

BIOLOGICAL RESOURCE ASSESSMENT
3150 DUTTON AVENUE
(APN: 043-133-013)
SANTA ROSA, CA

Prepared for:

Mr. Mark Garay, President
Paladin Funding, Inc.
430 Ridge Road
Tiburon, CA 94920

Prepared by:

Ted P. Winfield, Ph.D.
Ted Winfield & Associates
1455 Wagoner Drive
Livermore, CA 94550

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1.0 INTRODUCTION

The purpose of this Biological Resource Assessment (report) is to identify the biological resources that occur or may occur at the approximately 5.95-acre site located at 3150 Dutton Avenue (Project Site) in Santa Rosa, and the anticipated impacts of proposed development of apartments and associated infrastructure at the Project Site on these biological resources.

The proposed project will consist of a gated residential community of 107 apartments. The apartments will include 33 one-bedroom, 64 two-bedroom, and 10 three-bedroom units within 5 buildings (Project). The building complex will consist of a one two-story, three three-story, and a mixed three- and four-story buildings. Amenities include a leasing office/ internet-cafe, club house, community kitchen, wine storage, and fitness center; as well as public gathering spaces, which includes a swimming pool, BBQ areas, fireplace, and bocce ball area. The entrance to the property will be off Dutton Avenue. There will be vertical transportation through elevator in the four-story structure and a series of bridges connecting the buildings.

The proposed Project will also consist of 243 parking spaces onsite, consisting of 136 uncovered and 107 covered spaces, and 102 bicycle storage lockers.

The focus of this report is on the possible occurrence of special-status species of plants and wildlife at the Project Site that could be affected by the proposed development, the anticipated impacts, and recommended mitigation for impacts to special-status species of plants and wildlife.

1.1 SITE LOCATION

The Project Site is located on an approximately 5.95-acre parcel (APN: 043-133-013) at 3150 Dutton Avenue in the southwest area of Santa Rosa (Figure 1). Commercial/industrial development occurs on the north and south side of the Project Site, residential development occurs on the east side, and Dutton Avenue and an undeveloped parcel occurs on the west side of the Project Site (Figure 2). The Northwestern Pacific Railroad tracks occur adjacent to the eastern border of the Project Site.

1.2 RECENT AND CURRENT LAND USE

The General Plan Land Use designation of the Project Site is *Medium Density Residential* housing, and is zoned for *Multi-Family Residential* housing.

1.3 PHYSICAL SITE CONDITIONS

The terrain on the Project Site is relatively flat with a slope of less than 1% across much of the Project Site except for a couple of high points with elevations approximately three feet above the remainder of the Project Site. There are several debris piles associated with the high points on the Project Site.

There is a small depressional area along the eastern boundary and another one along the southern boundary of the Project Site. There are no defined drainages on the Project Site.

The soils on the western two-thirds of the Project Site have been mapped by the Soil Conservation Service as Wright loam, wet, 0 to 2 percent slopes, and on the eastern third of the Project Site the soils are mapped as Wright loam, shallow, wet, 0 to 2 percent slopes¹. The Wright soil series consists of somewhat poorly drained and moderately well drained loamy soils with a clay subsoil and relatively level surface topography.

The soil is largely devoid of redox or mottling. Soil across virtually the entire Project Site has been significantly altered through placement of fill and other activities (grading, disking, ditching), as have any/all pre-existing natural drainage features or routes.

¹ Natural Resources Conservation Service, National Cooperative Soil Survey. Web Soil Survey. April 4, 2016.

