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January 30, 2017

To: Wesley Okamoto
Martinez + Okamoto Architects, Inc.
15487 Seneca Road, Suite 203
Victorville, CA 92393

Re: **Biological Review of Habitat Loss – Santa Rosa MOB & Parking Structure**
Corner of Montgomery Dr. & Sotoyome St.
Santa Rosa, CA 95405

INTRODUCTION

This study was conducted at the request of J. Kapolchok & Associates as background information for permits from the City of Santa Rosa. The project proposes the construction of a 600 space parking structure, and 92,000 Sq Foot MOB 4-story building. Construction will require removal of existing buildings and approximately 77 trees (the project).

PURPOSE.

The purpose of our field review and this report is to:

- Identify any potential biological impacts as a result of the project;
- Identify if the project will have a substantial adverse effect, either directly or through habitat modifications, on any special-status species or avian fauna; and
- Recommend avoidance or mitigation measures to reduce impacts by the proposed project to a less than significant level.

METHODS

The project site was reviewed on January 19, 2017. Site Plans prepared by Boulder Associates Architects as well as the Landscape Planting Plan prepared by Quadriga Landscape Architecture and Planning, Inc. were reviewed. Aerial photographs were reviewed for evaluating surrounding conditions.

SCOPING

Scoping for the proposed project considered location, habitat and vegetation types present on the property or associated with potential special-status species known for the Quadrangle, surrounding Quadrangles, the County, or the region (see attached lists). Our scoping considered records in the most recent version of the CDFW California Natural Diversity Data Base (CNDDB) Rare Find and USFWS listed species for the project. Aerial photographs were used to complement our field study.

Special-status Species

Special-status organisms are plants or animals that have been designated by Federal or State agencies as rare, endangered, or threatened. Section 15380 of the California Environmental Quality Act [CEQA (September, 1983)] has a discussion regarding non-listed (State) taxa. This section states that a plant (or animal) must be treated as Rare or Endangered even if it is not officially listed as such. If a person (or organization) provides information showing that a taxa meets the State's definitions and criteria, then the taxa should be treated as such.

Sensitive Communities

CDFW CNDDB identifies environmentally sensitive plant communities that are rare or threatened in nature. Sensitive habitat is defined as any area which meets one of the following criteria: (1) habitats containing or supporting "rare and endangered" species as defined by the State Fish and Wildlife Commission, (2) all perennial and intermittent streams and their tributaries, (3) coastal tide lands and marshes, (4) coastal and offshore areas containing breeding or nesting sites and coastal areas used by migratory and resident water-associated birds for resting areas and feeding, (5) areas used for scientific study and research concerning fish and wildlife, (6) lakes and ponds and adjacent shore habitat, (7) existing game and wildlife refuges and reserves, and (8) sand dunes.

Critical Habitat

Critical habitat is a specific geographic area(s) that contains features essential for the conservation of a threatened or endangered species and that may require special management and protection. Critical habitat may include an area that is not currently occupied by the species but that will be needed for its recovery.

The Endangered Species Act (ESA)

The Endangered Species Act of 1973 provides for the protection and conservation of various species of fish, wildlife, and plants that have been federally listed as threatened or endangered. Section 9 of the ESA prohibits the "take" of any fish or wildlife species that is listed as endangered under the ESA unless such take is otherwise specifically authorized pursuant to either Section 7 or Section 10(a)(l)(B) of the Act. Pursuant to the implementing regulations of the ESA, the take of fish or wildlife species listed as threatened is also prohibited unless otherwise authorized by the U.S. Fish and Wildlife Service (USFWS).

The Migratory Bird Treaty Act

The Migratory Bird Treaty Act (MBTA) of 1918 makes it unlawful to take, possess, buy, sell, purchase, or barter any migratory bird listed in CFR Part 10, including feathers or other parts, nests, eggs, or products, except as allowed by implementing regulations (50 CFR 21). The MBTA also prohibits disturbance or harassment of nesting migratory birds at any time during their breeding season.

FINDINGS

The findings presented are the result of our on site analysis, review of site plans prepared by Boulder Associates Architects, Landscape Planting Plan prepared by Quadriga Landscape Architecture and Planning, Inc, and Arborist report by Becky Duckles Consulting Arborist & Landscape Advisor.

