Habitat Assessment for the Valley Corridor Specific Plan Area Bloomington, San Bernardino County, California

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1. INTRODUCTION

This report summarizes the results of a biological survey and habitat assessment for plant and animal species of concern within the Valley Corridor Specific Plan area (Plan area) in Bloomington, an unincorporated community in San Bernardino County (County of San Bernardino 2015). Bloomington is bordered to the east by the City of Rialto, the City of Fontana to the west, and the Jurupa Mountains and the City of Jurupa Valley to the south. The elevation of the Plan Area ranges from 1,072 to 1,129 ft. above mean sea level. Figure 1 shows the location of the Plan area on the Fontana USGS 7'5 minute topographic map. Figure 2 shows the Plan Area on an aerial photograph. Site photos are found in Appendix 1.

The Valley Corridor Specific Plan would propose land use changes to a 355 acre area in Bloomington, an unincorporated community along a 1.25 mile corridor of Valley Boulevard, between Alder Ave. and Spruce Ave, and between Marygold Ave. and the I-10 freeway. The Plan proposes land use changes to 294 acres of existing land parcels and 60 acres of Right of Way (ROW). These changes would involve replacing the current zoning in the specific plan area with land use districts: Bloomington Enterprise, Commercial, Low and Medium Residential, and Medium and High Residential (County of San Bernardino 2015a, 2015b 2015c). In addition to the changes in land use designation, various infrastructure improvements are proposed within the Plan Area, including relocation of Ayala Park (County of San Bernardino 2015c).

2. METHODS

Literature Review. A review of the existing literature was conducted to identify existing habitats within the study and the potential presence of any special status plant and animal species from Bloomington and surrounding areas. Sources reviewed for this study included:

- California Natural Diversity Database (CNDDB) Rarefind database of special status species and habitats for the Fontana, San Bernardino South and the Guasti 7.5' quadrangles (CDFW 2015);
- California Native Plant Society (CNPS) Rare Plant Inventory for the Fontana, San Bernardino South and the Guasti 7.5' quadrangles (CNPS 2015), which identifies the Rare Plant Rank (RPR) of listed species;
- Documented plant collections from the Consortium of California Herbaria for the study area (Consortium 2015);
- Information on the Delhi sands flower-loving fly (DSF), including the USFWS species listing, recovery plan, five year status review and survey guidelines (USFWS 1996, 1997, 2004, 2007, 2008), distributional information from the Rarefind database and other sources (Dudek 2003, RBF 2014), and documentation of DSF surveys (RCA 2012) or HCPs addressing this species (County of Riverside 2003, RBF 2014);
- Biological surveys conducted within or in the vicinity of the Plan Area (County of San Bernardino 2009, Jericho Systems 2013, LSA 2013, RBF 2013); and
- NRCS (2015) soil maps for the study corridor.

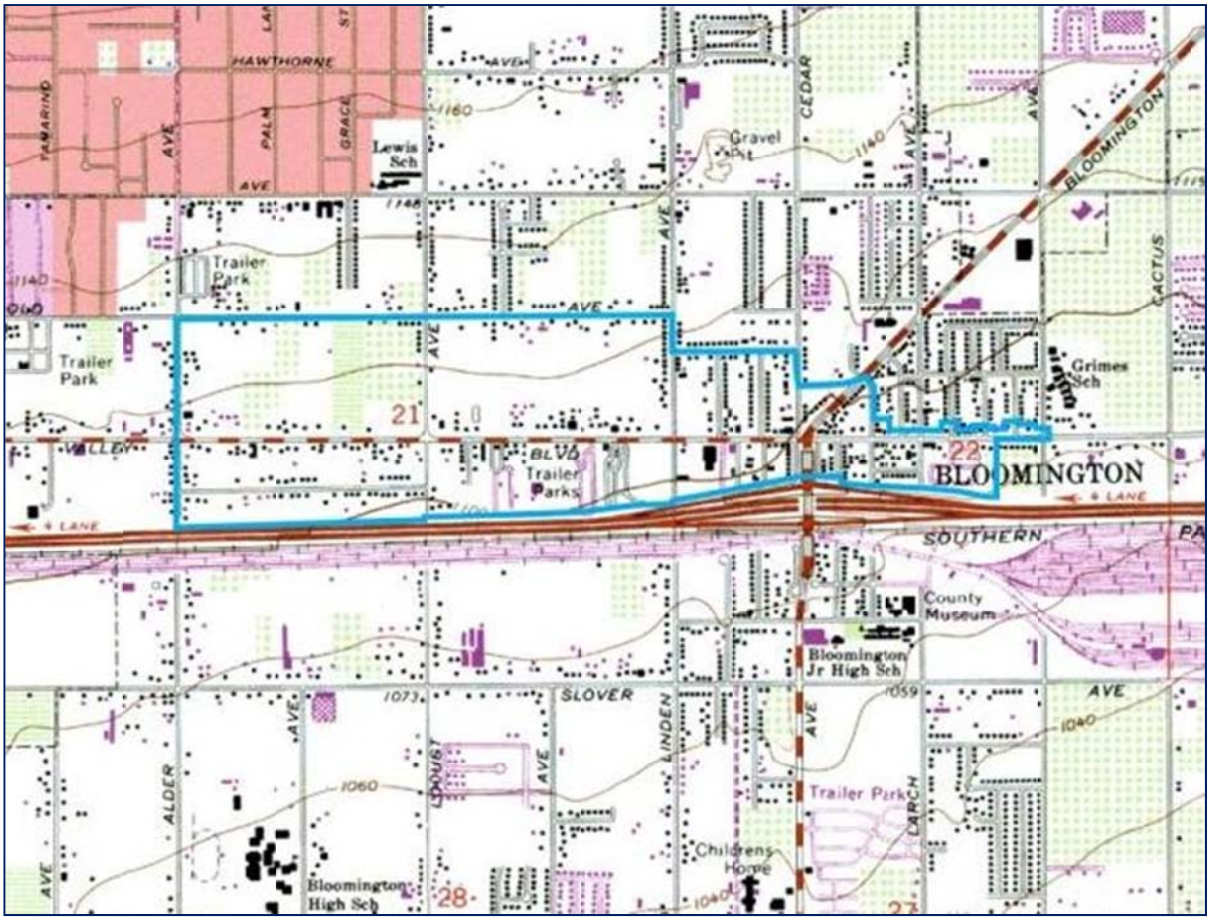

Figure 1. Topographic Map (Specific Plan boundary in blue)

Field Surveys. A reconnaisance survey of the plan area was carried out for botanical resources by David Bramlet on August 24, 2015, and by Phil Brylski for wildlife on October 9, 2015. Most of the parcels in the Valley Corridor are on private property and not accessible for examination. The survey did include several vacant lots that were accessible, mainly along Valley Blvd. The rest of the area was driven and foot surveys were carried out on accessible vacant lots, such as along Valley Blvd, Marygold Ave, and Taylor Ave.

