

Biological Resources Report
for
Verde Cruz Townhomes Project
Sacramento County, California



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1.0 INTRODUCTION

The Verde Cruz Townhomes Project (Project) is an approximately 1.9-acre development project located at the northeast corner of Manzanita Avenue and Bourbon Drive in Carmichael, Sacramento County, California (Exhibit A-1 and A-2). The Project will construct 17 townhomes, a playground, a barbeque area, and associated parking facilities.

As part of the Project's approval process, an application was sent to Sacramento County. On April 26, 2018, a *Request for Additional Information and/or Revisions* letter was received from the Sacramento County Department of Community Development, Planning and Environmental Review Division. The letter detailed additional information needed by the County, which included surveys for potentially occurring special-status species within the Project vicinity and an assessment of impacts to Swainson's hawk foraging habitat.

This report has been prepared by Area West Environmental, Inc. (AWE) to comply with items 40 and 41 of the *Request for Additional Information and/or Revisions* letter as detailed below.

40. *Advisory: The proposed project will require and analysis of impacts to Swainson's hawk foraging habitat. Actual mitigation requirements are not certain until an environmental document is prepared as required by the California Environmental Quality Act (CEQA) and mitigation would not be required until the project is approved and a final map is recorded.*
41. *Please conduct surveys for potentially occurring special status species within the project site and any areas located off-site that are subject to improvements necessary to serve the project where there is reasonable potential for impacts to special status species and provide a detailed plan which describes the specific methods to be implemented to mitigate any project impacts upon special status species to a less than significant level. If available, a pdf file of the report can be sent to the project manager at the below e-mail address.*

Separate reports have been prepared for items 23 and 43. An aquatic resources delineation was prepared by AWE for item 23 (AWE 2018) and an arborist report was prepared by others.

23. *Fish and Wildlife and Army Corps of Engineers: Subject property may contain Waters of the State or Waters of the U.S. Any alterations or work within these areas will require applicable State Fish & Wildlife and U.S. Army Corps of Engineers permits prior to grading or building permit issuance.*
43. *Please provide an exhibit that shows the location, truck size, species, and dripline of all existing trees on the site. Indicate any trees proposed to be removed. If the site contains native oak trees, other native trees, or other non-native trees with trunk diameters of 19 inches dbh or larger, then submit a report prepared by a certified arborist which evaluates the health and condition of the trees.*

2.0 ENVIRONMENTAL SETTING

The Project area is an approximately 1.9-acre area located in the community of Carmichael in Sacramento County. The Project area consists of an approximately 1.7-acre undeveloped parcel and approximately 0.2-acre of roadway and roadside south of the undeveloped parcel where roadway and sidewalk improvements may occur. The Project area is surrounded by urban and residential development, and elevations on the site range from approximately 95 feet to 115 feet above mean sea level (Exhibit A-1). On the western boundary lies Manzanita Avenue, a busy local roadway, and to the south of the area is Bourbon Drive, a residential street (Exhibit A-3). Another undeveloped parcel lies to the north, and along the eastern side of the Survey Area boundary, there are large residential lots. Within the Project area, the dominant vegetation community consists of Blue Oak Woodland with an understory comprised of non-native grassland species. The topography of the area is gradually sloped to the northwest where an intermittent waterway, Verde Cruz Creek, lies along the northern property boundary. The creek transverses the northern portion of the site, running east-west until it continues through a box culvert underneath Manzanita Avenue.

Biological field surveys were conducted on May 10, 2018, and consisted of habitat mapping, habitat assessments, and aquatic resources delineation fieldwork within the entire Project area. During these surveys, all wildlife species were recorded and all plant species observed in the Project area were identified to species, if possible given the condition of the plant, and recorded, as shown in Appendices A and B.

The Project area supports a total of three habitat types, as described below and shown in Exhibit A-4.

Blue Oak Woodland

The majority of the Project area consists of Blue Oak Woodland habitat. The Blue Oak Woodland vegetation community consists of open canopy blue oak woodland with an understory dominated by annual grasses and forbs and some scattered shrubs. This community typically occurs in the foothills surrounding the Central Valley in well-drained soils with a rocky component to the soil. The overstory of this community consists of blue oaks (*Quercus douglasii*) as the dominant species, with some scattered Northern California black walnut (*Junglans hindsii*), interior live oak (*Quercus wislizeni*), and broad-leaf privet (*Ligustrum lucidum*) in the mid-canopy and shrub layers. The understory supports vegetation consistent with non-native annual grassland species dominated by slender oats (*Avena barbata*), wild oats (*Avena fatua*), ripgut brome (*Bromus diandrus*), soft brome (*Bromus hordeaceus*), and Italian ryegrass (*Festuca perennis*). Dominant annual forbs primarily included non-native species such as field hedge-parsley (*Torilis arvensis*), spring vetch (*Vicia sativa*), and Italian thistle (*Carduus pycnocephalus*), as well as one dominant native forb, bedstraw (*Galium aparine*). There is also a small portion within this vegetation type (the eastern section along Manzanita Avenue) which has several ornamental and horticultural species within the overarching woodland including; river she-oak (*Casuarina cunninghamiana*), coast redwood (*Sequoia sempervirens*), white mulberry (*Morus alba*), olive (*Olea europaea*), and blueberry shrub (*Vaccinium* sp.). Representative photos of this habitat are shown in Appendix C.

Verde Cruz Creek – Intermittent Channel

Verde Cruz Creek is located in the northern portion of the Survey Area and conveys urban and residential runoff from the east through the Survey Area before running under Manzanita Avenue through a box culvert. A total of 0.088 acre of Intermittent Channel was mapped within the Survey Area. Open water within the Intermittent Channel is devoid of vegetation throughout its extent within the Survey Area. Vegetation observed growing adjacent to the open water are located primarily along the northern side at the base of the bank and are dominated by white-flowered onion (*Allium triquetrum*), and Himalayan blackberry (*Rubus armeniacus*). Additional non-dominant species present within the channel also include, tall flatsedge (*Cyperus eragrostis*), wild grape (*Vitis californica*), Mexican fan palm (*Washingtonia robusta*), English plantain (*Plantago lanceolata*), and smartweed (*Polygonum* sp.). The southern side of the channel is highly eroded and has a steep bank that does not support any vegetation below the top of the bank. Overall, the Intermittent Channel community was not dominated by wetland vegetation. Representative photos of this habitat are shown in Appendix C.

Developed

Developed portions of the Project area are situated within upland areas and characterized by anthropogenic features including paved roads, sidewalks, and roadside pull-offs. The Developed community is located in the southern portion of the Project area along and within Bourbon Drive. Vegetation in this habitat is highly disturbed and entirely herbaceous, consisting of non-native grassland and forb species discussed under the blue oak woodland habitat.

Special-status Species

Special-status species are generally defined as those species assigned a status designation indicating possible risk to the species. These designations are assigned by state and federal resource agencies (e.g., California Department of Fish and Wildlife [CDFW], U.S. Fish and Wildlife Service [USFWS]) or by private research or conservation groups (e.g., National Audubon Society or the California Native Plant Society [CNPS]). Assignment to a special-status designation is typically based on a declining or potentially declining population locally, regionally, or nationally. To what extent a species or population is at risk usually determines the status designation.

For the purpose of this document, special-status plant species are generally defined as follows:

- Plants listed or proposed for listing as threatened or endangered under the federal Endangered Species Act (ESA) (50 Code of Federal Regulations [CFR]17.12 [listed plants]) and various notices in the Federal Register [FR] [proposed species]). Plants that are candidates for possible future listing as threatened or endangered under the federal ESA.
- Plants considered by the CNPS to be “rare, threatened, or endangered” in California (Rare Plant Rank 1 and 2 species [CNPS 2018]).

- Plants listed or candidates for listing as threatened or endangered by the State of California under the California Endangered Species Act (CESA) (14 California Code of Regulations [CCR] 670.5).
- Plants listed under the California Native Plant Protection Act (California Fish and Game Code [CFGF] 1900 et seq.).
- Plants considered sensitive by other federal agencies (i.e., U.S. Forest Service, Bureau of Land Management) or state and local agencies or jurisdictions.
- Plant species that meet the definition of rare or endangered under California Environmental Quality Act (CEQA) (14 CCR Section 15380).

Special-status wildlife species are generally defined as follows:

- Wildlife species that are listed or proposed for listing as threatened or endangered under the federal ESA (50 CFR 17.11 [listed animals]) and various notices in the FR [listed animals]).
- Wildlife species that are candidates for possible future listing as threatened or endangered under the federal ESA.
- Wildlife species that are listed or proposed for listing under CESA (CFGF 1992 Sections 2050 et seq.; 14 CCR Sections 670.1 et seq.).
- Wildlife species that are designated as Species of Special Concern by CDFW.
- Wildlife species that are designated as fully protected under the CFGF Section 3511 (birds), Section 4700 (mammals), Section 5515 (fish), and Section 5050 (reptiles and amphibians).

Prior to conducting field surveys, available information regarding biological resources on or near the Project area were gathered and reviewed, including information on special-status plant and wildlife species with the potential to occur in the vicinity of the Project site. Several data sources were reviewed, including; 1) records search of the CDFW California Natural Diversity Database (CNDDDB) and a search of the CNPS Inventory of Rare and Endangered Plants Database for the *Citrus Heights, Pleasant Grove, Rocklin, Roseville, Folsom, Buffalo Creek, Carmichael, Sacramento East, and Rio Linda* 7.5 minute U.S. Geological Survey (USGS) topographic quadrangles (CNDDDB 2018) (Appendix D); a species list from the USFWS for the Project (USFWS 2018) (Appendix D). Based on the information collected in these data searches, as well as an analysis of the elevation and habitats present, 11 special-status plant species and 24 special-status wildlife species were initially identified as having the potential to occur within the Project area. See Tables 1 and 2 for and evaluation of each species' potential for occurrence and Exhibit 1 for the location of all CNDDDB occurrences in the vicinity of the Project area.

