Appendix D

Biological Resources and Wetland Evaluation Report



October 21, 2020

Project # VHD-02

Mr. Ryan Patterson President Vintage Housing 369 San Miguel Drive, Suite 135 Newport Beach, CA 92660

Subject: Biological Resources and Wetland Evaluation Letter Report for 102 Natoma Street, City of Folsom, CA

Dear Mr. Patterson:

HELIX Environmental Planning, Inc. (HELIX) has prepared this biological and wetland resource evaluation letter report in support of the proposed 102 Natoma Street project (proposed project) on behalf of Vintage Housing. The purpose of the biological and wetland resources evaluation was to evaluate the potential for regionally occurring special-status plant and animal species, wetlands or other waters of the U.S. or waters of the State, and/or other sensitive biological habitats to occur on the project site and/or be impacted by the proposed project. This letter report describes the methods and results of our biological resources evaluation and provides recommended mitigation measures to reduce impacts.

INTRODUCTION

Project Location and Description

The approximately 4.86-acre project site (also referred to as the Study Area) is located within the City of Folsom approximately 350-feet northeast of the intersection of Fargo Way and Natoma Street in Sacramento County, CA (Figure 1). The approximate center of the site is latitude 38.683517 and longitude -121.158532, NAD 83. The approximate boundary of the project site depicted on aerial imagery is included as Figure 2. All figures are included in Attachment A.

The proposed project intends to construct and operate a senior living community on the subject parcel.

METHODS

Studies conducted in support of this report included a special-status species evaluation, an aquatic resources evaluation, and a biological and wetlands reconnaissance survey.

Special-Status Species Evaluation

Regulations pertaining to the protection of biological resources at the project site are summarized in Attachment B. For the purposes of this report, special-status species are those that fall into one or more of the following categories, including those:

Letter to Ryan Patterson October 21, 2020

- listed as endangered or threatened under the Federal Endangered Species Act (FESA; including candidates and species proposed for listing);
- listed as endangered or threatened under the California Endangered Species Act (CESA; including candidates and species proposed for listing);
- designated as rare, protected, or fully protected pursuant to California Fish and Game Code;
- designated a Species of Special Concern (SSC) by the California Department of Fish and Wildlife (CDFW);
- considered by CDFW to be a Watch List species with potential to become an SSC;
- defined as rare or endangered under Section 15380 of the California Environmental Quality Act (CEQA); or
- Having a California Rare Plant Rank (CRPR) of 1A, 1B, 2A, 2B, or 3.

In order to evaluate special-status species and/or their habitats with the potential to occur in the project site and/or be impacted by the proposed project, HELIX obtained lists of special-status species known to occur and/or having the potential to occur on the proposed project site and vicinity from the U.S. Fish and Wildlife Service (USFWS; USFWS 2020), the California Native Plant Society (CNPS; CNPS 2020), and the California Natural Diversity Database (CNDDB; CDFW 2020), which are included as Attachment C. The potential for these regionally occurring special-status species to occur in the project site is analyzed in Attachment D.

Aquatic Resource Evaluation

The U.S. Fish and Wildlife Service's National Wetlands Inventory (NWI) online database¹ was reviewed to determine if there are any wetlands or other waters of the U.S. mapped by the USFWS on the project site. The NWI provides reconnaissance level information on wetlands and deepwater habitats from analysis of high-altitude aerial imagery. Historic aerial imagery from National Environmental Title Research (NETR)² was reviewed for information on past land uses and presence of aquatic features visible on aerial imagery. NETR provides aerial imagery covering the study area at irregular intervals from 1956 to 2016.

Biological and Wetland Resource Evaluation

A biological and wetlands reconnaissance survey was conducted on September 30, 2020 by HELIX Principal Biologist Stephen Stringer, M.S. and HELIX Biologist Stephanie McLaughlin, M.S. between 0830 and 1400 hours. The project site was assessed to identify the habitat type(s) present on-site and the potential to support special-status plant and wildlife species. The survey consisted of a pedestrian survey of the project site and the surrounding area. Meandering transects of the site were performed to obtain visual coverage of the site. Plant species were identified to the level necessary to determine whether or not they were a special-status species.

The three-parameter method was used to determine the presence/absence of wetlands, which involves identifying indicators of hydrophytic vegetation, hydric soils, and wetland hydrology according to the *Corps of Engineers Wetlands Delineation Manual* (USACE 1987), the *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region* (Version 2.0; USACE 2008), *A Field Guide to the Identification of the Ordinary High Water Mark (OHWM) in the Arid West Region of the Western*



¹ https://www.fws.gov/wetlands/Data/Mapper.html

² https://www.historicaerials.com

United States (Lichvar and McColley 2008) and the State Wetland Definition and Procedures for Discharges of Dredged or Fill Material to Waters of the State prepared by the State Water Resources Control Board and which became effective May 28, 2020. The presence/absence of other non-wetland aquatic resources was determined by searching for the presence of an ordinary high water mark and bed and bank. The extent of waters on the project site were mapped in the field with sub-meter accuracy using a Trimble GeoXT Global Positioning System (GPS) hand-held unit. The GPS data were downloaded from the unit, exported into ArcMap 10.7.1[®], and used to produce the map of aquatic features in the delineation area and to calculate the acreage of each aquatic feature.