The plant communities that remain in these areas were mapped using an aerial photograph from Google Earth, based on observations onsite. The nomenclature for these communities generally follows Holland (Holland 1986) with the exception of annual grassland instead of "non-native grassland", and the addition of the non-vegetative mapping units, e.g. developed. Scientific and common names presented in the text generally follow Roberts et al (2004); the Jepson Manual (Baldwin et al. 2012) is used to provide current names for species. The names for the special status plant species (narrow endemic and criteria area species) follow the CNPS Rare Plant Inventory (CNPS 2015).

Figure 2. Aerial photo (red line delimits Specific Plan boundary).

3. RESULTS

Site Description

The Plan Area is a flat, urbanized landscape. The Plan Area contains a number of vacant lots and old graded or paved storage lots, and areas of open land within the rural residential areas. Historically, many these areas were citrus orchards but only a few citrus trees remain. Many of the open lots are currently used for stables, vehicle storage, or simply as open yards. The Plan Area is surrounded by a similar mix of commercial and residential land uses. The area along Valley Blvd generally consists of commercial and light industry land uses with some residential areas. The northwest corner of the study area along Marygold Ave consists of rural residential lots, some of which have been converted to commercial uses. The northern area of the corridor, extending from Linden Ave to Spruce Ave, consists of single-family residential lots with commercial uses along Cedar and Bloomington Aves. The southwest part of the Plan Area consists of commercial-industrial businesses and rural residential lots with some commercial-light industry land uses. The area east of Locust Ave and south of Valley Blvd contains commercial areas, trailer parks, and Ayala Park. To the east of Linden Ave are mostly commercial land uses. The southern part of the Plan Area consists of commercial land uses along Valley Blvd, with rural residential lots south of Valley Blvd from Cedar Ave. to Larch Ave.

The main soil series found within the Plan Area is Tujunga loamy sand on gentle slopes (0 to 5%). There is a small area of Tujunga gravelly, loamy sand in the northeastern part of the Plan Area (NRCS 2015, Woodruff 1980). Figure 3 shows the distribution of soil types on the site. Delhi sand soils, which are important for the Delhi sands flower-loving fly, an endangered species, occur mainly south of the Plan Area below I-10 (Figure 3).

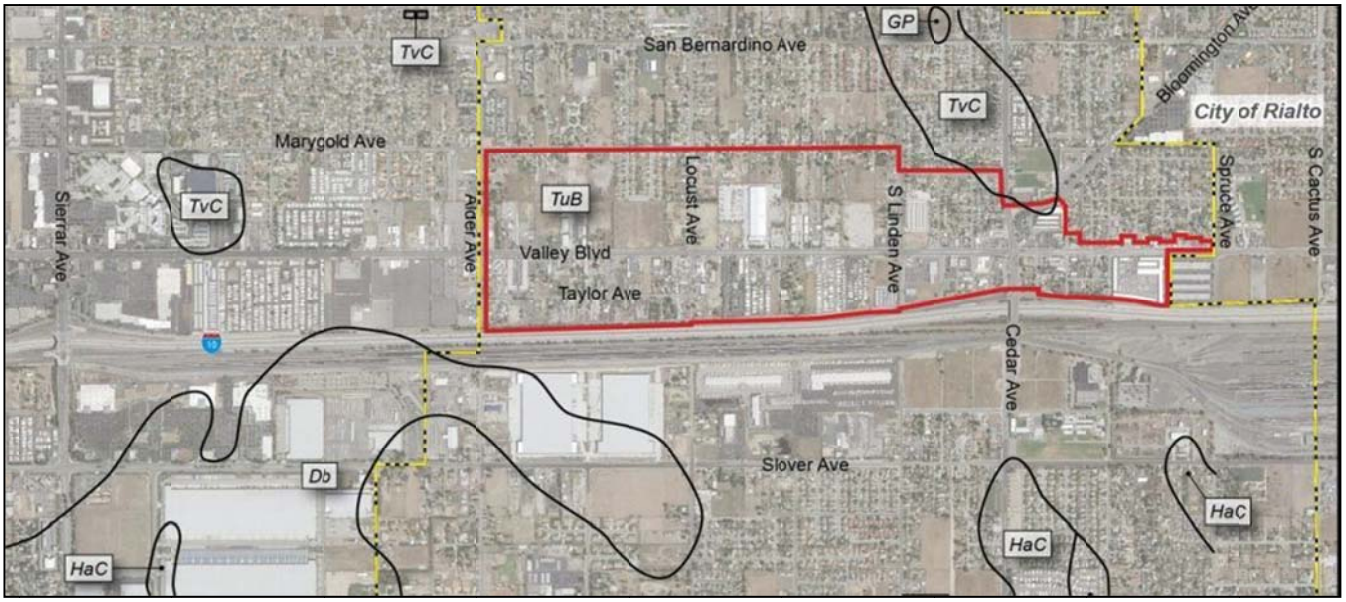

Figure 3. Soils Map. (Specific Plan area boundary in red; Db, Delhi fine sand; TuB, Tujunga loamy sand; TvC, Tujunga gravelly loam; hAc, Hanford coarse sandy loam.