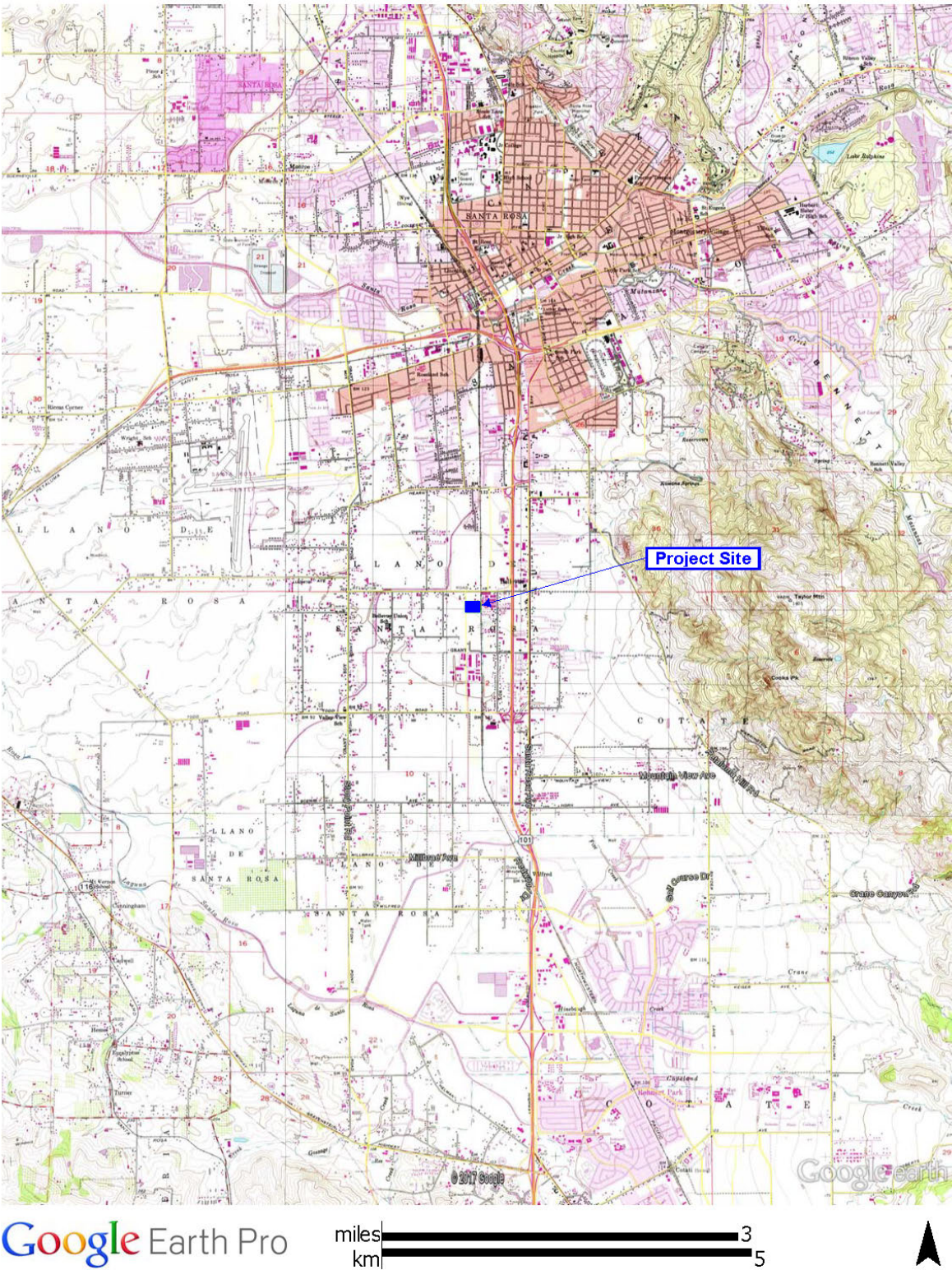


Figure 1. Project location map.



Figure 2. Project vicinity map.

2.0 BIOLOGICAL RESOURCES

The following discussion of vegetation at the Project Site is summarized from the letter report prepared by Charles A. Patterson (Patterson), which is appended to this report in Appendix A.

2.1 VEGETATION

Mr. Patterson conducted plant surveys at the Project Site following the U.S. Fish and Wildlife Service's (FWS) protocols for in 2005 (February 22, April 5), 2012 (March 23, April 20, May 4), 2013 (March 27, April 11, May 9), 2014 (April 7, June 25), and 2015 (April 3, 20). Each site visit involved walking essentially the entire Site, noting plants observed, and carefully examining any low places. All plants encountered were identified, at least to the level necessary to determine potential commonness or rarity. Almost no native species were recorded as occurring on the Project Site.

The Project Site consists primarily of upland habitat dominated by non-native grasses and forbs. One small area of seasonal wetland was found during the multiple surveys conducted by Mr. Patterson. Following is a description of the composition of the upland areas and the small seasonal wetland at the Project Site.

2.1.1 Upland

The Project Site supports primarily non-native species of grasses and forbs characteristic of undeveloped, non-agricultural lands on the Santa Rosa Plain. The dominant species listed by Patterson include mustards (*Brassica* ssp.), chickory (*Cichorium intybus*), thistles (*Cirsium vulgare*, *Sonchus*, *Silybum marianum*, *Carduus pycnocephalus*), wild radish (*Raphanus sativa*), several small nonnative forbs and forage species (*Vicia*, *Geranium*, *Melilotus*, *Medicago*, *Erodium*), and numerous introduced grasses (*Avena*, *Festuca perennis*, two species of brome grasses, *Bromus diandrus*, *Bromus hordeaceus*, *Phalaris aquatica*, two species of *Hordeum*, *Vulpia*, *Elymus* [*Teniatherum*], *Cynodon*, and *Festuca arundinacea*). There are no trees onsite, nor any other significant woody vegetation; there are a few scattered coyote brush (*Baccharis*) shrubs.

2.1.2 Seasonal Wetland

Mr. Patterson also surveyed the Project Site for the possible presence of wetlands during the multiple vegetation surveys conducted between 2005 and 2015. Based on his observations, he submitted a map showing the location of a potential 0.037-acre seasonal wetlands to the U.S. Army Corps of Engineers (Corps), which was subsequently verified by the Corps. The Corps determined that the 0.037-acre seasonal wetland was subject to its jurisdiction pursuant to section 404 of the Clean Water Act.

The 0.037-acre seasonal wetland was found to be dominated by common non-native grasses and forbs, with minimal native vegetation consisting of a small amount of common semaphore grass (*Pleuropogon californicus*) and toad rush (*Juncus bufonius*).

Although the small 0.037-acre seasonal wetland is claimed as jurisdictional (potentially subject to regulation) by the Corps, it is essentially devoid of any actual wetland functions, resources, and/or other related values. It is merely a small and extremely fragmented remnant of the historic landscape, or possibly (likely) even man-made. It is highly isolated, and has been largely dewatered by surrounding land uses and development, resulting in minimal seasonal hydrology and almost complete conversion of vegetation to non-native grasses and weeds. It has virtually no habitat value for wetland-dependent plants or wildlife known from the region.

2.2 WILDLIFE

Non-native annual grasslands on the Santa Rosa Plain support a number of wildlife species, including small mammals such as several species of mice, broad-footed mole (*Scapanus latimanus*), shrews (*Sorex* sp.) and, gophers (*Thomomys bottae*), which provide an essential food resource to snakes and larger mammals, as well as to raptorial birds (hawks, kestrels, kites, and owls). Other mammals, such as black-tailed jackrabbit (*Lepus californicus*), striped skunk (*Mephitis mephitis*), raccoon (*Procyon lotor*) and opossum (*Didelphis virginiana*), along with Coyote (*Canis latrans*) may access the Project Site from the surrounding undeveloped areas open fields west of the Project Site.

A number of migratory song birds also occur in grasslands habitat, such as house finch (*Carpodacus mexicanus*), western meadowlark (*Sturnella neglecta*), California quail (*Callipepla californica*), Brewer's blackbird (*Euphagus cyanocephalus*), and various sparrows.