Weather during the survey was clear and warm and hazy conditions. A complete list of plant and animal species observed on the project site during the biological reconnaissance survey is included as Attachment E.

RESULTS

Environmental Setting

The project site is a vacant, wooded parcel within the City of Folsom. The site is generally bordered by residential parcels and small commercial buildings, as well as the paved Oak Parkway cycling trail. Folsom State Prison is located north of the project site, on the opposite side of Natoma Street.

Site Conditions

The entire project site is considered to be blue oak woodland, surrounded by urban development. Historic aerial imagery shows that the project site has changed little since 1952 and has consisted of oak woodland with a drainage running through the site. The site is moderately disturbed. There is evidence of recreational use by bicycles and the site has a constructed dirt track with several constructed dirt ramps and jumps for bicycles, presumably constructed by kids from the adjacent residential neighborhood. It also has debris piles and other evidence of use by transients.

Habitat Types/Vegetation Communities

Habitat types/vegetation communities in the project site include blue oak woodland and ephemeral and intermittent drainages. Aquatic habitats are discussed below in the aquatic resources evaluation section. Habitats and land covers are depicted on Figure 3. Representative site photographs are included as Attachment F.

Blue Oak Woodland

Blue oak woodland is the predominant habitat type in the project site and occupies 4.82-acres within the site. Vegetation in the blue oak woodland habitat consists primarily of blue oak (*Quercus douglasii*) and interior live oak (*Quercus wislizeni*), with some non-native species including mulberry (*Morus alba*), Chinese tallow (*Triadica sebifera*), Chinese hackberry (*Celtis sinensis*), and ornamental cherry (*Prunus* sp.). The understory is dominated by non-native grasses and forbs, including cultivated oats (*Avena* sp.), Italian rye grass (*Festuca perennis*), and yellow star-thistle (*Centaurea solstitialis*). Disturbed areas, such as bike trails and jumps occur beneath the canopy of the oak woodland, and there is a significant amount of trash and debris in these areas. A small segment of the bike trail occurs in this habitat.



HELIX has authored a stand-alone arborist report for the project site available under separate cover.

Topography

The terrain in the project site and vicinity is locally flat. The elevation on the project site ranges from 350- to 370-feet above mean sea level and has low to moderate sloping from east to west.

Soils

The project site includes two soil mapping units (NRCS 2020): Argonaut-Auburn-Urban land complex, 3 to 8 percent slopes and Argonaut-Auburn complex, 3 to 8 percent slopes. Soils on the National Hydric Soils List for Sacramento County (NRCS 2015) are not present in the project site.

Both soils occur on hills and are derived from residuum weathered from metamorphic rock. A typical profile of the Argonaut-Auburn-Urban land complex and Argonaut-Auburn complex, 3 to 8 percent slopes include loam from 0- to 14-inches, clay from 14- to 29-inches and bedrock from 29- to 33-inches; the depth to water table is more than 80-inches. Project site soils are mapped on Figure 4.

Special-Status Species Evaluation

A total of 17 regionally occurring special-status plant species and 27 regionally occurring special-status wildlife species were identified during the database queries and desktop review and are evaluated in Attachment D. Species determined to have no potential to occur on the project site or be impacted by the proposed project (Attachment D) are not discussed further in this report.

Special-Status Plant Species

No special-status plant species were determined to have the potential to occur on the project site or be impacted by the proposed project. Of the 17 regionally occurring special-status plant species that were identified during the database queries and desktop review, the majority occur in wetland habitats such as vernal pools or seeps, which are absent from the site. Several others are limited to grassland or cismontane woodland habitats. Although the site contains blue oak woodland, the study area is located in an urban area dominated by non-native species that does not provide suitable habitat for special-status plant species. Therefore, no impacts to special-status plants are anticipated as a result of the proposed project.

Special-Status Wildlife Species

A total of 23 regionally occurring special-status wildlife species were identified during the database searches and desktop review. The majority of the special-status wildlife species are associated with aquatic habitats of the adjacent Sacramento Valley such as rivers, sloughs, and freshwater wetlands, including vernal pools. The remaining species are associated with specific habitats such as bats roosting in rocky habitats, caves or abandoning buildings, which are not present in or near the study area.

There are no reported occurrences of special-status animal species on or adjacent to the site. However, the site provides suitable habitat for white-tailed kite (*Elanus leucurus*) and other nesting migratory birds. These species are discussed briefly below. Species determined to have no potential to occur on the project site or be impacted by the proposed project (Attachment D) are not discussed further in this report.



White-Tailed Kite

White-tailed kite is a year-round resident in coastal and valley lowlands, where it inhabits herbaceous and open stages of most habitat types. Individuals forage in grasslands, farmlands, and wetlands, preying mostly on small diurnal mammals. Nests are built near the top of dense tree stands, usually near open foraging areas (Zeiner et al. 1988).