Plant Communities

Native habitats and vegetation communities are absent from the Plan Area. The plant communities and land use categories found in the Plan Area include disturbed annual grassland, ruderal, ornamental, rural residential, graded and developed mapping units. Figure 4 shows the distribution of mapping units in the Plan Area. A list of plant species observed is found in Appendix A. Descriptions of the mapping units are as follows:

Disturbed Annual Grassland. Vacant land and some pasture areas contain a disturbed annual grassland characterized by a dense cover of naturalized grasses. Characteristic grasses include ripgut brome (*Bromus diandrus*), foxtail barley (*Horduem murinum* ssp. *leporinum)*, red brome (*Bromus madritensis* ssp. *rubens*), wild oat (*Avena fatua*), schismus (*Schismus barbatus*), slender wild oat (*Avena barbata*), and Bermuda grass (*Cynodon dactylon*). Common forbs in this grassland included: common fiddleneck (*Amsinckia intermedia*), summer mustard (*Hirschfeldia incana*), red-stemmed filaree (*Erodium cicutarium*), prickly lettuce (*Lactuca serriola*), annual burweed (*Ambrosia acanthicarpa*), common horse weed (*Conyza canadensis*), telegraph weed (*Heterotheca grandiflora*), cheese weed (*Malva parviflora*), common sow thistle (*Sonchus oleraceus*), London rocket (*Sisymbrium irio*), pitseed goosefoot (*Chenopodium belandieri*), and earless crownbeard (*Verbesina encelioides*). Remnant native floral elements found in these grasslands included scalebroom (*Lepidospartum squamatum*), and Spanish lotus (*Acmispon americanus*).

Ruderal. A number of the open, undeveloped parcels contain vegetation more associated with highly disturbed sites, and were mapped as a ruderal community. Characteristic annual grasses include schismus, ripgut brome, red brome, slender wild oat, Bermuda grass, and foxtail barley. However, these habitats also contained dense patches of: caltrop (*Tribulus terrestris*), and Russian thistle (*Salsola tragus*), with tumbling pigweed (*Amaranthus albus*), telegraph weed, common horse weed, annual burweed, summer mustard, red-stemmed filaree, rough pigweed (*Amaranthus retroflexus*), annual sunflower (*Helianthus annuus*), earless crownbeard, prickly lettuce, common purslane (*Portulaca oleracea*), cheese weed, horehound (*Marrubium vulgare*), pitseed goosefoot, telegraph weed, pale-flowered thorn apple (*Datura stramonium*), and annual rattlesnake spurge (*Euphorbia serpens*).

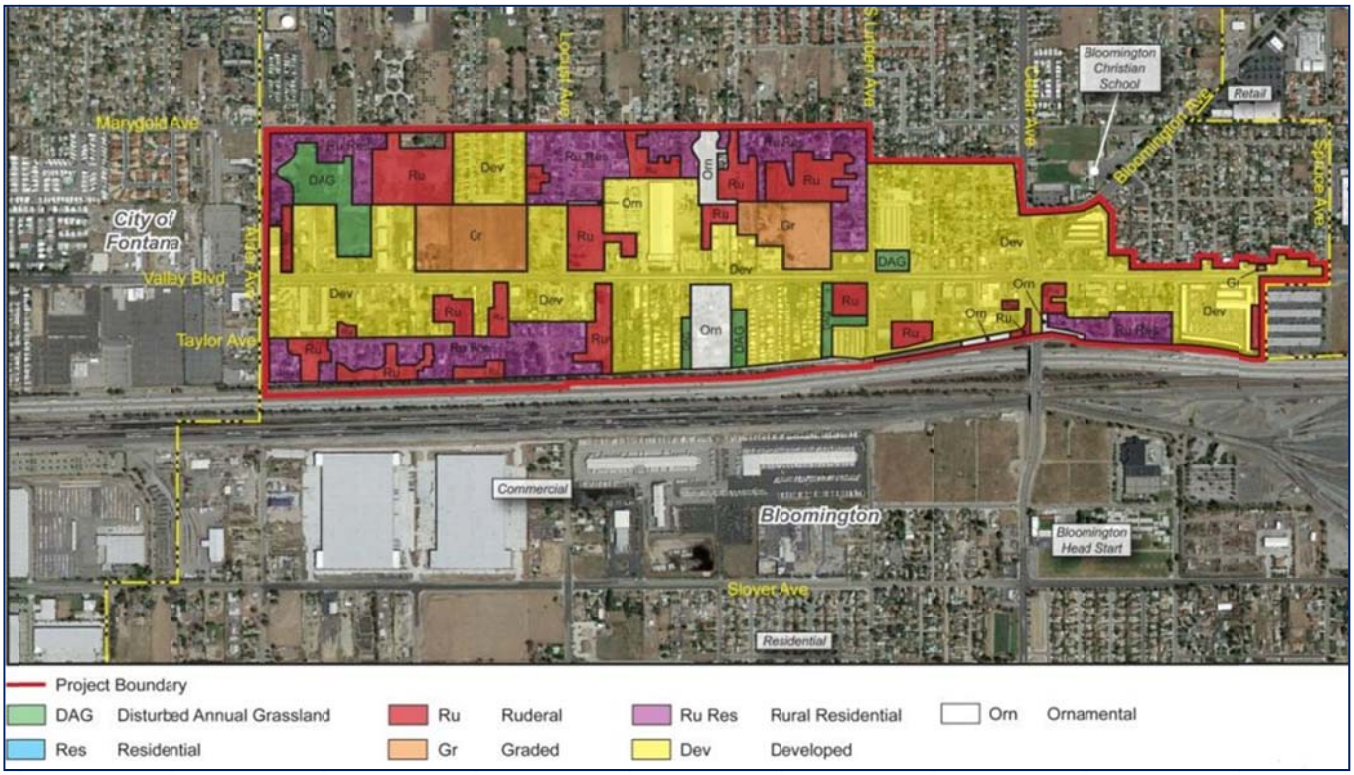

Figure 4. Plant Communities

Ornamental. Ayala Park, an existing nursery, and other areas of horticultural plantings were mapped as Ornamental. However, at the scale of the mapping for the Plan Area, many ornamental tree and shrub stands were included into other mapping units. The park area contained a large area of turf grasses, but most of these areas were characterized by strands of large trees. Typical ornamental trees include red river gum (*Eucalyptus camaldulensis*), which is planted along the margin of the I-10 freeway; Peruvian pepper tree (*Schinus molle*), Tree of Heaven (*Alianthus* altissima), white mulberry (*Morus alba*), Shamel ash (*Fraxinus udehi*), Mexican fan palm (*Washingtonia robusta*), queen palms **(***Sygarus romanoffiana*), carrot wood (*Cupanopsis anacarioides*), aleppo pine (*Pinus pinea*), Canary island pine (*Pinus canariensis*), Brazilian pepper tree (*Schinus terbinthifolius*), orange (*Citrus sinensis*), Jacaranda (*Jacaranda mimosifolia*), Chinese elm (*Ulmus parviflora*), salt cedar (*Tamarix aphylla*), magnolia (*Magnolia grandiflora*), Canary date palm (*Phoenix canariensis*), olive (*Olea europea*), Italian cypress (*Cupressus sempervirens*), sweet gum (*Liquidambar styraciflua*), and Texas umbrella tree (*Melia azedarach*).

