this potential impact to less than significant with mitigation incorporated.

The proposed action could create a substantial new source of lighting that could increase ambient lighting above current levels. This light could impede wildlife movement, breeding, nesting, and/or foraging behavior of common and/or sensitive species within the Project Site open space areas. Implementation of **BIO-MM5** would reduce this potential impact to less than significant with mitigation incorporated.

b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by CDFW or USFWS?

Less than Significant with Mitigation Incorporated. The proposed action would impact approximately 90 acres of the 116-acre Project Site as illustrated in Exhibit 8, *Vegetation Communities Impacts* and Table 4, *Impacts to Vegetation Communities*. Three (3) sensitive plant communities were documented onsite including riversidean alluvial fan sage scrub, southern sycamore riparian woodland, and southern cottonwood riparian woodland. The 0.34 acre outside of the specific plan boundary and 24.85 acres within the specific plan boundary of alluvial fan sage scrub, 1.70 acre of southern sycamore riparian woodland, and 0.67 acre of southern cottonwood riparian woodland will be impacted by the Project development. Impacts to sensitive vegetation communities are considered adverse and significant. Therefore, impacts to sensitive habitats will be mitigated through the implementation of a sensitive habitat mitigation plan (**BIO-MM6**) that will reduce the impacts to less than significant with mitigation incorporated.

c) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the CWA (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?

Less than Significant with Mitigation Incorporated. Although no wetlands or vernal pools were identified onsite, the proposed Project will impact resources regulated by the USACE (1.86 acre) and CDFW (6.98 acre) through direct removal, filling, hydrological interruption, or other means (Figure 7, *Jurisdictional Waters Impacts* and Table 3, *Impacts to Jurisdictional Resources*). Impacts to jurisdictional resources are considered significant. Implementation of **BIO-MM7 to BIO-MM10** will reduce these impacts to less than significant with mitigation incorporated.

d) 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?

Less than Significant with Mitigation Incorporated. Implementation of the proposed project would result in the temporary direct impact to wildlife movement within Wilson and Oak Glen Creeks. The Project Site represents a wildlife movement corridor/route between the upstream reaches of Wilson and Oak Glen Creeks and downstream confluence of Wilson Creek and Gateway Wash. Specifically, the Project Site is traversed by both Wilson and Oak Glen Creeks and no onsite barriers exist that would preclude movement through the site. Any project design features which would restrict, reduce, or impede wildlife movement through the Project Site within Wilson or Oak Glen Creeks would represent a significant impact.

Implementation of **BIO-MM5** and **BIOMM11** will reduce impacts to less than significant with mitigation incorporated.

e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?

No Impact. Although the City of Yucaipa requires a permit to remove oak trees from within City limits (Oak Tree Conservation Ordinance YDC Section 89.0501), the onsite oak tree will not be impacted by Project development. No other local policies or ordinances that would impact development of the Project Site apply. Therefore, no impact is expected.

f) Conflict with the provisions of an adopted HCP, NCCP, or other approved local, regional, or state habitat conservation plan?

No Impact. The Project Site does not occur within the plan areas of any the Natural Community Conservation Plan (NCCP) or HCP (USFWS 2011). Therefore, the Project will not conflict with provisions of an adopted HCP, NCCP, or other approved local, regional, or state habitat conservation plan. No impact is expected.

MITIGATION MEASURES

The following biological mitigation measures address those adverse impacts determined to be potentially significant, or are relevant to the protection of biological resources to the extent practicable as part of ensuring compliance and consistency with all City of Yucaipa General Plan and Municipal Code provisions.

Implementation of Mitigation Measures BIO-MM1 through BIO-MM11 would reduce all potential significant unavoidable impacts on biological resources below a level of significance.

BIO-MM1 Burrowing Owl 14-Day Take Avoidance Surveys

A 14-day burrowing owl take avoidance survey will be conducted prior to the initiation of ground-disturbing construction to ensure protection for this species and compliance with the conservation goals as outlined by the CDFW. The survey will be conducted in compliance with CDFW guidelines (CDFW 2012). A report of the findings prepared by a qualified biologist shall be submitted to CDFW and the City of Yucaipa prior to initiation ground disturbing activities.

If burrowing owls are detected onsite during the take avoidance survey effort, a burrowing owl mitigation plan which includes project specific avoidance and minimization measures will be developed based on CDFW and USFWS requirements.

BIO-MM2 Sensitive Plant Species Mitigation Plan

The City will develop a sensitive plant species mitigation plan to mitigate for the loss of 0.70-acre area of Parry's spineflower plants. This mitigation plan will be prepared by a qualified restoration biologist and provide at a minimum the following information (1) design modifications or minimization measures that are consistent with the project's purpose; (2) appropriate protection measures for any adjoining conserved land within the Project Site; (3) an evaluation of salvage, transplantation, restoration, enhancement, or other appropriate mitigation techniques to determine the most appropriate mitigation measures to offset impacts; and (4) monitoring and adaptive management measures for the mitigated plant species. The mitigation site shall be monitored and maintained by a qualified biologist for five years or until the plants have become fully established and can survive without supplemental irrigation.

The goal of the Sensitive Plant Species Mitigation Plan will be to compensate for the impacts to 0.70 acre through off-site acquisition of habitat, on-site preservation, enhancement, creation, and/or dedication of habitat, payment of fees into a mitigation bank or other appropriate measures to address the functions and values being impacted.