No white-tailed kites were observed during any of the biological surveys conducted for the proposed project. The nearest reported extant occurrence of white-tailed kite in the CNDDB is located approximately 3-miles southwest of the project site near Lake Natoma (CDFW 2020). Nesting habitat is present on the site in large trees and foraging habitat is present in the ruderal vegetation. However, habitat for white-tailed kite is marginal due to the urban character of the surrounding area.

No adverse effects to white-tailed kite foraging habitat are anticipated as a result of the loss of oak woodland habitat that would occur due to development of the proposed project. Non-breeding adults could readily avoid contact with construction equipment or personnel by moving out of the construction area. Displacement of non-breeding adults would not be a significant impact. The project has potential for adverse effects to white-tailed kite through nest disturbance leading to destruction of eggs or nestlings if this species were to nest in or adjacent to the project site. Eggs and young still dependent on the nest would be susceptible to injury or mortality through physical contact or through nest abandonment caused by displacement of adults. Destruction of eggs or young would be a violation of the Fish and Game Code and a significant impact.

The recommended mitigation measures for white-tailed kite and other nesting migratory birds and raptors in the following section would reduce potential impacts to this species to less than significant.

Migratory Birds and Raptors

The project site provides suitable habitat for nesting migratory birds and raptors. As noted in Attachment B, migratory and non-game birds are protected during the nesting season by California Fish and Game Code. The project site and immediate vicinity provides nesting and foraging habitat for a variety of native birds common to urbanized areas. Nests were not observed during surveys; however, a variety of migratory birds have the potential to nest in and adjacent to the site, in trees, shrubs and on the ground in vegetation.

Project activities such as clearing and grubbing during the avian breeding season (February 1 – August 31) could result in injury or mortality of eggs and chicks directly through destruction or indirectly through forced nest abandonment due to noise and other disturbance. Needless destruction of nests, eggs, and chicks would be a violation of the Fish and Game Code and a significant impact.

The recommended mitigation measures for nesting migratory birds and raptors in the following section would reduce potential impacts to these species to less than significant.

Aquatic Resource Evaluation

The project site is located in the City of Folsom in the Upper American River hydrologic unit (HUC12: 180201110201). NWI mapping shows no aquatic features on the project site.



HELIX conducted a routine assessment of waters of the U.S. and State on September 30, 2020, generally in accordance with the U.S. Army Corps of Engineers' (USACE) Corps of Engineers Wetlands Delineation Manual and the Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region (Version 2.0). A formal delineation of wetlands was not completed. HELIX identified two aquatic resources; an intermittent drainage and an ephemeral drainage totaling 0.04-acre of aquatic resources that are potentially jurisdictional waters of the U.S. and state. The drainage features are depicted on the Habitat and Resource Map, which is included in Attachment A as Figure 3. No other aquatic resources are present on the site.

The intermittent drainage totals 0.03-acre and flows in a southwesterly direction along the northern boundary of the project site. The intermittent drainage is fed by an unnamed emergent wetland swale located north of the site on the Folsom State Prison grounds, via a 24-inch metal culvert that runs beneath Natoma Street to enter the project site. The drainage also receives stormwater runoff from Natoma Street. The water to the site flows intermittently, with water persisting after rain events. The banks of the drainage are incised with a stream channel that is approximately 3-feet wide at the ordinary high water mark. The intermittent drainage on the project site does not support wetland vegetation, with most of the vegetation within the feature consistent with vegetation in the blue oak woodland vegetation community. Upon leaving the site, the intermittent drainage continues in a southwesterly direction and enters an unnamed tributary to the American River/Lake Natoma west of the prison.

An ephemeral drainage is characterized as a feature with a bed and a bank that channels water from uplands and typically only flows during periods of precipitation. Ephemeral drainages typically do not support wetlands due to their brief hydroperiods, although they typically have an incised bank. In the project site, there is one ephemeral drainage totaling 0.01 acre that crosses the eastern portion of the site and intersects with the intermittent drainage. The ephemeral drainage in the project site supports vegetation consistent with understory vegetation described in the blue oak woodland and is dominated by weedy grasses and forbs.

Determination of regulatory jurisdiction must be made by the U.S. Army Corps of Engineers (USACE), Central Valley Regional Water Quality Control Board (CVRWQCB), and CDFW. Based on our understanding of the proposed project, it is likely that impacts to the drainages would occur as a result of the proposed project, which would be a significant impact if they are considered waters of the U.S. or state or subject to CDFW jurisdiction. Implementation of the recommended mitigation measure for aquatic resources would reduce the potential for project impacts to potential waters of the U.S. and state to less than significant.

Protected Trees

A total of 111 trees are present on the site, including 94 blue oaks, seven Fremont's cottonwoods (*Populus fremontii*), four interior live oaks, two Gooding's black willow (*Salix gooddingii*), one mulberry, one Chinese hackberry, one Chinese tallow, and one ornamental cherry (see Attachment A; Figure 5). The City of Folsom regulates trees under Section 12.16 of the Folsom Municipal Code (Tree Preservation Ordinance). A permit is required to remove native oaks (defined as valley oak, blue oak, interior live oak, and coast live oak) measuring 6-inches in diameter at standard height (i.e., 54-inches above natural grade, DSH), or a multi-stemmed native oak measuring a total of 20-inches at DSH. For a tree with a common root system that branches at the ground, DSH is defined as the sum of the diameter of the largest trunk and one-half the cumulative diameter of the remaining trunks measured at 4.5-feet above



natural grade. If protected trees will be removed by the proposed project, mitigation will be required per Section 12.16.150.

