MOORE BIOLOGICAL CONSULTANTS

December 22, 2017

Mr. Trent Sanson
DeNova Homes
1500 Willow Pass Court
Concord, CA 94520

Subject:

"SONOMA HOSPITAL SITE", SONOMA, CALIFORNIA:

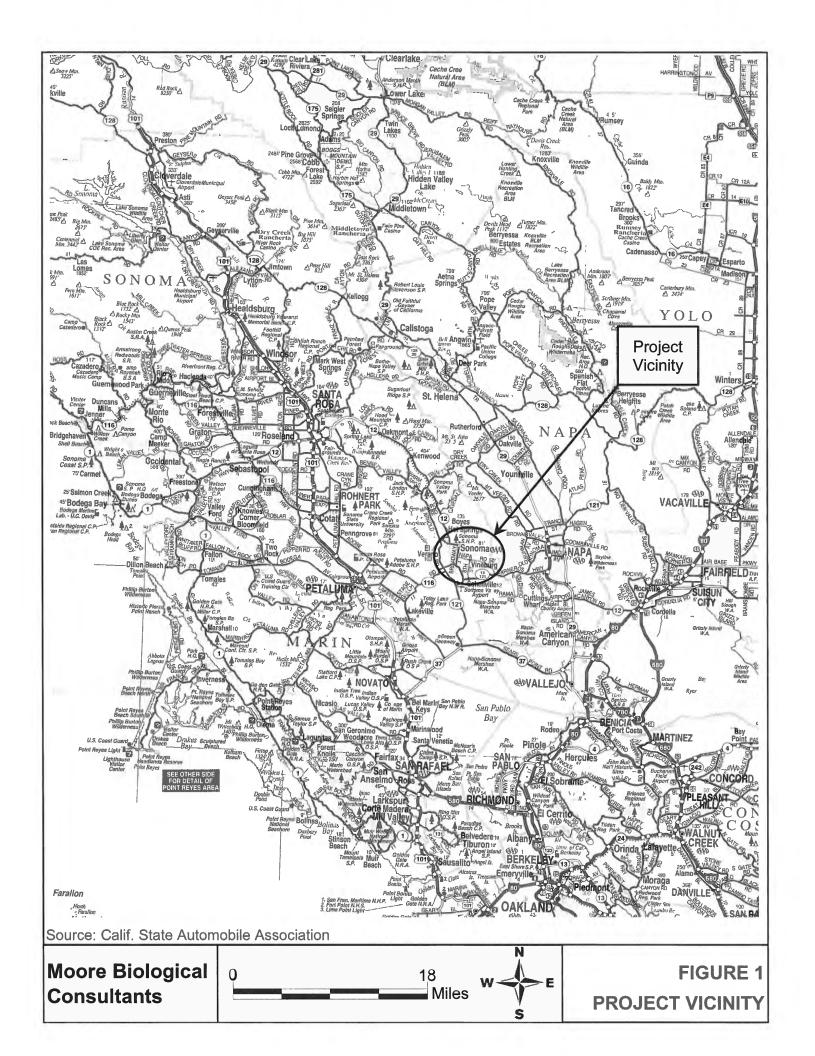
BIOLOGICAL ASSESSMENT

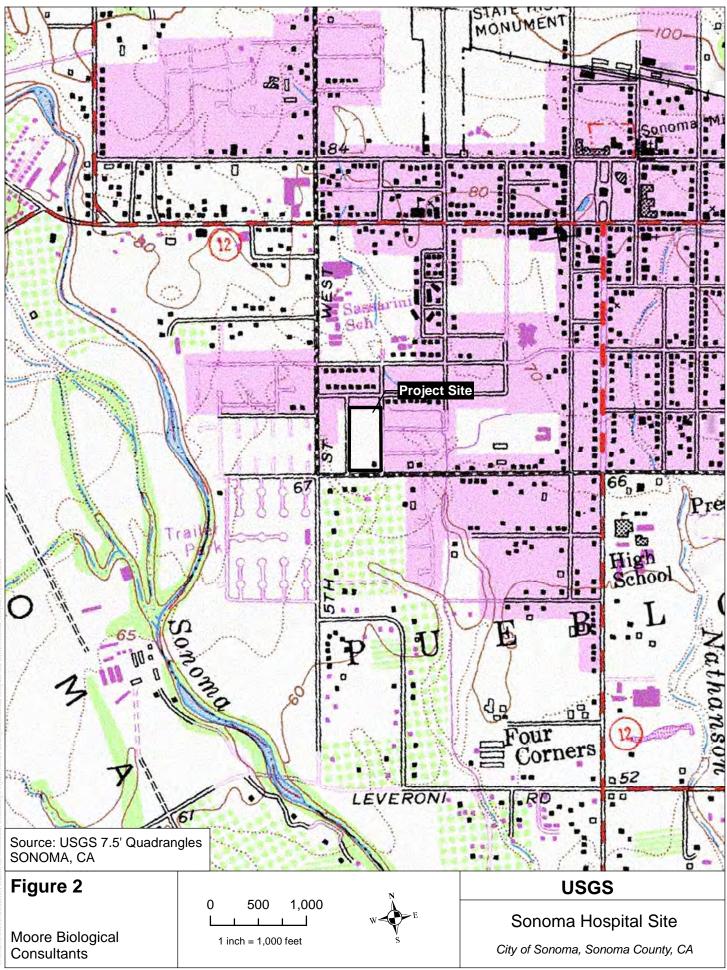
Dear Trent:

Thank you for asking Moore Biological Consultants to assist with this project in Sonoma, California (Figure 1). The site is an infill project on the north side of West MacArthur Street in a primarily residential neighborhood (Figure 2). The purpose of our work was to document current habitat conditions, identify potential waters of the U.S. and wetlands, search for suitable habitat for or presence of special-status species in the site, and identify any potential biological constraints to residential development of the site. The work involved reviewing databases and available documents, conducting a survey to document habitats present in the site, and searching the site for potentially jurisdictional Waters of the U.S. or wetlands and suitable habitat for or presence of special-status species. This report details the methodology and results of our investigation.

Project Overview

The 3.3+/- acre project site is the part of a larger parcel that contains a landscaped parking lot owned by Sonoma Valley Hospital. The project involves developing the project site in single and multi-family homes with access from (see Site Plan in Attachment A). Curb, gutter and sidewalk will be constructed





along Hayes Street and 4th Street West adjacent to the residential areas. The developer will also be responsible for completing the Hayes Street and 4th Street West road improvements along the length of the overall 5+/- parcel, including "off-site" road improvements north of the site adjacent to the hospital parking lot.

Methods

Prior to the field survey, we conducted a search of California Department of Fish and Wildlife's (CDFW) California Natural Diversity Database (CNDDB, 2017). The CNDDB search included the USGS 7.5-minute Sonoma and Glen Ellen topographic quadrangles, which encompass approximately 120 square miles surrounding the project site. The United States Fish and Wildlife Service (USFWS) IPaCTrust Report of Federally Threatened and Endangered species that may occur in or be affected by projects in the project vicinity was also reviewed (Attachment B). This information was used to identify wildlife and plant species that have been previously documented in the project vicinity or have the potential to occur based on suitable habitat and geographical distribution. The USFWS on-line maps of designated critical habitat were also downloaded.

A field survey was conducted on November 8, 2017. The survey consisted of walking throughout the site making observations of habitat conditions and noting surrounding land uses, general habitat types, and plant and wildlife species. The survey included an assessment of the site for presence or absence of potentially jurisdictional Waters of the U.S. (a term that includes wetlands) as defined by the ACOE (1987; 2008), special-status species, and suitable habitat for special-status species (e.g., salt marshes, vernal pools). Additionally, trees in and near the site were assessed for the potential use by nesting raptors and the site was also searched for burrowing owls (*Athene cunicularia*) or ground squirrel burrows that could be utilized by burrowing owls.

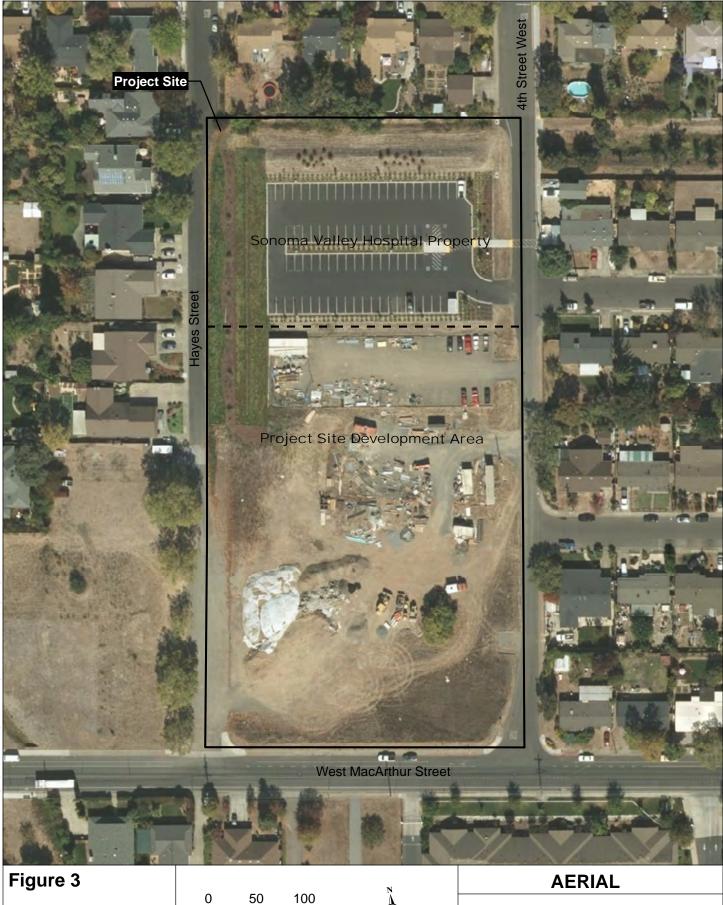
Results

GENERAL SETTING: The site is located in Sonoma, in Sonoma County, California (Figure 1). The site is in an unnumbered Section, in Township 5 North, Range 6 West of the USGS 7.5-minute Sonoma topographic quadrangle (Figure 2). The site is essentially level and is at an elevation of approximately 65 feet above mean sea level. The north part of the site is a graveled area that appears to have been used for overflow parking in the past, and an open field that is routinely disked (Figure 3 and photographs in Attachment C).

