

BIOLOGICAL RESOURCE ASSESSMENT
2199 MARLOW ROAD AND 2045 GUERNEVILLE ROAD
(APNs: 036-016-028, -064, -068, and -069)
SANTA ROSA, CA

Prepared for:

Greg Hall
Ji-Li Jiang
1206 Fourth Street
Santa Rosa, CA 95404

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 4.84-acre Marlow-Guerneville Site (Marlow-Guerneville Site) that includes property at 2199 Marlow Road and 2045 Guerneville Road in Santa Rosa, and the anticipated impacts of development of the Marlow-Guerneville Site on biological resources. The focus of this report is on the possible occurrence of special-status species plants and wildlife at the Marlow-Guerneville site that could be affected by development of the site, and the anticipated impacts and recommended mitigation for impacts to special-status species of plants and wildlife.

1.1 SITE LOCATION

The 4.84-acre Marlow-Guerneville Site is located at 2199 Marlow Road and 2045 Guerneville Road in Santa Rosa (Figure 1) and consists of four parcels (APNs: 036-016-028, -068, -069 and -064) (Figure 2). The Marlow-Guerneville Site occurs in an area of Santa Rosa consisting primarily of residential housing, an elementary and middle school, community shopping center, a community park and scattered rural residential lots (Figure 3).

1.2 RECENT AND CURRENT LAND USE

The parcels that comprise the Marlow-Guerneville Site are zoned for rural residential (APN: 036-061-064) and single-family residential (APNs: 036-061-028, -068, and -069). The General Plan designation for the parcels include medium-density residential (APN: 036-061-064) and low-density residential (APNs: 036-061-028, -068, and -069).

Most of the development of the lands in the vicinity of the Marlow-Guerneville Site has been developed by 1993 based on a review of the July 10, 1993 aerial photograph on Google Earth. Prior to develop of this area of Santa Rosa, the land in the area of the Marlow-Guerneville Site consisted primarily of orchards based on the 1942 photograph at the Sonoma County Vegetation Mapping & Lidar Program website¹.

1.3 PHYSICAL SITE CONDITIONS

The terrain on the Marlow-Guerneville Site is relatively flat, with a gentle east to west slope of less than 1%. The soils on the Marlow-Guerneville Site have been mapped by the Soil Conservation Service as Wright Loam, 0 to 9% percent slopes². There are no obvious depressional areas at the Marlow-Guerneville Site.

¹ www.sonomavegmap.org

² Natural Resources Conservation Service, National Cooperative Soil Survey. Web Soil Survey. January 23, 2015.