Typical ornamental shrubs in these areas include India hawthorn (*Rhaphiolepis indica*), oldeander (*Nerium oleander*), bird of paradise (*Caesalpinia gillesii*), Spanish bayonet (*Yucca alifolia*), Indian fig (*Opuntia ficus-indica*), bougainvillea (*Bouganvillea spectablilis*), Japanese mock orange (*Pittosporum tobria*), bottlebrush (*Callistemon citrinus*), rosemary (*Rosmarinus officinalis*), juniper (*Juniperus chinensis*), and other shrubs typically used for landscaping in the region.

Rural Residential. Residences located on large lots, where it was impractical to separate the open land from the existing homes or structures, were mapped as rural residential. These areas typically had single family homes on large open lots or were homes with commercial businesses on the parcel.

Graded. Sites that have been bladed, graveled or comprising dirt parking lots or roadways and generally lacking vegetation were mapped as graded.

Developed. The developed mapping unit includes the urbanized localities of the study corridor. This includes paved streets, urban neighborhoods, and commercial districts along Valley Blvd.

Wildlife

The Plan Area has been altered from natural conditions first by agricultural practices followed by urbanization. Native habitat is absent in the Plan Area. Common wildlife species occur in the scattered, vacant parcels. Birds such as raptors may forage in the area and use trees to roost and nest. The wildlife observed is typical of the suburban nature of the Plan area, and include rock pigeon (*Columba livia*), mourning dove (*Zenaida macroura*), Anna's Hummingbird (*Calypte anna*), Nuttall's woodpecker (*Picoides nuttallii*), northern flicker (*Colaptes auratus*), black phoebe (*Sayornis nigricans*), western kingbird (*Tyrannus verticalis*), common raven (*Corvus corax*), house wren (*Troglodytes aedon*), northern mockingbird (*Mimus polyglottos*), European starling (*Sturnus vulgaris*), song sparrow (*Melospiza melodia*), white-crowned sparrow (*Zonotrichia leucophrys*), Bullock's oriole (*Icterus bullockii*), house finch (*Carpodacus mexicanus*), and house sparrow (*Passer domesticus*).

Special Status Plant Species and Communities

Species of special interest include those plant or wildlife species listed by the state or federal governments as endangered, threatened or rare and species which are candidates for future listing. These include species noted on the CNDDB special plants or animals lists (CDFW 2015b, 2015c), or plants on the CNPS Rare Plant Inventory (CNPS 2015). Special status plant communities are those habitats noted as of concern to the California Dept. of Fish and Wildlife (CDFW 2010), or may be regulated by other agencies, such as the U.S Army Corps of Engineers, CDFW, or the Regional Water Control Board.

The Plan Area is located on an old alluvial fan with no historic or existing drainages. This area has a long history of agricultural use, mainly as citrus orchards, followed by residential and commercial development. As a result, shrubs or woodlands in the area have been removed and only remnant annual grasslands occur in the Plan Area.

Plant Species of Special Interest

Table 1 lists the plant species of special concern known from the project region and assesses their potential to occur in the Plan Area. No listed plant species were observed on the project site or have the potential to occur there. Of the non-listed special interest plant species known from the project area, three have low potential to occur in the Plan Area: one California Native Plant Society Rare Plant Rank (CRPR) 1B.1 species (plants considered rare, threatened or endangered in California and elsewhere), the smooth tarplant (*Centromadia pungens* ssp. *laevis*), and two CRPR 4.2 species (a watch list of plants of limited distribution list): the paniculate tarplant, (*Deinandra paniculata*) and the southern California black walnut (*Juglans californica*).

The botanical survey located six walnut trees in the vacant lot located at the southwest corner of Valley Blvd. and Linden Avenue. The trees were identified as Northern California Black Walnut (*Juglans hindsii*) based on McMinn and Maino (1981). The northern California black walnut is a CNPS RPR 1B.1 species, within its native range. However, this walnut is considered to be introduced into southern California and would have no special status in the Plan Area.

Table 1 Special Status Plant Species Known from Project Region				
Species	**Federal/ State**	**CNPS**	**Known or Expected Localities**	**Comments**
Calochortus plummerae Plummer's mariposa lily	-	RPR 4.2	Cajon and Lytle Creek washes and areas adjacent to these drainages, alluvial fans of Etiwanda and Day Creek, along with the associated foothills of these drainages.	Found in coastal sage scrub or chaparral. Not expected to occur in the Plan Area.
Centromadia pungens ssp. *laevis* Smooth tarplant	-	RPR 1B.1	Santa Ana River, Lytle Creek, Cities of San Bernardino, and Ontario.	Found in alkali meadows or grasslands. Also found on the margin of riparian habitats in the region. Not expected to occur in the Plan Area.
Chorizanthe xanti var. *leucotheca* White-bracted spineflower	-	RPR 1B.2	Lytle and Cajon Creek washes.	Found mainly in alluvial fans and openings of coastal sage scrub. Not expected to occur in the Plan Area.
Chorizanthe parryi var. *parryi* Parry's spineflower	-	RPR 1B.1	Lytle, Cajon Creek washes, along with the alluvial fans of Etiwanda and Day Creeks and associated foothills. Cities of San Bernardino, and Colton.	Found mainly in alluvial fans and openings of coastal sage scrub. Not expected to occur in the Plan Area.
Deinandra paniculata Paniculate tar plant	-	RPR 4.2	San Bernardino Valley, Fontana (Etiwanda Creek), Jurupa Hills, Santa Ana River.	Found in annual grasslands and in openings of coastal sage scrub. Very low potential for occurrence in the disturbed grasslands found in the Plan Area.
Juglans californica Southern California black walnut	-	RPR 4.2	Lower San Bernardino Valley area including Colton, Fontana, City of San Bernardino, Jurupa Hills, Cajon Wash, Santa Ana River, and Lytle Creek.	Grasslands, Riversidian sage scrub, alluvial fan sage scrub. In the City areas this species is often associated with walnuts not native to southern California including *J. hindsii, J. nigra, and J. regia*
Monardella pringlei Pringle's monardella	-	RPR 1A	Historically known from the Colton area, the area between Colton and Rialto, and the Jurupa Hills.	Riversidian sage scrub in loose, sandy soils. The species was last reported in the 1940s and is currently considered extinct.