West MacArthur Street is located along the south edge of the site and Hayes Street bounds the site on the west. The Sonoma Valley Hospital parking lot bounds the site on the north and 4th Street West is located along the east edge of the site. Adjacent parcels primarily contain single-family homes; there is a retirement home, to the south of the site, across West MacArthur Street.

VEGETATION: Natural habitats surrounding the project site have been entirely replaced by streets, homes, and generally highly landscaped areas. The body of the site is a periodically disked and/or mowed field vegetated in ruderal grass and weed species. California annual grassland best describes the disturbed upland grassland vegetation in the site. Oats (*Avena* sp.), foxtail barley (*Hordeum murinum*), soft chess (*Bromus hordeaceus*), ripgut brome (*Bromus diandrus*), and perennial ryegrass (*Lolium perenne*) are dominant grass species on-site. Other grassland species such as chickory (*Cichorium intybus*), mustard (*Brassica* sp.), mallow (*Malva neglecta*), prickly lettuce (*Lactuca serriola*), and morning glory (*Convolvulus arvensis*) are intermixed with the grasses.

The only tree in the site is an English walnut (*Juglans regia*), which is located in the southeast part of the site (Figure 3 and photographs in Attachment C). There are numerous primarily non-native landscape trees in the parcels surrounding the site, and some relatively small ornamentals in the Sonoma Valley Hospital parking lot.



Moore Biological Consultants





Sonoma Hospital Site

City of Sonoma, Sonoma County, CA

WILDLIFE: Only a few bird species were observed in the site during the recent survey. These include western kingbird (*Tyrannus verticalis*), mourning dove (*Zenaida macroura*), western scrub jay (*Aphelocoma coerulescens*), and Brewer's blackbird (*Euphagus cyanocephalus*). The on-site walnut and other relatively large trees near the site are suitable for nesting raptors and other protected migratory birds. Given the presence of some trees and raptor foraging habitat (i.e., open fields) in and near the site, it is possible one or more pairs of raptors, plus a variety of songbirds, nest in trees in or near the site each year. Further, it is considered likely that songbirds nest within trees, shrubs, and grassland habitats in and adjacent to the site each year.

Only a few mammals common to urban areas have potential to occur in the site and no mammals were observed during the field survey. Striped skunk (*Mephitis mephitis*), black-tailed hare (*Lepus californicus*), desert cottontail (*Sylvilagus audubonii*), Virginia opossum (*Didelphis virginiana*), and California ground squirrels (*Spermophilus beecheyi*) are expected to occur in the project site on occasion. No ground squirrel burrows were observed in the site.

Due to lack of suitable habitat and the location of the site in town, few amphibians and reptiles are expected to use habitats in the site. No reptiles or amphibians were observed during the recent survey. Common species such as western fence lizard (*Sceloporus occidentalis*) and Pacific chorus frog (*Pseudacris regilla*) may occur in the site.

WATERS OF THE U.S. AND WETLANDS: Waters of the U.S., including wetlands, are broadly defined under 33 Code of Federal Regulations (CFR) 328 to include navigable waterways, their tributaries, and adjacent wetlands. State and federal agencies regulate these habitats and Section 404 of the Clean Water Act requires that a permit be secured prior to the discharge of dredged or fill materials into any waters of the U.S., including wetlands. Both CDFW and ACOE have jurisdiction over modifications to riverbanks, lakes, stream channels and other wetland features.

"Waters of the U.S.", as defined in 33 CFR 328.4, encompasses Territorial Seas, Tidal Waters, and Non-Tidal Waters; Non-Tidal Waters includes interstate and intrastate rivers and streams, as well as their tributaries. The limit of federal jurisdiction of Non-Tidal Waters of the U.S. extends to the "ordinary high water mark". The ordinary high water mark is established by physical characteristics such as a natural water line impressed on the bank, presence of shelves, destruction of terrestrial vegetation, or the presence of litter and debris.

Jurisdictional wetlands and Waters of the U.S. include, but are not limited to, perennial and intermittent creeks and drainages, lakes, seeps, and springs; emergent marshes; riparian wetlands; and seasonal wetlands. Wetlands and Waters of the U.S. provide critical habitat components, such as nest sites and a reliable source of water, for a wide variety of wildlife species.

No potentially jurisdictional wetlands or Waters of the U.S. were observed in the site. The site consists of upland grassland habitats that are highly disturbed.

Interestingly, a small creek that is piped under the neighborhoods to the north of the overall 5+/- acre parcel daylights along the east side of 4th Street West, just east of and across the street from the north part of the Sonoma Valley Hospital parking lot. The creek flows east between residential subdivisions, drains into Schell Creek, and eventually drains in to Sonoma Creek several miles south of the site. Development of the project for residential uses, and completion of road improvements along Hayes Street and 4th Street West will not involve any work in this off-site creek.

SPECIAL-STATUS SPECIES: Special-status species are plants and animals that are legally protected under the state and/or federal Endangered Species Act or other regulations. The Federal Endangered Species Act (FESA) of 1973 declares that all federal departments and agencies shall utilize their authority to conserve endangered and threatened plant and animal species. The California

Endangered Species Act (CESA) of 1984 parallels the policies of FESA and pertains to native California species.

Special-status species also include other species that are considered rare enough by the scientific community and trustee agencies to warrant special consideration, particularly with regard to protection of isolated populations, nesting or denning locations, communal roosts, and other essential habitat. The presence of species with legal protection under the Endangered Species Act often represents a major constraint to development, particularly when the species are wide-ranging or highly sensitive to habitat disturbance and where proposed development would result in a take of these species.

Special-status plants are those which are designated rare, threatened, or endangered and candidate species for listing by the USFWS. Special-status plants also include species considered rare or endangered under the conditions of Section 15380 of the California Environmental Quality Act Guidelines, such as those plant species identified on Lists 1A, 1B and 2 in the Inventory of Rare and Endangered Vascular Plants of California (CNPS, 2017). Finally, special-status plants may include other species that are considered sensitive or of special concern due to limited distribution or lack of adequate information to permit listing or rejection for state or federal status, such as those included on CNPS List 3.

The likelihood of occurrence of listed, candidate, and other special-status species in the site is generally low. Table 1 provides a summary of the listing status and habitat requirements of special-status species that have been documented in the greater project vicinity or for which there is potentially suitable habitat in the greater project vicinity. This table also includes an assessment of the likelihood of occurrence of each of these species in the site. The evaluation of the potential for occurrence of each species is based on the distribution of regional occurrences (if any), habitat suitability, and field observations.

TABLE 1
SPECIAL-STATUS PLANT AND WILDLIFE SPECIES DOCUMENTED OR POTENTIALLY-OCCURRING IN THE PROJECT VICINITY

Common Name	Scientific Name	Federal Status ¹	State Status ²	CNPS List ³	Habitat	Potential for Occurrence in the Project Site
PLANTS Franciscan onion	Allium peninsulare var. franciscanum	None	None	1B	Valley and foothill grassland, cismontane woodland.	Unlikely: the site is highly disturbed and does not provide suitable habitat for Franciscan onion. The nearest occurrence of this species in the CNDDB (2017) search area is approximately 1 mile northeast of the site.
Napa false indigo	Amorpha californica var. napensis	None	None	1B	Broadleafed upland forest, chaparral, cismontane woodland.	Unlikely: the site does not provide suitable habitat for this species. The nearest occurrence of Napa false indigo in the CNDDB (2017) search area is approximately 2.5 miles northeast of the site.
Big-scale balsamroot	Balsamorhiza macrolepis var. macrolepis	None	None	1B	Chaparral, valley and foothill grassland, cismontane woodland.	Unlikely: the site does not provide suitable habitat for big-scale balsamroot; the site is also below the elevation range of this species (CNPS, 2017). The nearest occurrence of this species in the CNDDB (2017) search area is an undated record with its exact location unknown and mapped nonspecifically.
Sonoma sunshine	Blennosperma bakeri	Е	Е	1B	Vernal pools, valley and foothill grassland.	Unlikely: the upland grassland in the site do not provide suitable habitat for Sonoma sunshine. The nearest occurrence of this species in the CNDDB (2017) search area is a historical record mapped non-specifically in the vicinity of Sonoma. The CNDDB describes this population as "extirpated" (i.e., it no longer exists) and notes that no habitat remains for this species in the vicinity of Sonoma.
Narrow- anthered California brodiaea	Brodiaea californica var. leptandra	None	None	1B	Broadleafed upland forest, chaparral, lower montane coniferous forest.	Unlikely: the site does not provide suitable habitat for narrow-anthered California brodiaea; the site is also below the elevation range of this species (CNPS, 2017). The nearest occurrence of narrow-anthered California brodiaea in the CNDDB (2017) search area is approximately 1 mile northeast of the site.