The project site consists of existing buildings and houses. The only habitat on the site consists of trees around the edge of parking lots and buildings. The project proposes the removal of approximate 77 trees, the majority of the trees are non-native landscape trees. Review of the Arborist report identified 10-Live Oak and 2–Valley Oaks. Of the 12 native trees to be removed only one tree would be considered a mature tree >24in Diameter at Brest Height (DBH).

Following construction landscape plantings as per Landscape Plan prepared by Quadriga Landscape Architecture and Planning. Inc. will be implemented on the property.

The local sensitive habitat is the riparian corridor of Santa Rosa Creek along the north side of Memorial Hospital. This is more than 500-feet away from the project site and separated by Montgomery Drive.

The trees on the site contain habitat for local bird life (nesting/foraging/cover). Construction or tree removal during the nesting season has the potential for impacting local nesting avifauna.

In general developed landscape within the city limits does not contain high quality habitat for wildlife.

Habitat
The project consists of a developed landscape including buildings, parking lot and a mix of native and landscape trees. There is no natural undeveloped land within the project footprint. The following photos illustrate existing conditions and habitat found on site.

Photo 1. View from the south end of the study area illustrating the site conditions.

Photo 2. Typical trees on the project site.

Habitat Surrounding the Proposed Project site Project
The habitat surrounding the proposed project site project consists of businesses, hospital, city streets and parking lots. Plate II Aerial Photograph illustrates the local setting for the project site project.

Special-Status Species
A map from the CDFW CNDDB Rare Find shows known special-status species in the proximity of the project site project as shown on Plate I. These taxa as well as the taxa listed in Appendix A were considered and reviewed as part of our scoping for the project site and property.

The existing project site does not contain habitat, which would support special-status species. The historic development, traffic, absence of vernal pools, lack of wetlands, and host plants reasonably precludes the presence of special-status species within the proposed project site area. Based on existing habitat, historic use, it is unlikely that proposed project site project would have a substantial impact or result in any take of special-status species listed by CDFW and USFWS.

Sensitive Communities
The sensitive habitat types in the region consist of vernal pools, fresh water marshes, serpentinite, riparian corridors and native grasslands. There was no evidence within the project area for the presence of any of these sensitive habitat types.

Seasonal Wetlands are areas that are inundated or saturated by surface water or groundwater at a frequency and duration sufficient to support, and under normal circumstances, do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. There were no areas within the footprint of the proposed project site, which contained any evidence of standing water for any extended period of time or hydric vegetation. Routine agricultural maintenance of the site precludes the presence of wetland indicator plants (hyrophytes). Historic and ongoing agricultural practices have eliminated the potential for any seasonal wetlands on the project site. No seasonal wetlands are present on the project site.

Waters of the U.S. There are no seasonal or permanent creeks or drainages with definable bed and or bank within the proposed project area.

Riparian Habitat is by all standards considered sensitive. Riparian vegetation functions to control water temperature, regulate nutrient supply (biofilters), provide bank stabilization, control the rate of runoff and groundwater recharge, provide wildlife habitat (shelter, breeding and food), release allochthonous material for aquatic life, supply woody debris which functions as habitat and slow nutrient release, and protection for aquatic organisms. Significant riparian habitat exists along the Santa Rosa Creek. No riparian habitat will be removed by the project.

Critical Habitat The property is not located within the current U.S. Fish and Wildlife Service (USFWS) Critical Habitat for the Sonoma County Population of the California Tiger Salamander (CTS) or California Red-legged Frog (RLF).

Nesting or Breeding Habitat
We found no indications of nesting raptors on the property or in the near vicinity of the project. We did not observe any nests, whitewash or nest droppings, associated with the project site. No bird rookeries were found to be present within the project footprint. The project site contains limited potential nesting habitat for Migratory Birds. No potential raptor nests or whitewash from nests were observed.

• Bat Roosting Habitat
Foliage and bark with small cavities in any tree could provide suitable temporary habitat for solitary tree-roosting bat species. Trees on the project site were reviewed for potential structure for roosting bats. Trees on the site are healthy and do not support potential roosting habitat for bats.