BIO-MM3 Federal Migratory Bird Treaty Act

Mitigation for potential direct/indirect impacts to common and sensitive passerine and raptor species will require compliance with the federal MBTA. Construction outside the nesting season (between September 1st and January 31st) do not require pre-removal nesting bird surveys. If construction is proposed between February 1st and August 31st, a qualified biologist must conduct a nesting bird survey(s) no more than fourteen (14) days prior to initiation of grading to document the presence or absence of nesting birds within or directly adjacent (100 feet) to the Project Site.

The survey(s) will focus on identifying any raptors and/or passerines nests that are directly or indirectly affected by construction activities. If active nests are documented, species-specific measures shall be prepared by a qualified biologist and implemented to prevent abandonment of the active nest. At a minimum, grading in the vicinity of a nest shall be postponed until the young birds have fledged. A minimum exclusion buffer of 100 feet shall be maintained during construction, depending on the species and location. The perimeter of the nest setback zone shall be fenced or adequately demarcated with stakes and flagging at 20-foot intervals, and construction personnel and activities restricted from the area. A survey report by a qualified biologist verifying that no active nests are present, or that the young have fledged, shall be submitted to the CDFW and City of Yucaipa prior to initiation of grading in the nest-setback zone. The qualified biologist shall serve as a construction monitor during those periods when construction activities occur near active nest areas to ensure that no inadvertent impacts on these nests occur.

Any nest permanently vacated for the season would not warrant protection pursuant to the MBTA.

BIO-MM4 Noise

If a) nesting birds are found onsite during pre-construction surveys and b) construction related impacts occur between January 31st and September 15th, an acoustical consultant shall evaluate the construction equipment/phases and estimate noise levels anticipated during clearing, grubbing and grading activities. The acoustical consultant shall identify appropriate measures for reducing construction noise levels to below 60 dB(A) hourly Equivalent Continuous Noise Level or prevent any increases in the ambient noise levels at nesting location if existing noise levels are 60 dB(A) hourly or greater. Noise reduction measures may include operational adjustments, including:

- Stationary construction noise sources such as generators or pumps should be located at least 100 feet from sensitive land uses, as feasible.
- Construction staging areas should be located as far from noise sensitive land uses as feasible.
- During construction, the contractor shall ensure all construction equipment is equipped with appropriate noise attenuating devices.
- Idling equipment shall be turned off when not in use.
- Equipment shall be maintained so that vehicles and their loads are secured from rattling and banging.

If noise reduction measures are required, bi-weekly monitoring of the nesting species shall be conducted by the qualified biologist to observe if the birds are being affected by construction activities. The acoustical consultant shall confirm through noise measurements that the noise reduction measures are effective at preventing noise levels in excess of 60 dB(A) hourly or an increase in ambient noise levels.

Noise reduction measures are not required from September 16th through January 31st.

BIO-MM5 Lighting

Lighting plans shall ensure that (1) direct lighting is shielded from residential areas and other light sensitive receptors; (2) direct lighting is shielded to the specific location intended for illumination (e.g., roads, walkways, or recreation fields); (3) non-essential lighting and stray light spillover is minimized; (4) low intensity lamps are used except when high intensity illumination is required, such as for a recreational field; and (5) night lighting shall not be used during the course of construction unless determined to be absolutely necessary. If night lighting is necessary, the lights shall be shielded to minimize temporary lighting of neighboring properties and realigned wildlife movement routes through the Project Site.

BIO-MM6 Sensitive Habitat Mitigation Plan

Mitigation for impacts to alluvial fan sage scrub habitat within the project footprint will be accounted for with on-site preservation, restoration and/or enhancement and long-term management on-site at a 1:1 ratio for impacts. Residual impacts that cannot be mitigated on-site will be accomplished with off-site acquisition, preservation, rehabilitation, restoration, enhancement and long-term management of alluvial fan sage scrub habitat at the Oak Glen Creek Flood Corridor Area located upstream (east) of the project between Bryant Street and Pendleton Road. The City shall prepare a Sensitive Habitat Mitigation Plan for CDFW review and concurrence. The City shall be responsible for funding and implementing the Plan. The

goal of the Sensitive Habitat Mitigation Plan will be to compensate for the impacts to 25.19 acres of alluvial fan sage scrub through off-site acquisition of habitat, on-site preservation, enhancement, creation, and/or dedication of habitat, payment of fees into a mitigation bank or other appropriate measures to address the functions and values being impacted. Impacts to southern cottonwood riparian woodland will be addressed and mitigated as a result of implementing BIO-MM7 and BIO-MM8.

The content of the Sensitive Habitat Mitigation Plan will address the responsibilities and qualifications of the personnel to implement and supervise the plan, incorporate pertinent site selection criteria, provide for the site preparation and planting implementation program if appropriate, provide a schedule for implementation, maintenance and monitoring, detail maintenance plan and guidelines, detail the monitoring plan and address long term preservation.

BIO-MM7 USACE, RWQCB, and CDFW Jurisdictional Resources

Prior to issuance of a grading permit the applicant will obtain a Section 404 permit authorization from USACE, a Section 401 Water Quality Certification from RWQCB, and 1602 SAA from CDFW. Approved impacts to USACE, and CDFW would require mitigation through on-site habitat creation, restoration, enhancement, and/or preservation and long-term management within the constructed basin at a 1:1 ratio for impacts to achieve a no net-loss of jurisdictional resources, as determined by a qualified restoration specialist in consultation with the regulatory agencies. The lake/emergent wetland is anticipated to be between 3.5 and 4 acres in size. If there are any residual impacts to streambeds and riparian habitat that cannot be mitigated on-site, these impacts will be mitigated off-site at a ratio of 1.5:1 at the City's El Dorado Ranch Park or Oak Glen Creek Flood Corridor Area or other off-site location approved by CDFW (could include mitigation banks or in lieu fee programs).