2.3 SPECIAL-STATUS SPECIES

2.3.1 Special-status Plants

The CNDDDB and CNPS Online Inventory of Rare and Endangered Plants were searched for information on special-status plants for Santa Rosa, Sebastopol, Healdsburg, Two Rocks, and Cotati USGS Quadrangle maps, which defines the Project region. Special-status plant species are defined in *Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Natural Communities*² to include all plant species that meet one or more of the following criteria:

- Listed or proposed for listing as threatened or endangered under FESA or candidates for possible future listing as threatened or endangered under FESA (50 CFR §17.12).
- Listed or candidates for listing by the State of California as threatened or endangered under CESA (Fish and Game Code §2050 *et seq.*).
- Listed as rare under the California Native Plant Protection Act (Fish and Game

² California Department of Fish and Game (CDFG). *Protocols for surveying and evaluating impacts to special status native plant populations and natural communities*. November 24, 2009.

Code §1900 *et seq.*). A plant is **rare** when, although not presently threatened with extinction, the species, subspecies, or variety is found in such small numbers throughout its range that it may be endangered if its environment worsens (Fish and Game Code §1901).

- Meet the definition of rare or endangered under CEQA §15380(b) and (d). Species that may meet the definition of rare or endangered include the following:
 - ♦ Species considered by the California Native Plant Society (CNPS) to be “rare, threatened or endangered in California” (Lists 1A, 1B and 2);
 - ♦ Species that may warrant consideration on the basis of local significance or recent biological information;
 - ♦ Some species included on the California Natural Diversity Database’s (CNDDDB) *Special Plants, Bryophytes, and Lichens List* (California Department of Fish and Game 2008).
- Considered a **locally significant species**, that is, a species that is not rare from a statewide perspective but is rare or uncommon in a local context such as within a county or region (CEQA §15125 (c)) or is so designated in local or regional plans, policies, or ordinances (CEQA Guidelines, Appendix G). Examples include a species at the outer limits of its known range or a species occurring on an uncommon soil type.

The list of special-status plants occurring in the Project region and their regulatory status are listed in Table 1.

Table 1. List of special-status plant species reported to occur in the Project region and their regulatory status.

Scientific Name	Common Name	Federal Status*	State Status*	CNPS LIST
<i>Alopecurus aequalis</i> var. <i>sonomensis</i>	Sonoma alopecurus	E		1B.1
<i>Amsinckia lunaris</i>	bent-flowered fiddleneck			1B.2
<i>Arctostaphylos canescens</i> ssp. <i>sonomensis</i>	Sonoma canescent manzanita			1B.2
<i>Arctostaphylos densiflora</i>	Vine Hill manzanita		E	1B.1
<i>Arctostaphylos stanfordiana</i> ssp. <i>decumbens</i>	Rincon Ridge manzanita			1B.1
<i>Astragalus breweri</i>	Brewer’s milkvetch			4.2
<i>Astragalus claranus</i>	Clara Hunt’s milk-vetch	E	T	1B.1
<i>Balsamorhiza macrolepis</i> var. <i>macrolepis</i>	big-scale balsamroot			1B.2
<i>Blennosperma bakeri</i>	Sonoma sunshine	E	E	1B.1
<i>Brodiaea leptandra</i>	narrow-anthered California brodiaea			1B.2
<i>Calamagrostis crassiglumis</i>	Thurber’s reed grass			2.1
<i>Campanula californica</i>	swamp harebell			1B.2
<i>Carex albida</i>	White sedge	E	E	1B.1

Scientific Name	Common Name	Federal Status*	State Status*	CNPS LIST
<i>Castilleja uliginosa</i>	Pitkin Marsh paintbrush		E	1A
<i>Ceanothus confusus</i>	Rincon Ridge ceanothus			1B.1
<i>Ceanothus divergens</i>	Calistoga ceanothus			1B.2
<i>Ceanothus foliosus</i> var. <i>vineatus</i>	Vine Hill ceanothus			1B.1
<i>Ceanothus sonomensis</i>	Sonoma ceanothus			1B.2
<i>Centromadia parryi</i> ssp. <i>parryi</i>	pappose tarplant			1B.2
<i>Chorizanthe valida</i>	Sonoma spineflower	E	E	1B.1
<i>Clarkia imbricata</i>	Vine Hill clarkia	E	E	1B.1
<i>Cuscuta obtusiflora</i> var. <i>glandulosa</i>	Peruvian dodder			2.2
<i>Delphinium bakeri</i>	Baker's larkspur	E	E	1B.1
<i>Delphinium luteum</i>	golden larkspur	E	R	1B.1
<i>Downingia pusilla</i>	dwarf downingia			2.2
<i>Fritillaria liliacea</i>	fragrant fritillary			1B.2
<i>Gilia capitata</i> ssp. <i>tomentosa</i>	wooly-headed gilia			1B.1
<i>Gratiola heterosepala</i>	Bogg's Lake hedge-hyssop		E	1B.2
<i>Hemizonia congesta</i> ssp. <i>congesta</i>	seaside tarplant			1B.2
<i>Horkelia tenuiloba</i>	thin-lobed horkelia			1B.2
<i>Lasthenia burkei</i>	Burke's goldfields	E	E	1B.1
<i>Legenere limosa</i>	legenere			1B.1
<i>Leptosiphon jepsonii</i>	Jepson's leptosiphon			1B.2
<i>Lilium pardalinum</i> ssp. <i>pitkinense</i>	Pitkin Marsh lily	E	E	1B.1
<i>Limnanthes vinculans</i>	Sebastopol meadowfoam	E	E	1B.1
<i>Microseris paludosa</i>	marsh microseris			1B.2
<i>Navarretia leucocephala</i> ssp. <i>bakeri</i>	Baker's navarretia			1B.1
<i>Navarretia leucocephala</i> ssp. <i>pauciflora</i>	Few-flowered navarretia	E	T	1B.1
<i>Navarretia leucocephala</i> ssp. <i>plieantha</i>	many-flowered navarretia	E	E	1B.2
<i>Perideridia gairdneri</i> ssp. <i>gairdneri</i>	Gairdner's yampah			4.2
<i>Pleuropogon hooverianus</i>	semaphore grass		T	1B.1
<i>Potentilla uliginosa</i>	Cunningham Marsh cinquefoil			1A
<i>Ranunculus lobbii</i>	Lobb's aquatic buttercup			4.2
<i>Rhynchospora alba</i>	white beaked-rush			1B.1
<i>Rhynchospora californica</i>	California beaked-rush			2.2
<i>Rhynchospora globularis</i>	round-headed beaked-rush			1B.1
<i>Sidalcea oregana</i> ssp. <i>hydrophila</i>	marsh checkerbloom			1B.2
<i>Sidalcea oregana</i> ssp. <i>valida</i>	Kenwood Marsh checkerbloom	E	E	1B.1
<i>Tracyina rostrate</i>	beaked tracyina			1B.2
<i>Trifolium amoenum</i>	showy rancheria clover	E		1B.1
<i>Trifolium hydrophilum</i>	saline clover			1B.2
<i>Triquetrella californica</i>	coastal triquetrella			2.3
<i>Viburnum ellipticum</i>	oval-leaved viburnum			2.3