RECOMMENDED MEASURES FOR CONSIDERATION

The proposed removal of trees on the project site could result in directly destroying nests, eggs, and immature birds. The following recommendations will reduce impacts by the proposed project to a less than significant level

• For tree removal occurring during the breeding season (March 1 through August 31), a qualified biologist shall conduct pre-construction surveys of all potential nesting habitats.

• If active bird nests are found during preconstruction surveys 1) a 500-foot no-disturbance buffer will be created around active raptor nests during the breeding season or until it is determined that all young have fledged, and 2) a 250-foot buffer zone will be created around the nests of other special status birds and all other birds that are protected by California Fish and Game Code 3503. These buffer zones are consistent with CDFW avoidance guidelines and CDFW buffers required on other similar ECPA projects; however, they may be modified in coordination with CDFW based on existing conditions at the project site.

• If pre-construction surveys indicate that nests are inactive or potential habitat is unoccupied during the tree removal period, no further mitigation is required. Shrubs and trees that have been determined to be unoccupied by special status birds may be removed.

• If vegetation removal activities are delayed or suspended for more than two weeks after the preconstruction survey, the areas shall be resurveyed.

We recommend that the Landscape Planting Plan prepared by Quadriga Landscape Architetecture and Planning. Inc. incorporate as many local native species as possible into the landscape planting plan.

• Native trees recommended to be incorporated into the Landscape Planting Plan are:

Live Oak (*Quercus agrifolia)*
California Bay (*Umbellularia californica)*

SUMMARY

This biological review is provided as background information necessary for evaluating potential impacts on local biological resources by the proposed project site project.

We find that it is unlikely that the project will have a substantial adverse effect, either directly or through habitat modifications, on any threatened or endangered plant or animal species listed by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service.

For tree removal occurring during the breeding season (March 1 through August 31), a qualified biologist shall conduct pre-construction surveys of all potential nesting habitats.

The habitat impacted, local traffic and the ongoing use is such that there is no need for seasonal floristic surveys or seasonal wildlife surveys.

It is concluded, based on our site visit and available information that no State or Federal permits are required and that the project site project will be in compliance with the Federal Endangered Species Act (FESA) and the California Endangered Species Act (CESA). The project site must comply with all other applicable state and federal laws.

Should you have any questions, please do not hesitate to contact us at, (707) 544-3091, Fax (707) 575-8030, or by email at (kjeldsen@sonic.net).

Kjeldsen Biological Consulting

ATTACHMENTS

Plate I. CDFW CNDDB Five-Mile Search
Plate II. Aerial Photo

Appendix A California Department of Fish and Wildlife Rare Find 5 Threatened and Endangered Species list for the Quadrangle and Surrounding Quadrangles

U.S. Fish & Wildlife Service IPaC Trust Resources Federal and Threatened Species that Occur in or may be Affected by the Project

Names of and Qualifications of Field Investigators

Daniel T. Kjeldsen, B.S., Natural Resource Management, California Polytechnic State University, San Luis Obispo, California. He spent l994 to l996 in the Peace Corps managing natural resources in Honduras, Central America. His work for the Peace Corps in Central America focused on watershed inventory, mapping and the development and implementation of a protection plan. He has over fifteen years of experience in conducting Biological Assessments, CDFW Habitat Assessments, ACOE wetland delineations, wetland rehabilitation, and development of and implementation of mitigation projects and mitigation monitoring. He has received 3.2 continuing education units MCLE 27 hours in Determining Federal Wetlands Jurisdiction from the University of California Berkeley Extension. A full resume is available upon request.

Chris K. Kjeldsen, Ph.D., Botany, Oregon State University, Corvallis, Oregon. He has over thirty-five years of professional experience in the study of California flora. He was a member of the Sonoma County Planning Commission and Board of Zoning (1972 to 1976). He has over thirty years of experience in managing and conducting environmental projects involving impact assessment and preparation of compliance documents, Biological Assessments, CDFW Habitat Assessments, CDFW SB 34 Mitigation projects, ACOE Mitigation projects and State Parks and Recreation Biological Resource Studies. Experience includes conducting special-status species surveys, jurisdictional wetland delineations, general biological surveys, 404 and 1600 permitting, and consulting on various projects. He taught Plant Taxonomy at Oregon State University (three years) and numerous botanical science and aquatic botany courses (thirty-five years) at Sonoma State University including sections on wetlands and wetland delineation techniques. He has supervised numerous graduate theses, NSF, DOE and local agency grants and served as a university administrator. A full resume is available upon request. He has a valid CDFW collecting permit.