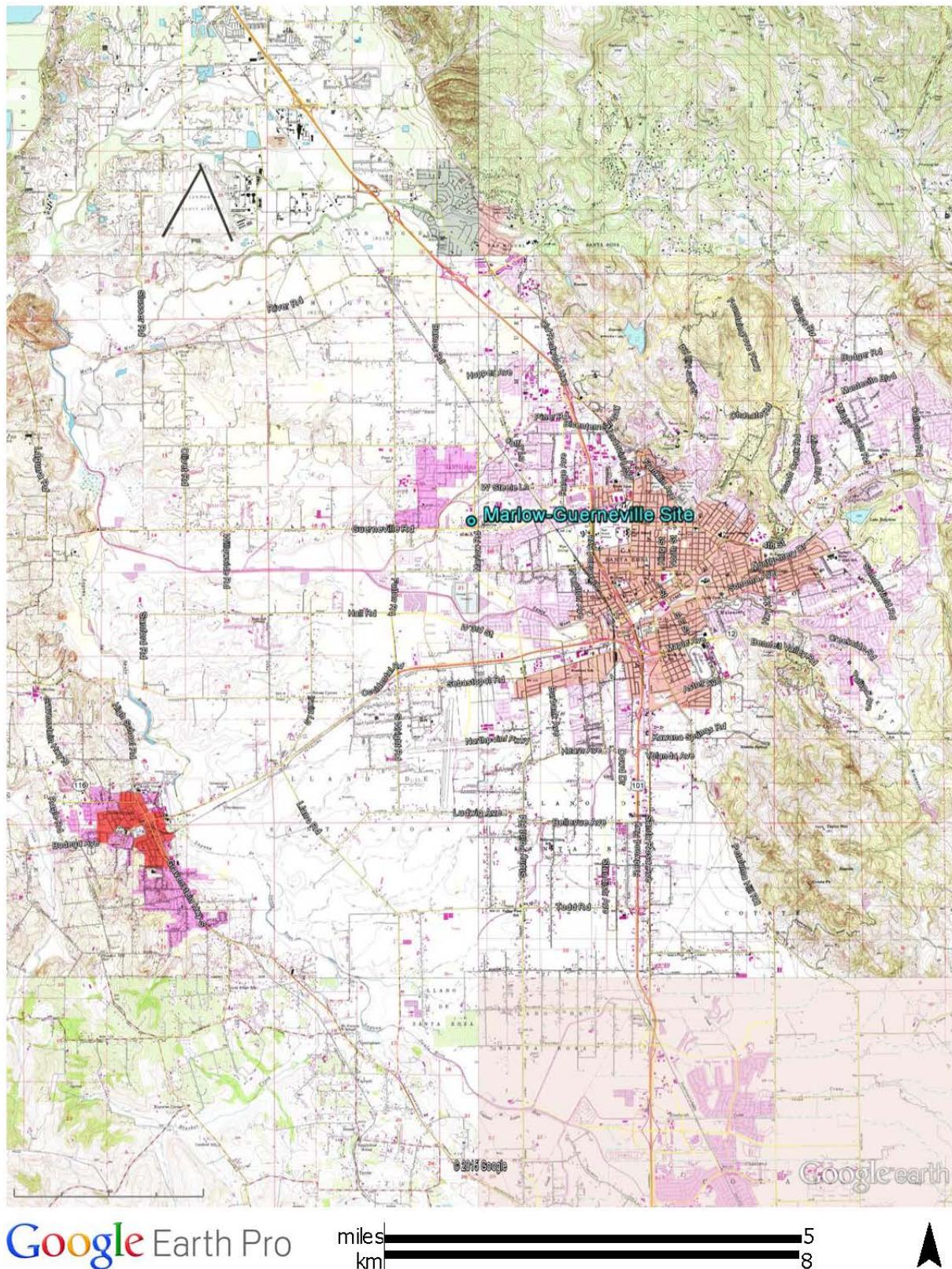


Figure 1. Marlow-Guerneville Site location map.

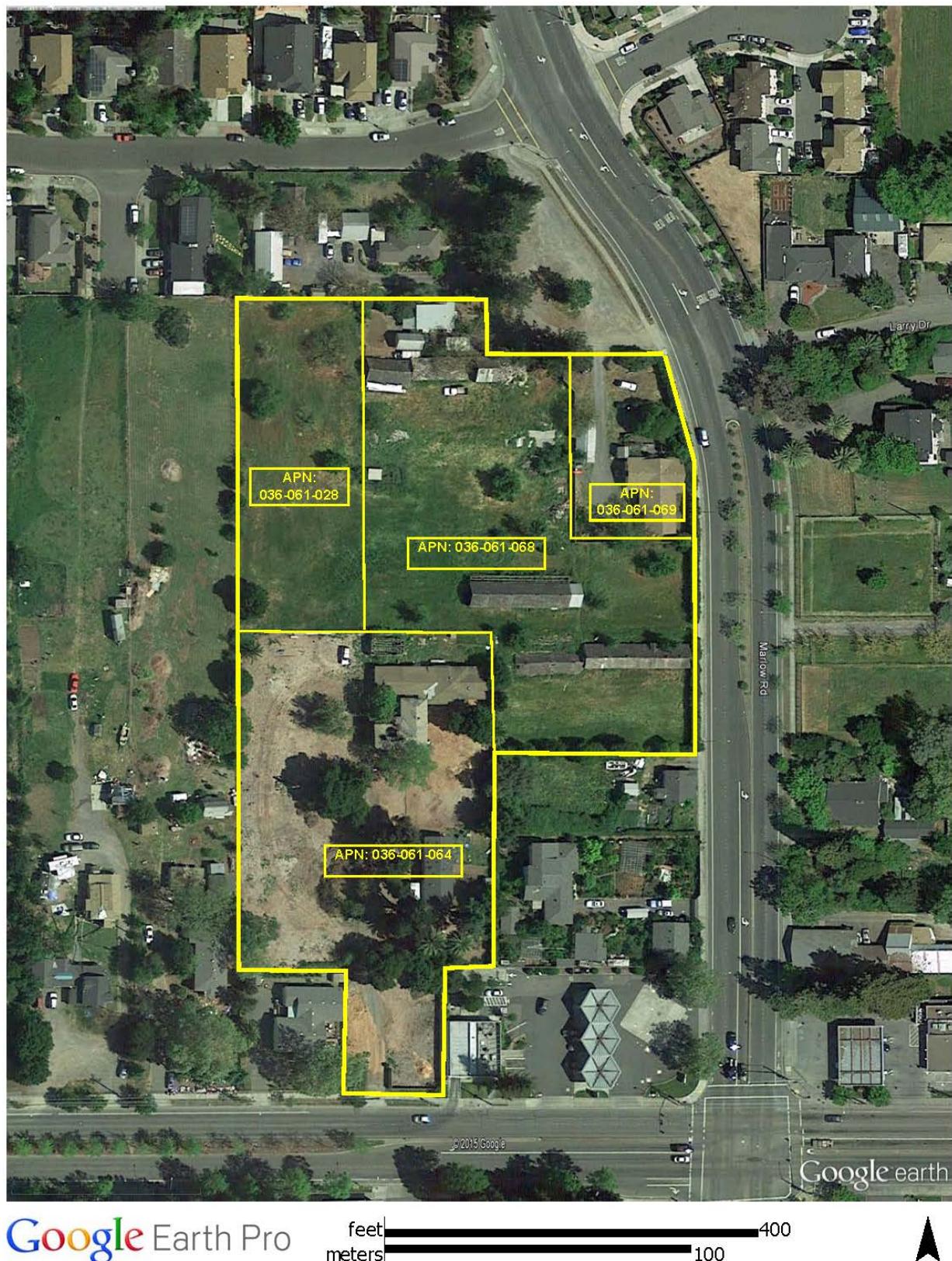


Figure 2. Marlow-Guerneville Site vicinity map.