* Federal Status: E = Endangered; State Status: E = Endangered, R = Rare, T = Threatened CNPS Designations: List 1A = Species presumed extinct in California. List 1B = Species rare and endangered in California and elsewhere. List 2 = Species rare and endangered in California but more common elsewhere. List 3 = Species for which additional data are needed.

The following discussion of special-status plant species and surveys conducted at the Project Site is summarized from the letter report prepared by Patterson, which is appended to this report in Appendix A.

The vegetation surveys conducted by Patterson were also accompanied by numerous additional site visits to other known rare plant locations on the Santa Rosa Plain (SRP), i.e., Alton Lane, the 'Madera' parcel, several parcels on Francisco Avenue and Barnes Road, and the Desmond, Hale, and Horn Mitigation Banks. These visits were conducted to document and monitor the seasonal flowering progression of the three primary listed plant species on the Santa Rosa Plain, specifically Burke's goldfields (*Lasthenia burkei*), Sebastopol meadowfoam (*Limnanthes vinculans*), and Sonoma sunshine (*Blennosperma bakeri*), consistent with FWS's rare plant survey protocols³. Each year, known populations (such as at Alton Lane, where all three of the listed species grow) were visited starting in early March, and were re-visited several times through April and May to provide a continuous check on the three species' phenologies.

Seasonally staggered surveys were conducted to cover the full blooming season of the special-status plants reported to occur in the region. Because the small seasonal wetland feature is so shallow and ephemeral, in most years it is very dry (and finished with its annual growth) at the same time as the surrounding grassland, typically mid-May. No late-flowering wetland species have been observed in the seasonal wetland.

Several other uncommon native plant species were also sought during the surveys, including species of seasonal wetlands and native grasslands and meadows. The list of special-status plant species known or expected to occur in the region prepared by Patterson is presented in Table 2. This list excludes those species typically found in habitats not present at the Project Site, such as chaparral, forest, woodland, serpentine, sandstone or other rock outcrops.

³ U.S. Fish and Wildlife Service. ND. Guidelines for conducting and reporting botanical inventories for federally listed plants on the Santa Rosa Plain.

Table 2. Special-status plant species reported to occur in the Project region, their habitat preference and likelihood of occurring at the Project Site⁴

Scientific Name	Common Name	Habitat	Likely Occurrence at Project Site
SPECIES OF PRIMARY CONCERN:			
<i>Campanula californica</i>	swamp harebell	freshwater marshes, bogs, closed cone pine, wet	No; no suitable habitat; none seen
<i>Fritillaria liliacea</i>	fragrant fritillary	heavy adobe soils, coastal grassland and scrub	No; poor habitat quality; none seen
<i>Legenere limosa</i>	legenere	vernal pools; valley grassland	No; no suitable habitat; none seen
<i>Trifolium amoenum</i>	showy Indian clover	low rich fields, swales; serpentine	No; poor habitat quality; none seen
<i>Castilleja liginosa</i>	Pitkin Marsh paintbrush	marshes, wet meadow; Pitkin Marsh	No; no suitable habitat; presumed extinct; none seen
<i>Alopecurus aequalis</i> var. <i>sonomensis</i>	Sonoma alopecurus	low wet places, marsh, riparian scrub	No; no suitable habitat; none seen
<i>Astragalus larianus</i>	Clara Hunt's milkvetch	grassy hillsides, cismontane woodland	No; no good habitat; out of range; none seen
<i>Blennosperma bakeri</i>	Sonoma sunshine	low wet places; valley grassland, vernal pools	No; poor habitat quality; none seen
<i>Carex lbida</i>	white sedge	open marshy places; Pitkin Marsh	No; no suitable habitat; none seen
<i>Delphinium bakeri</i>	Baker's larkspur	low brush and fencerows; coastal prairie	No; no suitable habitat; out of range; none seen
<i>Delphinium luteum</i>	yellow larkspur	sea bluffs, coastal scrub	No; no suitable habitat; out of range; none seen
<i>Gratiola heterosepala</i>	Bogg's Lake hedge-hyssop	vernal pools, shallow marshy ground	No; no suitable habitat; none seen
<i>Lasthenia burkei</i>	Burke's goldfields	vernal pools, wet swales	No; poor habitat quality; none seen
<i>Lilium pardalinum</i> ssp. <i>pitkinense</i>	Pitkin Marsh lily	wet marshy ground, Pitkin Marsh	No; no suitable habitat; none seen;
<i>Limnanthes vinculans</i>	Sebastopol meadowfoam	vernal pools, wet meadows	No; poor habitat quality; none seen
<i>Navarretia leucocephala</i> ssp. <i>bakeri</i>	Baker's navarretia	vernal pools, wet swales, mesic grassland?	No; no suitable habitat; none seen
<i>Navarretia leucocephala</i> ssp. <i>pauciflora</i>	few-flowered navarretia	vernal pools; volcanic ash-flow	No; no suitable habitat; none seen

⁴ Modified from Patterson. See Appendix A of this report for the Patterson letter report.