Plate I. CDFW CNDDB Rare Find Data **(Data Date January 2017)**

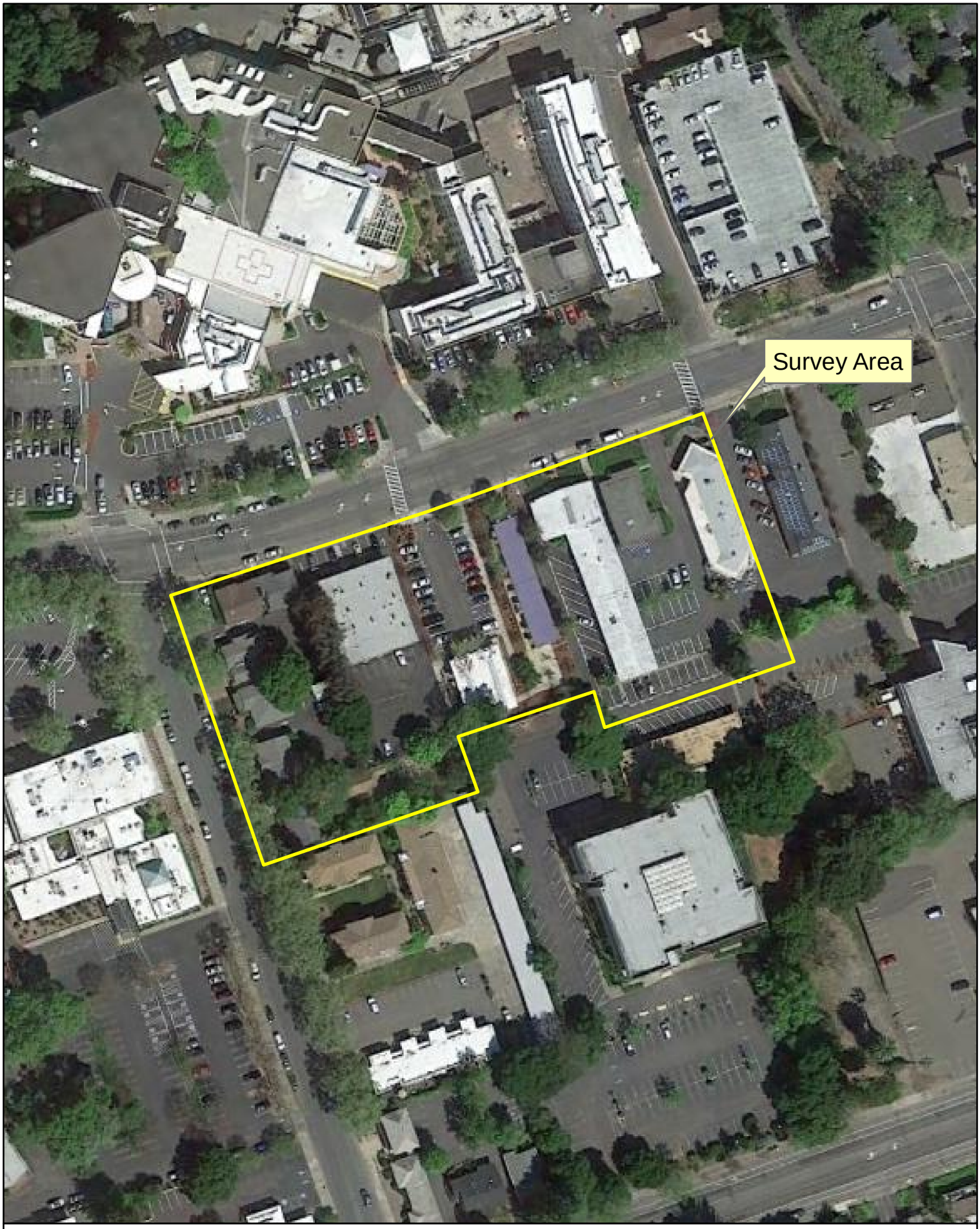

Plate II. Aerial Photo / Survey Area

CALIFORNIA DEPARTMENT OF FISH and WILDLIFE **RareFind**

Query Summary:
Quad IS (Calistoga (3812255) OR Cotati (3812236) OR Glen Ellen (3812235) OR Healdsburg (3812257) OR Kenwood (3812245) OR Mark West Springs (3812256) OR Santa Rosa (3812246) OR Sebastopol (3812247) OR Two Rock (3812237))
AND Habitat IS (Pavement plain OR Riparian woodland)

Print Close

CNDDB Element Query Results

Scientific Name	Common Name	Taxonomic Group	Element Code	Total Occs	Returned Occs	Federal Status	State Status	Global Rank	State Rank	CA Rare Plant Rank	Other Status	Habitats
Accipiter striatus	sharp-shinned hawk	Birds	ABNKC12020	22	1	None	None	G5	S4	null	CDFW_WL-Watch List, IUCN_LC-Least Concern	Cismontane woodland, Lower montane coniferous forest, Riparian forest, Riparian woodland
Ambystoma californiense	California tiger salamander	Amphibians	AAAAA01180	1148	79	Threatened	Threatened	G2G3	S2S3	null	CDFW_WL-Watch List, IUCN_VU-Vulnerable	Cismontane woodland, Meadow & seep, Riparian woodland, Valley & foothill grassland, Vernal pool, Wetland