A total of 71 trees on the project site are considered protected by Folsom City Code; 69 blue oaks are protected, and two interior live oaks are protected. None of the Fremont's cottonwood, Chinese hackberry, Chinese tallow, mulberry, ornamental cherry or Gooding's black willow are protected. Refer to the stand-alone arborist report prepared by HELIX for the project site.

Sensitive Natural Communities

The aquatic resources and oak trees within the blue oak woodland community are regulated as previously described. Recommendation measures to address potential impacts to these resources are provided below.

RECOMMENDED MITIGATION MEASURES

Aquatic Resources

The 0.04-acre of aquatic features are potentially regulated by the USACE, CVRWQCB, and CDFW under the Clean Water Act, Porter-Cologne Act, and Section 1600 of the Fish and Game Code. Therefore, removal or fill of the aquatic features would likely require a permit from these agencies.

The following mitigation measure is recommended to reduce potential project impacts to jurisdictional wetlands and waters:

• Prior to start of construction, the project proponent shall either prepare a formal delineation and submit it to the USACE for verification or obtain verification based on the mapping of aquatic resources in this report as well as contact the USACE, RWQCB, and CDFW to determine the need for permits and secure any required aquatic resources permits for impacts to waters of the U.S./State from the USACE, RWQCB, and CDFW, pursuant to Sections 404 and 401 of the Clean Water Act, the California Water Code, Section 1600 of the Fish and Game Code, and the State Water Resource Control Board Dredge and Fill Policy. The project proponent shall comply with all conditions of such permits including providing compensatory mitigation at a minimum 1:1 ratio as required to achieve no net loss of wetlands or other waters.

White-Tailed Kite and other Migratory Birds and Raptors

The trees and understory grassland areas within the project site provide suitable nesting habitat for white-tailed kite and other raptors as well as other native birds and large trees adjacent to the site provide nesting habitat for raptors. Removal of vegetation containing active nests would potentially result in destruction of eggs and/or chicks; noise, dust, and other anthropogenic stressors in the vicinity of an active nest could lead to forced nest abandonment and mortality of eggs and/or chicks. Needless destruction of eggs or chicks would be a violation of the Fish and Game Code and a significant impact. Pre-construction surveys should be conducted prior to project implementation to determine if nesting birds are present on or adjacent to the site, so that measures could be implemented if needed to avoid harming nesting birds.

The following mitigation is recommended to reduce potential project impacts to white-tailed kite and other nesting birds:



Letter to Ryan Patterson October 21, 2020

- If project (construction) ground-disturbing or vegetation clearing and grubbing activities commence during the avian breeding season (February 1 August 31), a qualified biologist shall conduct a pre-construction nesting bird survey no more than 14 days prior to initiation of project activities and again immediately prior to construction. The survey area shall include suitable raptor nesting habitat within 500-feet of the project boundary (inaccessible areas outside of the project site can be surveyed from the site or from public roads using binoculars or spotting scopes). Pre-construction surveys are not required in areas where project activities have been continuous since prior to February 1, as determined by a qualified biologist. Areas that have been inactive for more than 14 days during the avian breeding season must be resurveyed prior to resumption of project activities. If no active nests are identified, no further mitigation is required. If active nests are identified, the following measure is required:
 - A suitable buffer (e.g., 500-feet for raptors; 100-feet for passerines) shall be established by a qualified biologist around active nests and no construction activities within the buffer shall be allowed until a qualified biologist has determined that the nest is no longer active (i.e., the nestlings have fledged and are no longer reliant on the nest, or the nest has failed). Encroachment into the buffer may occur at the discretion of a qualified biologist. Any encroachment into the buffer shall be monitored by a qualified biologist to determine whether nesting birds are being impacted.

Protected Trees

Of the 111 trees on the project site, 71 trees are considered protected by Folsom City Code; 69 blue oaks, and two interior live oaks. If protected trees will be removed by the proposed project mitigation will be required per Section 12.16.150.

Protected trees rated 3, 4 or 5 shall be replaced at a ratio of one-inch equivalent for every one-inch of DSH removed as shown in Table 1. Protected trees rated 2 shall be replaced at a ratio of one-half-inch equivalent for every one-inch removed. Protected trees rated 0 or 1 require no replacement or any other mitigation. Mitigation for trees can be done through on-site replacement planting, payment of in-lieu fees, or a combination thereof.

Replacement Tree Size	DSH Equivalency
A sapling tree; or	0.5-inch DSH
Tree in container less than 15 gallons	0.5-inch DSH
15-gallon container tree	1-inch DSH
24-inch box tree	2-inch DSH
36-inch box tree	3-inch DSH

Table 1: Tree Replacement Equivalency Table



Of the 71 trees protected by Folsom City Code, only 57 trees require mitigation based on having a health rating of 5, 4, 3, or 2. Based on the DSH equivalency ratio, mitigation for a total of 935.6- inches is required if all protected trees subject to mitigation requirements are impacted.