Table 1. Special-status Plant Species with the Potential to Occur in the Vicinity of the Project

Common and Scientific Name	Legal Status ¹		Distribution	Habitat Association	Identification Period	Potential for Species/Habitat Presence
	Federal /State	CNPS				
Big-scale balsamroot <i>Balsamorhiza macrolepis</i> var. <i>macrolepis</i>	--/--	1B.2	Alameda, Amador, Butte, Colusa, El Dorado, Lake, Mariposa, Napa, Placer, Santa Clara, Solano, Sonoma, Tehama, and Tuolumne counties.	Serpentine soils in chaparral, cismontane woodland, and valley and foothill grassland from 295 – 5,102 feet (90 – 1,555 meters).	March - June	Unlikely to occur. Project area is outside of the elevational range of this species and no appropriate habitat is present.
Hispid bird's-beak <i>Chloropyron molle</i> ssp. <i>hispidum</i>	--/--	1B.1	Alameda, Fresno, Kern, Merced, Placer, and Solano counties.	Alkaline soils in meadows and seeps, playas, and valley and foothill grassland. 3 – 509 feet (1 – 155 meters).	June – September	Unlikely to occur; no suitable habitat is present.
Dwarf downingia <i>Downingia pusilla</i>	--/--	2B.2	Southern Sacramento Valley, northern San Joaquin Valley, and southern North Coast Ranges.	Vernal pools in valley and foothill grasslands. 3 – 1,460 feet (1 – 445 meters).	March – May	Unlikely to occur; no suitable habitat is present.
Boggs Lake hedge-hyssop <i>Gratiola heterosepala</i>	--/CE	1B.2	Fresno, Lake, Lassen, Madera, Merced, Modoc, Placer, Sacramento, Shasta, Siskiyou, San Joaquin, Solano, Sonoma, and Tehama counties.	Clay soils in marshes and swamps (lake margins) and vernal pools. 33 – 7,792 feet (10 – 2,375 meters).	April – August	Unlikely to occur; no suitable habitat is present.
Ahart's dwarf rush <i>Juncus leiospermus</i> var. <i>ahartii</i>	--/--	1B.2	Butte, Calaveras, Placer, Sacramento, Tehama, and Yuba counties.	Mesic soils in valley and foothill grasslands, including wetland riparian. 98 – 751 feet (30 – 229 meters).	March – May	Unlikely to occur; no suitable habitat is present.
Red Bluff dwarf rush <i>Juncus leiospermus</i> var. <i>leiospermus</i>	--/--	1B.1	Butte, Placer, Shasta, and Tehama counties.	Vernal pools; vernal mesic soils in chaparral, cismontane woodland, meadows and seeps, and valley and foothill grasslands. 115 – 4,101 feet (35 – 1,250 meters).	March – June	Unlikely to occur; no suitable habitat is present.
Legenere <i>Legenere limosa</i>	--/--	1B.1	Alameda, Lake Monterey, Napa, Placer, Sacramento Santa Clara, Shasta, San Joaquin, San Mateo, Solano, Sonoma, Tehama, and Yuba counties.	Vernal pools. 3 – 2,887 feet (1-880 meters).	April – June	Unlikely to occur; no suitable habitat is present.

Common and Scientific Name	Legal Status ¹		Distribution	Habitat Association	Identification Period	Potential for Species/Habitat Presence
	Federal /State	CNPS				
Pincushion navarretia <i>Navarretia myersii</i> <i>ssp. myersii</i>	--/--	1B.1	Amador, Calaveras, Merced, Placer, and Sacramento counties.	Often acidic soils in vernal pools. 66 – 1,083 feet (20 - 330 meters).	April – May	Unlikely to occur; no suitable habitat is present.
Slender Orcutt grass <i>Orcuttia tenuis</i>	FT/CE	1B.1	Northern Sacramento Valley, Pit River Valley; isolated populations in Lake and Sacramento counties.	Often gravelly soil in vernal pools. 115 - 5,775 feet (35 – 1,760 meters).	May - October	Unlikely to occur; no suitable habitat is present.
Sacramento Orcutt grass <i>Orcuttia viscida</i>	FE/CE	1B.1	Sacramento County.	Vernal pools. 98 – 328 feet (30 – 100 meters).	April – September	Unlikely to occur; no suitable habitat is present.
Sanford's arrowhead <i>Sagittaria sanfordii</i>	--/--	1B.2	Butte, Del Norte, El Dorado, Fresno, Merced, Mariposa, Placer, Sacramento, San Bernardino, Shasta, San Joaquin, Solano, Tehama, and Yuba counties.	Shallow, freshwater marshes and swamps. 0 – 2,133 feet (0 – 650 meters).	May – November	Unlikely to occur; suitable habitat is present, but the species was not observed during surveys conducted during the appropriate identification period.

<p>¹Status explanations: -- = no listing.</p> <p><u>Federal</u> FE = listed as endangered under the federal Endangered Species Act. FT = listed as threatened under the federal Endangered Species Act.</p> <p><u>State</u> CE = listed as endangered under the California Endangered Species Act.</p>	<p><u>California Native Plant Society Rare Plant Rank (formerly known as CNPS lists)</u> 1B = Rank 1B species: rare, threatened, or endangered in California and elsewhere. 2B = Rank 2B species: rare, threatened, or endangered in California but more common elsewhere. 0.1 = Seriously threatened in California (over 80% of occurrences threatened/high degree and immediacy of threat). 0.2 = Moderately threatened in California (20%-80% occurrences threatened/moderate degree and immediacy of threat). 0.3 = Not very threatened in California (less than 20% of occurrences threatened/low degree and immediacy of threat or no current threats known).</p> <p>Source: CNPS 2018; CNDDDB 2018; USFWS 2018, and Calflora 2017.</p>
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Table 2. Special-status Wildlife with the Potential to Occur in the Vicinity of the Project

Common Name Scientific Name	Legal Status ¹		Distribution	Habitat Requirements	Potential for Species/Habitat Presence
	Federal	State			
Invertebrates					
Vernal pool fairy shrimp <i>Branchinecta lynchi</i>	FT	--	Central Valley, Central and South Coast Ranges from Tehama County to Santa Barbara County; isolated populations also in Riverside County.	Common in vernal pools and seasonal wetlands; also found in sandstone rock outcrop pools.	Unlikely to occur. No suitable habitat is present.
Valley elderberry longhorn beetle <i>Desmocerus californicus dimorphus</i>	FT	--	Central Valley and surrounding foothills below 500-foot elevations.	Dependent on elderberry shrubs (host plant) as a food plant; potential habitat is shrubs with stems 1 inch in diameter within Central Valley.	Unlikely to occur. No suitable habitat is present.
Vernal pool tadpole shrimp <i>Lepidurus packardii</i>	FE	--	Central Valley from Shasta County south to Merced County.	Vernal pools, vernal lakes, and other seasonal wetlands.	Unlikely to occur. No suitable habitat is present.
Amphibians					
California tiger salamander <i>Ambystoma californiense</i>	FT	CT	Central Valley, including Sierra Nevada foothills up to 1,500 feet amsl and Coastal regions from Butte County south to Santa Barbara County.	Breeds in temporary ponds formed from rain associated with annual grassland and from 10–3,200 feet above mean sea level. May also occur in hardwood forest, but less common. Adult life is mostly subterranean in burrows, rock cracks and other structures. Seasonal movements associated with breeding are usually up to 1.25 miles.	Unlikely to occur. No suitable habitat is present.
California red-legged frog <i>Rana draytonii</i>	FT	SSC	Along the coast and coastal mountain ranges of California from Marin County to San Diego County and in the Sierra Nevada from Tehama County to Fresno County. Usually occurs below 4,000 feet amsl.	Permanent and semi-permanent aquatic habitats, such as creeks and cold water ponds, with emergent and submergent vegetation; may aestivate in rodent burrows or cracks during dry periods. This species has been known to move overland without regard for topography or vegetation corridors up to a distance of 2 miles.	Unlikely to occur. No suitable habitat is present.
Western spadefoot <i>Spea hammondi</i>	--	SSC	Sierra Nevada foothills, Central Valley, Coast Ranges, coastal counties in southern California.	Pools in intermittent streams, cattle ponds, and seasonal wetlands, such as vernal pools in annual grasslands and oak woodlands.	Unlikely to occur. Isolated oak woodland habitat and the highly urbanized creek are not expected to provide suitable habitat for this species.