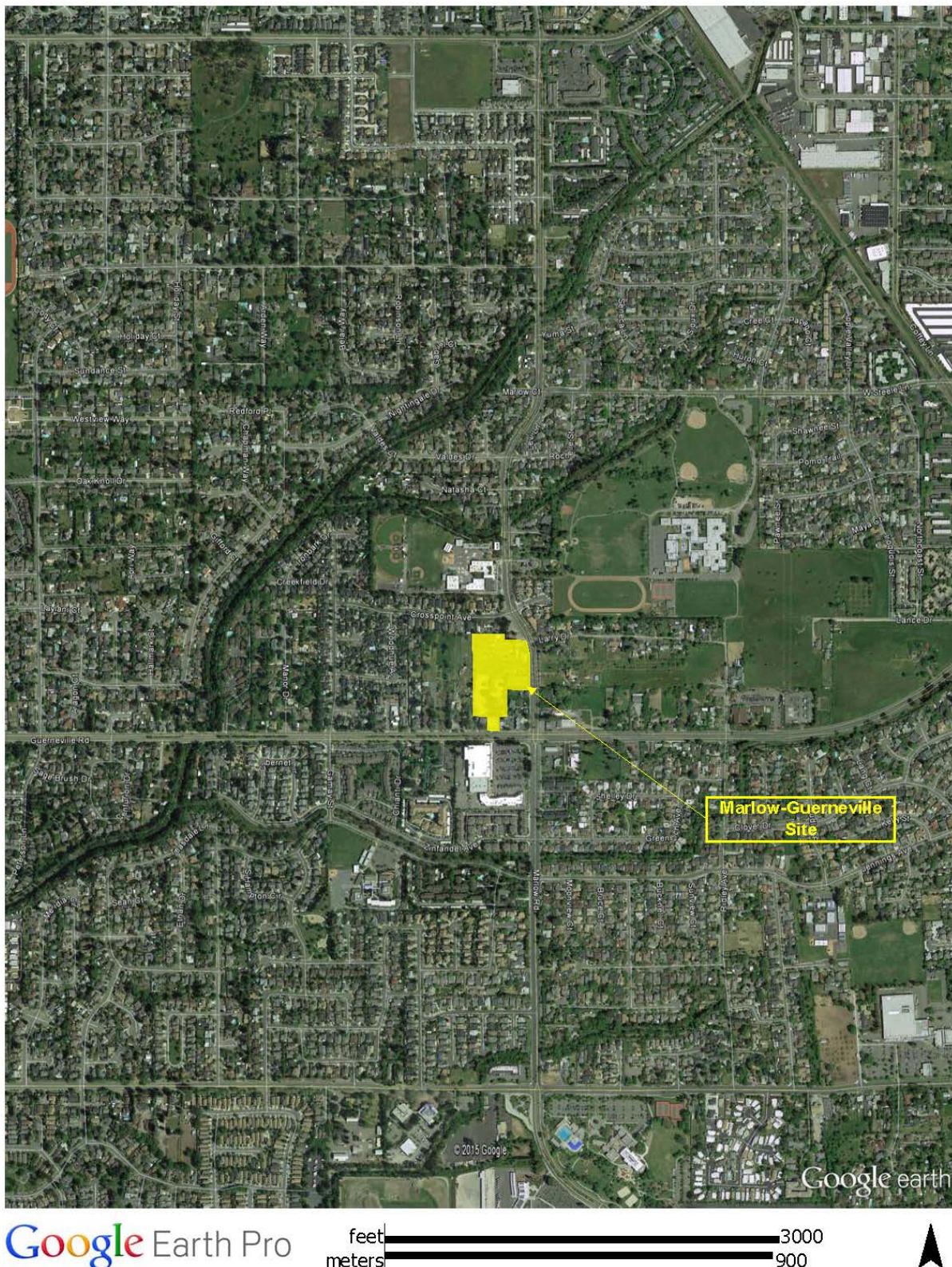


Figure 3. Aerial photograph showing regional land uses in vicinity of the Marlow-Guerneville Site.

2.0 BIOLOGICAL RESOURCES

2.1 VEGETATION

The Marlow-Guerneville Site consists primarily of non-native annual grasses and forbs (non-native annual grassland) with trees scattered throughout the site. Seasonal wetland habitat was not observed on the site during the field reconnaissance survey conducted August 10, 2015, and depressional areas that could pond water and support seasonal wetlands were not observed at the Marlow-Guerneville Site.