Federal Designations:
FE = Listed by the Federal government as endangered.
FT = Listed by the Federal government as endangered
BLM = A BLM sensitive plant species.

State Designations:
SE =Listed as endangered by the State of California.
ST Listed by the State of California as threatened.
SR Listed by the State of California as rare

California Native Plant Society (CNPS), Rare Plant Rank (CRPR):
RPR 1A = Plants presumed extinct in California.
RPR 1B = Plants considered rare, threatened or endangered in California and elsewhere.
RPR 2 = Plants rare, threatened or endangered in California but more common elsewhere.
RPR 3 = Plants about which we need more information - A review list.
RPR 4 = Plants of limited distribution - A watch list.

CNPS Threat Code Extensions
.1 = Seriously endangered in California.
.2 = Fairly endangered in California.
.3 = Not very endangered in California.

Sensitive Animal Species

Table 2 lists the animal species of special interest known from the project region and assesses their potential to occur in the Plan Area. No listed animal species are known from the Plan Area. The Delhi sands flower-loving fly (DSF), a federally endangered species, is known from the project region. This species occurs on Delhi sand soils, which are absent from the Plan Area but which occur approximately 1,500 feet west/southwest of the Plan Area. A habitat assessment for DSF in the project area (Jericho 2013) recommends that areas with alluvial soils not known to support DSF should be examined for their potential to serve as DSF habitat.

Of the non-listed special interest plant animal known from the project area, two California Species of Concern (CSC) have low potential to occur in the Plan Area: the burrowing owl and western yellow bat.

Table 2. Special Status Animal Species Known From Project Region

Species Name	Status*	Habitat Preference	Potential to Occur on Project Site
Invertebrates			
Delhi Sands flower-loving fly *Rhaphiomidas terminatus abdominalis*	FE	Wholly or partially consolidated dunes (Delhi soils series), open sand with sparse vegetation cover. Restricted to the Colton dunes area of northwestern Riverside and southwestern San Bernardino Counties.	Low. The site does not contain Delhi sand soils known to be required for this species.
Vertebrates			
Reptiles			
Coastal western whiptail *Aspidoscelis tigris stejnegeri*	SA	Occurs in coastal sage scrub, chaparral and wash habitats.	None sue to the absence of suitable habitat.
San Diego horned lizard *Phrynosoma coronatum blainvillei*	CSC	Occurs in variety of habitats including coastal sage, grassland, chaparral, oak woodland, and riparian woodland with loose sandy soils and abundant native ants or other insects.	None sue to the absence of suitable habitat.
Birds			
Burrowing owl *Athene cunicularia*	CSC	Open grassland, fallow fields, sparsely vegetated desert scrub, and edges of disturbed lands, where soil is friable for nesting burrows. Not observed during the biological survey.	Low.
Least Bell's vireo *Vireo bellii pusillus*	FE SE	Occurs in cottonwood-willow forest, but may also occur in oak woodland, shrubby thickets, and dry washes with willow thickets at the edges.	None due to absence of suitable habitat.
Coastal California gnatcatcher *Polioptila californica californica*	FT CSC	Occurs primarily in coastal sage scrub habitat, but also use chaparral, grassland, and riparian habitats where they occur in proximity to sage scrub.	None due to absence of suitable habitat.
Mammals			
San Diego black-tailed jackrabbit *Lepus californicus bennetti*	CSC	Occurs in a variety of habitats, including sage scrubs, chaparral,	None due to absence of suitable habitat.

Table 2. Special Status Animal Species Known From Project Region			
Species Name	Status*	Habitat Preference	Potential to Occur on Project Site
		agricultural lands and other disturbed habitats, but prefers open grassland.	
Western mastiff bat *Eumops perotis californicus*	CSC	Variety of habitats, from desert scrub and chaparral to oak woodland and ponderosa pine, but only where there are significant rock features for roosting. Natural roosts are often found under large exfoliating slabs of granite, sandstone slabs, or in columnar basalt, on cliff faces, or in large boulders. Some roosts have been found in buildings.	None due to absence of roosting habitat.
Western yellow bat *Lasiurus xanthinus*	CSC	Riparian, desert riparian, desert wash, and palm oasis habitats. Roosts in trees, particularly palms. They may be expanding their range with the increased usage of ornamental palms in landscaping.	Low.
Los Angeles pocket mouse *Perognathus longimembris brevinasus*	CSC	Inhabits coastal sage scrub and alluvial fan sage scrub habitats.	None due to the absence of suitable habitat
Northwestern San Diego pocket mouse *Chaetodipus fallax fallax*	CSC	Occurs mainly in sage scrub, chaparral, and grassland habitats.	None due to the absence of suitable habitat

Federal		State	
FE	Federally Endangered	SE	State Endangered
FT	Federally Threatened	ST	State Threatened
FPT	Federally Proposed Threatened	CSC	California Species of Concern
FSC	Federal Species of Concern	CFP	California Fully-Protected Species
		SA	Special Animal

Delhi sands flower-loving fly (DSF). The DSF occurs on fine, sandy soils (Delhi sands series), preferring aeolian sand dunes with sparse native vegetation. Three native plants that have been correlated with habitats that support DSF are California buckwheat (*Eriogonum fasciculatum*), California croton (*Croton californica*), and telegraph weed (*Heterotheca grandiflora*). These plants are correlated with DSF historical occurrences but are not known to be required for DSF presence.

The Recovery Plan for the DSF divides the areas known to be occupied by DSF and to contain Delhi sands into the Jurupa, Colton, and Ontario Recovery Units (USFWS 1997). The northeastern boundary of the Jurupa Recovery Unit is Valley Blvd to the north and Cedar Ave to the east, which is within the Plan Area. According to existing soils maps (NRCS 2015), Delhi sand soils do not occur in the Plan Area (Figure 3).

A qualitative habitat suitability assessment for DFS was carried out at a site north of Marygold Ave that adjoins the northern border of the Plan Area (Jericho Systems 2013). The site is similar to many vacant lots within the Plan Area: the site consists of a building and associated vacant lot with disturbed alluvial soils with no connectivity to undeveloped natural areas containing natural plant communities or undisturbed soils. The assessment notes that areas not historically mapped as Delhi sands could have recent deposition of Delhi sands on the surface. The habitat assessment assessed the relative abundance of

Delhi sand soils to alluvial soils such as Tujunga loamy sands on the subject site. The habitat assessment concluded that the soils were unsuitable for DSF based on the sole presence of alluvial soils (such as Tujunga loams) with no admixture of Delhi sand soils, and that inspection of the soils of vacant lots is necessary to determine potential suitability for DSF. Although the soils in the Plan Area have been impacted by years of agricultural and urban/suburban development, individual development projects within the Plan Area may have the potential to support soils suitable for DSF.