Common Name Scientific Name	Legal Status ¹		Distribution	Habitat Requirements	Potential for Species/Habitat Presence
	Federal	State			
Reptiles					
Western pond turtle <i>Actinemys marmorata</i>	--	SSC	Populations extend throughout the coast and Central Valley of California.	Thoroughly aquatic turtle of ponds, marshes, rivers, streams and irrigation ditches with aquatic vegetation, below 6,000 feet in elevation. Require soil up to 4 inches deep for egg-laying. Females will travel overland up to approximately 325 feet to lay eggs.	Potential for occurrence. Low quality habitat is present for this species in Verde Cruz Creek and nearby uplands (north bank only) in the Project area.
Giant garter snake <i>Thamnophis gigas</i>	FT	CT	Central Valley from Fresno north to the Gridley/Sutter Buttes area; has been extirpated from areas south of Fresno.	Sloughs, canals, and other small water-ways where there is a prey base of small fish and amphibians; require grassy banks and emergent vegetation for basking and areas of high ground protected from flooding during winter.	Unlikely to occur. No suitable habitat is present.
Birds					
Tricolored blackbird <i>Agelaius tricolor</i>	--	CT	Largely endemic to California; permanent residents in the Central Valley from Butte County to Kern County; at scattered coastal locations from Marin County south to San Diego County; breeds at scattered locations in Lake, Sonoma, and Solano counties; rare nester in Siskiyou, Modoc, and Lassen counties. Sacramento-San Joaquin Valleys and low foothills of coast ranges and Sierra Nevada.	Nests in dense colonies in emergent marsh vegetation, such as tules and cattails, or upland sites with blackberries, nettles, thistles, and grainfields; nesting habitat must be large enough to support 50 pairs; probably requires water at or near the nesting colony; requires large foraging areas, including marshes, pastures, agricultural wetlands, dairies, and feedlots, where insect prey is abundant.	Unlikely to occur. No suitable habitat is present.
Grasshopper Sparrow <i>Ammodramus savannarum</i>	--	SSC	An uncommon and local, summer resident and breeder in foothills and lowlands west of the Cascade-Sierra Nevada crest from Mendocino and Trinity cos. south to San Diego Co. Also has been found in Shasta Valley, Siskiyou Co.	Dry, dense grasslands, especially those with a variety of grasses and tall forbs and scattered shrubs for singing perches. In southern California occurs mainly on hillsides and mesas in coastal districts, but has bred up to 5000 feet amsl in San Jacinto Mts.	Unlikely to occur. No suitable habitat is present.
Golden eagle <i>Aquila chrysaetos</i>	--	FP	Foothills and mountains through-out California; uncommon nonbreeding visitor to lowlands such as the Central Valley. Concentrated in the Central Valley and coastal valleys.	Cliffs and escarpments or tall trees for nesting; annual grasslands, chaparral, and oak wood-lands with plentiful medium and large-sized mammals for prey. Uses rolling foothills and mountain terrain, including steep terrain in stream cut canyons and slopes.	Unlikely to occur. No suitable habitat is present.
Burrowing owl <i>Athene cunicularia</i>	--	SSC	Lowlands throughout California, including the Central Valley, northeastern plateau, southeastern deserts, and coastal areas; rare along south coast. Central and southern coastal habitats and Central Valley.	Open annual grasslands or perennial grasslands, deserts, and scrublands characterized by low-growing vegetation. Dependent upon burrowing mammals (especially California ground squirrel) for burrows.	Unlikely to occur. No suitable habitat is present.

Common Name Scientific Name	Legal Status ¹		Distribution	Habitat Requirements	Potential for Species/Habitat Presence
	Federal	State			
Swainson's hawk <i>Buteo swainsoni</i>	--	CT	Lower Sacramento and San Joaquin Valleys, the Klamath Basin, and Butte Valley; the state's highest nesting densities occur near Davis and Woodland, in Yolo County.	Nests in solitary trees or riparian habitats; nests located adjacent to suitable foraging habitat. Forages in open grasslands, irrigated pastures, and grain fields.	Unlikely to occur. Suitable riparian nesting habitat is present, but nesting habitat is located far from suitable open foraging habitat. No nests were observed during survey conducted in the nesting season.
Western yellow-billed cuckoo <i>Coccyzus americanus occidentalis</i>	FT	CE	Breeds along major river valleys and occurs at isolated sites in Sacramento Valley in northern California and along Kern and Colorado River systems in southern California. The northern limit of breeding populations in California is the Sacramento Valley.	In California, prefers riparian woodlands comprised of various compositions with a dense understory along slow moving watercourses. Typically requires expansive riparian habitat of 25 – 99 acres of habitat for breeding.	Unlikely to occur. No suitable habitat is present.
White-tailed kite <i>Elanus leucurus</i>	--	FP	Lowland areas west of Sierra Nevada from head of Sacramento Valley south, including coastal valleys and foothills to western San Diego County at the Mexico border. Central Valley and low foothills of the Sierra Nevada.	Agricultural lands and open stages of most herbaceous habitats. Nests in dense oak, willow, or other tree stands. Forages by hovering over grasslands and catching small mammals such as voles.	Potential for occurrence. This species could nest in the trees within the Project area. Foraging habitat is limited given the lack of open grassland within the Project area.
California black rail <i>Laterallus jamaicensis coturniculus</i>	--	CT/FP	Known to occur in Alameda, Butte, Contra Costa, Imperial, Marin, Napa, Nevada, Placer, Riverside, Sacramento, San Bernardino, San Joaquin, San Luis Obispo, San Mateo, Santa Clara, Santa Cruz, Solano, Sonoma, Sutter, and Yuba counties.	Inhabits saltwater, brackish, and freshwater marshes. Nests in high areas of salt marshes, shallow freshwater marshes (less than 1.2 inches deep), and wet meadows.	Unlikely to occur. No suitable habitat is present.
Song sparrow (Modesto Population) <i>Melospiza melodia</i>	--	SSC	Restricted to California, where it is locally abundant in the Sacramento Valley, Sacramento–San Joaquin River Delta, and northern San Joaquin Valley.	Emergent freshwater marshes and riparian willow thickets. Nests in riparian forests of valley oak with a sufficient understory of blackberry, along vegetated irrigation canals and levees, and in recently planted valley oak restoration sites.	Unlikely to occur. No suitable habitat is present.
Purple martin <i>Progne subis</i>	--	SSC	Nests in Sacramento; uncommon or absent elsewhere in the Central Valley. Breeds locally in coastal areas from Del Norte County south to Santa Barbara County; rare in southern California.	Uses tree cavities in woodlands for nesting; also nests in vertical drainage holes under elevated freeways and highway bridges; open areas required for feeding.	Potential for occurrence. This species could nest in tree cavities, if present, and forage in the blue oak woodland within the Project area.
Bank swallow <i>Riparia riparia</i>	--	CT	The state's largest remaining breeding populations are along the Sacramento River from Tehama County to Sacramento County and along the Feather River and lower American River, in the Owens Valley.	Nests in bluffs or banks, usually adjacent to water, where the soil consists of sand or sandy loam to allow digging.	Unlikely to occur. No potential habitat in the Project Area.

Common Name Scientific Name	Legal Status ¹		Distribution	Habitat Requirements	Potential for Species/Habitat Presence
	Federal	State			
Mammals					
Pallid bat <i>Antrozous pallidus</i>	--	SSC	Occurs throughout California except for the high Sierra Nevada.	Rocky outcrops, cliffs, and crevices for roosting; access to open habitats required for foraging.	Potential for foraging in Project area. Unlikely to roost as no appropriate habitat is present.
Ringtail <i>Bassariscus astutus</i>	--	FP	Sierra Nevada, Coast Ranges, and the Central Valley; upper and middle portions of the Sacramento River, Feather River, and Bobelaine Sanctuary.	Riparian forests, chaparral, scrub, oak woodlands, and rocky hillsides with crevices and tree hollows 3 inches in diameter or greater. Avoids open space and moves from tree to tree or along structures. Omnivorous and will feed on berries such as toyon or mistletoe leaves and berries and will vary depending on the seasons and food availability.	Unlikely to occur. Oak woodland habitat is isolated by surrounding urban areas and riparian vegetation corridor is not sufficient to support ringtail population in the Project Area.
American badger <i>Taxidea taxus</i>	--	SSC	Occurs throughout California where habitat is present, except in northwestern California.	Permanent resident of most open stage shrub, forest and herbaceous habitats with friable soils for digging burrows. Badgers feed primarily on fossorial species, such as burrowing mammals like pocket gophers and ground squirrels.	Unlikely to occur. No suitable habitat is present.
Fish					
Delta Smelt <i>Hypomesus transpacificus</i>	FT	CE	Sacramento River–San Joaquin River Delta.	Euryhaline (fresh and brackish water) estuary channels; spawning habitats consist of side channels and sloughs in the middle reaches of the Delta.	Unlikely to occur. No suitable habitat is present.
Central Valley Steelhead DPS <i>Oncorhynchus mykiss irideus</i>	FT	--	Sacramento and San Joaquin Rivers and tributaries, Sacramento-San Joaquin Delta, San Francisco Bay	Cool, rocky streams with moderate size gravel for spawning and shade trees for cover and rearing.	Unlikely to occur. No suitable habitat is present.

¹ Status explanations:

-- = no listing.

Federal

FE = listed as endangered under the federal Endangered Species Act.

FT = listed as threatened under the federal Endangered Species Act.

State

CE = listed as endangered under the California Endangered Species Act.

CT = listed as threatened under the California Endangered Species Act.

SSC = state species of special concern

FP = listed as fully protected by the state of California.

Source: CNDDDB 2018; USFWS 2018

3.0 RESULTS

3.1 Special-status Species

Potential impacts to the special-status plants listed in Table 1 and special-status wildlife listed in Table 2 are discussed below.