Specific mitigation and the specific location of mitigation lands will be determined in consultation with the appropriate regulatory agencies in accordance with the requirements of the federal CWA, federal wetland policies, and CDFW Code.

BIO-MM8 Habitat Mitigation Monitoring Plan

The City shall prepare a Habitat Mitigation Monitoring Plan (HMMP) for regulatory agencies review and concurrence. Impacts to USACE and CDFW resources shall be mitigated on-site or within the same watershed, if feasible. The goal of the HMMP will be to recreate the functions and values of the habitat being affected. These mitigation requirements will be outlined in the HMMP prepared for this project, with monitoring requirements and specific criteria to measure the success of the restoration. Guidelines for the HMMP shall include but not be limited to:

- The mitigation site(s) shall have been evaluated and selected on the basis of their suitability for use as riparian mitigation areas.
- The mitigation shall provide procedures to prepare soils in the mitigation area, provide detailed seeding/planting mixtures, provide seeding/planting methods, appropriate irrigation and other procedures that will be used for successful revegetation.
- Impacts to jurisdictional waters and wetlands shall be avoided to the extent feasible in the design phase of the project.
- Specific mitigation ratios and performance criteria shall be stated in the HMMP.

- Maintenance and monitoring requirements shall be established, including quarterly and annual monitoring reports to USACE and CDFW.

The content of the HMMP will address the responsibilities and qualifications of the personnel to implement and supervise the plan, incorporate pertinent site selection criteria, provide for the site preparation and planting implementation program, provide a schedule for implementation, maintenance and monitoring, detail maintenance plan and guidelines, detail the monitoring plan and address long term preservation.

BIO-MM9 Urban Runoff

To reduce the potential for the indirect impacts from urban runoff, the project Applicant shall implement the Best Management Practices (BMPs) required by the National Pollutant Discharge Elimination System (NPDES, EPA), administered by the RWQCB.

BIO-MM10 Storm Water Pollution Prevention Plan

The City shall ensure that the work limits will be staked, fenced, and/or marked with materials clearly visible to construction personnel to prevent encroachment upon sensitive vegetation communities; no construction access, parking, or storage of equipment or materials will be permitted outside of these marked areas; access roads and work areas shall be periodically sprayed with water to reduce the potential for dust accumulation on the leaves of adjacent sensitive vegetation communities not proposed for impacts; and erosion and sediment control BMPs (i.e. such as silt fence, straw wattles, sand bags, etc.) should be implemented and installed during the proposed project to comply with all measures proposed in the Storm Water Pollution Prevention Plan (SWPPP).

BIO-MM11 Wildlife Corridor Design & Urban Wildlands Interface Guidelines

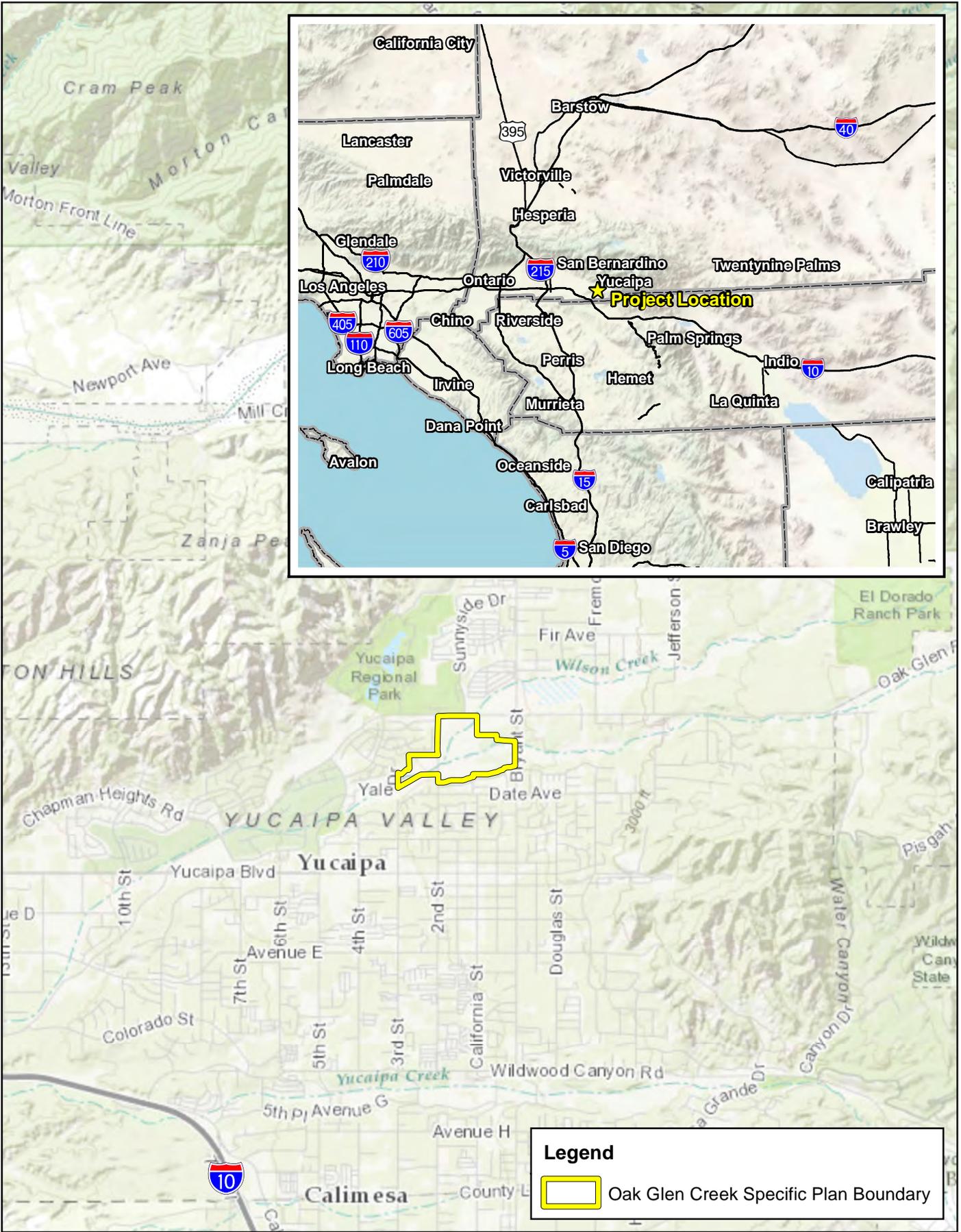
The following mitigation measures will be incorporated into final project designs to ensure the maintenance of habitat connectivity and reduce indirect impacts to wildlife movement associated with the proposed project:

- Wildlife movement routes through the project within both Wilson and Oak Glen Creeks will be maintained.
- No features will be utilized which would impede movement through the site by amphibians, reptiles, and small/large mammals.
- Realigned drainage features will have earthen bottoms, to the greatest extent feasible.
- Storm water treatment systems will be designed to prevent the release of toxins, chemicals, petroleum products, exotic plant material, or other elements that could degrade or harm downstream biological or aquatic resources.
- Night lighting associated with the proposed development that is adjacent to the realigned movement routes would be directed away to reduce potential indirect impacts to wildlife species.

- The landscape plans for the development shall avoid the use of invasive species for the portions of the development areas adjacent to the movement routes.
- Onsite culvert design will be consistent with existing structures located at the confluence of Wilson Creek/Oak Glen Road and Oak Glen Creek/Bryant Street.

Implementation of Mitigation Measures BIO-MM1 through BIO-MM11 would reduce all potential significant unavoidable impacts on biological resources below a level of significance.

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Legend

 Oak Glen Creek Specific Plan Boundary

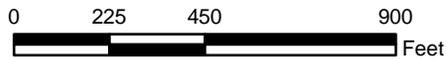
CITY OF YUCAIPA, OAK GLEN CREEK SPECIFIC PLAN
BIOLOGICAL RESOURCES IMPACT ANALYSIS REPORT

Location Map



Source: ESRI World Topographic Map, ESRI Terrain Map, ESRI Physical Map

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Source: San Bernardino County, Michael Baker International, ESRI World Imagery

CITY OF YUCAIPA, OAK GLEN CREEK SPECIFIC PLAN
BIOLOGICAL RESOURCES IMPACT ANALYSIS REPORT

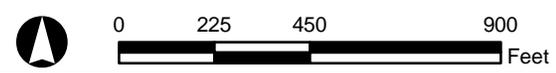
Project Site

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Legend

- Oak Glen Creek Specific Plan Boundary
- Waters of the US (2.34 Acres)
- Waters of the State (10.53 Acres)