Western Burrowing Owl. The western burrowing owl is a ground-nesting owl that inhabits grassland habitats in California, often in areas that have been disturbed as a result of agriculture and urban and suburban development. They frequently use burrows previously excavated by the California ground squirrel (*Otospermophilus beecheyi*). The burrowing owl often uses pipes and other natural and non-natural cavities at or below ground level. The entrances to burrows are often indicated by the presence of whitewash and other sign (scat, feathers, and litter). Burrowing owls also require open fields with adequate food supply for foraging habitat, low vegetative cover to allow owls to watch for predators, and adequate roosting sites. These owls can often be seen perched or standing by their burrow or hunting insects, rodents, amphibians, or small birds in open fields. Nesting season is from February through August, with most pairs usually fledging 4 or 5 young. After the nesting season, most owls in California remain throughout the winter as year-round residents and owls from others areas augment resident California populations.

The CNDDB (CDFW 2015) contains a number of burrowing owl records for the project region, none of which occur within the Plan Area. The records nearest to the Plan Area are as follows:

- About 0.25 miles SE of E. San Bernardino Ave. at Riverside Ave, Rialto. Latest record is for one breeding pair in May 2007. This site is approximately 1.3 miles E/NE of the Plan area;

- South of I-10, between South Fontana and Crestmore. Latest record is for 2 adults and 4 juveniles in July 2004. This site is approximately 1.0 mile SW of the Plan Area;

- S/SW San Bernardino Ave at N. Pepper Ave, Colton. Single adult and breeding pair observed in May 2007. This site is approximately 2.0 mile E/NE of the Plan Area; and

- About 0.2 miles E/NE of Cactus Ave at Cricket Dr., Rialto. 6 breeding pairs estimated to occur in May 2006. This site is approximately 1.9 mile S/SE of the Plan Area.

The disturbed annual grassland, disturbed, and ruderal habitats that occur within the Plan Area are potentially suitable for burrowing owls. The reconnaissance survey of the Plan Area did not yield any observations of burrowing owls or potential burrows. However, not all vacant lots were examined due to access constraints and the program-level habitat assessment of the Plan Area.

Nesting Birds

The ornamental plants found in the Plan Area provide nesting habitat for a number of bird species that occur there as residents or migrants. Nesting bird species are protected by California Fish and Game Code Sections 3503, 3503.5, and 3800, and by the Migratory Bird Treaty Act (MBTA) of 1918 (16 USC 703–711), which regulate the take, possession, or destruction of nests or eggs of any migratory bird or bird of prey.

Communities of Special Interest/Regulated Habitats

The Plan Area contains developed, disturbed, and ruderal habitats. No riparian, coastal sage scrub habitats, ephemeral stream courses, or other sensitive habitats occur in the Plan Area. The Plan Area lies approximately 2.6 miles northwest of the Santa Ana River.

Wildlife Movement Corridors

Wildlife corridors link areas of suitable habitat that are otherwise separated by rugged terrain, changes in vegetation, or human disturbance. Corridors are links between different populations of a species and mitigate the effects of habitat fragmentation by 1) allowing animals to move between remaining habitats (which allows replenishment of depleted populations and promotes genetic diversity); 2) providing escape routes from fire, predators, and human disturbances that put populations or local species at risk; and 3) serving as travel routes for individuals moving within their home ranges for food, water, mates, and shelter. Wildlife movement activities usually fall into one of three movement categories: dispersal, seasonal migration, or movements related to home range activities. Large open spaces will generally support a diverse wildlife community representing all types of movement. Wildlife movement may range from non-migratory movement of amphibians, reptiles, and some birds on a local level to the many-square-mile home ranges of large mammals moving at a regional level.

The Plan Area is developed with urban land uses and surrounded by similarly developed land uses. There are no water courses or major utility corridors in the Plan Area that might serve as wildlife movement corridors. I-10 forms a hard barrier along the southern border of the Plan Area. The areas that contain biologically important open space nearest to the Plan Area are the Jurupa Hills, approximately 1.5 miles to the southwest, and the Slover Mtn/Santa Ana River wash areas, from approximately 1.4 to 2.5 miles southeast of the Plan Area; the intervening areas are developed with residential and commercial land uses. The Plan Area and does not function as a wildlife movement corridor.

4. IMPACTS

1. Impacts to Sensitive Plant and Animal Species.

The Plan Area is developed with urban uses and lacks suitable habitat for most sensitive plant and animal species. Development in accordance with the proposed Plan could result in habitat modification and removal of vacant lots that have low potential to support several sensitive species. Development projects considered for approval under the proposed Plan would be required to undergo CEQA review and comply with the federal and California endangered species acts.

Sensitive Plants. Bloomington has a lengthy history of agricultural use followed by urban development, which has removed the native vegetation. No listed plant species are known from the Plan Area or currently have the potential to occur there. Three non-listed special interest plant species known from the Plan area have low potential to occur there: the smooth tarplant (*Centromadia pungens* ssp. *laevis*), a CRPR 1B.1 species (see legend of Table 1 for definition), and two CRPR 4.2 species: the paniculate tarplant (*Deinandra paniculata*) and the southern California black walnut (*Juglans californica*).

Sensitive Animals

No listed animal species are known to occur in the Plan Area; there is low potential for the federally endangered Delhi sands flower-loving fly (DSF) to occur there. Of the non-listed special interest animal known from the project area, two California Species of Concern (CSC) have low potential to occur in the Plan Area: the burrowing owl and western yellow bat. Although there is low potential for burrowing owl

to occur in the Plan area, impacts could be significant due to dramatic long term reduction in its distribution in the project region. Potential impacts of the proposed project on the western yellow bat would not be considered significant because the species could continue to occur in palm trees and other ornamental plants in the Plan Area after implementation of the Specific Plan.