<i>Navarretia leucocephala</i> ssp. <i>plieantha</i>	many- flowered navarretia	edges of vernal pools, meadows	No; no suitable habitat; none seen
<i>Pleuropogon hooverianus</i>	Hoover's semaphore grass	meadows, coastal deciduous forest, wet places	No; no good habitat onsite; none seen; out of range?
<i>Rhynchospora californica</i>	California beaked rush	bogs, swamps, freshwater marsh	No; no suitable habitat; none seen
<i>Sidalcea oregana</i> ssp. <i>hydrophila</i>	marsh checkerbloom	meadows, mesic riparian	No; no suitable habitat; none seen
<i>Sidalcea oregana</i> ssp. <i>valida</i>	Kenwood Marsh checkerblooms	freshwater marsh	No; no suitable habitat; none seen; out of range?
<i>Tracyina rostrata</i>	beaked tracyina	woodland, grassland	No; no good habitat; none seen
SPECIES OF SECONDARY CONCERN			
<i>Downingia pusilla</i>	dwarf downingia	vernal pools; valley grassland	No; poor habitat quality; none seen
<i>Hemizonia congesta</i> ssp. <i>leucocephala</i>	hayfield tarplant	coastal scrub, prairie, grassland	Possible, but poor habitat quality; none seen
<i>Pogogyne douglasii</i> ssp. <i>parviflora</i>	Douglas' pogogyne	vernal pools, low seas. wet places	No; poor habitat quality; none seen
<i>Amsinckia lunaris</i>	bent- flowered fiddleneck	valley and foothill grassland	No; poor habitat quality; none seen
<i>Leptosiphon acicularis</i>	bristly linanthus	chaparral, woodland, prairie	No; no good habitat; none seen
<i>Perideridia gairdneri</i> ssp. <i>gairdneri</i>	Gairdner's yampah	moist places, marshes, woodland	No; poor habitat quality; none seen
<i>Ranunculus lobbii</i>	Lobb's aquatic buttercup	shallow vernal ponds & pools	No; poor habitat quality; none seen
<i>Astragalus breweri</i>	Brewer's milkvetch	chaparral, woodland, grassland	No; no good habitat; none seen
<i>Rhynchospora alba</i>	white beaked rush	bogs, freshwater marsh	No; no suitable habitat; none seen
<i>Rhynchospora globularis</i> var. <i>globularis</i>	round headed beaked rush	bogs, freshwater marsh	No; no suitable habitat; none seen

No rare, endangered, or otherwise sensitive plant species were found on the Project Site during any of the field surveys, and no such species have been historically reported at the Project Site based on records from the California Native Plant Society (CNPS) or the California Natural Diversity Data Base (CNDDB). The Project Site was found to be heavily dominated by an assortment of common non-native annual grasses and forbs, with almost no remaining native vegetation.

There are no natural habitats or plant communities that remain on the Project Site, and whatever natural drainage patterns may have existed in the past are long gone. The entire Site supports a dense carpet of non-native grasses and weeds, and even the small wetland on the eastern fence is not particularly 'aquatic', supporting the same ruderal grass and weed species, plus a very few additional common species more typical of seasonal wetlands (*Lythrum*, *Rumex*, *Pleuropogon*, *Juncus*). Most of the region's known species of seasonal pools (e.g., *Plagiobothrys*, *Limnanthes*, *Lasthenia*, *Gratiola*, *Eryngium*, etc.) are lacking here. In dry years, the small wetland feature is exclusively dominated by Italian ryegrass (*Lolium*). With such extensive disturbance and no particularly suitable habitats, the Site currently has extremely low potential to support any of the listed species.

2.3.2 Special-status Wildlife

A total of 21 special-status species of invertebrates, fish and wildlife species were identified in the CNDDDB as occurring in the Project region (Table 3). The likelihood of occurrence of species known to occur in the type of habitat present at the Project Site are presented in Table 4.

Table 3. List of special-status invertebrates, fish and wildlife species reported to occur in the Project region.

Scientific Name	Common Name	Federal/State/CDFW Status**
INVERTEBRATES		
<i>Andrena blennospermatis</i>	Blennosperma vernal pool andrenid bee	-/-/*
<i>Lindieriella occidentalis</i>	California lindieriella	-/-/*
<i>Syncaris pacifica</i>	California freshwater shrimp	E/E/-
REPTILES AND AMPHIBIANS		
<i>Emys marmorata</i>	western pond turtle	-/-/SC
<i>Ambystoma californiense</i>	California tiger salamander	E/T/SC
<i>Rana boylei</i>	foothill yellow-legged frog	-/-/SC
<i>Rana draytonii</i>	California red-legged frog	T/-/SC
FISH		
<i>Hysterocarpus traski pomu</i>	Russian River tule perch	-/-/SC
<i>Lavinia symmetricus navarroensis</i>	Navarro roach	-/-/SC
<i>Oncorhynchus kisutch</i>	coho salmon-central CA coast ESU	E/E/-
<i>Oncorhynchus mykiss irideus</i>	steelhead-central CA coast DPS	T/-/-
BIRDS		
<i>Agelaius tricolor</i>	tricolored blackbird	-/-/SC
<i>Ardea herodias</i>	great blue heron	-/-/*
<i>Athene cunicularia</i>	burrowing owl	-/-/SC
<i>Coccyzus americanus occidentalis</i>	western yellow-billed cuckoo	C/E/-
<i>Elanus leucurus</i>	white-tailed kite	-/-/FP
<i>Pandion haliaetus</i>	osprey	-/-/*