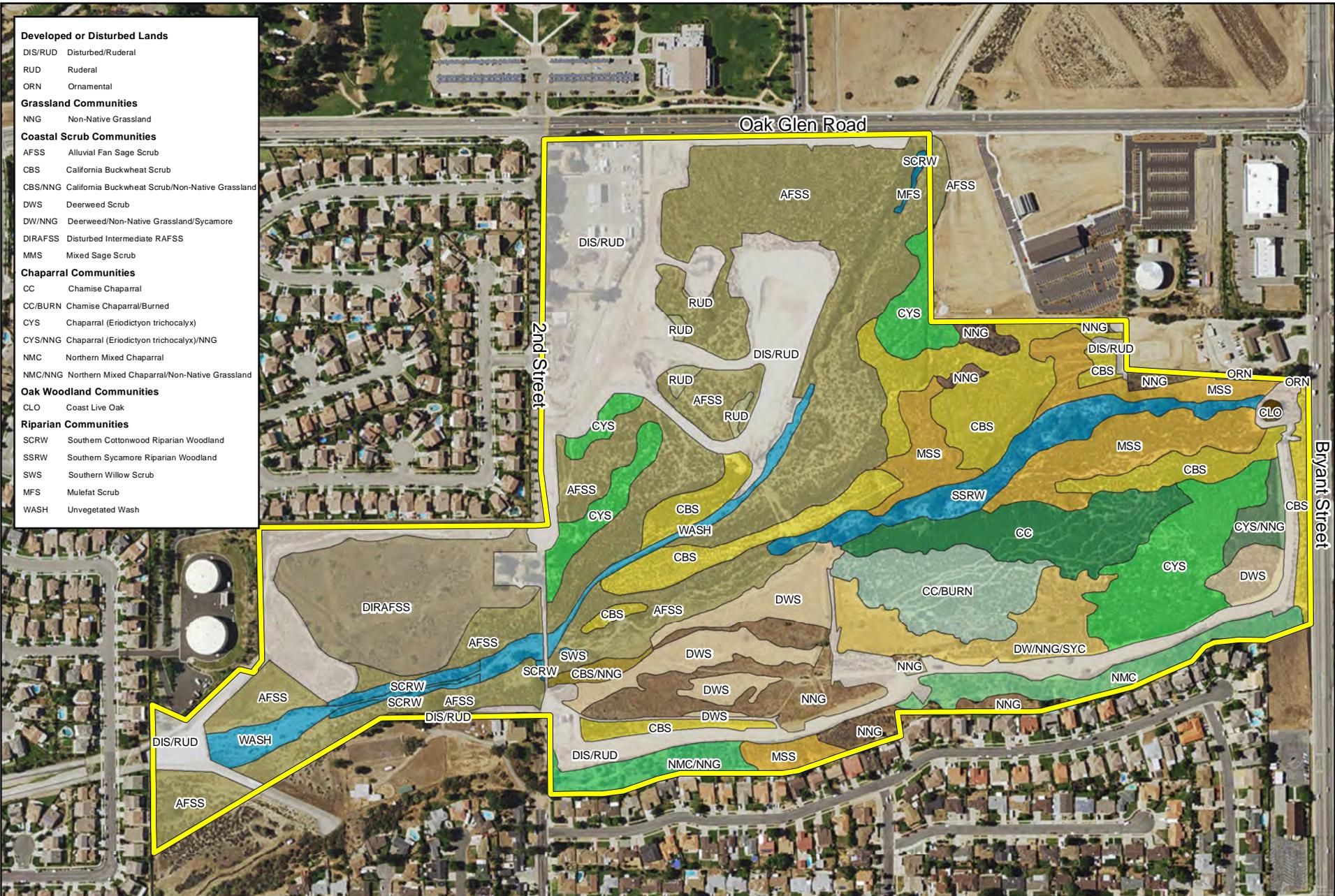


Source: San Bernardino County, Michael Baker International, Vandermost/VCS, ESRI World Imagery

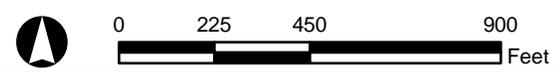
CITY OF YUCAIPA, OAK GLEN CREEK SPECIFIC PLAN
 BIOLOGICAL RESOURCES IMPACT ANALYSIS REPORT
Jurisdictional Waters Map

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- Developed or Disturbed Lands**
- DIS/RUD Disturbed/Ruderal
 - RUD Ruderal
 - ORN Ornamental
- Grassland Communities**
- NNG Non-Native Grassland
- Coastal Scrub Communities**
- AFSS Alluvial Fan Sage Scrub
 - CBS California Buckwheat Scrub
 - CBS/NNG California Buckwheat Scrub/Non-Native Grassland
 - DWS Deerweed Scrub
 - DW/NNG Deerweed/Non-Native Grassland/Sycamore
 - DIRAFSS Disturbed Intermediate RAFSS
 - MMS Mixed Sage Scrub
- Chaparral Communities**
- CC Chamise Chaparral
 - CC/BURN Chamise Chaparral/Burned
 - CYS Chaparral (Eriodictyon trichocalyx)
 - CYS/NNG Chaparral (Eriodictyon trichocalyx)/NNG
 - NMC Northern Mixed Chaparral
 - NMC/NNG Northern Mixed Chaparral/Non-Native Grassland
- Oak Woodland Communities**
- CLO Coast Live Oak
- Riparian Communities**
- SCRW Southern Cottonwood Riparian Woodland
 - SSRW Southern Sycamore Riparian Woodland
 - SWS Southern Willow Scrub
 - MFS Mulefat Scrub
 - WASH Unvegetated Wash