TABLE 1
SPECIAL-STATUS PLANT AND WILDLIFE SPECIES DOCUMENTED OR POTENTIALLY-OCCURRING IN THE PROJECT VICINITY

Common Name	Scientific Name	Federal Status ¹	State Status ²	CNPS List ³	Habitat	Potential for Occurrence in the Project Site
Rincon Ridge ceanothus	Ceanothus confusus	None	None	1B	Closed-cone coniferous forest, chaparral, cismontane woodland.	Unlikely: the site does not provide suitable habitat for Rincon Ridge ceanothus. The nearest occurrence of this species in the CNDDB (2017) search area is approximately 3.5 miles southeast of the site.
Sonoma ceanothus	Ceanothus sonomensis	None	None	1B	Chaparral on sandy serpentine or volcanic soils.	Unlikely: the site does not provide suitable habitat for Sonoma ceanothus. The nearest occurrence of this species in the CNDDB (2017) search area is approximately 4 miles northeast of the site.
Dwarf downingia	Downingia pusilla	None	None	2	Vernal pools.	Unlikely: there are no vernal pools or seasonal wetlands in the site. The nearest occurrence of dwarf downingia in the CNDDB (2017) search area is approximately 2 miles west of the site.
Fragrant fritillary	Fritillaria liliacea	None	None	1B	Coastal scrub, valley and foothill grassland and coastal prairie; often serpentine soils.	Unlikely: the site does not provide suitable habitat for fragrant fritillary. The nearest occurrence of this species in the CNDDB (2017) search area is approximately 2 miles southwest of the site.
Congested- headed hayfield tarplant	Hemizonia congesta ssp. congesta	None	None	1B	Valley and foothill grassland.	Unlikely: the site does not provide suitable habitat for congested-headed hayfield tarplant. The nearest occurrence of this species in the CNDDB (2017) search area is one historical record from 1909 mapped nonspecifically in a broad area just south of the site.
Thin-lobed horkelia	Horkelia tenuiloba	None	None	1B	Broadleafed upland forest, chaparral, valley and foothill grassland.	Unlikely: the site does not provide suitable habitat for thin-lobed horkelia. The nearest occurrence of this species in the CNDDB (2017) search area is approximately 4 miles northeast of the site.
Legenere	Legenere limosa	None	None	1B	Vernal pools.	Unlikely: there are no vernal pools or seasonal wetlands in the project site. The nearest occurrence of this species in the CNDDB (2017) search area is approximately 8 miles northwest of the project site.

TABLE 1
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Common Name	Scientific Name	Federal Status ¹	State Status ²	CNPS List ³	Habitat	Potential for Occurrence in the Project Site
Jepson's leptosiphon	Leptosiphon jepsonii	None	None	1B	Chaparral, cismontane woodlanf.	Unlikely: the site does not provide suitable habitat for Jepson's leptosiphon. The nearest occurrence of this species in the CNDDB (2017) search area is approximately 6 miles northwest of the site.
Cobb Mountain lupine	Lupinus sericatus	None	None	1B	Chaparral, cismontane woodland, lower montane coniferous forest.	Unlikely: the site does not provide suitable habitat for Cobb Mountain lupine; the site is also below the elevation range of this species (CNPS, 2017). The nearest occurrence of Cobb Mountain lupine in the CNDDB (2017) search area is approximately 4.5 miles northeast of the site.
Oval-leaved viburnum	Viburnum ellipticum	None	None	2	Chaparral, cismontane woodland, and lower montane coniferous forest.	Unlikely: the site does not contain suitable habitat for this species. The site is also well below the known elevation range of oval-leaved viburnum (CNPS, 2017). The nearest occurrence of this species in the CNDDB (2017) search area is in a broad area just northeast of the site.
WILDLIFE Birds						
Northern spotted owl	Strix occidentalis caurina	Т	Т	N/A	Mixed aged stands of old growth and mature trees; usually damp, dense, shaded forests. Occasionally found in younger forests.	Unlikely: the site does not provide suitable habitat for this species. There are no occurrences of northern spotted owl in the CNDDB (2017) search area.
Western yellow-billed cuckoo	Coccyzus americanus occidentalis	Т	Е	N/A	Nests in riparian forests, along the broad, lower flood-bottoms of larger river systems.	Unlikely: the site does not provide suitable habitat for this species. The nearest occurrence of western yellow-billed cuckoo in the CNDDB (2017) search area is approximately 8 miles northwest of the site.
White-tailed kite	Elanus leucurus	None	FP	N/A	Herbaceous lowlands with variable tree growth and dense population of voles.	Unlikely: white-tailed kite is unlikely to occur in such an urban setting. The nearest occurrence of white-tailed kite in the CNDDB (2017) search area is approximately 6.5 miles northwest of the site.

TABLE 1
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Common Name	Scientific Name	Federal Status ¹	State Status ²	CNPS List ³	Habitat	Potential for Occurrence in the Project Site
Bank swallow	Riparia riparia	None	T	N/A	Nests colonially in riparian habitats; requires vertical banks and cliffs with finetextured soils.	Unlikely: there is no suitable nesting habitat for bank swallows in the project site. The only occurrence of this species in the CNDDB (2017) search area is approximately 1 mile south of the project site.
Burrowing owl	Athene cunicularia	None	SC	N/A	Grasslands, deserts and scrubland; subterranean nester, dependent upon burrowing mammals.	Unlikely: no burrowing owls, evidence of past occupancy by owls, ground squirrels, or ground squirrel burrows were observed in the site during the recent field survey. The nearest occurrence of burrowing owls in the CNDDB (2017) search area is approximately 7 miles northwest of the site.
San Pablo song sparrow	Melospiza melodia samuelis	None	SC	N/A	Salt marshes bordering the north side of San Francisco Bay and San Pablo Bay.	Unlikely: the project site does not contain suitable marsh habitat for this species. This species may fly over the site on occasion. The closest occurrence of San Pablo song sparrow in the CNDDB (2017) search area is approximately 2 miles southeast of the site.
Golden eagle	Aquila chrysaetos	None	FP	N/A	Nesting areas are associated with cliff-walled canyons and large trees. Forages in rolling hills and mountain areas.	Unlikely: the trees within the site provide poor quality nesting habitat for golden eagles, as they prefer ledges on cliff walls or very large trees and isolated from any type of disturbance. The nearest occurrence of golden eagle in the CNDDB (2017) search area is approximately 6.5 miles northwest of the site.
Black swift	Cypseloides niger	None	SC	N/A	Breeds in small colonies on cliffs behind or adjacent to waterfalls in deep canyons and sea bluffs above the surf; forages widely.	Unlikely: the project site does not contain suitable marsh habitat for this species. This species may fly over the site on occasion. The closest occurrence of black swift in the CNDDB (2017) search area is approximately 6 miles northeast of the site.
Grasshopper sparrow	Ammodramus savannarum	None	SC	N/A	Occurs primarily in dry densely vegetated grasslands in the eastern San Joaquin Valley and coastal foothills.	Unlikely: the project site does not contain suitable habitat for grasshopper sparrow. This species may fly over the site on occasion. The closest occurrence of grasshopper sparrow in the CNDDB (2017) search area is approximately 8 miles northwest of the site.

TABLE 1
SPECIAL-STATUS PLANT AND WILDLIFE SPECIES DOCUMENTED OR POTENTIALLY-OCCURRING IN THE PROJECT VICINITY

Common Name	Scientific Name	Federal Status ¹	State Status ²	CNPS List ³	Habitat	Potential for Occurrence in the Project Site
Yellow rail	Coturnicops noveboracensis	None	SC	N/A	Fresh water marshlands, summer residence in eastern Sierra Nevada in Mono County.	Unlikely: the site does not provide suitable habitat for this species. The nearest occurrence of western yellow rail in the CNDDB (2017) search area is an historical (1898) record mapped nonspecifically in the vicinity of Sonoma.
Mammals						·
American badger	Taxidea taxus	None	SC	N/A	A variety of habitat types with friable soils for digging.	Unlikely: the site does not contain burrow habitat for this species; no evidence of American badger was observed in the site. The nearest occurrence of this species in the CNDDB (2017) search area is approximately 6 miles northwest of the site.
Pallid bat	Antrozous pallidus	None	SC	N/A	Open and dry habitats with rocky areas for roosting.	Unlikely: pallid bat may fly over, forage, or roost in the site on occasion. The nearest occurrence of this species in the CNDDB (2017) search area is approximately 1.5 miles south of the site.
Salt-marsh harvest mouse	Reithrodontomys raviventris	E	E	N/A	Saline emergent wetlands dominated by pickleweed.	Unlikely: the project site does not contain suitable emergent wetland habitat for this species. There are no occurrences of the Salt-marsh harvest mouse recorded in the CNDDB (2017) in the search area.
Reptiles & Am	phibians					
California tiger salamander	Ambystoma californiense	Т	Т	N/A	Seasonal water bodies without fish (i.e., vernal pools and stock ponds) and grassland/ woodland habitats with summer refugia (i.e., burrows).	Unlikely: there is no suitable California tiger salamander breeding habitat in or near the site. The nearest occurrence of this species in the CNDDB (2017) search area is 8+/- miles southwest of the site. The site is not within designated critical habitat for California tiger salamander (USFWS, 2011).
California red- legged frog	Rana aurora draytonii	Т	SC	N/A	Lowlands and foothills in or near permanent sources of deep water with dense, shrubby or emergent riparian vegetation.	Unlikely: there is no suitable aquatic habitat for California red-legged frog in the project site. The nearest occurrence of this species in the CNDDB (2017) search area is approximately 6.5 miles northwest of the site. The site is not within designated critical habitat for California red-legged frog (USFWS, 2006).