SUMMARY/CONCLUSION

Special-Status Species

HELIX conducted a biological resources evaluation for the proposed project. Based on a desktop review and a query of databases and lists maintained by the USFWS, CDFW, and CNPS, a total of 23 specialstatus animal species and 17 special-status plant species were identified as occurring in the project region and were evaluated for the potential to occur on the project site or be impacted by the proposed project. Based on the results of a biological reconnaissance survey and the habitats present on the site, the project site does not provide suitable habitat for any of the 17 regionally occurring special-status plant species. Suitable habitat is present on the project site for one (white-tailed kite) of the 23 regionally occurring special-status animal species, but none were observed on the site during the biological surveys.

White-Tailed Kite, Other Raptors, and Migratory Birds

The project site and vicinity provide suitable nesting habitat for white-tailed kite and other raptors and migratory birds. Removal of vegetation containing active nests would potentially result in destruction of eggs and/or chicks; noise, dust, and other anthropogenic stressors in the vicinity of an active nest could lead to forced nest abandonment and mortality of eggs and/or chicks. Needless destruction of eggs or chicks would be a violation of the Fish and Game Code and a significant impact. Pre-construction surveys should be conducted prior to project implementation to determine if nesting birds are present on or adjacent to the site, so that measures could be implemented if needed to avoid harming nesting birds.

Aquatic Resources

The 0.04-acre of aquatic features on the site are potentially regulated by the USACE, CVRWQCB, and CDFW under the Clean Water Act, Porter-Cologne Act, and Section 1600 of the Fish and Game Code. Therefore, removal or fill of the aquatic features would likely require a permit from these agencies and compliance with the permit requirements including providing compensatory mitigation at a minimum 1:1 ratio as required to achieve no net loss of wetlands or other waters.

Protected Trees

Of the 111 trees on the project site, 71 trees are considered protected by Folsom City Code. If protected trees will be removed by the proposed project, mitigation will be required per Section 12.16.150. Of the 71 trees that are protected by Folsom City Code, only 57 trees require mitigation based on having a health rating of 5, 4, 3, or 2. Based on the DSH equivalency ratio, mitigation for a total of 935.6-inches is required if all protected trees subject to mitigation are impacted.



Letter to Ryan Patterson October 21, 2020

I appreciate the opportunity to assist you on this project. Feel free to contact me with any questions at 916-365-8712.

Stephen String

Stephen Stringer, M.S. Principal Biologist

Attachments:

A – Figures

- B Regulatory Context
- C Database Query Results
- D Potential for Regionally Occurring Special-status Species to Occur on the Project site
- E Species Observed on the Project site
- F Site Photographs



REFERENCES

- Bolster, B.C., editor. 1998. Terrestrial Mammal Species of Special Concern in California. Draft Final Report prepared by P.V. Brylski, P.W. Collins, E.D. Pierson, W.E. Rainey and T.E. Kucera. Report submitted to California Department of Fish and Game Wildlife Management Division, Nongame Bird and Mammal Conservation Program for Contract No. FG3146WM.
- California Department of Fish and Wildlife (CDFW). 1994. Staff report regarding mitigation for impacts to Swainson's hawk (Buteo swainsoni) in the Central Valley of California. November 1.

_____. 2020. RareFind 5.0, California Natural Diversity Database. Sacramento, California. Accessed October 1, 2020. Information expires 2/28/2021.

- California Native Plant Society (CNPS). 2020. Inventory of Rare and Endangered Plants (online edition, v8-03 0.39). Website <u>http://www.rareplants.cnps.org</u> [Accessed 1 October 2020].
- Eriksen, C. H. and D. Belk. 1999. Fairy shrimps of California's puddles, pools, and playas. Mad River Press, Eureka, California.
- Gervais, J. A., Rosenberg, D. K., and Anthony, R. G. 2003. Space use and pesticide exposure risk of male Burrowing Owls in an agricultural landscape. J. Wildl. Mgmt. 67:156–165.
- Jennings, M.R. and M.P. Hayes. 1994. Amphibian and Reptile Species of Special Concern in California. Final Report submitted to the California Department of Fish and [Wildlife], Inland Fisheries Division.
- Lichvar, Robert W. and Shawn McColley. 2008. A Field Guide to the Identification of the Ordinary High-Water Mark (OHWM) in the Arid West Region of the Western United States. Vicksburg, MS: U.S. Army Corps of Engineers Research and Development Center.
- National Marine Fisheries Service (NMFS). 2016. California Central Valley Steelhead Distinct Population Segment: 5-year Review. California Central Valley Area Office.
- Natural Resources Conservation Service (NRCS). 2015. 2016 National Hydric Soils List. December 2015. Available on-line at: https://www.nrcs.usda.gov/wps/portal/nrcs/main/soils/use/hydric/.

_____. 2020. Web Soil Survey. Available online at: <u>https://websoilsurvey.sc.egov.usda.gov/App/WebSoilSurvey.aspx</u>. Accessed October 1, 2020.

NETR Online (NETR). 2020. Historic Aerials. https://www.historicaerials.com/viewer.