Non-Native Annual Grassland. The plants present over much of the Marlow-Guerneville Site commonly occur throughout the Santa Rosa Plain on similar lands that have been left fallow or uncultivated. The more common grasses and forbs identifiable during the survey included slender wild oats (*Avena barbata*), soft chess (*Bromus hordeaceus*), Harding grass (*Phalaris aquatica*), foxtail barley (*Hordeum murinum*), Mediterranean barley (*Hordeum murinum* ssp. *gussoneanum*), Bermuda grass (*Cynodon dactylon*), prickly lettuce (*Lactuca serriola*), willowleaf lettuce (*Lactuca saligna*), bristly ox-tongue (*Helminthotheca echioides*), rough cats-tongue (*Hypochaeris radicata*), wild mustard (*Hirschfeldia incana*), wild radish (*Raphanus sativa*), field bindweed (*Convolvulus arvensis*), dovefoot geranium (*Geranium molle*), and sharp leaved fluellin (*Kickxia eglantine*). Other grasses and forbs included chicory (*Cichorium intybus*), bull thistle (*Cirsium vulgare*), prostrate knotweed (*Polygonum aviculare*), curly dock (*Rumex crispus*), fiddle dock (*Rumex pulcher*), sand spurry (*Spergularia* sp.), and English plantain (*Plantago lanceolata*). The native California poppy (*Eschscholzia californica*) was scattered throughout the site.

Himalayan blackberry (*Rubus armeniacus*) occurred at scattered locations at the Marlow-Guerneville Site, especially along the internal fence line between parcels. The northern three parcels (Figure 2) supported a mixture of native coast live oak (*Quercus agrifolia*), valley oak (*Quercus lobata*), including seedling and saplings of the oaks, along with pear (*Pyrus* sp.) and other fruit trees remaining from prior use of the site as an orchard.

The parcel fronting on Marlow (APN: 036-061-064) (Figure 2) supported a mixture of native and non-native trees, including coast live oak, walnut (*Juglans ?regia*), palm (*Phoenix ?canariensis*), plum (*Prunus* sp.), cypress (*Hesperocyparis* sp.), and magnolia (*Magnolia grandiflora*).

2.3 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 that could occur at the site include the black-tailed jackrabbit (*Lepus californicus*), striped skunk (*Mephitis mephitis*),

raccoon (*Procyon lotor*) and opossum (*Didelphis virginiana*), and possibly an occasional coyote (*Canis latrans*).

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. The open fields could provide seasonal nesting habitat for ground-nesting migratory song birds, and the trees occurring at the site, especially the older oaks, could provide suitable nesting habitat for migratory song birds and possibly raptors, although the location of the trees surrounded by development may substantially reduce the suitability of the trees for nesting raptors.

2.4 SPECIAL-STATUS SPECIES

2.4.1 Special-status Plants

The California Natural Diversity Database (CNDBD)³ and California Native Plant Society (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 region. Special-status plant species are defined in *Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Natural Communities*⁴ to include all plant species that meet one or more of the following criteria:

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

³ June 2015 version of CNDBD

⁴ 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.

“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 (CNDDB) *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.

A total of forty-three special-status plants were identified as occurring in the region (Table 1). The list of these special-status plant species, their habitat preference, and potential to occur at the Marlow-Guerneville Site is presented in Table 2. While marginally suitable habitat is present at the site for several of the species that occur in grassland habitat, suitable habitat for most of special-status species is not present at the Marlow-Guerneville Site, and these species, therefore, are not likely to be affected by development activity at the site.

There are two special-status plant species found in the region that occur in grassland habitat, including bent-flowered fiddleneck (*Amsinckia lunaris*), seaside tarplant (*Hemizonia congesta* ssp. *congesta*). Hayfield tarweed has a long flowering season, extending from April through November. Tarweeds can survive mowing and continue to grow and flower following mowing. No tarweed plant species were observed during the site survey. The site reconnaissance survey occurred outside the flowering period for the bent-flowered fiddleneck and the site had been mowed previously, but no cut dead specimen of this species was observed during the site survey.

Table 1. List of special-status plant species reported to occur in the 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 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

Scientific Name	Common Name	Federal Status*	State Status*	CNPS LIST
<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>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 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>	woolly-headed gilia			1B.1
<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>plieantha</i>	many-flowered navarretia	E	E	1B.2
<i>Pleuropogon hooverianus</i>	North Coast semaphore grass		T	1B.1
<i>Potentilla uliginosa</i>	Cunningham Marsh cinquefoil			1A
<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>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.