Antrozous pallidus	pallid bat	Mammals	AMACC10010	406	8	None	None	G5	S3	null	BLM_S-Sensitive, CDFW_SSC-Species of Special Concern, IUCN_LC-Least Concern, USFS_S-Sensitive, WBWG_H-High Priority	Chaparral, Coastal scrub, Desert wash, Great Basin grassland, Great Basin scrub, Mojavean desert scrub, Riparian woodland, Sonoran desert scrub, Upper montane coniferous forest, Valley & foothill grassland
Corynorhinus townsendii	Townsend's big-eared bat	Mammals	AMACC08010	625	7	None	None	G3G4	S2	null	BLM_S-Sensitive, CDFW_SSC-Species of Special Concern, IUCN_LC-Least Concern, USFS_S-Sensitive, WBWG_H-High Priority	Broadleaved upland forest, Chaparral, Chenopod scrub, Great Basin grassland, Great Basin scrub, Joshua tree woodland, Lower montane coniferous forest, Meadow & seep, Mojavean desert scrub, Riparian forest, Riparian woodland, Sonoran desert scrub, Sonoran thorn woodland, Upper montane coniferous forest, Valley & foothill grassland
Elanus leucurus	white-tailed kite	Birds	ABNKC06010	162	4	None	None	G5	S3S4	null	BLM_S-Sensitive, CDFW_FP-Fully Protected, IUCN_LC-Least Concern	Cismontane woodland, Marsh & swamp, Riparian woodland, Valley & foothill