- Richmond, O.W., Chen, S.K., Risk, B.B., Tecklin, J., and S. R. Beissinger. 2010. California Black Rails Depend on Irrigation-fed Wetlands in the Sierra Nevada Foothills. California Agriculture: Volume 2, Number 2.
- Rogers, D.C. 2001. Revision of the North American Lepidurus (Notostraca: Crustacea) with a description of a new species previously confused with two other species. Journal of Crustacean Biology.

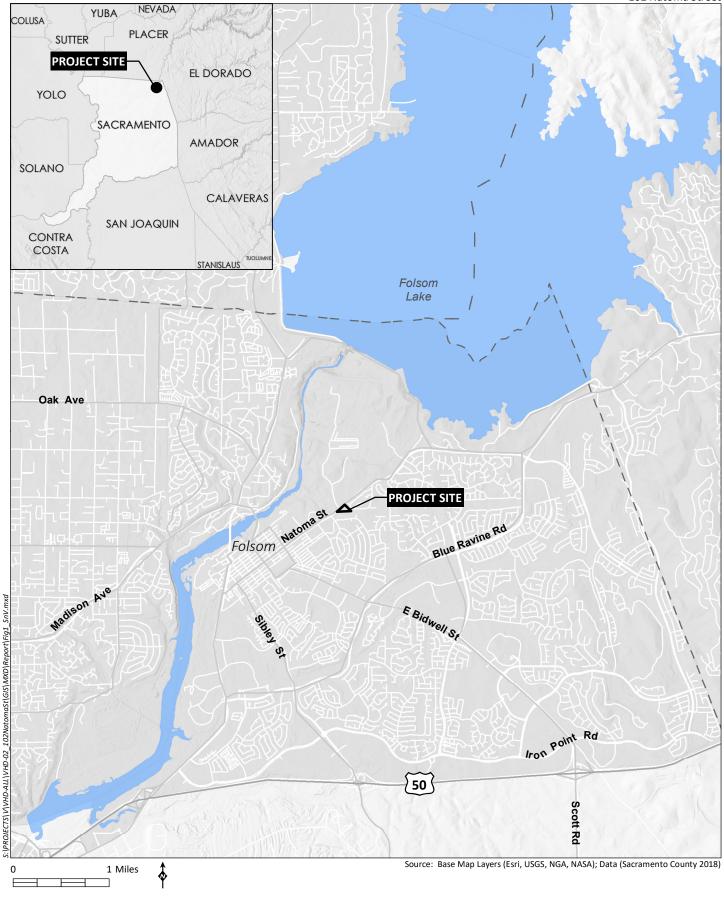


- Shuford, W.D., and T. Gardali, editors. 2008. California Bird Species of Special Concern: A ranked assessment of species, subspecies, and distinct populations of birds of immediate conservation concern in California. Studies of Western Birds 1. Western Field Ornithologists, Camarillo, California, and California Department of Fish and Game, Sacramento.
- U.S. Army Corps of Engineers (USACE). 1987. Corps of Engineers Wetlands Delineation Manual, Technical Report Y-87-1, U.S. Army Engineer Waterways Experiment Station, Vicksburg, MS.
- _____. 2008. Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region (Version 2.0). J.S. Wakeley, R.W. Lichvar, and C.V. Noble, eds., Technical Report prepared for the U.S. Army Engineer Research and Development Center, Vicksburg, MS.
- U.S. Fish and Wildlife Service (USFWS). 1995. Sacramento San Joaquin Delta Native Fishes Recovery Plan. U.S. Fish and Wildlife Service, Portland, OR.
- _____. 2002. Recovery Plan for the California Red-legged Frog (*Rana aurora draytonii*). U.S. Fish and Wildlife Service, Portland, Oregon. viii + 173 pp.
- _____. 2005. Recovery Plan for Vernal Pool Ecosystems of California and Southern Oregon. Region 1, U.S. Fish and Wildlife Service, Portland, OR. December 15.
- _____. 2014. 50 CFR Part 17 RIN–1018–AV29 Endangered and Threatened Wildlife and Plants; Withdrawal of the Proposed Rule to Remove the Valley Elderberry Longhorn Beetle from the Federal List of Endangered and Threatened Wildlife. Federal Register Vol. 79, No. 180. September 17.
- _____. 2017. Framework for Assessing Impacts to the Valley Elderberry Longhorn Beetle (*Desmocerus californicus dimorphus*). U.S. Fish and Wildlife Service; Sacramento, California. 28 pp.
- . 2017b. Recovery Plan for the Central California Distinct Population Segment of the California Tiger Salamander (*Ambystoma californiense*). U.S. Fish and Wildlife Service, Pacific Southwest Region, Sacramento, California. v + 69pp.
- _____. 2017c. Recovery Plan for the Giant Garter Snake (*Thamnophis gigas*). U.S. Fish and Wildlife Service, Pacific Southwest Region, Sacramento, California. vii + 71 pp.
- U.S. Fish and Wildlife Service (USFWS). 2020. Information for Planning and Consultation (IPaC). List of threatened and endangered species that may occur in your proposed project location and/or be affected by your proposed project.
- Williams, D.F. 1986. California Mammal Species of Special Concern in California. Department of Biological Sciences California State University, Stanislaus and California Department of Fish and Game, Sacramento.
- Zeiner, D.C., W.F. Laudenslayer, Jr., K.E. Mayer, and M. White, eds. 1988. California's Wildlife. Vol. I-III. California Depart. of Fish and Game, Sacramento, California.