TABLE 1
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Common Name	Scientific Name	Federal Status ¹	State Status ²	CNPS List ³	Habitat	Potential for Occurrence in the Project Site
Foothill yellow- legged frog	Rana boylii	None	SC	N/A	Rocky perennial streams in the Sierra and coastal foothills.	Unlikely: the site does not provide suitable habitat for foothill yellow-legged frog. The nearest occurrence of this species in the CNDDB (2017) search area is approximately 2.5 miles northwest of the site.
Western pond turtle	Emys marmorata	None	SC	N/A	Ponds, marshes, streams, and ditches with emergent aquatic vegetation and basking areas.	Unlikely: the site does not provide suitable habitat for western pond turtle. The nearest occurrence of this species in the CNDDB (2017) search area is approximately 2 miles southeast of the site.
Green sea turtle	Chelonia mydas	Т	None	N/A	Tropical and subtropical waters along continental coasts.	Unlikely: the site does not provide suitable habitat for this species. There are no occurrences of green sea turtle recorded in the CNDDB (2017) in the search area.
Red-bellied newt	Taricha rivularis	None	SC	N/A	Coastal forests; breeds in streams	Unlikely: the site does not provide suitable habitat for this species. The nearest occurrence of this species in the CNDDB (2017) is a historical record (1977) mapped nonspecifically in the vicinity of Sonoma approximately 5 miles northwest of the site.
California giant salamander	Dicamptodon ensatus	None	SC	N/A	Coastal forests; breeds in streams.	Unlikely: there is no suitable breeding habitat within or near the site for pacific giant salamander. The nearest occurrence of this species in the CNDDB (2017) search area is approximately 1 mile northwest of the site.
Fish						
Steelhead - central California coast DPS	Oncorhynchus mykiss irideus pop. 8	Т	None	N/A	Riffle and pool complexes with adequate spawning substrates within Central Valley drainages.	Unlikely: there is no aquatic habitat in the site. The nearest occurrence of Central Valley steelhead in the CNDDB (2017) search area is approximately 3 miles west of the site. The site is not within designated critical habitat for Central California coast steelhead (NOAA, 2005).

TABLE 1
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Common Name	Scientific Name	Federal Status ¹	State Status ²	CNPS List ³	Habitat	Potential for Occurrence in the Project Site
Delta smelt	Hypomesus transpacificus	T	T	N/A	Shallow lower delta waterways with submersed aquatic plants and other suitable refugia.	Unlikely: there is no suitable aquatic habitat in the site. There are no occurrences of this species in the CNDDB (2017) search area. The site is not within designated critical habitat for delta smelt (USFWS, 1994).
Invertebrates						,
San Bruno elfin butterfly	Incisalia mossii bayensis	E	None	N/A	Rocky outcrops and cliffs in coastal scrub habitats.	Unlikely: the site does not provide suitable habitat for this species. There are no occurrences of San Bruno elfin butterfly recorded in the CNDDB (2017) in the search area.
California freshwater shrimp	Syncaris pacifica	E	None	N/A	Low-elevation perennial streams in the northern Bay Area.	Unlikely: there is no aquatic habitat in the site. The nearest occurrence of California freshwater shrimp in the CNDDB (2017) search area is approximately 1 mile northwest of the site.

¹ T= Threatened; E = Endangered.

² T = Threatened; E = Endangered; FP = State of California Fully Protected Species; SC = State of California Species of Special Concern.

³ CNPS List 1B includes species that are rare, threatened, or endangered in California and elsewhere; List 2 includes plants that are rare, threatened or endangered in California but are more common elsewhere.

SPECIAL-STATUS PLANTS: Fifteen (15) species of special-status plants were identified in the CNDDB (2017) search: Franciscan onion (*Allium peninsulare var. franciscanum*), Napa false indigo (*Amorpha californica var. napensis*), big-scale balsamroot (*Balsamorhiza macrolepis var. macrolepis*), Sonoma sunshine (*Blennosperma bakeri*), narrow-anthered California brodiaea (*Brodiaea californica var, leptandra*), Rincon Ridge ceanothus (*Ceanothus confusus*), Sonoma ceanothus (*Ceanothus sonomensis*), dwarf downingia (*Downingia pusilla*), fragrant frittilary (*Fritillaria liliacea*), congested-headed hayfield tarplant (*Hemizonia congesta ssp. congesta*), thin-lobed horkelia (*Horkelia tenuiloba*), legenere (*Legenere limosa*), Jepson's leptosiphon (*Leptosiphon jepsonii*), Cobb Mountain lupine (*Lupinus sericatus*), and oval-leaved viburnum (*Viburnum ellipticum*). (Table 1 and Attachment A). Sonoma sunshine is the only special-status plant in the USFWS IPaC Trust Report.

No special-status plants or suitable habitat for special-status plants were observed in the site. Special-status plants generally occur in relatively undisturbed areas in vegetation communities such as chaparral, vernal pools, marshes and swamps, seasonal wetlands, woodlands, and areas with unusual soils. Most of the species in Table 1 occur in one of these unique habitat types that are not present on-site. In contrast, the site is disturbed upland grassland that is not suitable for any special-status plant species. Due to lack of suitable habitat, it is unlikely that special-status plants occur in the site.

SPECIAL-STATUS WILDLIFE: The potential for intensive use of the site by special-status wildlife species is low. Special-status wildlife species recorded in project area in the CNDDB (2017) query include northern spotted owl (*Strix occidentalis caurina*) western yellow-billed cuckoo (*Coccyzus americanus occidentalis*), white-tailed kite (*Elanus leucurus*), bank swallow (*Riparia riparia*), burrowing owl, San Pablo song sparrow (*Melospiza melodia samuelis*), golden eagle (*Aquila chrysaetos*), black swift (*Cypseloides niger*), grasshopper sparrow (*Ammodramus savannarum*), yellow rail (*Coturnicops noveboracensis*), American badger (*Taxidea taxus*), pallid bat (*Antrozous pallidus*), California tiger

salamander (*Ambystoma californiense*), California red-legged frog (*Rana auroura draytonii*), foothill yellow-legged frog (*Rana boylii*), western pond turtle (*Emys marmorata*), red-bellied newt (*Taricha rivularis*), California giant salamander (*Dicamptodon ensatus*), Central Coast steelhead (*Oncorhynchus mykiss*), and California freshwater shrimp (*Syncaris pacifica*). Salt-marsh harvest mouse (*Reithrodontomys raviventris*), green sea turtle (*Chelonia mydas*), San Bruno elfin butterfly (*Callophrys mossii bayensis*) and delta smelt (*Hypomesus transpacificus*) are not recorded in the CNDDB (2015) within the search area, but are on the USFWS IPaC Trust Report (Attachment B).

While the project site may have provided habitat for special-status wildlife species at some time in the past, development has substantially modified natural habitats in the greater project vicinity, including those within the site. None of the wildlife species identified in the CNDDB have the potential to occur in the site on more than a transitory or very occasional basis. Special-status birds may fly over the area on occasion, but would not be expected to nest in the project site. Special-status bats may also fly over the area on occasion, but would not be expected to roost in the site.

The site does not provide aquatic habitat for Central Coast steelhead, delta smelt, any other species of special-status fish, or California freshwater shrimp. The site also does not provide aquatic habitat required by California red-legged frog, foothill yellow-legged frog, California tiger salamander, California giant salamander, red-bellied newt, green sea turtle, or western pond turtle. The site does not provide suitable denning habitat for American badger and there is no coastal scrub habitat in the site for San Bruno elfin butterfly.

CRITICAL HABITAT: The site is not in designated critical habitat of any federally listed species (Attachment D). There is a polygon of designated critical habitat for California red-legged frog (USFWS, 2006) several miles west of the site a polygon of designated critical habitat for Northern spotted owl (USFWS, 2012) a

few miles northeast of the site (Attachment D). Several rivers and creeks in the area are designated critical habitat for Central Coast steelhead (NOAA, 2005).

Conclusions and Recommendations

- The site is disturbed upland grasslands, an old gravel parking area, and a single walnut tree. There are no sensitive habitats in the site; the site is biologically unremarkable.
- There are no potentially jurisdictional Waters of the U.S. or wetlands in the site.
- Due to a lack of suitable habitat, it is unlikely that special-status plants occur in the site.
- Due to a lack of suitable habitat and location in an urban setting, no special-status wildlife species are expected to occur in or near the site on more than an occasional basis.
- The site is not within designated critical habitat for any federally listed species.
- The tree and grasslands in the site may be used by nesting birds protected by the Migratory Bird Treaty Act of 1918 and Fish and Game Code of California. If vegetation removal and/or project construction occurs between February 1 and August 31, a pre-construction nesting bird survey is recommended. If active nests are found within the survey area, vegetation removal and/or project construction should be delayed until a qualified biologist determines nesting is complete.

We hope this information is useful. Please call me at (209) 745-1159 with any questions.