												grassland, Wetland
Lasiurus blossevillii	western red bat	Mammals	AMACC05060	122	1	None	None	G5	S3	null	CDFW_SSC-Species of Special Concern, IUCN_LC-Least Concern, WBWG_H-High Priority	Cismontane woodland, Lower montane coniferous forest, Riparian forest, Riparian woodland
Myotis yumanensis	Yuma myotis	Mammals	AMACC01020	262	1	None	None	G5	S4	null	BLM_S-Sensitive, IUCN_LC-Least Concern, WBWG_LM-Low-Medium Priority	Lower montane coniferous forest, Riparian forest, Riparian woodland, Upper montane coniferous forest
Rana boylii	foothill yellow-legged frog	Amphibians	AAABH01050	879	20	None	None	G3	S3	null	BLM_S-Sensitive, CDFW_SSC-Species of Special Concern, IUCN_NT-Near Threatened, USFS_S-Sensitive	Aquatic, Chaparral, Cismontane woodland, Coastal scrub, Klamath/North coast flowing waters, Lower montane coniferous forest, Meadow & seep, Riparian forest, Riparian woodland, Sacramento/San Joaquin flowing waters
Rana draytonii	California red-legged frog	Amphibians	AAABH01022	1407	22	Threatened	None	G2G3	S2S3	null	CDFW_SSC-Species of Special Concern, IUCN_VU-Vulnerable	Aquatic, Artificial flowing waters, Artificial standing waters, Freshwater marsh, Marsh & swamp, Riparian forest, Riparian scrub, Riparian woodland, Sacramento/San Joaquin flowing waters, Sacramento/San Joaquin standing waters, South coast flowing waters, South coast standing waters, Wetland
Riparia riparia	bank swallow	Birds	ABPAU08010	297	1	None	Threatened	G5	S2	null	BLM_S-Sensitive, IUCN_LC-Least Concern	Riparian scrub, Riparian woodland
Taricha rivularis	red-bellied newt	Amphibians	AAAAF02020	136	9	None	None	G4	S2	null	CDFW_SSC-Species of Special Concern, IUCN_LC-Least Concern	Broadleaved upland forest, North coast coniferous forest, Redwood, Riparian forest, Riparian woodland
Taxidea taxus	American badger	Mammals	AMAJF04010	523	9	None	None	G5	S3	null	CDFW_SSC-Species of Special Concern, IUCN_LC-Least Concern	Alkali marsh, Alkali playa, Alpine, Alpine dwarf scrub, Bog & fen, Brackish marsh, Broadleaved upland forest, Chaparral, Chenopod scrub, Cismontane woodland, Closed-cone coniferous forest, Coastal

												bluff scrub, Coastal dunes, Coastal prairie, Coastal scrub, Desert dunes, Desert wash, Freshwater marsh, Great Basin grassland, Great Basin scrub, Interior dunes, lone formation, Joshua tree woodland, Limestone, Lower montane coniferous forest, Marsh & swamp, Meadow & seep, Mojavean desert scrub, Montane dwarf scrub, North coast coniferous forest, Oldgrowth, Pavement plain, Redwood, Riparian forest, Riparian scrub, Riparian woodland, Salt marsh, Sonoran desert scrub, Sonoran thorn woodland, Ultramafic, Upper montane coniferous forest, Upper Sonoran scrub, Valley & foothill grassland

IPaC **U.S. Fish & Wildlife Service**

IPaC resource list

Location

Sonoma County, California

Local office

Sacramento Fish And Wildlife Office

(916) 414-6600
(916) 414-6713

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

Not for consultation

Endangered species

This resource list is for informational purposes only and should not be used for planning or analyzing project level impacts.

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 either from the Regulatory Review section in IPaC 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 creating a project and making a request from the Regulatory Review section.

Listed species

[1] are managed by the Endangered Species Program of the U.S. Fish and Wildlife Service.

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

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

Amphibians

NAME	STATUS
California Red-legged Frog Rana draytonii There is a **final** critical habitat designated for this species. Your location is outside the designated critical habitat. http://ecos.fws.gov/ecp/species/2891	Threatened
California Tiger Salamander Ambystoma californiense There is a **final** critical habitat designated for this species. Your location is outside the designated critical habitat. http://ecos.fws.gov/ecp/species/2076	Endangered

Not for consultation

Birds

NAME	STATUS
Northern Spotted Owl Strix occidentalis caurina There is a **final** critical habitat designated for this species. Your location is outside the designated critical habitat. http://ecos.fws.gov/ecp/species/1123	Threatened

Crustaceans

NAME	STATUS
California Freshwater Shrimp Syncaris pacifica **No critical habitat** has been designated for this species. http://ecos.fws.gov/ecp/species/7903	Endangered

Fishes

NAME	STATUS
Steelhead Oncorhynchus (=Salmo) mykiss There is a **final** critical habitat designated for this species. Your location is outside the designated critical habitat. http://ecos.fws.gov/ecp/species/1007	Threatened