Potential Impacts to Special-status Plants

There are no CNDDDB records of special-status plant species in the Project area. Based on a review of species lists obtained from CNPS (CNPS 2018), CNDDDB (CDFW 2018), and USFWS (USFWS 2018), and an analysis of the elevations and habitat types supported within the Project Area, 11 special-status plant species were initially identified as having the potential to occur in the Project Area consisting of Big-scale balsamorhiza (*Balsamorhiza macrolepis* var. *macrolepis*), Hispid bird's-beak (*Chloropyron molle* ssp. *hispidum*), Dwarf downingia (*Downingia pusilla*), Boggs Lake hedge-hyssop (*Gratiola heterosepala*), Ahart's dwarf rush (*Juncus leiospermus* var. *ahartii*), Red Bluff dwarf rush (*Juncus leiospermus* var. *leiospermus*), legenere (*Legenere limosa*), Pincushion navarretia (*Navarretia myersii* ssp. *myersii*), slender Orcutt grass (*Orcuttia tenuis*), Sacramento Orcutt grass (*Orcuttia viscida*), Sanford's arrowhead (*Sagittaria sanfordii*) (Table 1). However, upon further analysis it was determined that the Project area contains the habitat characteristics needed to support one species, Sanford's arrowhead, as described in Table 1. However, Sanford's arrowhead was not observed during surveys conducted within the bloom period for this species. Therefore, there are no special-status plants present in the Project area and no impacts to special-status plants would result from the proposed Project.

Potential Impacts to Special-status and Migratory Birds

There are no CNDDDB records of special-status wildlife species in the Project area. Based on a review of species lists obtained from CNDDDB (CDFW 2018), and USFWS (USFWS 2018), and an analysis of the elevations and habitat types supported within the Project Area, 24 special-status plant species were initially identified as having the potential to occur in the Project Area consisting of; Vernal pool fairy shrimp (*Branchinecta lynchi*), Valley elderberry longhorn beetle (*Desmocerus californicus dimorphus*), Vernal pool tadpole shrimp (*Lepidurus packardii*), California tiger salamander (*Ambystoma californiense*), California red-legged frog (*Rana draytonii*), Western spadefoot (*Spea hammondi*), Western pond turtle (*Actinemys marmorata*), Giant garter snake (*Thamnophis gigas*), Tricolored blackbird (*Agelaius tricolor*), grasshopper sparrow (*Ammodramus savannarum*), Golden eagle (*Aquila chrysaetos*), Burrowing owl (*Athene cunicularia*), Swainson's hawk (*Buteo swainsoni*), Western yellow-billed cuckoo (*Coccyzus americanus occidentalis*), White-tailed kite (*Elanus leucurus*), California black rail (*Laterallus jamaicensis coturniculus*), Song sparrow (Modesto Population, *Melospiza melodia*), purple martin (*Progne subis*), bank swallow (*Riparia riparia*), pallid bat (*Antrozous pallidus*), Ringtail (*Bassariscus astutas*), American badger (*Taxidea taxus*), Delta Smelt (*Hypomesus transpacificus*), Central Valley Steelhead DPS (*Oncorhynchus mykiss irideus*).

Trees and shrubs in the Project area represent potential breeding and/or foraging habitat for some species of special-status and migratory birds, such as white-tailed kite and purple martin. Additionally, the proposed Project area also contains potential foraging habitat for numerous

birds and raptors protected under the Migratory Bird Treaty Act and CFGC Section 3503.5. The site does not have the large open areas that Swainson's hawk need for foraging and therefore would not be subject to the *Sacramento County Swainson's Hawk Impact Mitigation Program*.

Tree removal and construction-related noise, dust, and human disturbance associated with the Project could lead to nest abandonment and/or could disturb birds foraging in the area. Impacts to foraging birds resulting from tree removal and construction are not considered significant due to the temporary nature of these activities, limits on the duration of noise, and the minimal extent of the disturbance. Impacts to nesting birds would be reduced to a less-than-significant level through implementation of Mitigation Measures BIO-1, which requires that Project activities, including tree removal, would be scheduled to avoid the avian nesting season, which generally extends from February to August, as much as possible. If work must occur during the nesting season, preconstruction nesting surveys would be completed by a qualified biologist prior to any Project activities. Any nests identified would be protected by a no-disturbance buffer.

Potential Impacts to Special-status Mammals

The pallid bat could potentially forage in the Project area. Tree removal and construction-related noise, dust, and human disturbance could cause a temporary disturbance to this species, if present. However, impacts to foraging bats resulting from tree removal and construction are not considered significant due to the temporary nature of these activities, limits on the duration of disturbance, and local evening and nighttime noise restrictions. Therefore, this impact would be less than significant.

Potential Impacts to Other Special-status Species

As described previously and shown in Table 2, the Project area does not contain potential habitat for any special-status invertebrates, amphibians, or fish. Therefore, there would be no impact to these species.

Verde Cruz Creek and its banks provide suitable (although low quality) aquatic and upland habitat for the western pond turtle, a state species of special concern. Construction of the proposed Project could result in both direct and indirect impacts to the western pond turtle. Direct impacts to western pond turtles resulting from ground disturbance, equipment use, and other proposed Project activities would be avoided through implementation of Mitigation Measures BIO-1 through BIO-3.

In summary, overall impacts to special-status wildlife species as a result of the proposed Project are considered to be less than significant with mitigation.

3.2 Wetlands and Waters of the U.S. and State

A total of 0.088 acre of other waters of the U.S. were identified within the Survey Area, comprised of one intermittent channel, Verde Cruz Creek. No other wetlands or other waters are present in the Project area. See the aquatic resources delineation prepared for the Project for additional details (AWE 2018).

The project is currently designed to avoid direct impacts to Verde Cruz Creek. Indirect impacts to Verde Cruz Creek could occur as a result of construction-related dust and equipment. Direct and indirect impacts to Verde Cruz Creek would be avoided through the implementation of Mitigation Measures BIO-2 and BIO-5. Therefore, the overall impacts to wetlands and Waters of the U.S. and State are considered less than significant with mitigation.

4.0 CONCLUSIONS

The proposed Project consists of construction 17 townhomes on a 1.7-acre parcel. Development has been designed to avoid impacts to Verde Cruz Creek. If design changes occur and impacts to Verde Cruz Creek are anticipated, development of the site may require the following permits;

- Section 401 Water Quality Certification, Regional Water Quality Control Board (RWQCB);
- Section 404 Nationwide Permit, U.S. Army Corps of Engineers;
- Section 1602 Lake or Streambed Alteration Agreement, California Department of Fish and Wildlife.

In order to minimize the potential impacts resulting from the proposed Project activities, the following mitigation measures are recommended for the Project.

Mitigation Measure BIO-1: Conduct Worker Environmental Awareness Training (WEAT). Before any work occurs in the proposed Project area, including grading and equipment staging, all construction personnel shall participate in an environmental awareness training regarding special-status species and sensitive habitats present in the proposed Project limits. If new construction personnel are added to the proposed Project, they must receive the mandatory training before starting work. As part of the training, an environmental awareness handout will be provided to all personnel that describes and illustrates sensitive resources (i.e., waters of the U.S. and state, riparian habitat, special-status species and habitat, nesting birds/raptors) to be avoided during proposed Project construction and lists applicable permit conditions identified by state and federal agencies to protect these resources.

Mitigation Measure BIO-2: Install Temporary Fencing around Environmentally Sensitive Habitat. Before any ground-disturbing activity occurs within the proposed Project area, temporary construction barrier fencing, silt fencing, and/or flagging shall be installed between the work area and environmentally sensitive habitat areas (i.e., waters of the U.S. and state, riparian vegetation, special-status species habitat, active bird/raptor nests to be avoided), as appropriate. Construction personnel and construction activity shall avoid fenced-off sensitive areas. The exact location of the fencing and/or flagging shall be determined in coordination with a qualified biologist, with the goal of protecting sensitive biological habitat and water quality. The fencing/flagging shall be checked regularly and maintained until all construction is complete.

Mitigation Measure BIO-3: Conduct a Preconstruction Survey for Western Pond Turtle. A qualified biologist shall conduct a preconstruction clearance survey for western pond turtles within 48 hours prior to any ground disturbance in the Project area. Any western pond turtles found within the construction work area shall be allowed to voluntarily move out of this area or shall be captured and held by a qualified biologist for the minimum amount of time necessary to release them into suitable aquatic habitat outside the construction work area. If a western pond turtle nest containing eggs or young is identified within the construction work area, the biologist shall determine an appropriate no-disturbance buffer to ensure avoidance of the nest.

Mitigation Measure BIO-4: Conduct a Preconstruction Nesting Migratory Bird and Raptor Survey. To the degree possible, all project activities would be scheduled outside of the avian nesting season (generally February 1 through August 31). If vegetation removal will occur during the breeding season for migratory birds and raptors, a qualified biologist shall conduct a pre-construction nesting bird and raptor survey prior to the start of vegetation removal and construction activities (including equipment staging). The preconstruction survey shall be conducted no more than 14 days before the initiation of construction activities or vegetation removal.

If an active bird or raptor nest is identified within the construction work area or an active raptor nest is identified within 250 feet from the construction work area, a no-disturbance buffer shall be established around the nest to avoid disturbance of the nesting birds or raptors until a qualified biologist determines that the young have fledged and are foraging on their own. The extent of these buffers shall be determined by the biologist and shall depend on the species identified, level of noise or construction disturbance, line-of-sight between the nest and the disturbance, ambient levels of noise and other disturbances, and other topographical or artificial barriers. If no active nests are found during the preconstruction surveys, then no buffers or additional mitigation is required.