MAMMALS		
<i>Antrozous pallidus</i>	pallid bat	-/-/SC
<i>Corynorhinus townsendii</i>	Townsend's big-eared bat	-/-/SC
<i>Lasiurus cinereus</i>	hoary bat	-/-/*
<i>Taxidea taxus</i>	American badger	-/-/SC

* These species do not have a specific state or federal status but are of concern due to limited habitat requirements, threatened habitat, limited numbers or a combination of factors

** Status: Federal - E = Endangered, T = Threatened, C = Candidate for listing; State - E = Endangered; CDFG Status - FP = Fully Protected

Table 4. Special-status invertebrate and wildlife species reported to occur at the Project Region in habitat present at the Project Site and the likelihood of occurring at the Project Site.

SCIENTIFIC NAME COMMON NAME	HABITAT AFFINITY	POTENTIAL SITE OCCURRENCE
REPTILES AND AMPHIBIANS		
<i>Ambystoma californiense</i> California tiger salamander (CTS)	Annual grass habitat, but also occurs in grassy understory of valley-foothill hardwood habitats, in valley-foothill riparian habitats.	Unlikely. Project Site is designated in the PBO ⁵ as "May adversely affect plants, but would not likely adversely affect CTS."
BIRDS		
<i>Athene cunicularia</i> burrowing owl	Subterranean nesting species found in open grassland habitat with burrowing mammals present, preferably the California ground squirrel	Unlikely. Suitable upland habitat present, but lacking population of burrowing mammals
<i>Elanus leucurus</i> white-tailed kite	Open lowland valleys and low rolling foothill; forage in grasslands, marshes cultivated fields where prey species are abundant; nests in top of trees close to good foraging habitat	Unlikely. Suitable upland foraging habitat present, but Project Site is small and area subject to human activity.
MAMMALS		
<i>Antrozous pallidus</i> Pallid bat	Grasslands, shrublands, woodlands, and forests; prefers rocky outcrops, cliffs, and crevices with access to open habitats for foraging	Unlikely. Suitable habitat is not present at the Project Site.

⁵ Programmatic Biological Opinion (Programmatic) for U.S. Army Corps of Engineers (Corps) Permitted Projects that May Affect California Tiger Salamander and Three Endangered Plants Species on the Santa Rosa Plain, California (Corps file Number 223420N: Service File Number 81420-2008-F-0361) dated November 9, 2007.

<i>Corynorhinus townsendii</i> Townsend's big-eared bat	Roosts in the open, hanging from walls and ceilings; extremely sensitive to human disturbance	Unlikely. Suitable habitat is not present at the Project Site.
<i>Lasiurus cinereus</i> hoary bat	Prefers open habitats or habitat mosaics with access to trees for cover and open areas or habitat edges for feeding. Roosts in dense foliage of medium to large trees, requires access to water.	Unlikely. Suitable habitat is not present at the Project Site.
<i>Taxidea taxus</i> American badger	Most abundant in drier open stages of most shrub, forest, and herbaceous habitats, with friable soils	Unlikely. Marginally suitable upland habitat present but past and ongoing disturbance associated with the site reduces the suitability for the site.

Burrowing owls (*Athene cunicularia*) are not reported to occur in the immediate vicinity of the Project Site and suitable burrow habitat for the owl is lacking at the Project Site. The white-tailed kite (*Elanus leucurus*) could forage over the site, but suitable nesting sites are not present at the Project Site.

The American badger (*Taxidea taxus*) is reported to occur in the region but is unlikely to occur at the Project Site due to nearby development and other human activity. American badger burrows were not observed at the Project Site. Suitable habitat for the bat species is lacking at the Project Site.

There is no aquatic habitat at the Project Site so species dependent on aquatic habitat, including the California freshwater shrimp (*Syncaris pacifica*), western pond turtle (*Emys marmorata*), foothill yellow-legged frog (*Rana boylei*), California red-legged frog (*Rana draytonii*), tricolored blackbird (*Agelaius tricolor*), great blue heron (*Ardea herodias*), western yellow-billed cuckoo (*Coccyzus americanus occidentalis*), osprey (*Pandion haliaetus*), and all the fish species are unlikely to occur at the Project Site.

California Tiger Salamander. The Project Site is designated in the PBO as “*May adversely affect plants, but would not likely adversely affect CTS.*” There are a number of CTS observations within 1.3 miles of the Project Site, including several known breeding sites (Figure 3). The nearest known CTS breeding site is located approximately 5,005 feet northwest of the Project Site at the Southwest Community Park (SWP). The other reported CTS breeding sites are either south of Todd Road or west of Stony Point Road.

In an e-mail dated September 8, 2004, from Vincent Griego (FWS) to Mr. Mark Garay (Project Applicant), FWS concluded that “. . . *this project will not result in “take” of the threatened [endangered] California Tiger Salamander (Ambystoma californiense) (CTS). The project site lacks potential breeding habitat and is isolated from areas either known or having potential to support CTS. Therefore, unless new information reveals effects of the proposed project that may affect a federal listed species in a manner or to an extent*

not considered, or a new species is listed or critical habitat is designated that may be affected by the proposed action, no further action pursuant to the Endangered Species Act of 1973, as amended, is necessary.” The complete e-mail is appended to this report in Appendix B).