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

Scientific Name Common Name	Habitat	Potential Occurrence at Marlow-Guerneville Site
<i>Alopecurus aequalis</i> var. <i>sonomensis</i> Sonoma alopecurus	Marshes and swamps (freshwater); riparian scrub	Unlikely. Habitats for species not present at Marlow-Guerneville Site.
<i>Amsinckia lunaris</i> bent-flowered fiddleneck	Coastal bluff scrub; cismontane woodland; valley and foothill grassland	Low. Marginally suitable grassland habitat present, but subject to regular mowing for fire control.
<i>Arctostaphylos canescens</i> ssp. <i>sonomensis</i> Sonoma canescent manzanita	Chaparral; cismontane woodland; lower montane coniferous forest/ sometimes serpentinite	Unlikely. Habitats for species not present at Marlow-Guerneville Site.
<i>Arctostaphylos densiflora</i> Vine Hill manzanita	Chaparral	Unlikely. Habitats for species not present at Marlow-Guerneville Site.
<i>Arctostaphylos stanfordiana</i> ssp. <i>decumbens</i> Rincon Ridge manzanita	Chaparral; cismontane woodland	Unlikely. Habitats for species not present at Marlow-Guerneville Site.
<i>Astragalus claranus</i> Clara Hunt's milk-vetch	Chaparral (openings); cismontane woodland; valley and foothill grassland/serpentinite or volcanic, rocky, clay	Unlikely. Habitats for species not present at Marlow-Guerneville Site.
<i>Balsamorhiza macrolepis</i> var. <i>macrolepis</i> big-scale balsamroot	Chaparral; cismontane woodland; valley and foothill grassland/ sometimes serpentinite	Unlikely. Habitats for species not present at Marlow-Guerneville Site.
<i>Blennosperma bakeri</i> Sonoma sunshine	Valley and foothill grasslands (mesic); vernal pools	Unlikely. Habitats for species not present at Marlow-Guerneville Site.
<i>Brodiaea leptandra</i> narrow-anthered California brodiaea	Broadleafed upland forest; chaparral; cismontane woodland; lower montane coniferous forest; valley and foothill grassland (volcanic)	Unlikely. Habitats for species not present at Marlow-Guerneville Site.
<i>Calamagrostis crassiglumis</i> Thurber's reed grass	Coastal scrub (mesic); marshes and swamps (freshwater)	Unlikely. Habitats for species not present at Marlow-Guerneville Site.
<i>Campanula californica</i> swamp harebell	Bogs and fens; closed-cone coniferous forest; coastal prairie; meadows and seeps; marshes and swamps (freshwater); north coast coniferous forest	Unlikely. Habitats for species not present at Marlow-Guerneville Site.
<i>Castilleja uliginosa</i> Pitkin Marsh paintbrush	Marshes and swamps (freshwater)	Unlikely. Habitats for species not present at Marlow-Guerneville Site.
<i>Ceanothus confusus</i> Rincon Ridge ceanothus	Closed-cone coniferous forest; chaparral; cismontane woodland/ volcanic or serpentinite	Unlikely. Habitats for species not present at Marlow-Guerneville Site.

Scientific Name Common Name	Habitat	Potential Occurrence at Marlow-Guerneville Site
<i>Ceanothus divergens</i> Calistoga ceanothus	Chaparral (serpentinite or volcanic, rocky)	Unlikely. Habitats for species not present at Marlow-Guerneville Site.
<i>Ceanothus foliosus</i> var. <i>vineatus</i> Vine Hill ceanothus	Chaparral	Unlikely. Habitats for species not present at Marlow-Guerneville Site.
<i>Ceanothus sonomensis</i> Sonoma ceanothus	Chaparral (sandy, serpentinite or volcanic)	Unlikely. Habitats for species not present at Marlow-Guerneville Site.
<i>Centromadia parryi</i> ssp. <i>parryi</i> pappose tarplant	Chaparral; coastal prairie; meadows and seeps; marshes and swamps (coastal salt marshes); valley and foothill grassland (vernally mesic/often alkaline)	Unlikely. Habitats for species not present at Marlow-Guerneville Site.
<i>Chorizanthe valida</i> Sonoma spineflower	Coastal prairie (sandy)	Unlikely. Habitats for species not present at Marlow-Guerneville Site.
<i>Clarkia imbricate</i> Vine Hill clarkia	Chaparral; valley and foothill grassland/acidic sandy loam)	Unlikely. Habitats for species not present at Marlow-Guerneville Site.
<i>Cuscuta obtusiflora</i> var. <i>glandulosa</i> Peruvian dodder	Marshes and swamps (freshwater)	Unlikely. Habitats for species not present at Marlow-Guerneville Site.
<i>Delphinium luteum</i> golden larkspur	Chaparral; coastal prairie; coastal scrub/rocky	Unlikely. Habitats for species not present at Marlow-Guerneville Site.
<i>Downingia pusilla</i> dwarf downingia	Valley and foothill grasslands (mesic); vernal pools	Unlikely. Habitats for species not present at Marlow-Guerneville Site.
<i>Fritillaria liliacea</i> fragrant fritillary	Cismontane woodland; coastal prairie; coastal scrub; valley and foothill grassland/often serpentinite	Unlikely. Habitats for species not present at Marlow-Guerneville Site.
<i>Gilia capitata</i> ssp. <i>tomentosa</i> woolly-headed gilia	Coastal bluff scrub, valley and foothill grasslands/serpentinite; rocky outcrops	Unlikely. Habitats for species not present at Marlow-Guerneville Site.
<i>Hemizonia congesta</i> ssp. <i>congesta</i> seaside tarplant	Valley and foothill grassland/ sometimes roadsides	Low. Marginally suitable grassland habitat present, but not observed during plant survey.
<i>Horkelia tenuiloba</i> thin-lobed horkelia	Broadleafed upland forest; chaparral; valley and foothill grassland/mesic openings, sandy	Unlikely. Habitats for species not present at Marlow-Guerneville Site.
<i>Lasthenia burkei</i> Burke's goldfields	meadows and seeps; vernal pools	Unlikely. Habitats for species not present at Marlow-Guerneville Site.
<i>Legenere limosa</i> legenere	Vernal pools	Unlikely. Habitats for species not present at Marlow-Guerneville Site.
<i>Leptosiphon jepsonii</i> Jepson's leptosiphon	Chaparral; cismontane woodland	Unlikely. Habitats for species not present at Marlow-Guerneville Site.