Attachment A

Figures





Vicinity Map

Figure 1



HELIX Environmental Planning

Source: Base Map Layers (Maxar 2019)





Source: Base Map Layers (Maxar 2019); Data (HELIX 2020)





100 Feet

HELIX

Environmental Plannin



0

Source: Base Map Layers (Maxar 2019); Data (NRCS 2020)



Soils Map

Attachment B

Regulatory Context

Regulatory Setting

Policies, regulations, and plans pertaining to the protection of biological resources on the project site are summarized in the following sections.

Federal Requirements

Federal Endangered Species Act

The U.S. Fish and Wildlife Service (USFWS) enforces the provisions stipulated within the Federal Endangered Species Act of 1973 (FESA; 16 USC 1531 *et seq*.). Species identified as federally threatened or endangered (50 CFR 17.11, and 17.12) are protected from take, defined as direct or indirect harm, unless a Section 10 permit is granted to an entity other than a federal agency or a Biological Opinion with incidental take provisions is rendered to a federal lead agency via a Section 7 consultation. Pursuant to the requirements of FESA, an agency reviewing a proposed project within its jurisdiction must determine whether any federally-listed species may be present in the study area and determine whether the proposed project will jeopardize the continued existence of or result in the destruction or adverse modification of critical habitat of such species (16 USC 1536 (a)[3], [4]). Other federal agencies designate species of concern (species that have the potential to become listed), which are evaluated during environmental review under the National Environmental Protection Act (NEPA) or California Environmental Quality Act (CEQA) although they are not otherwise protected under FESA.

Migratory Bird Treaty Act

The Migratory Bird Treaty Act (MBTA) of 1918 established federal responsibilities for the protection of nearly all species of birds, their eggs, and nests. The Migratory Bird Treaty Reform Act of 2004 further defined species protected under the act and excluded all non-native species. Section 16 U.S.C. 703–712 of the Act states "unless and except as permitted by regulations, it shall be unlawful at any time, by any means or in any manner, to pursue, hunt, take, capture, kill, attempt to take, capture, or kill" a migratory bird. A migratory bird is any species or family of birds that live, reproduce or migrate within or across international borders at some point during their annual life cycle. Currently, there are 836 migratory birds protected nationwide by the Migratory Bird Treaty Act, of which 58 are legal to hunt. The U.S. Court of Appeals for the 9th Circuit (with jurisdiction over California) has ruled that the MBTA does not prohibit incidental take (952 F 2d 297 – Court of Appeals, 9th Circuit 1991).

Clean Water Act

Any person, firm, or agency planning to alter or work in Waters of the U.S. (WOTUS), including the discharge of dredged or fill material, must first obtain authorization from the U.S. Army Corps of Engineers (USACE) under Section 404 of the Clean Water Act (CWA; 33 United States Code [USC] 1344). Waters of the U.S. are defined as:

(1) All waters which are currently used, were used in the past, or may be susceptible to use in interstate or foreign commerce, including all waters which are subject to the ebb and flow of the tide;

(2) All interstate waters, including interstate wetlands;



(3) The territorial seas;

(4) All impoundments of waters otherwise identified as waters of the United States under this section;

(5) All tributaries, as defined in paragraph (c)(3) of this section, of waters identified in paragraphs (a)(1) through (3) of this section;

(6) All waters adjacent to a water identified in paragraphs (a)(1) through (5) of this section, including wetlands, ponds, lakes, oxbows, impoundments, and similar waters;

(7) All waters in paragraphs (a)(7)(i) through (v) of this section where they are determined, on a case-specific basis, to have a significant nexus to a water identified in paragraphs (a)(1) through (3) of this section. The waters identified in each of paragraphs (a)(7)(i) through (v) of this section are similarly situated and shall be combined, for purposes of a significant nexus analysis, in the watershed that drains to the nearest water identified in paragraphs (a)(1) through (3) of this section. Waters identified in this paragraph shall not be combined with waters identified in paragraph (a)(6) of this section when performing a significant nexus analysis. If waters identified in this paragraph are also an adjacent water under paragraph (a)(6), they are an adjacent water and no case-specific significant nexus analysis is required.

(i) *Prairie potholes.* Prairie potholes are a complex of glacially formed wetlands, usually occurring in depressions that lack permanent natural outlets, located in the upper Midwest.

(ii) *Carolina bays and Delmarva bays.* Carolina bays and Delmarva bays are ponded, depressional wetlands that occur along the Atlantic coastal plain.

(iii) *Pocosins.* Pocosins are evergreen shrub and tree dominated wetlands found predominantly along the Central Atlantic coastal plain.

(iv) Western vernal pools. Western vernal pools are seasonal wetlands located in parts of California and associated with topographic depression, soils with poor drainage, mild, wet winters and hot, dry summers.