Mitigation Measure BIO-5: Best Management Practices. The project will utilize best management practices to prevent sediment generated from project-related activities from entering Verde Cruz Creek. These include, but are not limited to:

- The use of temporary erosion and sediment controls such as fiber rolls or silt fencing to prevent sediment from entering Verde Cruz Creek;
- Any equipment or vehicles operated adjacent to Verde Cruz Creek shall be checked and maintained daily to prevent leaks of materials that could be deleterious to aquatic or terrestrial life;
- Staging and storage areas for equipment, materials, fuels, lubricants, and solvents will be located at least 50 feet from Verde Cruz Creek; and
- All fuels, solvents, and lubricants will be stored with secondary containment.

5.0 REFERENCES

Area West Environmental, Inc. 2018. Aquatic Resources Delineation Report for the Verde Cruz Townhomes Project. Sacramento County, California.

California Native Plant Society. 2018. Inventory of rare, threatened, and endangered plants of California. Available at: <http://www.rareplants.cnps.org/>. Website accessed on May 7, 2018.

California Natural Diversity Data Base. 2018. Available at: <http://www.dfg.ca.gov/biogeodata/cnddb/mapsanddata.asp>. Website accessed on May 7, 2018.

USFWS. 2018. IPaC Trust Resource Report. Available at: <https://ecos.fws.gov/ipac/>. Website accessed on May 7, 2018.

Appendix A.
Plant Species Observed in the Project Area

Appendix A. Plant Species Observed in the Project Area

Scientific Name	Common Name
<i>Allium triquetrum</i>	white-flowered onion
<i>Avena sativa</i>	wild oats
<i>Bambusa</i> sp.	bamboo
<i>Bromus arvensis</i>	soft brome
<i>Bromus diandrus</i>	ripgut grass
<i>Bromus tectorum</i>	cheatgrass
<i>Carduus pycnocephalus</i>	Italian thistle
<i>Casuarina cunninghamiana</i>	river she-oak
<i>Cyperus eragrostis</i>	tall flatsedge
<i>Cytisus scoparius</i>	scotch broom
<i>Festuca perennis</i>	Italian ryegrass
<i>Ficus carica</i>	edible fig
<i>Foeniculum vulgare</i>	fennel
<i>Galium aparine</i>	bedstraw
<i>Hordeum marinum</i> ssp. <i>gussoneanum</i>	Mediterranean barley
<i>Iris</i> sp.	iris (ornamental)
<i>Juglans hindsii</i>	Northern black walnut
<i>Ligustrum lucidum</i>	broad-leaf privet
<i>Morus alba</i>	white mulberry
<i>Olea europaea</i>	olive
<i>Pinus sabiniana</i>	grey pine
<i>Plantago lanceolata</i>	English plantain
<i>Polygonum</i> sp.	smartweed
<i>Quercus douglasii</i>	blue oak
<i>Quercus wislizeni</i>	interior live oak

Scientific Name	Common Name
<i>Rubus armeniacus</i>	Himalayan blackberry
<i>Rumex obtusifolius</i>	bitter dock
<i>Sequoia sempervirens</i>	coast redwood
<i>Torilis arvensis</i>	field hedge-parsely
<i>Vaccinium</i> sp.	blueberry shrub (cultivar)
<i>Vicia sativa</i>	spring vetch
<i>Vitis californica</i>	wild grape
<i>Washingtonia robusta</i>	Mexican fan palm

Appendix B.
Wildlife Species Observed in the Project Area

Appendix B. Wildlife Species Observed in the Project Area

Scientific Name	Common Name
<i>Aphelocoma californica</i>	Western scrub-jay
<i>Calypte anna</i>	Anna's hummingbird
<i>Corvus brachyrhynchos</i>	American crow
<i>Melanerpes formicivorus</i>	acorn woodpecker
<i>Meleagris gallopavo</i>	turkey
<i>Passer domesticus</i>	house sparrow
<i>Sayornis nigricans</i>	black phoebe
<i>Sciurus griseus</i>	grey squirrel
<i>Sturnus vulgaris</i>	European starling
<i>Troglodytes aedon</i>	house wren
<i>Zenaida macroura</i>	mourning dove

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Appendix C.

Representative Photographs



Photo 1. View of Verde Cruz Creek – Intermittent Channel, downstream view towards Manzanita Avenue (facing northwest). Taken on May 10, 2018.



Photo 2. View of Verde Cruz Creek – Intermittent Channel, upstream view (facing northeast). Taken on May 10, 2018.



Photo 3. View just above south bank of Verde Cruz Creek – Intermittent Channel, (facing east). Taken on May 10, 2018.



Photo 4. View of southeast corner of Survey Area (facing southeast). Taken on May 10, 2018.



Photo 5. View of open non-native grassland area within Blue Oak Woodland (facing east). Taken on May 10, 2018.



Photo 6. View of southern boundary of Survey Area (facing southeast). Taken on May 10, 2018.

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Appendix D

Special-status Species Lists



Selected Elements by Scientific Name

California Department of Fish and Wildlife

California Natural Diversity Database



Query Criteria: Quad (Citrus Heights (3812163) OR Pleasant Grove (3812174) OR Rocklin (3812172) OR Roseville (3812173) OR Folsom (3812162) OR Buffalo Creek (3812152) OR Carmichael (3812153) OR Sacramento East (3812154) OR Rio Linda (3812164))

Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
<i>Accipiter cooperii</i> Cooper's hawk	ABNKC12040	None	None	G5	S4	WL
<i>Agelaius tricolor</i> tricolored blackbird	ABPBXB0020	None	Candidate Endangered	G2G3	S1S2	SSC
<i>Alkali Meadow</i> Alkali Meadow	CTT45310CA	None	None	G3	S2.1	
<i>Alkali Seep</i> Alkali Seep	CTT45320CA	None	None	G3	S2.1	
<i>Ammodramus savannarum</i> grasshopper sparrow	ABPBXA0020	None	None	G5	S3	SSC
<i>Andrena subapasta</i> An andrenid bee	IIHYM35210	None	None	G1G2	S1S2	
<i>Antrozous pallidus</i> pallid bat	AMACC10010	None	None	G5	S3	SSC
<i>Aquila chrysaetos</i> golden eagle	ABNKC22010	None	None	G5	S3	FP
<i>Ardea alba</i> great egret	ABNGA04040	None	None	G5	S4	
<i>Ardea herodias</i> great blue heron	ABNGA04010	None	None	G5	S4	
<i>Athene cunicularia</i> burrowing owl	ABNSB10010	None	None	G4	S3	SSC
<i>Balsamorhiza macrolepis</i> big-scale balsamroot	PDAST11061	None	None	G2	S2	1B.2
<i>Branchinecta lynchi</i> vernal pool fairy shrimp	ICBRA03030	Threatened	None	G3	S3	
<i>Branchinecta mesovallensis</i> midvalley fairy shrimp	ICBRA03150	None	None	G2	S2S3	
<i>Buteo regalis</i> ferruginous hawk	ABNKC19120	None	None	G4	S3S4	WL
<i>Buteo swainsoni</i> Swainson's hawk	ABNKC19070	None	Threatened	G5	S3	
<i>Chloropyron molle ssp. hispidum</i> hispid salty bird's-beak	PDSCR0J0D1	None	None	G2T1	S1	1B.1
<i>Clarkia biloba ssp. brandegeae</i> Brandegee's clarkia	PDONA05053	None	None	G4G5T4	S4	4.2
<i>Coccyzus americanus occidentalis</i> western yellow-billed cuckoo	ABNRB02022	Threatened	Endangered	G5T2T3	S1	



Selected Elements by Scientific Name
California Department of Fish and Wildlife
California Natural Diversity Database



Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
<i>Desmocerus californicus dimorphus</i> valley elderberry longhorn beetle	IICOL48011	Threatened	None	G3T2	S2	
<i>Downingia pusilla</i> dwarf downingia	PDCAM060C0	None	None	GU	S2	2B.2
<i>Dumontia oregonensis</i> hairy water flea	ICBRA23010	None	None	G1G3	S1	
<i>Elanus leucurus</i> white-tailed kite	ABNKC06010	None	None	G5	S3S4	FP
<i>Elderberry Savanna</i> Elderberry Savanna	CTT63440CA	None	None	G2	S2.1	
<i>Emys marmorata</i> western pond turtle	ARAAD02030	None	None	G3G4	S3	SSC
<i>Falco columbarius</i> merlin	ABNKD06030	None	None	G5	S3S4	WL
<i>Fritillaria agrestis</i> stinkbells	PMLIL0V010	None	None	G3	S3	4.2
<i>Gratiola heterosepala</i> Boggs Lake hedge-hyssop	PDSCR0R060	None	Endangered	G2	S2	1B.2
<i>Hydrochara rickseckeri</i> Ricksecker's water scavenger beetle	IICOL5V010	None	None	G2?	S2?	
<i>Juncus leiospermus var. ahartii</i> Ahart's dwarf rush	PMJUN011L1	None	None	G2T1	S1	1B.2
<i>Juncus leiospermus var. leiospermus</i> Red Bluff dwarf rush	PMJUN011L2	None	None	G2T2	S2	1B.1
<i>Lasionycteris noctivagans</i> silver-haired bat	AMACC02010	None	None	G5	S3S4	
<i>Laterallus jamaicensis coturniculus</i> California black rail	ABNME03041	None	Threatened	G3G4T1	S1	FP
<i>Legenere limosa</i> legenere	PDCAM0C010	None	None	G2	S2	1B.1
<i>Lepidurus packardi</i> vernal pool tadpole shrimp	ICBRA10010	Endangered	None	G4	S3S4	
<i>Linderiella occidentalis</i> California linderiella	ICBRA06010	None	None	G2G3	S2S3	
<i>Melospiza melodia</i> song sparrow ("Modesto" population)	ABPBXA3010	None	None	G5	S3?	SSC
<i>Navarretia myersii ssp. myersii</i> pincushion navarretia	PDPLM0C0X1	None	None	G2T2	S2	1B.1
<i>Northern Claypan Vernal Pool</i> Northern Claypan Vernal Pool	CTT44120CA	None	None	G1	S1.1	
<i>Northern Hardpan Vernal Pool</i> Northern Hardpan Vernal Pool	CTT44110CA	None	None	G3	S3.1	