Scientific Name Common Name	Habitat	Potential Occurrence at Marlow-Guerneville Site
<i>Lilium pardalinum</i> ssp. <i>pitkinense</i> Pitkin Marsh lily	Cismontane woodland; meadows and seeps, marshes and swamps (freshwater)/mesic, sandy	Unlikely. Habitats for species not present at Marlow-Guerneville Site.
<i>Limnanthes vinculans</i> Sebastopol meadowfoam	Meadows and seeps, valley and foothill grassland; vernal pools/vernally mesic	Unlikely. Habitats for species not present at Marlow-Guerneville Site.
<i>Microseris paludososa</i> marsh microseris	Closed-cone coniferous forest; cismontane woodland; coastal scrub; valley and foothill grassland	Unlikely. Habitats for species not present at Marlow-Guerneville Site.
<i>Navarretia leucocephala</i> ssp. <i>bakeri</i> Baker's navarretia	Cismontane woodland; lower montane coniferous forest; meadows and seeps; valley and foothill grassland; vernal pools/mesic	Unlikely. Seasonal wetland habitat at Marlow-Guerneville Site not suitable for species.
<i>Navarretia leucocephala</i> ssp. <i>plieantha</i> many-flowered navarretia	Vernal pools (volcanic ash flow)	Unlikely. Seasonal wetland habitat at Marlow-Guerneville Site not suitable for species.
<i>Pleuropogon hooverianus</i> North Coast semaphore grass	Broadleafed upland forest; meadows and seeps; north coastal coniferous forest/open areas, mesic	Unlikely. Habitats for species not present at Marlow-Guerneville Site.
<i>Potentilla uliginosa</i> Cunningham Marsh cinquefoil	Marshes and swamps/freshwater, permanent oligotrophic wetlands	Unlikely. Habitats for species not present at Marlow-Guerneville Site.
<i>Rhynchospora alba</i> white beaked-rush	Bogs and fens; meadows and seeps; marshes and swamps (freshwater)	Unlikely. Habitats for species not present at Marlow-Guerneville Site.
<i>Rhynchospora californica</i> California beaked-rush	Bogs and fens; lower mountain coniferous forest; meadows and seeps; marshes and swamps	Unlikely. Habitats for species not present at Marlow-Guerneville Site.
<i>Rhynchospora globularis</i> round-headed beaked-rush	Marshes and swamps (freshwater)	Unlikely. Habitats for species not present at Marlow-Guerneville Site.
<i>Trifolium amoenum</i> showy rancheria clover	Coastal bluff scrub; valley and foothill grassland (sometimes serpentinite)	Unlikely. Habitats for species not present at Marlow-Guerneville Site.
<i>Trifolium hydrophilum</i> saline clover	Marshes and swamps; valley and foothill grasslands (mesic, alkaline)	Unlikely. Habitats for species not present at Marlow-Guerneville Site.
<i>Triquetrella californica</i> coastal triquetrella	Coastal bluff scrub; coastal scrub/soil	Unlikely. Habitats for species not present at Marlow-Guerneville Site.
<i>Viburnum ellipticum</i> oval-leaved viburnum	Chaparral; cismontane woodland; lower montane coniferous forest	Unlikely. Habitats for species not present at Marlow-Guerneville Site.

2.4.2 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 region (Table 3). Burrowing owls (*Athene cunicularia*) are not reported to occur in the immediate vicinity of the Marlow-Guerneville Site and suitable burrow habitat for the owl is lacking at the Marlow-Guerneville Site.

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

Scientific Name	Common Name	Federal/State/CDFW Status**
INVERTEBRATES		
<i>Andrena blennospermatis</i>	Blennosperma vernal pool andrenid bee	-/-/*
<i>Linderiella occidentalis</i>	California linderiella	-/-/*
<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 pomo</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 in the region and the likelihood of occurring at the Marlow-Guerneville Site.