Sincerely,

Diane S. Moore, M.S. Principal Biologist

References and Literature Consulted

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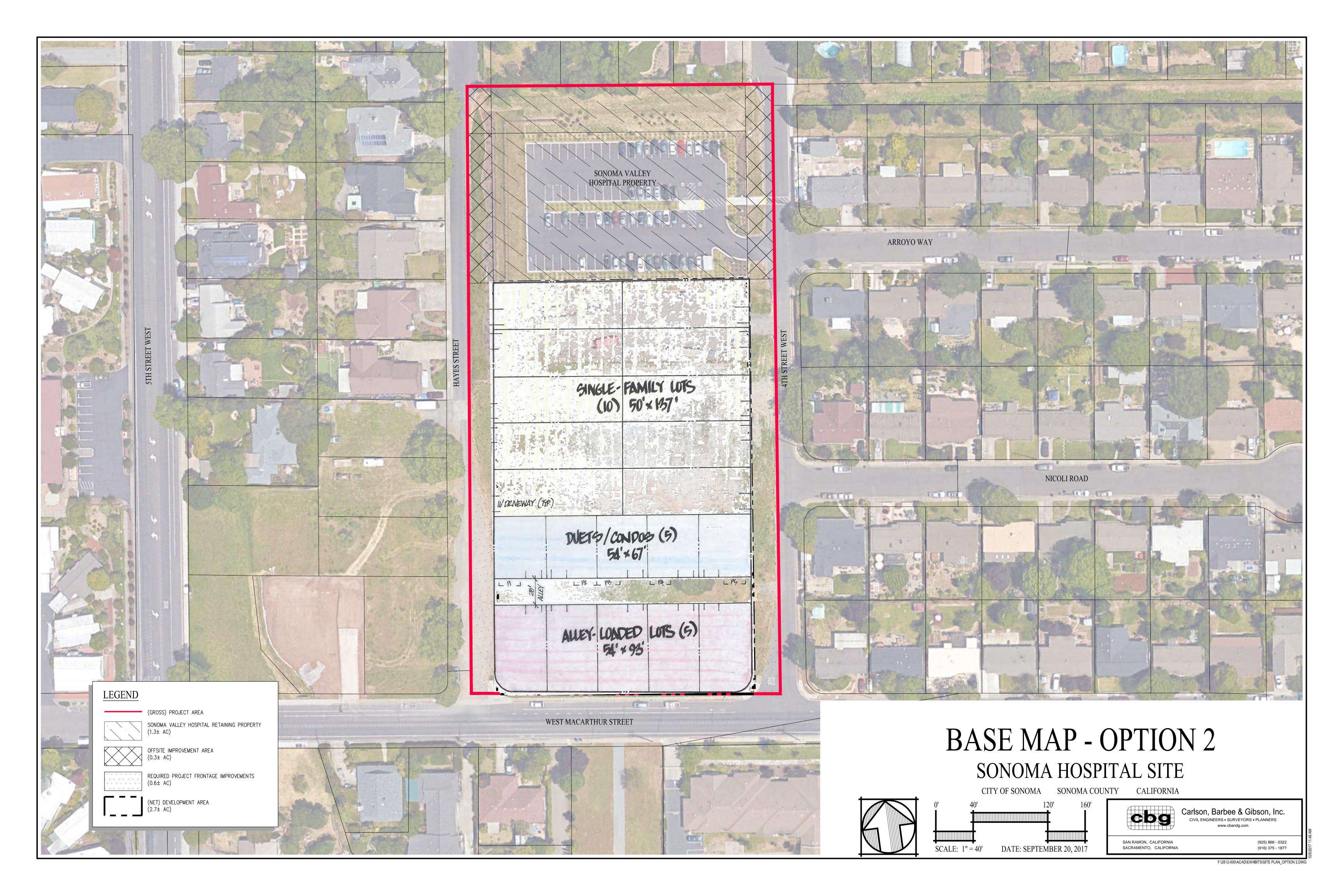
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Attachment A

Site Plan



Attachment B

CNDDB Summary Report and Exhibits

& USFWS IPaC Trust Resource Report



Selected Elements by Scientific Name

California Department of Fish and Wildlife California Natural Diversity Database



Query Criteria: Quad IS (Sonoma (3812234) OR Glen Ellen (3812235))

Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
Allium peninsulare var. franciscanum	PMLIL021R1	None	None	G5T1	S1	1B.2
Franciscan onion						
Ambystoma californiense	AAAAA01180	Threatened	Threatened	G2G3	S2S3	WL
California tiger salamander						
Ammodramus savannarum	ABPBXA0020	None	None	G5	S3	SSC
grasshopper sparrow						
Amorpha californica var. napensis	PDFAB08012	None	None	G4T2	S2	1B.2
Napa false indigo						
Antrozous pallidus	AMACC10010	None	None	G5	S3	SSC
pallid bat						
Aquila chrysaetos	ABNKC22010	None	None	G5	S3	FP
golden eagle						
Athene cunicularia	ABNSB10010	None	None	G4	S3	SSC
burrowing owl						
Balsamorhiza macrolepis	PDAST11061	None	None	G2	S2	1B.2
big-scale balsamroot						
Blennosperma bakeri	PDAST1A010	Endangered	Endangered	G1	S1	1B.1
Sonoma sunshine						
Bombus caliginosus	IIHYM24380	None	None	G4?	S1S2	
obscure bumble bee						
Bombus crotchii	IIHYM24480	None	None	G3G4	S1S2	
Crotch bumble bee						
Bombus occidentalis	IIHYM24250	None	None	G2G3	S1	
western bumble bee						
Brodiaea leptandra	PMLIL0C022	None	None	G3?	S3?	1B.2
narrow-anthered brodiaea						
Buteo regalis	ABNKC19120	None	None	G4	S3S4	WL
ferruginous hawk						
Caecidotea tomalensis	ICMAL01220	None	None	G2	S2S3	
Tomales isopod						
Ceanothus confusus	PDRHA04220	None	None	G1	S1	1B.1
Rincon Ridge ceanothus						
Ceanothus sonomensis	PDRHA04420	None	None	G2	S2	1B.2
Sonoma ceanothus						
Coccyzus americanus occidentalis western yellow-billed cuckoo	ABNRB02022	Threatened	Endangered	G5T2T3	S1	
Coturnicops noveboracensis	ABNME01010	None	None	G4	S1S2	SSC
yellow rail						
Cypseloides niger	ABNUA01010	None	None	G4	S2	SSC
black swift						



Selected Elements by Scientific Name

California Department of Fish and Wildlife California Natural Diversity Database



	-		a. . a. .	.	.	Rare Plant Rank/CDFW
Species	Element Code	Federal Status	State Status	Global Rank	State Rank	SSC or FP
Dicamptodon ensatus	AAAAH01020	None	None	G3	S2S3	SSC
California giant salamander	DD O A MOOO O O	Maria	Mana	011	00	00.0
Downingia pusilla	PDCAM060C0	None	None	GU	S2	2B.2
dwarf downingia	4.D.N.(.O.0.0.4.0.			0.5	2224	==
Elanus leucurus white-tailed kite	ABNKC06010	None	None	G5	S3S4	FP
	4 D 4 4 D 00000	Maria	Mana	0004	00	000
Emys marmorata	ARAAD02030	None	None	G3G4	S3	SSC
western pond turtle	ADDAT00044	Maria	Mana	05740	0.4	\A/I
Eremophila alpestris actia	ABPAT02011	None	None	G5T4Q	S4	WL
California horned lark	DM II 01/000			00	00	40.0
Fritillaria liliacea	PMLIL0V0C0	None	None	G2	S2	1B.2
fragrant fritillary						
Hemizonia congesta ssp. congesta	PDAST4R065	None	None	G5T1T2	S1S2	1B.2
congested-headed hayfield tarplant				_		
Horkelia tenuiloba	PDROS0W0E0	None	None	G2	S2	1B.2
thin-lobed horkelia						
Hydrochara rickseckeri	IICOL5V010	None	None	G2?	S2?	
Ricksecker's water scavenger beetle						
Legenere limosa	PDCAM0C010	None	None	G2	S2	1B.1
legenere						
Leptosiphon jepsonii	PDPLM09140	None	None	G3	S3	1B.2
Jepson's leptosiphon						
Lupinus sericatus	PDFAB2B3J0	None	None	G2?	S2?	1B.2
Cobb Mountain lupine						
Melospiza melodia samuelis	ABPBXA301W	None	None	G5T2	S2	SSC
San Pablo song sparrow						
Myotis thysanodes	AMACC01090	None	None	G4	S3	
fringed myotis						
Myotis volans	AMACC01110	None	None	G5	S3	
long-legged myotis						
Myotis yumanensis	AMACC01020	None	None	G5	S4	
Yuma myotis						
Northern Vernal Pool	CTT44100CA	None	None	G2	S2.1	
Northern Vernal Pool						
Oncorhynchus mykiss irideus pop. 8 steelhead - central California coast DPS	AFCHA0209G	Threatened	None	G5T2T3Q	S2S3	
Rana boylii	AAABH01050	None	Candidate	G3	S3	SSC
foothill yellow-legged frog			Threatened			
Rana draytonii	AAABH01022	Threatened	None	G2G3	S2S3	SSC
California red-legged frog						
Riparia riparia	ABPAU08010	None	Threatened	G5	S2	
bank swallow						