Selected Elements by Scientific Name
California Department of Fish and Wildlife
California Natural Diversity Database



Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
Northern Volcanic Mud Flow Vernal Pool Northern Volcanic Mud Flow Vernal Pool	CTT44132CA	None	None	G1	S1.1	
<i>Oncorhynchus mykiss irideus</i> pop. 11 steelhead - Central Valley DPS	AFCHA0209K	Threatened	None	G5T2Q	S2	
<i>Orcuttia tenuis</i> slender Orcutt grass	PMPOA4G050	Threatened	Endangered	G2	S2	1B.1
<i>Orcuttia viscida</i> Sacramento Orcutt grass	PMPOA4G070	Endangered	Endangered	G1	S1	1B.1
<i>Pandion haliaetus</i> osprey	ABNKC01010	None	None	G5	S4	WL
<i>Phalacrocorax auritus</i> double-crested cormorant	ABNFD01020	None	None	G5	S4	WL
<i>Progne subis</i> purple martin	ABPAU01010	None	None	G5	S3	SSC
<i>Riparia riparia</i> bank swallow	ABPAU08010	None	Threatened	G5	S2	
<i>Sagittaria sanfordii</i> Sanford's arrowhead	PMALI040Q0	None	None	G3	S3	1B.2
<i>Spea hammondi</i> western spadefoot	AAABF02020	None	None	G3	S3	SSC
<i>Taxidea taxus</i> American badger	AMAJF04010	None	None	G5	S3	SSC
<i>Thamnophis gigas</i> giant gartersnake	ARADB36150	Threatened	Threatened	G2	S2	
Valley Needlegrass Grassland Valley Needlegrass Grassland	CTT42110CA	None	None	G3	S3.1	

Record Count: 53

Plant List

Inventory of Rare and Endangered Plants

14 matches found. *Click on scientific name for details*

Search Criteria

Found in Quads 3812174, 3812173, 3812172, 3812164, 3812163, 3812162, 3812154 3812153 and 3812152;

[Modify Search Criteria](#)
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Scientific Name	Common Name	Family	Lifeform	Blooming Period	CA Rare Plant Rank	State Listing Status	Federal Listing Status	Habitats
Balsamorhiza macrolepis	big-scale balsamroot	Asteraceae	perennial herb	Mar-Jun	1B.2			<ul style="list-style-type: none"> • Chaparral • Cismontane woodland • Valley and foothill grassland
Chloropyron molle ssp. hispidum	hispid bird's-beak	Orobanchaceae	annual herb (hemiparasitic)	Jun-Sep	1B.1			<ul style="list-style-type: none"> • Meadows and seeps • Playas • Valley and foothill grassland
Clarkia biloba ssp. brandegeae	Brandegee's clarkia	Onagraceae	annual herb	May-Jul	4.2			<ul style="list-style-type: none"> • Chaparral • Cismontane woodland • Lower montane coniferous forest
Downingia pusilla	dwarf downingia	Campanulaceae	annual herb	Mar-May	2B.2			<ul style="list-style-type: none"> • Valley and foothill grassland (mesic) • Vernal pools
Fritillaria agrestis	stinkbells	Liliaceae	perennial bulbiferous herb	Mar-Jun	4.2			<ul style="list-style-type: none"> • Chaparral • Cismontane woodland • Pinyon and juniper woodland • Valley and foothill grassland
Gratiola heterosepala	Boggs Lake hedge-hyssop	Plantaginaceae	annual herb	Apr-Aug	1B.2	CE		<ul style="list-style-type: none"> • Marshes and swamps (lake margins) • Vernal pools

<u>Juncus leiospermus var. ahartii</u>	Ahart's dwarf rush	Juncaceae	annual herb	Mar-May	1B.2			<ul style="list-style-type: none"> • Valley and foothill grassland (mesic) • Chaparral • Cismontane woodland • Meadows and seeps • Valley and foothill grassland • Vernal pools
<u>Juncus leiospermus var. leiospermus</u>	Red Bluff dwarf rush	Juncaceae	annual herb	Mar-Jun	1B.1			<ul style="list-style-type: none"> • Vernal pools
<u>Legenere limosa</u>	legenere	Campanulaceae	annual herb	Apr-Jun	1B.1			<ul style="list-style-type: none"> • Vernal pools
<u>Navarretia myersii ssp. myersii</u>	pincushion navarretia	Polemoniaceae	annual herb	Apr-May	1B.1			<ul style="list-style-type: none"> • Vernal pools
<u>Navarretia nigelliformis ssp. nigelliformis</u>	adobe navarretia	Polemoniaceae	annual herb	Apr-Jun	4.2			<ul style="list-style-type: none"> • Valley and foothill grassland vernal mesic • Vernal pools sometimes
<u>Orcuttia tenuis</u>	slender Orcutt grass	Poaceae	annual herb	May-Sep (Oct)	1B.1	CE	FT	<ul style="list-style-type: none"> • Vernal pools
<u>Orcuttia viscida</u>	Sacramento Orcutt grass	Poaceae	annual herb	Apr-Jul (Sep)	1B.1	CE	FE	<ul style="list-style-type: none"> • Vernal pools
<u>Sagittaria sanfordii</u>	Sanford's arrowhead	Alismataceae	perennial rhizomatous herb (emergent)	May-Oct (Nov)	1B.2			<ul style="list-style-type: none"> • Marshes and swamps (assorted shallow freshwater)

Suggested Citation

California Native Plant Society, Rare Plant Program. 2018. Inventory of Rare and Endangered Plants of California (online edition, v8-03 0.39). Website <http://www.rareplants.cnps.org> [accessed 07 May 2018].

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United States Department of the Interior



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Sacramento Fish And Wildlife Office
Federal Building
2800 Cottage Way, Room W-2605
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In Reply Refer To:

May 15, 2018

Consultation Code: 08ESMF00-2018-SLI-2116

Event Code: 08ESMF00-2018-E-06230

Project Name: Verde Cruz Townhomes

Subject: List of threatened and endangered species that may occur in your proposed project location, and/or may be affected by your proposed project

To Whom It May Concern:

The enclosed species list identifies threatened, endangered, proposed and candidate species, as well as proposed and final designated critical habitat, under the jurisdiction of the U.S. Fish and Wildlife Service (Service) that may occur within the boundary of your proposed project and/or may be affected by your proposed project. The species list fulfills the requirements of the Service under section 7(c) of the Endangered Species Act (Act) of 1973, as amended (16 U.S.C. 1531 *et seq.*).

Please follow the link below to see if your proposed project has the potential to affect other species or their habitats under the jurisdiction of the National Marine Fisheries Service:

http://www.nwr.noaa.gov/protected_species/species_list/species_lists.html

New information based on updated surveys, changes in the abundance and distribution of species, changed habitat conditions, or other factors could change this list. Please feel free to contact us if you need more current information or assistance regarding the potential impacts to federally proposed, listed, and candidate species and federally designated and proposed critical habitat. Please note that under 50 CFR 402.12(e) of the regulations implementing section 7 of the Act, the accuracy of this species list should be verified after 90 days. This verification can be completed formally or informally as desired. The Service recommends that verification be completed by visiting the ECOS-IPaC website at regular intervals during project planning and implementation for updates to species lists and information. An updated list may be requested through the ECOS-IPaC system by completing the same process used to receive the enclosed list.

The purpose of the Act is to provide a means whereby threatened and endangered species and the ecosystems upon which they depend may be conserved. Under sections 7(a)(1) and 7(a)(2) of the Act and its implementing regulations (50 CFR 402 *et seq.*), Federal agencies are required to utilize their authorities to carry out programs for the conservation of threatened and endangered species and to determine whether projects may affect threatened and endangered species and/or designated critical habitat.

A Biological Assessment is required for construction projects (or other undertakings having similar physical impacts) that are major Federal actions significantly affecting the quality of the human environment as defined in the National Environmental Policy Act (42 U.S.C. 4332(2) (c)). For projects other than major construction activities, the Service suggests that a biological evaluation similar to a Biological Assessment be prepared to determine whether the project may affect listed or proposed species and/or designated or proposed critical habitat. Recommended contents of a Biological Assessment are described at 50 CFR 402.12.

If a Federal agency determines, based on the Biological Assessment or biological evaluation, that listed species and/or designated critical habitat may be affected by the proposed project, the agency is required to consult with the Service pursuant to 50 CFR 402. In addition, the Service recommends that candidate species, proposed species and proposed critical habitat be addressed within the consultation. More information on the regulations and procedures for section 7 consultation, including the role of permit or license applicants, can be found in the "Endangered Species Consultation Handbook" at:

<http://www.fws.gov/endangered/esa-library/pdf/TOC-GLOS.PDF>

Please be aware that bald and golden eagles are protected under the Bald and Golden Eagle Protection Act (16 U.S.C. 668 *et seq.*), and projects affecting these species may require development of an eagle conservation plan (http://www.fws.gov/windenergy/eagle_guidance.html). Additionally, wind energy projects should follow the wind energy guidelines (<http://www.fws.gov/windenergy/>) for minimizing impacts to migratory birds and bats.