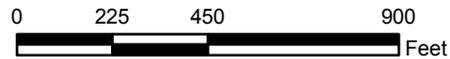
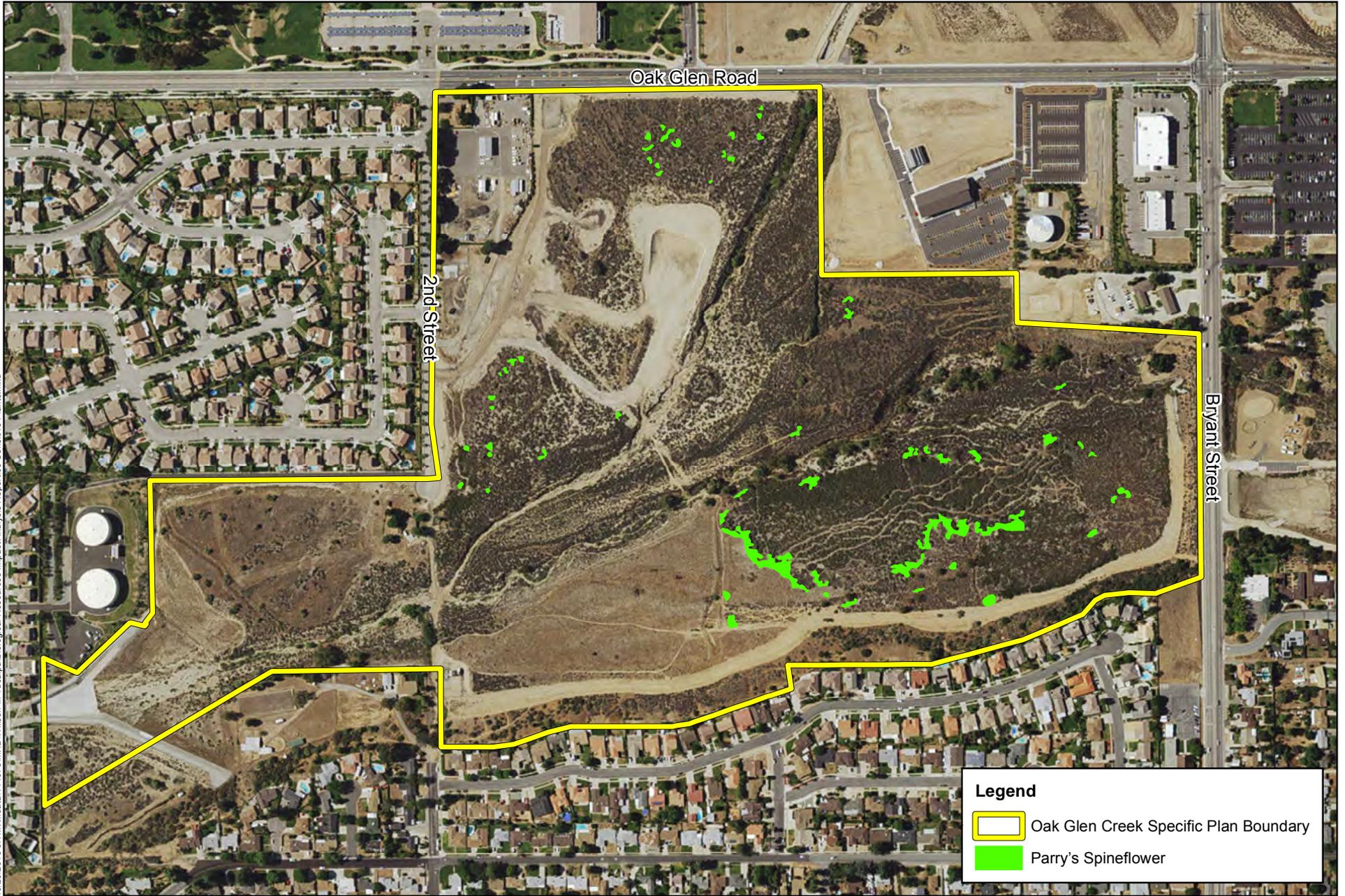


CITY OF YUCAIPA, OAK GLEN CREEK SPECIFIC PLAN
 BIOLOGICAL RESOURCES IMPACT ANALYSIS REPORT
Vegetation Communities Map



Source: San Bernardino County, Michael Baker International, Cadre

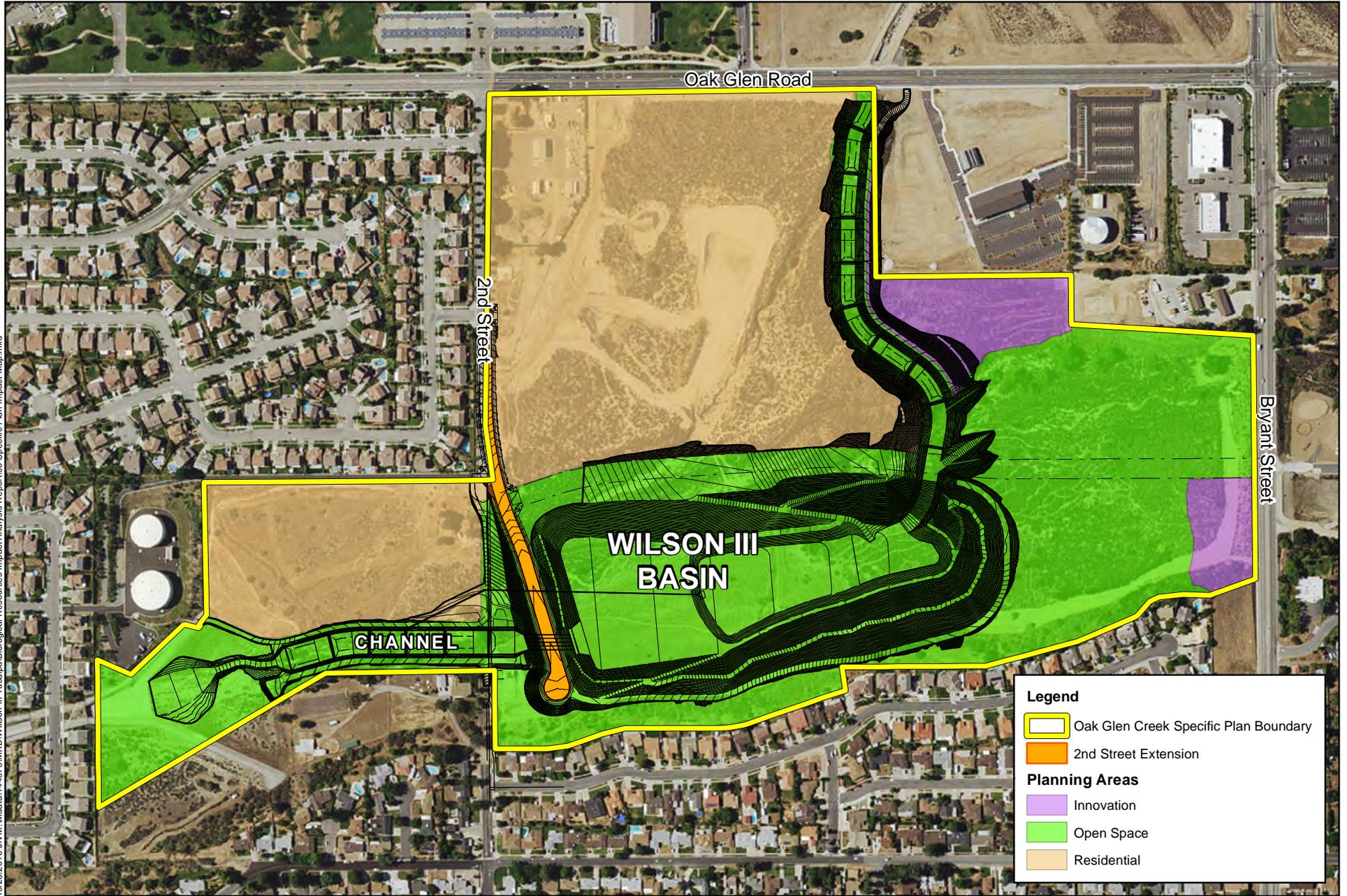
10/28/2016 JN.M:\Mdata\144675\MXD\Wilson III Yucaipa\Biological Resources Impact Analysis\Report\05 Sensitive Plants.mxd