Delhi sands flower-loving fly (DSF). Available soil maps (NRCS 2015) indicate that Delhi sands, which are required habitat for DSF, do not occur within the Plan Area but do occur approximately 1,500 feet west/southwest of the Plan Area (Figure 3). A habitat assessment for DSF in the project area (Jericho 2013) suggests that site-specific habitat assessments for DSF are needed to ensure that Delhi sands have not been deposited by wind in areas that are near to historical Delhi sand soils (Jericho Systems 2013). Therefore, project specific development within the Plan Area could result in impacts to the DSF. Impacts to the DSF would be mitigated to a less than significant level with implementation of Mitigation Measure BIO 1, requiring project-specific level biological assessment and appropriate mitigation measures to offset any impacts.

Burrowing owl. The vacant lots that were examined in the Plan Area are low quality habitat for burrowing owls. However, burrowing owl presence cannot be excluded, in part because the habitat assessment did not involve intensive surveys and also because not all vacant lots were examined due to access constraints. The biological assessment for the proposed project was prepared at a program level to analyze land use changes within the Plan Area because site specific development and design has not been proposed. Potential impacts to the burrowing owl would be mitigated to a less than significant level with implementation of Mitigation Measure BIO-1.

Nesting Birds. The proposed project could result in the removal of ornamental trees and shrubs in the Plan area. If construction or site preparation activities would result in the removal of tree and shrub vegetation during the bird nesting season (January 15 to September 1), then the project could impact nesting birds. The Federal Migratory Bird Treaty Act prohibits direct impacts to nesting birds and their nests. Also, the California Fish and Game Code (Section 3503.5) prohibits activities that take, possess or destroy the nest of eggs of any such bird. With adherence to the existing regulations, the potential impact on biological resources would be less than significant.

2. Impacts to riparian habitat or other sensitive natural community

No impact. The Plan Area contains developed, disturbed, and ruderal habitats. No riparian, coastal sage scrub habitats, ephemeral stream courses, or other sensitive habitats occur in the Plan Area. The proposed project would not impact riparian habitat or other sensitive natural communities.

3. Impacts on federally protected wetlands

No impact. The Plan area site does not contain any wetland resources. No ephemeral drainages were observed in the Plan Area and the topographic map does not show any "blue line" streams. The Plan area lies approximately 2.6 miles northwest of the Santa Ana River. The proposed project would not impact any wetlands or other jurisdictional waters.

4. Impact wildlife movement or migratory fish or wildlife species

No Impact. The Plan Area is developed with urban land uses and is surrounded by developed land uses. There are no water courses or major utility corridors in the Plan Area that might serve as corridors. I-10 forms a movement barrier along the southern border of the Plan Area. The areas that contain biologically important open space nearest to the Plan Area are the Jurupa Hills, approximately 1.5 miles to the

southwest, and the Slover Mtn/Santa Ana River wash areas, approximately from 1.4 to 2.5 miles to the southeast; the intervening areas are developed with residential and commercial land uses. The Plan Area and adjoining area does not function as a wildlife movement corridor. The proposed project would not fragment habitat or impede wildlife movement. No mitigation measures are needed.

5. Conflict with local policies or ordinances protecting biological resources.

No Impact. The existing biological resources of the Specific Plan area consists mainly of plant and animal species common in suburban settings, which would be maintained in land uses under the proposed Specific Plan. The Conservation Element of the Bloomington Community Plan, as part of the San Bernardino County General Plan, notes that there are no wildlife habitats in the Bloomington Community Plan Area (County of San Bernardino, 2007). The goals and policies of the Conservation Element relate to the conservation of historical sites and structures. The Open Space element Community Plan identifies the priorities as maintaining the large-lot rural residential character of the Community Plan. The proposed Plan would not conflict with General Plan conservation and open space policies with respect to biological resources.

San Bernardino County Development Code 88.01.070 stipulates that the removal of native trees and row-planted palm trees requires a Tree or Plant Removal Permit if they meet the thresholds (6 inches diameter at 4.5 feet above grade for native trees, and at least three trees in row for planted palm trees). The Plan Area was previously in agricultural use followed by residential and commercial development. No native trees or rows of palm trees were observed during the biological survey. However, not all of the Plan Area was examined due to access constraints and the program-level habitat assessment of the Specific Plan. Review of individual development projects under the Specific Plan will determine whether a Tree or Plant removal Permit will be needed. With adherence to the existing regulation, the potential impact on biological resources would be less than significant.

6. Conflict with the provisions of any approved local, regional, or state habitat conservation plan

No Impact. The Plan Area is not within an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan. No mitigation measures are needed.

Mitigation Measures

BIO–1 Prior to the issuance of any grading permit for development on a vacant site, the project applicant shall prepare a biological resources assessment. The biological resources assessment shall be prepared by a qualified biological consultant, and include a characterization of biological resources on-site and a habitat assessment for the Delhi-sands flower-loving fly and burrowing owl.

BIO–2 If there is potential for direct impacts to special-status species with implementation of construction activities, the project-specific biological resources assessment report (as mentioned in Mitigation Measure BIO–1) shall include mitigation measures requiring pre-construction surveys for special-status species and/or construction monitoring to ensure avoidance, relocation, or safe escape of special-status species from the construction activities, as appropriate.

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Appendix 1. Site photographs

Photo 1. Oblique aerial photo of eastern part of Plan Area (view looking west)

Photo 2. Oblique aerial photo of western part of Plan Area (view looking east)

Photo 3. Ruderal field at southwest corner of Valley Blvd & Linden Ave, view looking southwest

Photo 4. Vacant lot at northeast corner Valley Blvd and Locust Ave (view looking northwest)

Photo 5. Lot located northwest of corner of Valley Blvd and Locust Ave (view looking northeast) being developed.