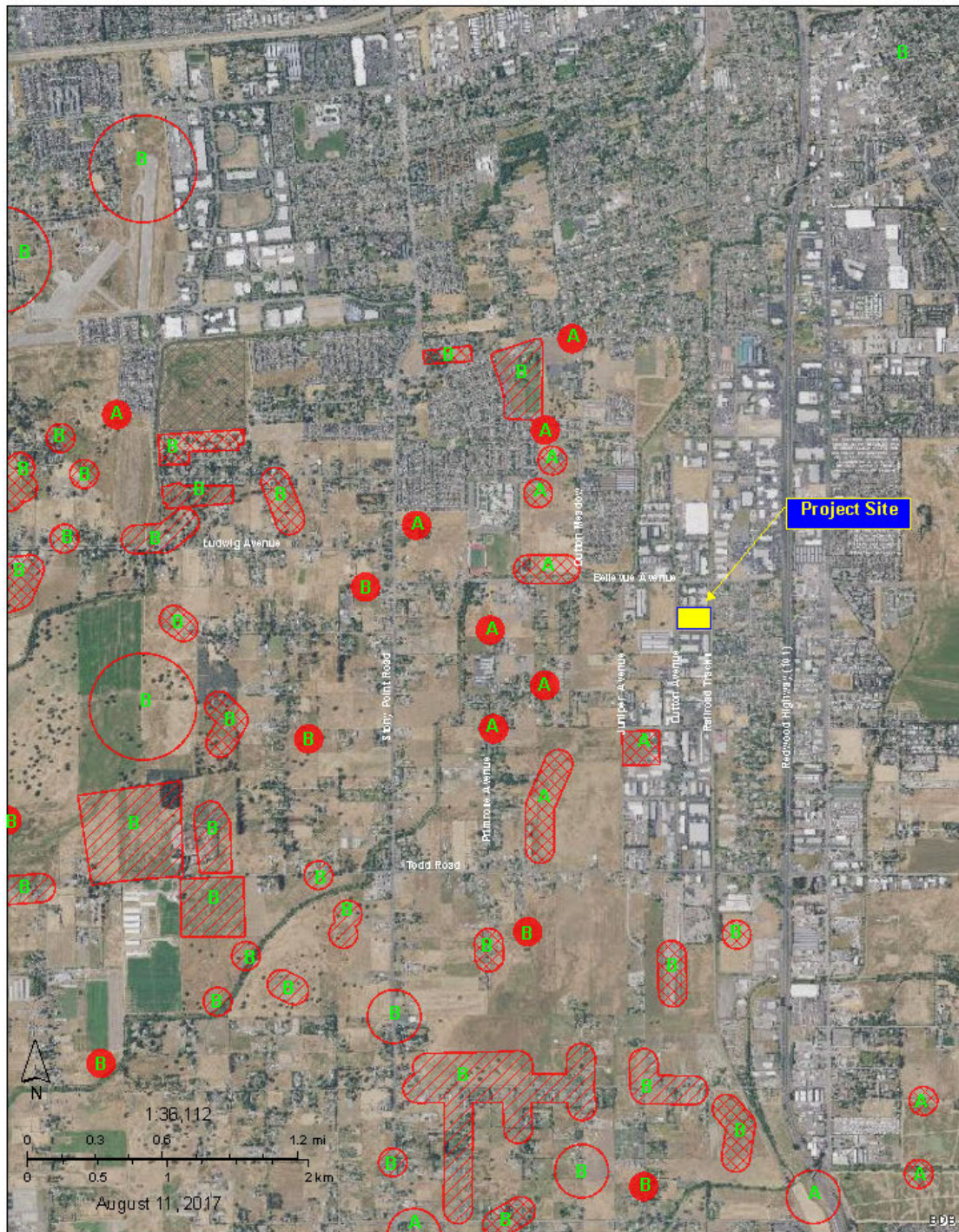
The Project Site remains isolated from known CTS breeding sites in the region. A residential subdivision was constructed on lands along the west and south sides of the SWP breeding pond in 1999-2000. In 2000, the City of Santa Rosa constructed a fence around the breeding pond at SWP to protect the site. A 60-cm high drift fence with a solid wood barrier at the base was constructed along the west and south side of this fence blocks CTS access to and prevent CTS mortality on the adjacent roads (Trenham and Cook 2008)⁶. This fence, Tuxhorn Drive, the subdivision, and associated curbs and storm drains blocked direct access to areas south of the breeding pond (Trenham and Cook 2008). In 2006, the Bellevue No 6 development project contributed an additional barrier to CTS southerly migration.

Development between the Project Site and known CTS breeding sites to the south have been in place since 2004 providing a barrier to CTS migration from the known CTS breeding sites south of Todd Road (Figure 3).

Stony Point Road is a heavily traveled road and represent barriers to movement by CTS. In a study by Hils and Buchwald (2001), cited in Trenham and Cook (2008), they estimated that roads with levels of traffic greater than 12,000 vehicles/day would prove to be 100 percent lethal to migrating amphibians. Stony Point Road has an average daily traffic volume of 20,454 vehicles/day, considerably higher than the 12,000 vehicle/day threshold considered by Hils and Buchwald (2001)⁷ to result in 100 percent mortality for CTS attempting to cross roads carrying such heavy traffic volumes.

⁶ Trenham, P.C and D.G. Cook. 2008. Distribution of migrating adults related to the location of remnant grassland around an urban California tiger salamander (*Ambystoma californiense*) breeding pool. Urban Herpetology. J.C. Mitchell, R.E. Jung Brown, and B. Bartholomew, editors. Herpetological Conservation 3: 33-40.

⁷ Hils, T. and E. Buchwald. 2001. The effect of road kills on amphibian populations. Biological Conservation 99: 331-340.



Author: Ted P. Whitehead, Ph.D.
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Figure 3. Distribution of known CTS breeding sites (B) and adult observations (A) in the vicinity of the Project Site.