SCIENTIFIC NAME COMMON NAME	HABITAT AFFINITY	POTENTIAL SITE OCCURRENCE
INVERTEBRATES		
<i>Andrena blennospermatis</i> Blennosperma vernal pool andrenid bee	Upland habitat around vernal pools/seasonal wetlands	Unlikely. Suitable aquatic habitat not present at Marlow- Guerneville Site.
<i>Linderiella occidentalis</i> California linderiella	Ponded areas with low alkalinity, conductivity and TDS.	Unlikely. Suitable aquatic habitat not present at Marlow- Guerneville Site.
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, and uncommonly along stream courses in valley-foothill riparian habitats	Unlikely. Suitable aquatic habitat not present at Marlow- Guerneville Site or nearby properties.
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 (California ground squirrels) to create burrows used by owls.
<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 limited due to surrounding development and human activity adjacent to the site. May occasionally forage but unlikely to nest.
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	Low to Moderate. Trees and possibly residential buildings could provide habitat.
<i>Corynorhinus townsendii</i> Townsend's big-eared bat	Roosts in the open, hanging from walls and ceilings; extremely sensitive to human disturbance	Low. Could roost in the existing housing but houses are currently occupied.
<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. Could roost in the trees present the site but open water areas are lacking in the immediate area.

Suitable habitat for the other species is lacking at the Marlow-Guerneville Site, including habitat for the California freshwater shrimp (*Syncaris pacifica*), western pond turtle (*Emys marmorata*), foothill yellow-legged frog (*Rana boylii*), California red-legged frog (*Rana draytonii*), all the fish species, tricolored blackbird (*Agelaius tricolor*), great blue heron (*Ardea herodias*), western yellow-billed cuckoo (*Coccyzus americanus occidentalis*), osprey (*Pandion haliaetus*), and the bat species. American badger (*Taxidea taxus*) burrows were not observed at the Marlow-Guerneville Site.

California Tiger Salamander. Most of the Marlow-Guerneville Site is designated in the Santa Rosa Plain Conservation Strategy as “*Presence of CTS is Not Likely,...*” and in the Programmatic Biological Opinion (PBO)⁵ “*..., but would not likely adversely affect CTS.*” The parcel at 2199 Marlow Road (APN: 036-061-069) is designated in the Conservation Strategy at “*Already Developed (No Potential for Impact)*” and in the PBO as “*No Effect.*”

According to section 5.3.3.3 of the Conservation Strategy (Projects Where Presence of CTS is Not Likely), “*[I]mpact to CTS is not likely on some lands beyond 1.3 miles from breeding sites, or on lands within 1.3 miles from breeding sites that are surrounded by significant barriers or are otherwise unsuitable CTS habitat. Neither surveys nor mitigation would be required for projects on these properties.*”

There are no reported CTS breeding sites within 1.3 miles of the Marlow-Guerneville Site based on the most recent information in the CNDDB. The nearest two breeding sites, the Alton Lane Mitigation Site and Hall Road Unit of the Santa Rosa Plain Vernal Pool Ecological Reserve (a.k.a. Wright Preservation Bank), occur more than 1.9 miles from the Marlow-Guerneville Site and there are significant barriers between these two breeding sites and the Marlow-Guerneville Site, including major heavily used roadways and residential development.

⁵ USFWS. 2007. Programmatic Biological Opinion (Programmatic) for U.S. Army Corps of Engineers (Corps) Permitted Projects that May Affect California Tiger Salamander and Three Endangered Plant Species on the Santa Rosa Plain, California (Corps File Number 223420N).

3.0 IMPACTS AND MITIGATION MEASURES

Impacts to biological resources that would result from development of the Marlow-Guerneville Site and measures to mitigate these impacts are described below. The significance of the anticipated impacts of the were evaluated following the criteria established in Appendix G of the CEQA Guidelines (California Natural Resources Agency 2010). According to these criteria, development of the Marlow-Guerneville Site 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 Wildlife 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 or U.S. Fish and Wildlife Service;
- 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 development of the Marlow-Guerneville Site. This analysis is based on the current condition of the site, and regulations and guidelines that cover the affected biological resources.

3.1 IMPACTS ON SPECIAL-STATUS PLANT SPECIES

Special-status plant species are not expected to occur at the Marlow-Guerneville site. Although protocol surveys have not been conducted at the site, suitable habitat for only two of the 43 special-status plant species reported to occur in the region occurs at the Marlow-Guerneville Site. Regular mowing of the Marlow-Guerneville Site in the late spring or early summer to control fuel load to lower the likelihood of fire reduces the suitability of the site for the two special-status plant species that could occur at the site: bent-flowered fiddleneck and seaside tarplant.

3.2 IMPACTS ON WETLANDS

Wetland habitat is not present at the Marlow-Guerneville Site.