Flowering Plants

NAME	STATUS
Burke's Goldfields Lasthenia burkei **No critical habitat** has been designated for this species. http://ecos.fws.gov/ecp/species/4338	Endangered
Clara Hunt's Milk-vetch Astragalus clarianus **No critical habitat** has been designated for this species. http://ecos.fws.gov/ecp/species/3300	Endangered
Sebastopol Meadowfoam Limnanthes vinculans **No critical habitat** has been designated for this species. http://ecos.fws.gov/ecp/species/404	Endangered

Not for consultation

Showy Indian Clover Trifolium amoenum — Endangered
No critical habitat has been designated for this species.
http://ecos.fws.gov/ecp/species/6459

Sonoma Sunshine Blennosperma bakeri — Endangered
No critical habitat has been designated for this species.
http://ecos.fws.gov/ecp/species/1260

White Sedge Carex albida — Endangered
No critical habitat has been designated for this species.
http://ecos.fws.gov/ecp/species/3063

Insects

NAME	STATUS
San Bruno Elfin Butterfly Callophrys mossii bayensis **No critical habitat** has been designated for this species. http://ecos.fws.gov/ecp/species/3394	Endangered

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.

Not for consultation

Migratory birds

Birds are protected under the Migratory Bird Treaty Act

[1] and the Bald and Golden Eagle Protection Act[2].

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 Service

[3]. 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.

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
- Conservation measures for birds http://www.fws.gov/birds/management/project-assessment-tools-and-guidance/conservation-measures.php
- Year-round bird occurrence data http://www.birdscanada.org/birdmon/default/datasummaries.jsp

The migratory birds species listed below are species of particular conservation concern (e.g. Birds of Conservation Concern) that may be potentially affected by activities in this location, not a list of every bird species you may find in this location. 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 view available data on other bird species that may occur in your project area, please visit the AKN Histogram Tools and Other Bird Data Resources.

NAME	SEASON(S)
Bald Eagle Haliaeetus leucocephalus http://ecos.fws.gov/ecp/species/1626	Year-round
Bell's Sparrow Amphispiza belli http://ecos.fws.gov/ecp/species/9303	Year-round
Burrowing Owl Athene cunicularia http://ecos.fws.gov/ecp/species/9737	Year-round
Fox Sparrow Passerella iliaca	Wintering

Not for consultation

Least Bittern Ixobrychus exilis http://ecos.fws.gov/ecp/species/6175	Breeding
Lesser Yellowlegs Tringa flavipes http://ecos.fws.gov/ecp/species/9679	Wintering
Lewis's Woodpecker Melanerpes lewis http://ecos.fws.gov/ecp/species/9408	Wintering
Long-billed Curlew Numenius americanus http://ecos.fws.gov/ecp/species/5511	Wintering
Nuttall's Woodpecker Picoides nuttallii http://ecos.fws.gov/ecp/species/9410	Year-round
Oak Titmouse Baeolophus inornatus http://ecos.fws.gov/ecp/species/9656	Year-round
Olive-sided Flycatcher Contopus cooperi http://ecos.fws.gov/ecp/species/3914	Breeding
Peregrine Falcon Falco peregrinus http://ecos.fws.gov/ecp/species/8831	Year-round
Rufous-crowned Sparrow Aimophila ruficeps http://ecos.fws.gov/ecp/species/9718	Year-round
Short-eared Owl Asio flammeus http://ecos.fws.gov/ecp/species/9295	Wintering
Tricolored Blackbird Agelaius tricolor http://ecos.fws.gov/ecp/species/3910	Year-round
Western Grebe aechmophorus occidentalis http://ecos.fws.gov/ecp/species/6743	Year-round

Not for consultation

What does IPaC use to generate the list of migratory bird species potentially occurring in my specified location?

Landbirds:

Migratory birds that are displayed on the IPaC species list are based on ranges in the latest edition of the National Geographic Guide, Birds of North America (6th Edition, 2011 by Jon L. Dunn, and Jonathan Alderfer). Although these ranges are coarse in nature, a number of U.S. Fish and Wildlife Service migratory bird biologists agree that these maps are some of the best range maps to date. These ranges were clipped to a specific Bird Conservation Region (BCR) or USFWS Region/Regions, if it was indicated in the 2008 list of Birds of Conservation Concern (BCC) that a species was a BCC species only in a particular Region/Regions. Additional modifications have been made to some ranges based on more local or refined range information and/or information provided by U.S. Fish and Wildlife Service biologists with species expertise. All migratory birds that show in areas on land in IPaC are those that appear in the 2008 Birds of Conservation Concern report.