Source: San Bernardino County, Michael Baker International, ESRI World Imagery

CITY OF YUCAIPA, OAK GLEN CREEK SPECIFIC PLAN
 BIOLOGICAL RESOURCES IMPACT ANALYSIS REPORT
Sensitive Plants Map

10/28/2016 JN.M:\mdata\144575\WXD\Wilson III Yucaipa\Biological Resources Impact Analysis Report\06 Specific Plan Impact Map.mxd



Legend

- Oak Glen Creek Specific Plan Boundary
- 2nd Street Extension

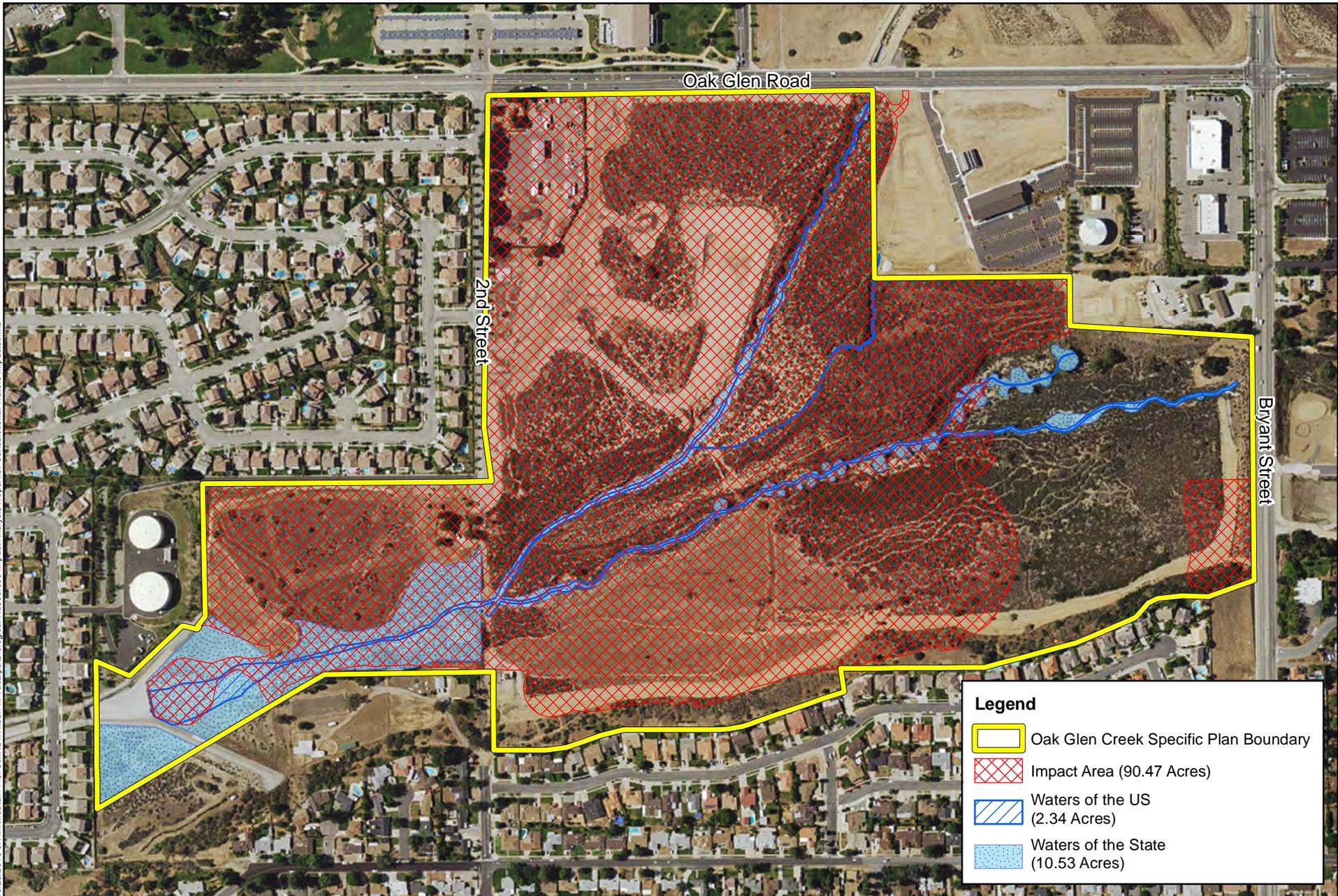
Planning Areas

- Innovation
- Open Space
- Residential

CITY OF YUCAIPA, OAK GLEN CREEK SPECIFIC PLAN
 BIOLOGICAL RESOURCES IMPACT ANALYSIS REPORT
Specific Plan Map



Source: San Bernardino County, Michael Baker International, Vandermost/VCS, ESRI World Imagery