Critical Habitat for the California Tiger Salamander. The Project site is located within the recently designated critical habitat for the Sonoma County Distinct Population of the California tiger salamander. FWS issued the Revised Designation of Critical Habitat for the Sonoma County Distinct Population Segment of California Tiger Salamander; Final Rule on August 31, 2011 (76 **FR** 54346 54372). The designated critical habitat in Sonoma County covers approximately 47,383 acres.

In determining which areas occupied by the species of interest to include in the proposed listing of critical habitat FWS evaluates “*those physical and biological features that are essential to the conservation of the species that may require special management consideration or protection.*” (74 FR 158: 41665) Primary Constituent Elements (PCEs) are considered by FWS to be these physical and biological features “*laid out in the appropriate quantity and spatial arrangement for the conservation of the species.*” (74 FR 158: 41665)

In its designation of critical habitat for the Sonoma County Distinct Population Segment of CTS, FWS determined that the primary constituent elements for CTS in Sonoma County include:

1. Standing bodies of fresh water (including natural and manmade (e.g., stock)) ponds, vernal pools and other ephemeral or permanent water bodies that typically support inundation during winter/early spring and hold water for a minimum of 12 consecutive weeks in a year of average rainfall.
2. Upland habitats adjacent and accessible to and from breeding ponds that contain small mammal burrows or other underground refugia that California tiger salamanders depend upon for food, shelter, and protection from the elements and predation.
3. Accessible upland dispersal habitat between occupied locations that allow for movement between such sites.

As stated in the e-mail from FWS, the Project Site *lacks potential breeding habitat*, is *isolated from areas of either known or having potential to support CTS*, and that there is *no opportunity for dispersal of California Tiger Salamanders to the property*. Pursuant to these findings by FWS, which support the conclusion that the Project Site lacks any of the PCEs used to define critical habitat for CTS, the Project Site will not have an adverse impact to designated critical habitat for CTS.

3.0 IMPACTS AND MITIGATION MEASURES

Project impacts to biological resources and measures to mitigate these impacts are described below. The significance of the anticipated impacts of the Project was evaluated following the criteria established in Appendix G of the CEQA Guidelines (California Natural Resources Agency 2010). According to these criteria, the Project would have a significant effect on a biological resource if it would:

- Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service;
- Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the California Department of Fish and Wildlife (CDFW) or U.S. Fish and Wildlife Service (FWS);
- Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means;
- Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites;
- Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance; or
- Conflict with the provisions of an adopted habitat conservation plan, natural community conservation plan, or other approved local, regional, or state habitat conservation plan.

The determination of impact significance is based on whether the particular impact is “substantial,” which consists of three components: the magnitude and duration of the affect; the uniqueness of the affected resource; and the susceptibility of the affected resource to disturbance.

The following analysis of impacts addresses both direct and indirect effects to the affected biological resources resulting from the construction and operation of the proposed Project. This analysis is based on the Project plans, the current condition of the Project impact site, and regulations and guidelines that cover the affected biological resources.

3.1 IMPACTS ON SPECIAL-STATUS PLANT SPECIES

Special-status plant species have not been observed at the site, and are not expected to occur at the Project Site. Habitat for those special-status plant species that occur in seasonal wetland and other types of aquatic habitat does not occur at the Project Site.

3.2 IMPACTS ON WETLANDS

The Project has been designed to avoid direct impacts to the small 0.037-acre seasonal wetland present at the Project Site and, as a result, the Project will not impact seasonal wetland habitat at the Project Site.

3.3 IMPACTS ON CALIFORNIA TIGER SALAMANDER

The Project Site is designated in the PBO as *“May adversely affect plants, but would not likely adversely affect CTS.”* In an e-mail dated September 8, 2004, FWS concluded that *“. . . this project will not result in “take” of the threatened California Tiger Salamander (Ambystoma californiense) (CTS). The project site lacks potential breeding habitat and is isolated from areas either known or having potential to support CTS. Therefore, unless new information reveals effects of the proposed project that may affect a federal listed species in a manner or to an extent not considered, or a new species is listed or critical habitat is designated that may be affected by the proposed action, no further action pursuant to the Endangered Species Act of 1973, as amended, is necessary.”* The Project will not affect designated critical for the Sonoma County Distinct Population Segment of the California tiger salamander. CTS are not expected to occur at the Project Site, and the Project, therefore, will not have an impact on CTS or designated critical habitat for CTS.

3.4 IMPACTS ON SPECIAL-STATUS BIRDS

Construction of the proposed Project could have a substantial direct and/or indirect effect on ground-nesting birds. This impact would be less than significant with mitigation.

In addition to regulations protecting special-status bird species (federal and state Endangered Species Acts), most birds in the United States, including non-status species, are protected by the Migratory Bird Treaty Act of 1918. Under this legislation, it is unlawful to destroy active nests, eggs, and young. Furthermore, California Fish and Game Code Section 3503.5 makes it unlawful to take, possess or destroy birds in the Falconiformes (birds of prey, vultures, eagles, falcons) and Strigiformes (owls) families, which can include nest disturbance from construction and other activities.

The Project Site provides suitable habitat for ground-nesting bird species. To avoid impacts to ground-nesting birds, pre-construction surveys will be conducted no more than 14 days prior to the start of construction or ground disturbing activities if the activities occur during the nesting season (February 1 to August 15). Preconstruction surveys will be repeated at 30-day intervals until construction has started. Active nests will be

identified, located, and described and protective measures will be implemented. Protective measures will include establishment of clearly delineated (i.e., Visi-barrier, orange construction fencing) exclusion zones around each nest site. The active nest sites within exclusion zones will be monitored on a weekly basis throughout the nesting season to identify any signs of disturbance or nest abandonment. The barriers marking exclusion zones will remain in place until the young have left the nest and are foraging independently or if the nest is no longer active.

Implementation of these mitigation measures will result in less than significant impacts to birds.

APPENDIX A. LETTER REPORT PREPARED BY CHARLES A. PATTERSON.