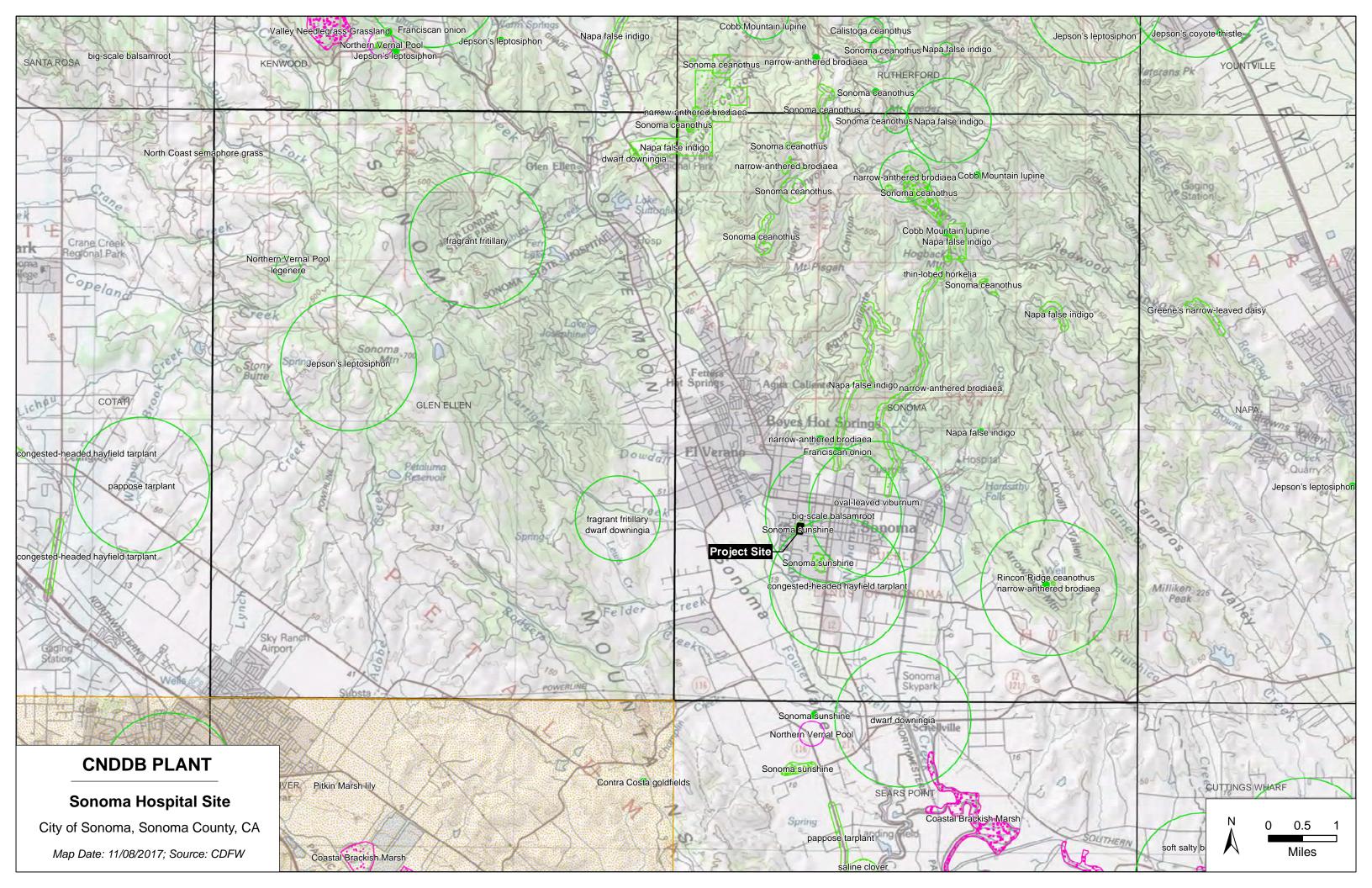
Selected Elements by Scientific Name

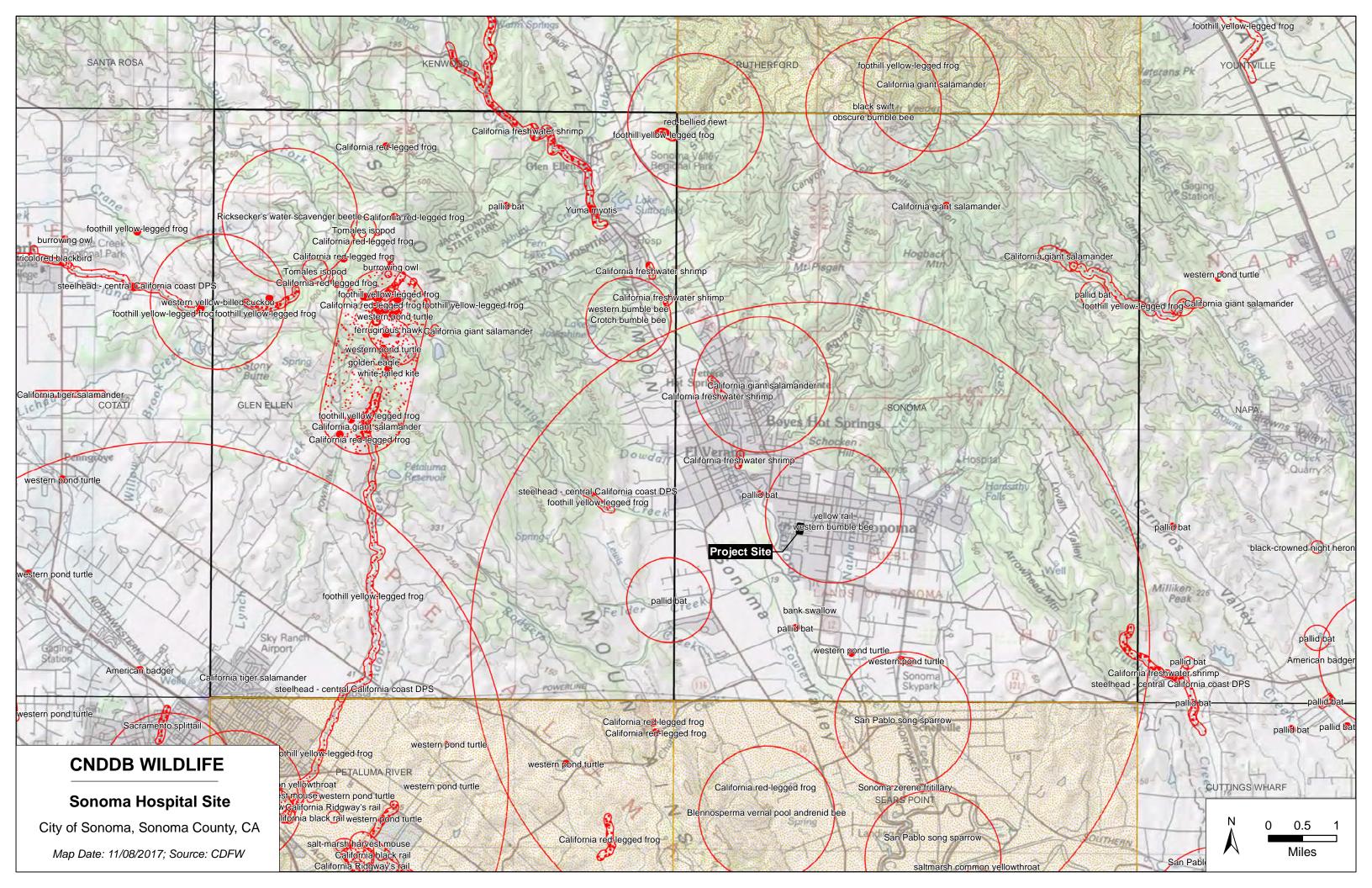
California Department of Fish and Wildlife California Natural Diversity Database



Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
Syncaris pacifica	ICMAL27010	Endangered	Endangered	G2	S2	
California freshwater shrimp						
Taricha rivularis	AAAAF02020	None	None	G4	S2	SSC
red-bellied newt						
Taxidea taxus	AMAJF04010	None	None	G5	S3	SSC
American badger						
Viburnum ellipticum	PDCPR07080	None	None	G4G5	S3?	2B.3
oval-leaved viburnum						

Record Count: 45





IPaC U.S. Fish & Wildlife Service

IPaC resource list

This report is an automatically generated list of species and other resources such as critical habitat (collectively referred to as *trust resources*) under the U.S. Fish and Wildlife Service's (USFWS) jurisdiction that are known or expected to be on or near the project area referenced below. The list may also include trust resources that occur outside of the project area, but that could potentially be directly or indirectly affected by activities in the project area. However, determining the likelihood and extent of effects a project may have on trust resources typically requires gathering additional site-specific (e.g., vegetation/species surveys) and project-specific (e.g., magnitude and timing of proposed activities) information.

Below is a summary of the project information you provided and contact information for the USFWS office(s) with jurisdiction in the defined project area. Please read the introduction to each section that follows (Endangered Species, Migratory Birds, USFWS Facilities, and NWI Wetlands) for additional information applicable to the trust resources addressed in that section.

2 CONSULTI

Location

Sonoma County, California



Local office

Sacramento Fish And Wildlife Office

4 (916) 414-6600

(916) 414-6713

Federal Building 2800 Cottage Way, Room W-2605 Sacramento, CA 95825-1846

Endangered species

This resource list is for informational purposes only and does not constitute an analysis of project level impacts.

The primary information used to generate this list is the known or expected range of each species. Additional areas of influence (AOI) for species are also considered. An AOI includes areas outside of the species range if the species could be indirectly affected by activities in that area (e.g., placing a dam upstream of a fish population, even if that fish does not occur at the dam site, may indirectly impact the species by reducing or eliminating water flow downstream). Because species can move, and site conditions can change, the species on this list are not guaranteed to be found on or near the project area. To fully determine any potential effects to species, additional site-specific and project-specific information is often required.