Guidance for minimizing impacts to migratory birds for projects including communications towers (e.g., cellular, digital television, radio, and emergency broadcast) can be found at: <http://www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/towers/towers.htm>; <http://www.towerkill.com>; and <http://www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/towers/comtow.html>.

We appreciate your concern for threatened and endangered species. The Service encourages Federal agencies to include conservation of threatened and endangered species into their project planning to further the purposes of the Act. Please include the Consultation Tracking Number in the header of this letter with any request for consultation or correspondence about your project that you submit to our office.

Attachment(s):

- Official Species List

Official Species List

This list is provided pursuant to Section 7 of the Endangered Species Act, and fulfills the requirement for Federal agencies to "request of the Secretary of the Interior information whether any species which is listed or proposed to be listed may be present in the area of a proposed action".

This species list is provided by:

Sacramento Fish And Wildlife Office

Federal Building

2800 Cottage Way, Room W-2605

Sacramento, CA 95825-1846

(916) 414-6600

Project Summary

Consultation Code: 08ESMF00-2018-SLI-2116

Event Code: 08ESMF00-2018-E-06230

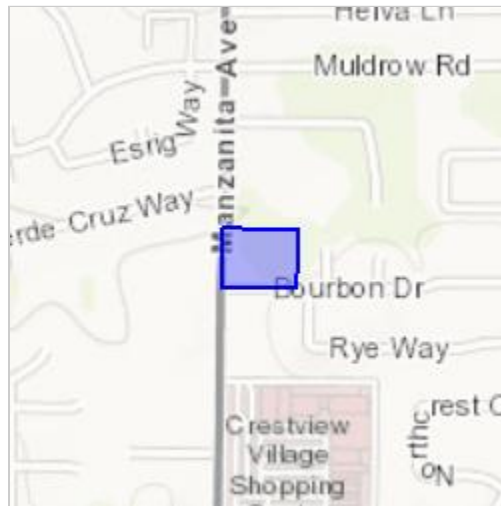
Project Name: Verde Cruz Townhomes

Project Type: DEVELOPMENT

Project Description: The Project proposes to develop 17 townhomes on an approximately 1.8-acre site in Carmichael, CA

Project Location:

Approximate location of the project can be viewed in Google Maps: <https://www.google.com/maps/place/38.653632337292336N121.32698744282966W>



Counties: Sacramento, CA

Endangered Species Act Species

There is a total of 7 threatened, endangered, or candidate species on this species list.

Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species.

IPaC does not display listed species or critical habitats under the sole jurisdiction of NOAA Fisheries¹, as USFWS does not have the authority to speak on behalf of NOAA and the Department of Commerce.

See the "Critical habitats" section below for those critical habitats that lie wholly or partially within your project area under this office's jurisdiction. Please contact the designated FWS office if you have questions.

-
1. [NOAA Fisheries](#), also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

Reptiles

NAME	STATUS
Giant Garter Snake <i>Thamnophis gigas</i> No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/4482	Threatened

Amphibians

NAME	STATUS
California Red-legged Frog <i>Rana draytonii</i> There is final critical habitat for this species. Your location is outside the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/2891	Threatened
California Tiger Salamander <i>Ambystoma californiense</i> Population: U.S.A. (Central CA DPS) There is final critical habitat for this species. Your location is outside the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/2076	Threatened

Fishes

NAME	STATUS
Delta Smelt <i>Hypomesus transpacificus</i> There is final critical habitat for this species. Your location is outside the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/321	Threatened

Insects

NAME	STATUS
Valley Elderberry Longhorn Beetle <i>Desmocerus californicus dimorphus</i> There is final critical habitat for this species. Your location is outside the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/7850 Habitat assessment guidelines: https://ecos.fws.gov/ipac/guideline/assessment/population/436/office/11420.pdf	Threatened

Crustaceans

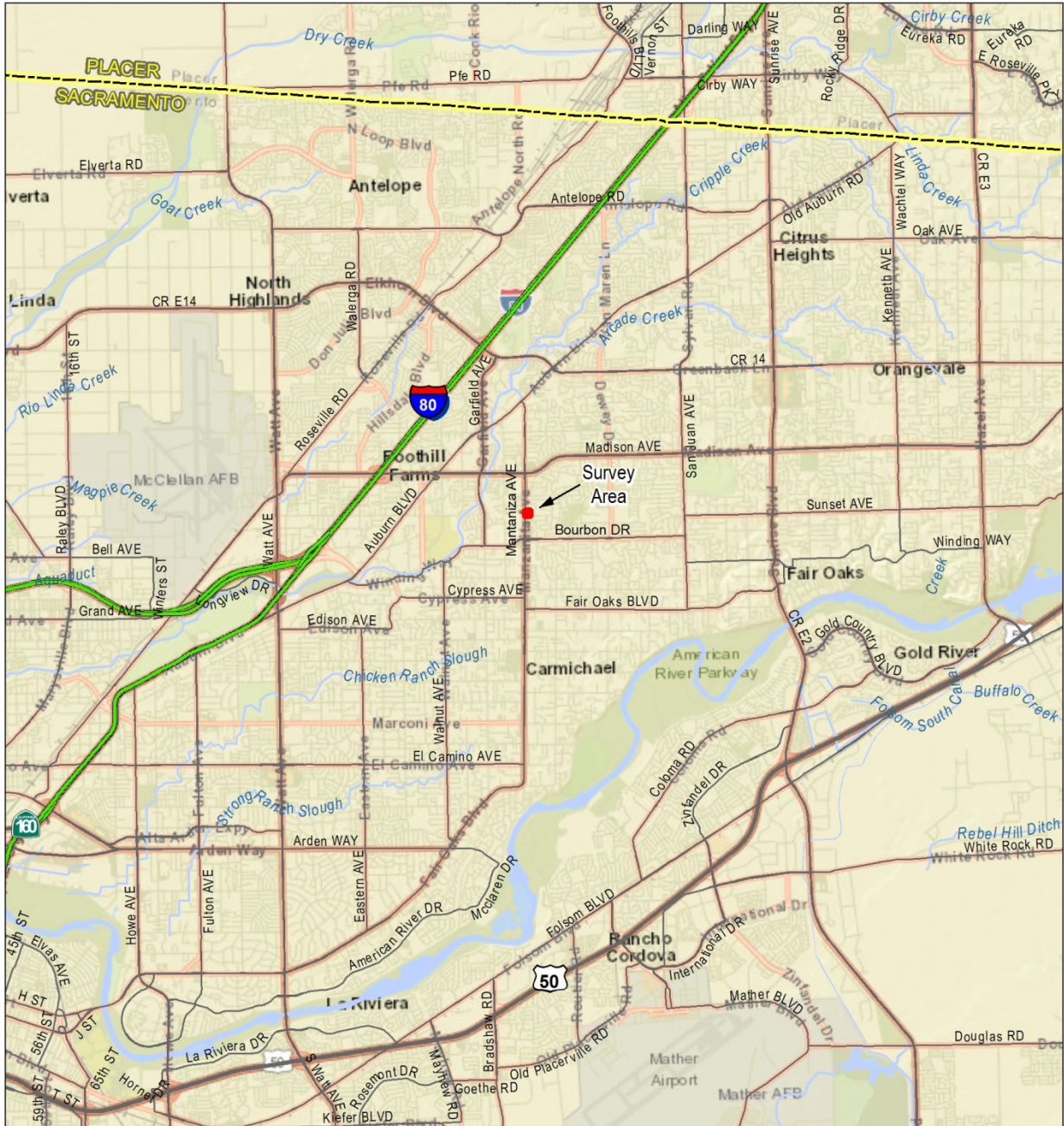
NAME	STATUS
Vernal Pool Fairy Shrimp <i>Branchinecta lynchi</i> There is final critical habitat for this species. Your location is outside the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/498	Threatened
Vernal Pool Tadpole Shrimp <i>Lepidurus packardii</i> There is final critical habitat for this species. Your location is outside the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/2246	Endangered

Critical habitats

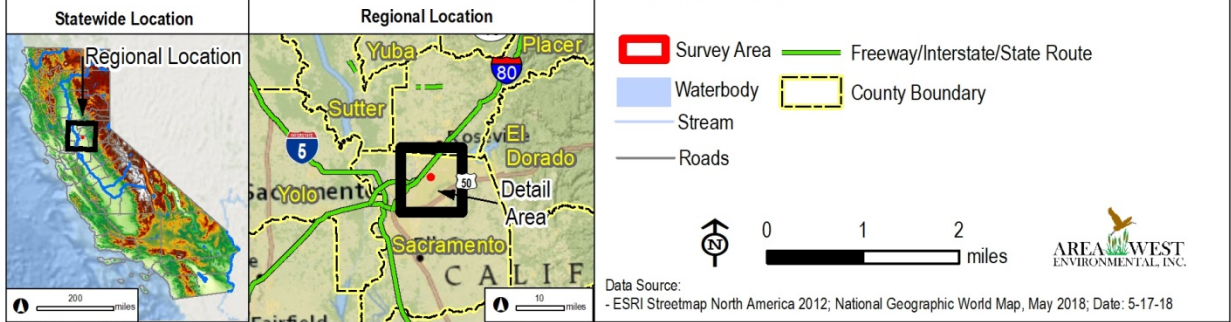
THERE ARE NO CRITICAL HABITATS WITHIN YOUR PROJECT AREA UNDER THIS OFFICE'S JURISDICTION.