Atlantic Seabirds:

Ranges in IPaC for birds off the Atlantic coast are derived from species distribution models developed by the National Oceanic and Atmospheric Association (NOAA) National Centers for Coastal Ocean Science (NCCOS) using the best available seabird survey data for the offshore Atlantic Coastal region to date. NOAANCCOS assisted USFWS in developing seasonal species ranges from their models for specific use in IPaC. Some of these birds are not BCC species but were of interest for inclusion because they may occur in high abundance off the coast at different times throughout the year, which potentially makes them more susceptible to certain types of development and activities taking place in that area. For more refined details about the abundance and richness of bird species within your project area off the Atlantic Coast, see the Northeast Ocean Data Portal. The Portal also offers data and information about other types of taxa that may be helpful in your project review.

About the NOAANCCOS models: the models were developed as part of the NOAANCCOS project: Integrative Statistical Modeling and Predictive Mapping of Marine Bird Distributions and Abundance on the Atlantic Outer Continental Shelf. The models resulting from this project are being used in a number of decision-support/mapping products in order to help guide decision-making on activities off the Atlantic Coast with the goal of reducing impacts to migratory birds. One such product is the Northeast Ocean Data Portal, which can be used to explore details about the relative occurrence and abundance of bird species in a particular area off the Atlantic Coast.

All migratory bird range maps within IPaC are continuously being updated as new and better information becomes available.

Can I get additional information about the levels of occurrence in my project area of specific birds or groups of birds listed in IPaC?

Landbirds:

Draft for consultation

The Avian Knowledge Network (AKN) provides a tool currently called the "Histogram Tool", which draws from the data within the AKN (latest,survey, point count, citizen science datasets) to create a view of relative abundance of species within a particular location over the course of the year. The results of the tool depict the frequency of detection of a species in survey events, averaged between multiple datasets within AKN in a particular week of the year. You may access the histogram tools through the Migratory Bird Programs AKN Histogram Tools webpage.

The tool is currently available for 4 regions (California, Northeast U.S., Southeast U.S. and Midwest), which encompasses the following 32 states: Alabama, Arkansas, California, Connecticut, Delaware, Florida, Georgia, Illinois, Indiana, Iowa, Kentucky, Louisiana, Maine, Maryland, Massachusetts, Michigan, Minnesota, Mississippi, Missouri, New Hampshire, New Jersey, New York, North, Carolina, Ohio, Pennsylvania, Rhode Island, South Carolina, Tennessee, Vermont, Virginia, West Virginia, and Wisconsin.

In the near future, there are plans to expand this tool nationwide within the AKN, and allow the graphs produced to appear with the list of trust resources generated by IPaC, providing you with an additional level of detail about the level of occurrence of the species of particular concern potentially occurring in your project area throughout the course of the year.

Atlantic Seabirds:

For additional details about the relative occurrence and abundance of both individual bird species and groups of bird species within your project area off the Atlantic Coast, please visit the Northeast Ocean Data Portal. The Portal also offers data and information about other taxa besides birds that may be helpful to you in your project review. Alternately, you may download the bird model results files underlying the portal maps through the NOAANCCOS Integrative Statistical Modeling and Predictive Mapping of Marine Bird Distributions and Abundance on the Atlantic Outer Continental Shelf project webpage.

Not for consultation

Facilities

Wildlife refuges

Any activity proposed on National Wildlife Refuge lands must undergo a 'Compatibility Determination' conducted by the Refuge. Please contact the individual Refuges to discuss any questions or concerns.

THERE ARE NO REFUGES AT THIS LOCATION.

Fish hatcheries

THERE ARE NO FISH HATCHERIES AT THIS LOCATION.

Wetlands in the National Wetlands Inventory

Impacts to NWI wetlands 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.S. Army Corps of Engineers District.

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.

Not for consultation

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.

Not for consultation