Photo 6. Vacant lot southeast of corner of Alder Ave and Marygold Ave (view looking southeast)

Appendix 2. List of Plant Species

Gymnosperms
Coniferata, cone bearing plants

Cupressaceae, Cypress Family
Italian cypress (**Cupressus sempervirens*)
Juniper (**Juniperus chinensis*)

Pinacea, Pine family
Deodar cedar (**Cedrus deodara*)
Canary Island pine (**Pinus canariensis*)
Italian stone pine (**Pinus pinea*)
Aleppo pine (**Pinus halepensis*)

Magniophyta, flowering plants

Magnoliaceae, Magnolias
Magnolia (**Magnolia grandiflora*)

Eudicotyldones, Eudicots

Aizoaceae, fig marigold family
Baby sun rose (**Aptenia cordifolia*)

Altingiaceae
Liquidambar (**Liquidambar styraflua*)

Amaranthaceae, Amaranth family
Tumbling pigweed (**Amaranthus albus*)
Rough pigweed (**Amaranthus retroflexus*)

Anacardiaceae, cashew family
Peruvian pepper tree (**Schinus molle*)
Brazilian pepper tree (**Schinus terebinthifolius*)

Apocynaceae, dogbane family
Oleander (**Nerium oldeander*)

Asteraceae, sunflower family
Annual burweed (*Ambrosia acanthicarpa*)
Common horseweed (*Erigeron Canadensis*)
Green-leaved euryops (**Euryops pectinatus*)
Gazania (**Gazinia linearis*)
Annual sunflower (*Helianthus annuus*)
Telegraph weed (*Heterotheca grandiflora*)
Prickly lettuce (**Lactuca serriola*)
Scalebroom (*Lepidospartum squamatum*)
Trailing African daisy (**Osteospermum fruiticosum*)
Prickly sow thistle (**Sonchus asper*)
Common sow thistle (**Sonchus oleraceus*)
Dandelion (**Taraxacum officinale*)
Earless crownbeard (**Verbesina encelioides*)

Bignoniaceae, Bignonia family
Cigar tree (**Catalpa bignonioides*)
Jacaranda (**Jacaranda mimosifolia*)

Boraginaceae, forget-me-not family
Common fiddleneck (*Amsinckia intermedia*)

Brassicaceae, mustard family
Sahara mustard (**Brassica tournefortii*)
Summer mustard (**Hirschfeldia incana*)
London rocket (**Sisymbrium irio*)

Cactaceae, cactus family
Night blooming cactus (**Cereus peruviensis*)
Valley cholla (*Cylindropuntia californica* var. *parkeri*?)
Spineless cactus (**Opuntia ficus-indica*)

Chenopodiaceae, goosefoot family
Lambs quarters (**Chenopodium album* ?)
Pitseed goosefoot (*Chenopodium berlandieri*)
Mexican tea (**Dysphania ambrosioides*)
Russian thistle (**Salsola tragus*)

Euphorbiacea, spurge family
Spotted spurge (*Euphorbia maculata*)
Annual rattlesnake spurge (*Euphorbia serpens*)

Fabaceae, pea family
Acacia (**Acacia sp.*)
Spanish lotus (*Acmispon americanus*)
Desert bird of paradise (**Ceasalpinia gilliesii*)
Redbud (**Cercis occidentalis*)
Honey locust (**Gleditsia triacanthos*)
Bur clover (**Medicago polymorpha*)

Fagaceae, beech family
Oak (**Quercus sp.*)

Geraniaceae, geranium family
Red-stemmed filaree (**Erodium cicutarium*)
Bedding geranium (**Pelaargonium Xhortorum*)

Juglandaceae, walnut family
Northern California black walnut (*Juglans hindsii* (Tentative ID))

Lamiaceae, mint family
Horehound (**Marrubium vulgare*)
Rosemary (**Rosmarinus officinalis*)

Malvaceae, mallow family
Silk floss tree (**Ceiba speciosa*)
Cheeseweed (**Malva parviflora*)

Meliaceae, mahogany family

China berry (*_Melia azedarach_*)

Moraceae, fig family
Fig (*_Ficus carica_*)
White mulberry (*_Morus alba_*)

Myrtaceae, myrtle family
Red river gum (*_Eucalyptus camaldulensis_*)
Eucalyptus (*_Eucalyptus spp._*)
Crimson bottlebrush (*_Melaleuca citrina_*)
Lemon guava (*_Psidium littorale_* var. *littorale*)

Nyctaginaceaceae, four o'clock family
Bougainvillea (*_Bougainvillea glabra_*)

Oleaceaceae, olive family
Shamel ash (*_Fraxinus udehi_*)
Privet (*_Ligustrum japonicum_*)
Olive (*_Olea europea_*)
Japanese mock orange (*_Pittosporum tobria_*)

Plumbaginaceae, leadwort family
Blue cape plumbago (*_Plumbago auriculata_*)

Polygonaceae, buckwheat family
Common knotweed (*_Polygonum aviculare_*)

Portulacaceae, purslane family
Purslane (*_Portulaca oleracea_*)

Rosaceae, rose family
India hawthorn (*_Rhaphiolepis indica_*)
Cultivated rose (*_Rosa chinensis_*)

Rutaceae, rue family
Orange (*_Citrus sinensis_*)

Salicaceae, willow family
Fremont cottonwood (*Populus fremontii* Planted?)

Sapindaceae, soapberry family
Carrot wood (*_Cupaniopsis anacardioides_*)

Simaroubaceae, quassia family
Tree of Heaven (*_Alianthus altissima_*)

Solanaceae, nightshade family
Pale-flowered thorn-apple (*_Datura strumonium_*)

Tamaicaceae, tamarisk family
Salt cedar (*_Tamarix aphylla_*)

Ulmaceae, elm family
Chinese elm (*_Ulmus parviflora_*)

Vitaceae, grape family
Grape (**Vitus vinifera*)

Zygophyllaceae, caltrop family
Puncture vine (**Tribulus terrestris*)

Monoctyledones, Monocots

Agavaceae Agave Family
**Agave Americana* (Century plant)
**Yucca aloifolia* (Spanish bayonet)

Areacaceae (Palmae), Palm Family
Canary Island palm (**Phoenix canariensis*)
Queen palm (**Syagrus romanzoffiana*)
California fan palm (*Washingtonia filifera* planted)
Mexican fan palm (**Washingtonia robusta*)

Cyperaceae, sedge family
Tall umbrella sedge (*Cyperus eragrostis*)

Poaceacea, grass family
Slender wild oat (**Avena barbata*)
Wild oat (**Avena fatua*)
Ripgut brome (**Bromus diandrus*)
Red brome (**Bromus madritensis ssp. rubens*)
Pampas grass (**Cortaderia selloana*)
Bermuda grass (**Cynodon dactylon*)
Hairy crab grass (**Digitaria sanguinalis*)
Barn yard grass (**Echinochloa crus-galli*)
Orcutt's love grass (**Eragrostis Mexicana* ssp. *virescens*)
Foxtail barley (**Hordeum murinum* ssp. *leporinum*.)
Mexican sprangletop (**Leptochloa fusca* ssp. *uninervia*)
Mediterranean schismus (**Schismus barbatus*)
Green bristle grass (**Setaria viridis*)
Johnson grass (**Sorghum halepense*)

* indicates non-native species