Exhibit A

Project Figures

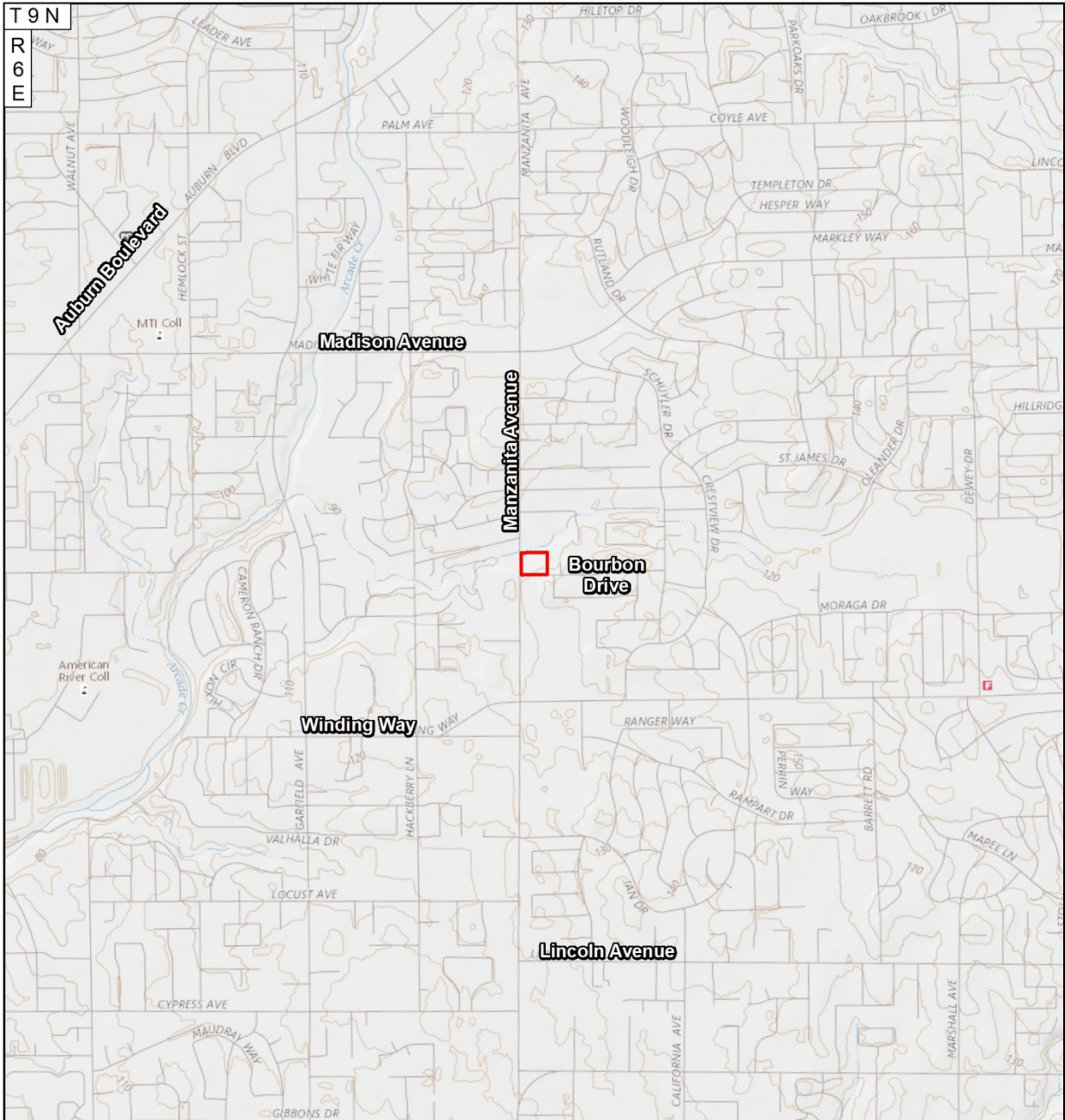


VERDE CRUZ TOWNHOMES PROJECT



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Exhibit A-1. Project Location

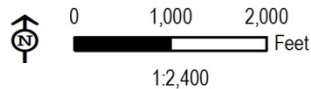


VERDE CRUZ TOWNHOMES PROJECT

 Survey Area (1.929 acres)

The Survey Area is located within the Citrus Heights USGS 7.5-minute quadrangle map. The Survey Area occurs in Township 9 North, Range 6 East. The Survey Area encompasses 1.929 acres.

Coordinates for the centroid of the Survey Area:
 UTM Zone 10N NAD83, 645579E, 4279672N
 Latitude 38.653664, Longitude -121.326965



Data Source:
 - ESRI Streetmap North America 2012
 - USGS 7.5-minute quadrangle maps; Public Land Survey System (PLSS); Date: 5-23-18

Exhibit A-2. Project Vicinity



VERDE CRUZ TOWNHOMES PROJECT

 Survey Area (1.929 acres)



Data Source:
- ESRI Aerial Basemaps, July 3, 2016;
- Area West Environmental, Inc. 2018; Date: 5-17-18

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Exhibit A-3. Project Area



VERDE CRUZ TOWNHOMES PROJECT

 Survey Area (1.929 acres)

Vegetation Communities

-  Verde Cruz Creek - Intermittent Channel
-  Blue Oak Woodland
-  Urban

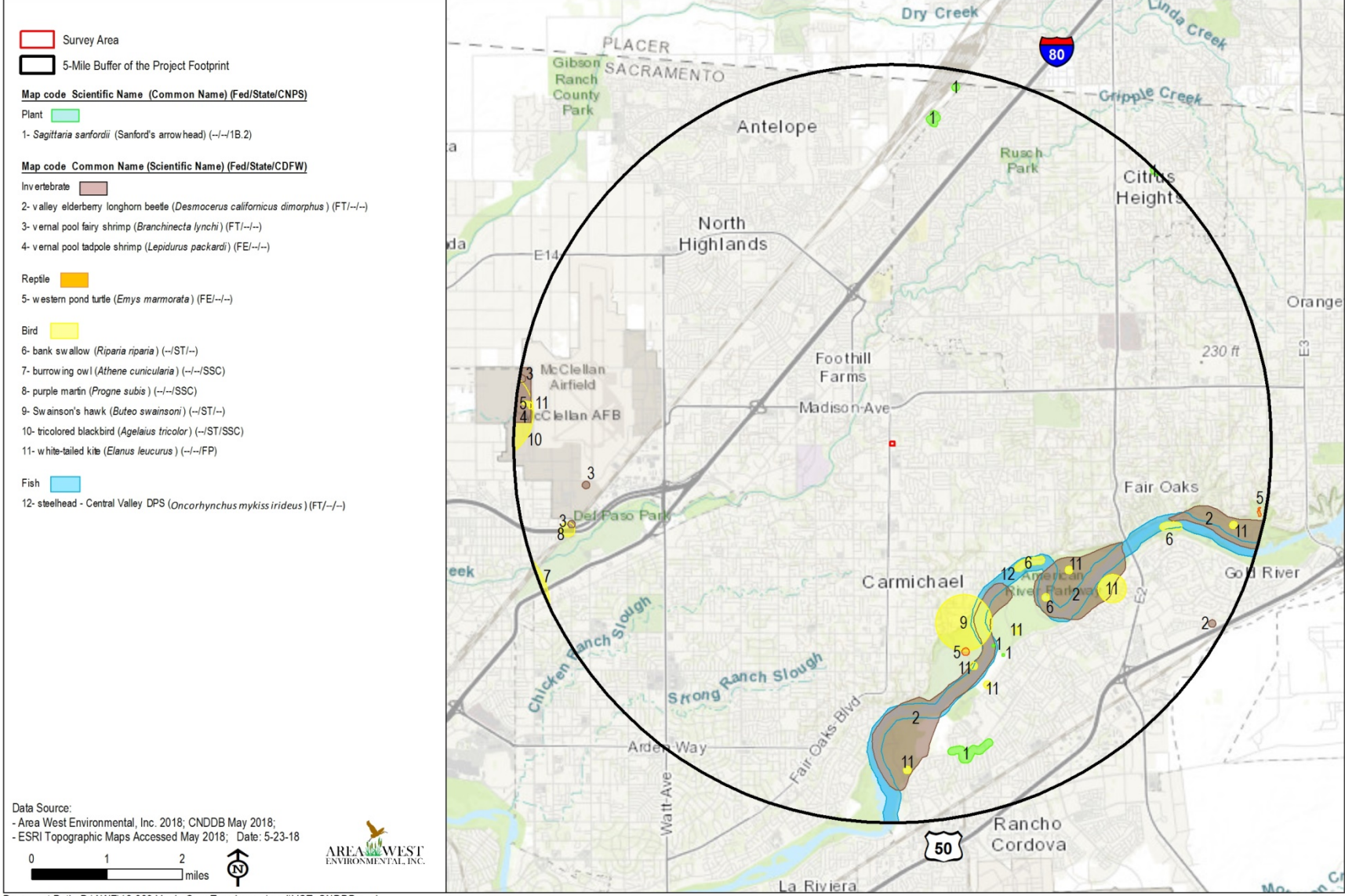


Data Source:
 -Google Earth Imagery, February 1, 2018;
 -Area West Environmental, Inc. 2018; Date: 5-17-18

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Exhibit A-4. Project Habitats

VERDE CRUZ TOWNHOMES PROJECT



Document Path: D:\AWE\18-009 Verde Cruz Townhomes\mxd\VCT_CNDDDB.mxd

Exhibit A-5. CNDDDB Map