Section 7 of the Endangered Species Act **requires** Federal agencies to "request of the Secretary information whether any species which is listed or proposed to be listed may be present in the area of such proposed action" for any project that is conducted, permitted, funded, or licensed by any Federal agency. A letter from the local office and a species list which fulfills this requirement can **only** be obtained by requesting an official species list from either the Regulatory Review section in IPaC (see directions below) or from the local field office directly.

For project evaluations that require USFWS concurrence/review, please return to the IPaC website and request an official species list by doing the following:

- 1. Draw the project location and click CONTINUE.
- 2. Click DEFINE PROJECT.
- 3. Log in (if directed to do so).
- 4. Provide a name and description for your project.
- 5. Click REQUEST SPECIES LIST.

Listed species are managed by the <u>Ecological Services Program</u> of the U.S. Fish and Wildlife Service.

1. Species listed under the <u>Endangered Species Act</u> are threatened or endangered; IPaC also shows species that are candidates, or proposed, for listing. See the <u>listing status page</u> for more information.

The following species are potentially affected by activities in this location:

Mammals

NAME	~	STATUS
Salt Marsh Harvest Mouse Reithrodontomys raviventris No critical habitat has been designated for this species.	U	Endangered
https://ecos.fws.gov/ecn/species/613		

Birds

NAME		STATUS
Northern Spotted Owl Str There is final critical habit	ix occidentalis caurina at for this species. Your location is outside the critical habitat.	Threatened
https://osos.fus.gov/osp/s	nosins/1122	

Reptiles

NAME	STATUS
Green Sea Turtle Chelonia mydas	Threatened
No critical habitat has been designated for this species.	

https://ecos.fws.gov/ecp/species/6199

Amphibians

NAME	STATUS
California Red-legged Frog Rana draytonii	Threatened
There is final critical habitat for this species. Your location is outside the critical habitat.	

https://ecos.fws.gov/ecp/species/2891

Fishes

1131163	
NAME	STATUS

Delta Smelt Hypomesus transpacificus

There is **final** critical habitat for this species. Your location is outside the critical habitat.

https://ecos.fws.gov/ecp/species/321

Insects

NAME STATUS

San Bruno Elfin Butterfly Callophrys mossii bayensis

Endangered

Threatened

There is **proposed** critical habitat for this species. The location of the critical habitat is not available.

https://ecos.fws.gov/ecp/species/3394

Crustaceans

NAME STATUS

California Freshwater Shrimp Syncaris pacifica

Endangered

No critical habitat has been designated for this species.

No critical habitat has been designated for this species.

https://ecos.fws.gov/ecp/species/7903

Flowering Plants

NAME	STATUS
Sonoma Sunshine Blennosperma bakeri	Endangered

https://ecos.fws.gov/ecp/species/1260

Critical habitats

Potential effects to critical habitat(s) in this location must be analyzed along with the endangered species themselves.

THERE ARE NO CRITICAL HABITATS AT THIS LOCATION.

Migratory birds

Certain birds are protected under the Migratory Bird Treaty Act¹ and the Bald and Golden Eagle Protection Act².

Any activity that results in the take (to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct) of migratory birds or eagles is prohibited unless authorized by the U.S. Fish and Wildlife Service³. There are no provisions for allowing the take of migratory birds that are unintentionally killed or injured. Any person or organization who plans or conducts activities that may result in the take of migratory birds is responsible for complying with the appropriate regulations and implementing appropriate conservation measures, as described below.

- 1. The Migratory Birds Treaty Act of 1918.
- 2. The Bald and Golden Eagle Protection Act of 1940.
- 3. 50 C.F.R. Sec. 10.12 and 16 U.S.C. Sec. 668(a)

Additional information can be found using the following links:

- Birds of Conservation Concern http://www.fws.gov/birds/management/managed-species/birds-of-conservation-concern.php
- Measures for avoiding and minimizing impacts to birds http://www.fws.gov/birds/management/project-assessment-tools-and-guidance/conservation-measures.php
- Nationwide conservation measures for birds http://www.fws.gov/migratorybirds/pdf/management/nationwidestandardconservationmeasures.pdf

The birds listed below are <u>USFWS Birds of Conservation Concern</u> that might be affected by activities in this location. The list does not contain every bird you may find in this location, nor is it guaranteed that all of the birds on the list will be found on or near this location. To get a better idea of the specific locations where certain species have been reported and their level of occurrence, please refer to resources such as the <u>E-bird data mapping tool</u> (year-round bird sightings by birders and the general public) and <u>Breeding Bird Survey</u> (relative abundance maps for breeding birds). Although it is important to try to avoid and minimize impacts to all birds, special attention should be given to the birds on the list below. To get a list of all birds potentially present in your project area, visit the <u>E-bird Explore Data Tool</u>.

NAME BREEDING SEASON

Allen's Hummingbird Selasphorus sasin https://ecos.fws.gov/ecp/species/9637	Breeds Feb 1 to Jul 15
Ashy Storm-petrel Oceanodroma homochroa https://ecos.fws.gov/ecp/species/7237	Breeds May 1 to Jan 15
Black Oystercatcher Haematopus bachmani https://ecos.fws.gov/ecp/species/9591	Breeds Apr 15 to Oct 31
Black Rail Laterallus jamaicensis https://ecos.fws.gov/ecp/species/7717	Breeds Mar 1 to Sep 15
Black Swift Cypseloides niger https://ecos.fws.gov/ecp/species/8878	Breeds Jun 15 to Sep 10
Black Turnstone Arenaria melanocephala	Breeds elsewhere
Burrowing Owl Athene cunicularia https://ecos.fws.gov/ecp/species/9737	Breeds Mar 15 to Aug 31
California Spotted Owl Strix occidentalis occidentalis https://ecos.fws.gov/ecp/species/7266	Breeds Mar 10 to Jun 15
California Thrasher Toxostoma redivivum	Breeds Jan 1 to Jul 31
Clark's Grebe Aechmophorus clarkii	Breeds Jan 1 to Dec 31
Common Yellowthroat Geothlypis trichas sinuosa https://ecos.fws.gov/ecp/species/2084	Breeds May 20 to Jul 31
Lawrence's Goldfinch Carduelis lawrencei https://ecos.fws.gov/ecp/species/9464	Breeds Mar 20 to Sep 20
Lewis's Woodpecker Melanerpes lewis https://ecos.fws.gov/ecp/species/9408	Breeds Apr 20 to Sep 30
Long-billed Curlew Numenius americanus https://ecos.fws.gov/ecp/species/5511	Breeds elsewhere
Marbled Godwit Limosa fedoa https://ecos.fws.gov/ecp/species/9481	Breeds elsewhere
Nuttall's Woodpecker Picoides nuttallii https://ecos.fws.gov/ecp/species/9410	Breeds Apr 1 to Jul 20
Oak Titmouse Baeolophus inornatus https://ecos.fws.gov/ecp/species/9656	Breeds Mar 15 to Jul 15
Red Knot Calidris canutus ssp. roselaari https://ecos.fws.gov/ecp/species/8880	Breeds elsewhere
Rufous Hummingbird selasphorus rufus https://ecos.fws.gov/ecp/species/8002	Breeds elsewhere
Short-billed Dowitcher Limnodromus griseus https://ecos.fws.gov/ecp/species/9480	Breeds elsewhere
Snowy Plover Charadrius alexandrinus	Breeds Mar 5 to Sep 15

Song Sparrow Melospiza melodia maxillaris https://ecos.fws.gov/ecp/species/7716 Breeds Feb 20 to Sep 5

Spotted Towhee Pipilo maculatus clementae https://ecos.fws.gov/ecp/species/4243

Breeds Apr 15 to Jul 20

Tricolored Blackbird Agelaius tricolor https://ecos.fws.gov/ecp/species/3910 Breeds Mar 15 to Aug 10

Whimbrel Numenius phaeopus https://ecos.fws.gov/ecp/species/9483 Breeds elsewhere

Willet Tringa semipalmata

Breeds elsewhere

Wrentit Chamaea fasciata

Breeds Mar 15 to Aug 10

Probability of Presence Summary

The graphs below provide our best understanding of when birds of concern are most likely to be present in your project area. This information can be used to tailor and schedule your project activities to avoid or minimize impacts to birds.

Probability of Presence (■)

Each green bar represents the bird's relative probability of presence in your project's counties during a particular week of the year. (A year is represented as 12 4-week months.) A taller bar indicates a higher probability of species presence. The survey effort (see below) can be used to establish a level of confidence in the presence score. One can have higher confidence in the presence score if the corresponding survey effort is also high.

How is the probability of presence score calculated? The calculation is done in three steps:

- 1. The probability of presence for each week is calculated as the number of survey events in the week where the species was detected divided by the total number of survey events for that week. For example, if in week 12 there were 20 survey events and the Spotted Towhee was found in 5 of them, the probability of presence of the Spotted Towhee in week 12 is 0.25.
- 2. To properly present the pattern of presence across the year, the relative probability of presence is calculated. This is the probability of presence divided by the maximum probability of presence across all weeks. For example, imagine the probability of presence in week 20 for the Spotted Towhee is 0.05, and that the probability of presence at week 12 (0.25) is the maximum of any week of the year. The relative probability of presence on week 12 is 0.25/0.25 = 1; at week 20 it is 0.05/0.25 = 0.2.
- 3. The relative probability of presence calculated in the previous step undergoes a statistical conversion so that all possible values fall between 0 and 10, inclusive. This is the probability of presence score.