3.3 IMPACTS ON CALIFORNIA TIGER SALAMANDER

The California tiger salamander is unlikely to occur at the Marlow-Guerneville Site and, therefore, development of the Marlow-Guerneville Site would not affect CTS. According to the Conservation Strategy, “*[I]mpact to CTS is not likely on some lands beyond 1.3 miles from breeding sites, or on lands within 1.3 miles from breeding sites that are surrounded by significant barriers or are otherwise unsuitable CTS habitat. Neither surveys nor mitigation would be required for projects on these properties.*”

There are no reported CTS breeding sites within 1.3 miles of the Marlow-Guerneville Site based on the most recent information in the CNDDB. The nearest two breeding sites, the Alton Lane Mitigation Site and Hall Road Unit of the Santa Rosa Plain Vernal Pool Ecological Reserve (a.k.a. Wright Preservation Bank), occur more than 1.9 miles from the Marlow-Guerneville Site and there are significant barriers between these two breeding sites and the Marlow-Guerneville Site, including major heavily used roadways and residential development.

3.4 IMPACTS ON SPECIAL-STATUS BIRDS AND MAMMALS

Development at the Marlow-Guerneville Site could have a substantial direct and/or indirect effect on special-status or otherwise protected migratory song birds and raptors. 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 site does provide suitable habitat for ground nesting bird species. The Marlow-Guerneville Site also provides suitable foraging habitat for raptors. If birds were to nest in or near the Marlow-

Guerneville Site during construction activities, the impact would be significant and mitigation would be required to reduce the impact to less than significant.

A pre-construction survey of the open grassland areas and trees for nesting birds (migratory song birds and raptors), will be performed 30 days prior to the start of construction. A qualified avian biologist will conduct passerine nest surveys prior to tree pruning, tree removal, ground disturbing activities, or construction activities at the Marlow-Guerneville Site to locate any active nests on or adjacent to the Marlow-Guerneville Site. If land-clearing activities can be performed outside of the nesting season, that is, between August 15 and February 15, no preconstruction surveys for nesting birds are warranted.

Pre-construction surveys will be conducted no more than 30 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. The radius of the required buffer zone can vary depending on the species, (i.e., 75-100 feet for migratory song birds and 200-300 feet for raptors), with the dimensions of any required buffer zones to be determined by a qualified biologist in consultation with CDFW.

Proposed development of the Marlow-Guerneville Site could have a substantial direct and/or indirect effect on special-status bats. This impact would be less than significant with mitigation.

Development of the Marlow-Guerneville Site will result in the loss of potential roosting habitat for several special-status bat species, including the pallid bat and possibly Townsend's big eared bat.

Prior to removal of trees or building structures at the Marlow-Guerneville Site the Applicant will consult with a qualified bat biologist, who is defined as a bat biologist, who holds a CDFW collection permit and a Memorandum of Understanding with CDFW allowing the biologist to handle and collect bats. Depending on the proposed timing of removal of the trees and buildings, and the bat biologist initial survey of the site, the necessary measures to avoid or minimize impacts to suitable or known bat habitat will be identified and implemented under supervision of the bat biologist.

Murray, Susie

From: Gwyn Bauer <gwynbauer@sonomacountylanduse.com>
Sent: Friday, June 01, 2018 8:22 AM
To: Murray, Susie
Subject: FW: Marlow Commons Biotic Report (Final)

Hi Susie,

See below Ted Winfield's current assessment of the site.

Let me know if you need anything else.

Thanks,

Gwyn Bauer
Planning Assistant
J. Kapolchok & Associates
(707)526-8939

From: "Ted P. Winfield, Ph.D" <tpw_jr@comcast.net>
Date: Friday, June 1, 2018 at 8:06 AM
To: Gwyn Bauer <gwynbauer@sonomacountylanduse.com>
Subject: RE: Marlow Commons Biotic Report (Final)

Gwyn, I visited the Marlow Commons site on Thursday, May 31, 2018. The vegetation cover remains the same as I reported in the 2015 Biological Resource Assessment. Although the vegetation had recently been mowed, presumably for fire prevention, the recognizable vegetation in the unmowed fringes continues to be dominated by non-native plants.

The only change was the demolition of a structure and partial demolition of another structure on one of the parcels (APN: 036-061-064).

Please let me know if you need further assessment.

Thank you.

Ted

Ted P. Winfield, Ph.D.
Ted Winfield & Associates
1455 Wagoner Drive
Livermore, CA 94550
(925) 371-6379 (Office)
(925) 980-7787 (Cell)

From: Gwyn Bauer <gwynbauer@sonomacountylanduse.com>
Sent: Thursday, May 31, 2018 1:21 PM
To: Ted P. Winfield <tpw_jr@comcast.net>
Subject: Marlow Commons Biotic Report (Final)

Hi Ted,

Just checking to see if you were able to get out to the site and provide an updated memo for your biotic report findings?

Please let me know so I can reach out to Susie with an update.

Thanks,

Gwyn Bauer
Planning Assistant
J. Kapolchok & Associates
(707)526-8939