Legend

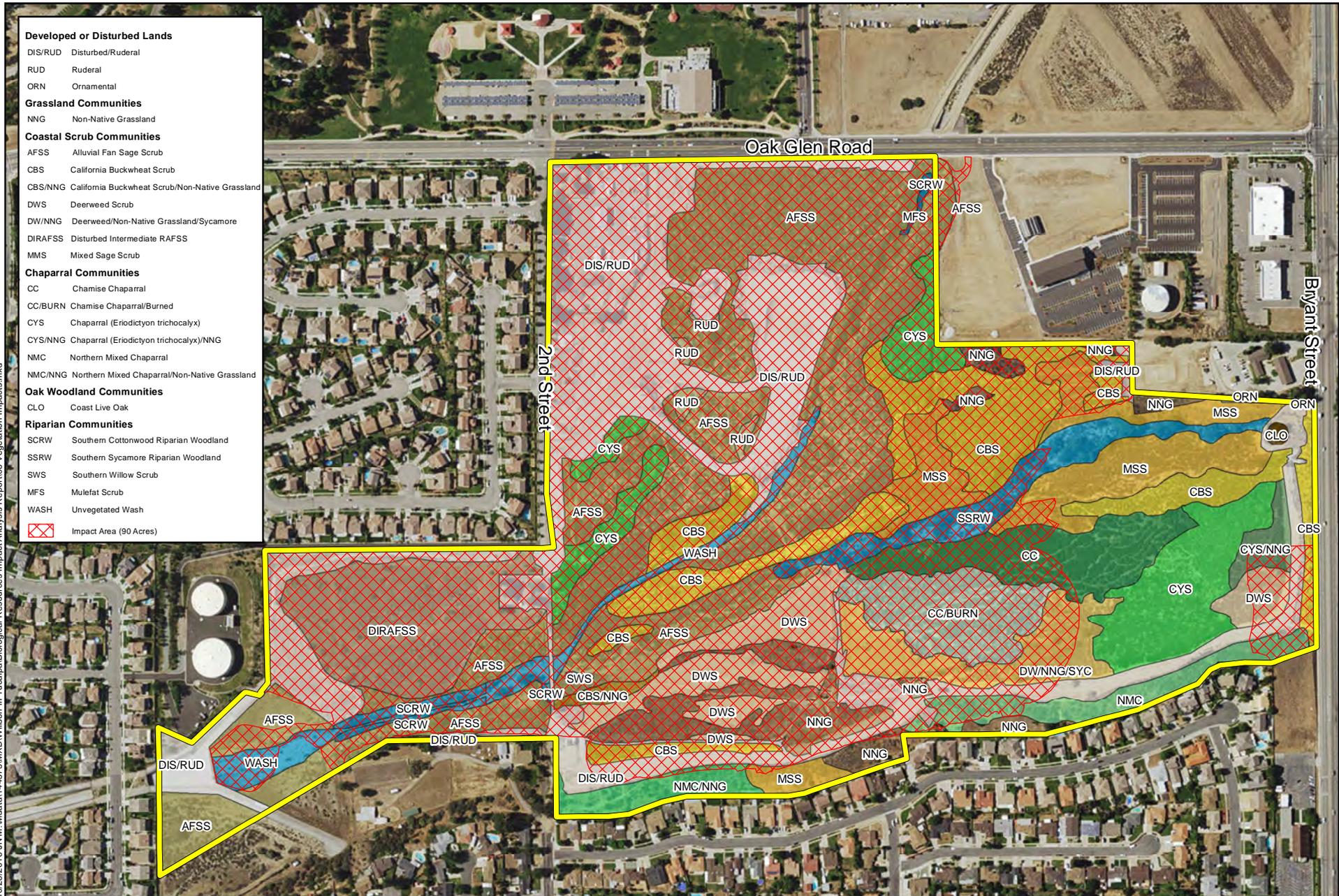
-  Oak Glen Creek Specific Plan Boundary
-  Impact Area (90.47 Acres)
-  Waters of the US (2.34 Acres)
-  Waters of the State (10.53 Acres)



Source: San Bernardino County, Michael Baker International, Vandermost/VCS, ESRI World Imagery

CITY OF YUCAIPA, OAK GLEN CREEK SPECIFIC PLAN
 BIOLOGICAL RESOURCES IMPACT ANALYSIS REPORT
Jurisdictional Waters Impacts

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CITY OF YUCAIPA, OAK GLEN CREEK SPECIFIC PLAN
 BIOLOGICAL RESOURCES IMPACT ANALYSIS REPORT
Vegetation Communities Impacts



Source: San Bernardino County, Michael Baker International, Cadre

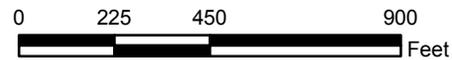
10/28/2016 JN.M:\Mdata\144575\MXD\Wilson III Yucaipa\Biological Resources Impact Analysis Report\09 Sensitive Plants Impacts.mxd



Legend

-  Oak Glen Creek Specific Plan Boundary
-  Impact Area (90.0 Acres)
-  Parry's Spineflower

CITY OF YUCAIPA, OAK GLEN CREEK SPECIFIC PLAN
 BIOLOGICAL RESOURCES IMPACT ANALYSIS REPORT
Sensitive Plants Impacts



Source: San Bernardino County, Michael Baker International, ESRI World Imagery