To see a bar's probability of presence score, simply hover your mouse cursor over the bar.

Breeding Season (

Yellow bars denote when the bird breeds in the Bird Conservation Region(s) in which your project lies. If there are no yellow bars shown for a bird, it does not breed in your project area.

Survey Effort (I)

Vertical black lines superimposed on probability of presence bars indicate the number of surveys performed for that species in the counties of your project area. The number of surveys is expressed as a range, for example, 33 to 64 surveys.

To see a bar's survey effort range, simply hover your mouse cursor over the bar.

No Data (-)

A week is marked as having no data if there were no survey events for that week.

Survey Timeframe

Surveys from only the last 10 years are used in order to ensure delivery of currently relevant information.

							probability	of presence	■ breedi	breeding season		ort – no data
SPECIES	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
Allen's Hummingbird	-++		1111			1111	1111	 				
Ashy Storm-petrel							##		1111	##-#		
Black Oystercatcher	1111	1111		1111		1111	1111				1111	1111
Black Rail	-	1-11	11	-###	1111	- -			1111	 	- -	-

Black Swift					-	-1	1-		- -			
Black Turnstone	1111	1111	1111	1111	###-		-				Ш	1111
Burrowing Owl	1111	-	- -			- #				-	-	- -
California Spotted Owl	∥ ∥	-	-	1-1-		1-		-	- -			
California Thrasher	-111				Ш	1111	-		***	***	-###	
Clark's Grebe	1111				1111	1111	1111	1111	-		1111	1111
Common Yellowthroat	****	####	***	1111	 	1111	 	***			1111	####
Lawrence's Goldfinch				1	-1	1		11				
SPECIES	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	ОСТ	NOV	DEC
Lewis's Woodpecker	####	1111	1111	-1						-	-	J-I-
Long-billed Curlew		11]]	Ш		****	****	1111	1111		Ш	ШП	IIII
Marbled Godwit			1111	1111	***	***	1111	1111	IIII.	m	un	Ш
Nuttall's Woodpecker						1111	1111	Ш	1011	mu	1111	1111
Oak Titmouse		Щ				1111	1111	Ш	Ш	1111	1111	1111
Red Knot	###-				-		+++1	1111	1111	####	***	1-44
Rufous Hummingbird		-###	+111		11-1	47,	-+++	++++	***	 		
Short-billed Dowitcher	***	***	***	Ш	111-)	####	1111		1111	***	***
Snowy Plover		1111			4		-###	1111			1111	***
Song Sparrow		Ш	IIII	IIII		1111	1111	1111			Ш	1111
Spotted Towhee	HIII	HILL	1111			1111					1111	1111
Tricolored Blackbird	1111	1111	1111	-	11	1	1-1-	-11		1111	1111	1111
SPECIES	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	ОСТ	NOV	DEC
Whimbrel		1111			1111	***	1111			1111	1111	1111
Willet		11]1		1111	***	****	####	1111			1111	***
Wrentit		1111	1111		Ш	1111	1111	ШП		1111	Ш	***

Tell me more about conservation measures I can implement to avoid or minimize impacts to migratory birds.

Nationwide Conservation Measures describes measures that can help avoid and minimize impacts to all birds at any location year round. Such measures are particularly important when birds are most likely to occur in the project area. To see when birds are most likely to occur in your project area, view the Probability of Presence Summary. Special attention should be made to look for nests and avoid nest destruction during the breeding season. The best information about when birds are breeding can be found in <u>Birds of North America (BNA) Online</u> under the "Breeding Phenology" section of each species profile. Note that accessing this information may require a <u>subscription</u>. <u>Additional measures</u> and/or <u>permits</u> may be advisable depending on the type of activity you are conducting and the type of infrastructure or bird species present on your project site.

What does IPaC use to generate the migratory birds potentially occurring in my specified location?

The Migratory Bird Resource List is comprised of USFWS <u>Birds of Conservation Concern (BCC)</u> that might be affected by activities in your project location. These birds are of priority concern because it has been determined that without additional conservation actions, they are likely to become candidates for listing under the <u>Endangered Species Act (ESA)</u>.

The migratory bird list generated for your project is derived from data provided by the <u>Avian Knowledge Network (AKN)</u>. The AKN data is based on a growing collection of <u>survey</u>, <u>banding</u>, <u>and citizen science datasets</u>. The AKN list represents all birds reported to be occurring at some level throughout the year in the counties in which your project lies. That list is then narrowed to only the Birds of Conservation Concern for your project area.

Again, the Migratory Bird Resource list only includes species of particular priority concern, and is not representative of all birds that may occur in your project area. Although it is important to try to avoid and minimize impacts to all birds, special attention should be made to avoid and minimize impacts to birds of priority concern. To get a list of all birds potentially present in your project area, please visit the E-bird Explore Data Tool.

What does IPaC use to generate the probability of presence graphs for the migratory birds potentially occurring in my specified location?

The probability of presence graphs associated with your migratory bird list are based on data provided by the <u>Avian Knowledge Network (AKN)</u>. This data is derived from a growing collection of <u>survey, banding, and citizen science datasets</u>.

Probability of presence data is continuously being updated as new and better information becomes available.

How do I know if a bird is breeding, wintering, migrating or present year-round in my project area?

To see what part of a particular bird's range your project area falls within (i.e. breeding, wintering, migrating or year-round), you may refer to the following resources: The The Cornell Lab of Ornithology All About Birds Bird Guide, or (if you are unsuccessful in locating the bird of interest there), the Cornell Lab of Ornithology Neotropical Birds guide. If a bird entry on your migratory bird species list indicates a breeding season, it is probable the bird breeds in your project's counties at some point within the time-frame specified. If "Breeds elsewhere" is indicated, then the bird likely does not breed in your project area.

Facilities

Wildlife refuges and fish hatcheries

REFUGE AND FISH HATCHERY INFORMATION IS NOT AVAILABLE AT THIS TIME

Wetlands in the National Wetlands Inventory

Impacts to <u>NWI wetlands</u> and other aquatic habitats may be subject to regulation under Section 404 of the Clean Water Act, or other State/Federal statutes.

For more information please contact the Regulatory Program of the local <u>U.S. Army Corps of Engineers District</u>.

THERE ARE NO KNOWN WETLANDS AT THIS LOCATION.

Data limitations

The Service's objective of mapping wetlands and deepwater habitats is to produce reconnaissance level information on the location, type and size of these resources. The maps are prepared from the analysis of high altitude imagery. Wetlands are identified based on vegetation, visible hydrology and geography. A margin of error is inherent in the use of imagery; thus, detailed on-the-ground inspection of any particular site may result in revision of the wetland boundaries or classification established through image analysis.

The accuracy of image interpretation depends on the quality of the imagery, the experience of the image analysts, the amount and quality of the collateral data and the amount of ground truth verification work conducted. Metadata should be consulted to determine the date of the source imagery used and any mapping problems.

Wetlands or other mapped features may have changed since the date of the imagery or field work. There may be occasional differences in polygon boundaries or classifications between the information depicted on the map and the actual conditions on site.

Data exclusions

Certain wetland habitats are excluded from the National mapping program because of the limitations of aerial imagery as the primary data source used to detect wetlands. These habitats include seagrasses or submerged aquatic vegetation that are found in the intertidal and subtidal zones of estuaries and nearshore coastal waters. Some deepwater reef communities (coral or tuberficid worm reefs) have also been excluded from the inventory. These habitats, because of their depth, go undetected by aerial imagery.

Data precautions

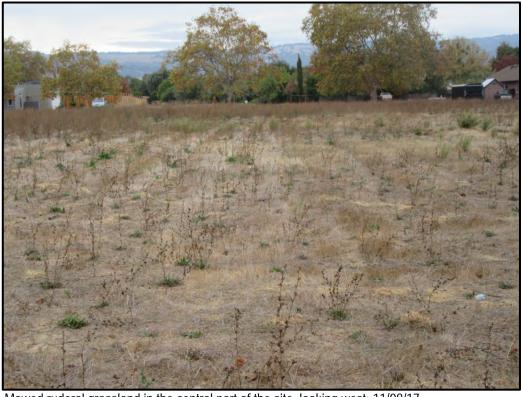
Federal, state, and local regulatory agencies with jurisdiction over wetlands may define and describe wetlands in a different manner than that used in this inventory. There is no attempt, in either the design or products of this inventory, to define the limits of proprietary jurisdiction of any Federal, state, or local government or to establish the geographical scope of the regulatory programs of government agencies. Persons intending to engage in activities involving modifications within or adjacent to wetland areas should seek the advice of appropriate federal, state, or local agencies concerning specified agency regulatory programs and proprietary jurisdictions that may affect such activities.

Attachment C

Photographs



Mowed ruderal grassland in the south part of the site, looking north from West MacArthur Street; 11/08/17.



Mowed ruderal grassland in the central part of the site, looking west; 11/08/17.



Graveled area in the north part of the site (just south of the parking lot), looking west; 11/08/17.



Walnut tree in the southeast part of the site, looking northwest; 11/08/17.

MOORE BIOLOGICAL



Landscaped parking lot in the north part of the overall parcel, looking west; 11/08/17. This lot will remain and the new subdivision will be constructed on land south of the parking lot.



Landscaped area along the west edge of the site, just west of the hospital parking lot, looking north; 11/08/17. Streetside improvements will extend north of the subdivision to the parcel boundary.

MOORE BIOLOGICAL

Attachment D

Designated Critical Habitat