(v) *Texas coastal prairie wetlands.* Texas coastal prairie wetlands are freshwater wetlands that occur as a mosaic of depressions, ridges, intermound flats, and mima mound wetlands located along the Texas Gulf Coast.

(8) All waters located within the 100-year floodplain of a water identified in paragraphs (a)(1) through (3) of this section and all waters located within 4,000 feet of the high tide line or ordinary high water mark of a water identified in paragraphs (a)(1) through (5) of this section where they are determined on a case-specific basis to have a significant nexus to a water identified in paragraphs (a)(1) through (3) of this section. For waters determined to have a significant nexus, the entire water is a water of the United States if a portion is located within the 100-year floodplain of a water identified in paragraphs (a)(1) through (3) of this section or within 4,000 feet of the high tide line or ordinary high water mark. Waters identified in this paragraph shall not be combined with waters identified in paragraph (a)(6) of this section when performing a significant nexus analysis. If waters identified in this paragraph are also an adjacent water under paragraph (a)(6), they are an adjacent water and no case-specific significant nexus analysis is required.



Within non-tidal waters that meet the definition given above, and in the absence of adjacent wetlands, the indicator used by the USACE to determine the lateral extent of its jurisdiction is the ordinary high water mark (OHWM), which is defined as that line on the shore established by the fluctuations of water and indicated by physical characteristics such as a clear, natural line impressed on the bank, shelving, changes in the character of soil, destruction of terrestrial vegetation, the presence of litter and debris, or other appropriate means that consider the characteristics of the surrounding areas.

Wetlands are defined under the CFR Part 328.3 as those areas that are inundated or saturated by surface or ground water at a frequency and duration to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions.

The USACE has determined that not all features which meet the WOTUS definition are, in fact, considered WOTUS. Normally, features not considered WOTUS include:

(1) Waste treatment systems, including treatment ponds or lagoons designed to meet the requirements of the Clean Water Act.

(2) Prior converted cropland. Notwithstanding the determination of an area's status as prior converted cropland by any other Federal agency, for the purposes of the Clean Water Act, the final authority regarding Clean Water Act jurisdiction remains with the U.S. Environmental Protection Agency (EPA).

(3) The following ditches:

(i) Ditches with ephemeral flow that are not a relocated tributary or excavated in a tributary.

(ii) Ditches with intermittent flow that are not a relocated tributary, excavated in a tributary, or drain wetlands.

(iii) Ditches that do not flow, either directly or through another water, into a water identified in paragraphs (a)(1) through (3) of this section.

(4) The following features:

(i) Artificially irrigated areas that would revert to dry land should application of water to that area cease;

(ii) Artificial, constructed lakes and ponds created in dry land such as farm and stock watering ponds, irrigation ponds, settling basins, fields flooded for rice growing, log cleaning ponds, or cooling ponds;

(iii) Artificial reflecting pools or swimming pools created in dry land;

(iv) Small ornamental waters created in dry land;

(v) Water-filled depressions created in dry land incidental to mining or construction activity, including pits excavated for obtaining fill, sand, or gravel that fill with water;



(vi) Erosional features, including gullies, rills, and other ephemeral features that do not meet the definition of tributary, non-wetland swales, and lawfully constructed grassed waterways; and

(vii) Puddles.

(5) Groundwater, including groundwater drained through subsurface drainage systems.

(6) Stormwater control features constructed to convey, treat, or store stormwater that are created in dry land.

(7) Wastewater recycling structures constructed in dry land; detention and retention basins built for wastewater recycling; groundwater recharge basins; percolation ponds built for wastewater recycling; and water distributary structures built for wastewater recycling.

Other features may be excluded based on Federal court rulings (e.g., SWANCC and Rapanos) or by regulation.

Permits, licenses, variances, or similar authorization may also be required by other federal, state, and local statutes. Section 10 of the Rivers and Harbors Act of 1899 prohibits the obstruction or alteration of navigable WOTUS without a permit from the USACE (33 USC 403).

On January 23, 2020 the EPA and the USACE finalized the Navigable Waters Protection Rule to define Waters of the U.S. and establish federal regulatory authority under the Clean Water Act. The rule was published on April 20, 2020 and became effective 60 days after publication in the *Federal Register*.

State Requirements

California Endangered Species Act

The California Endangered Species Act (CESA) (California Fish and Game Code Sections 2050 to 2097) is similar to the FESA. The California Fish and Wildlife Commission is responsible for maintaining lists of threatened and endangered species under CESA. CESA prohibits the take of listed and candidate (petitioned to be listed) species. "Take" under California law means to hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch capture, or kill (California Fish and Game Code, Section 86). The California Department of Fish and Wildlife (CDFW) can authorize take of a state-listed species under Section 2081 of the California Fish and Game Code if the take is incidental to an otherwise lawful activity, the impacts are minimized and fully mitigated, funding is ensured to implement and monitor mitigation measures, and CDFW determines that issuance would not jeopardize the continued existence of the species. A CESA permit must be obtained if a project will result in the "take" of listed species, either during construction or over the life of the project. For species listed under both FESA and CESA requiring a Biological Opinion under Section 7 of the FESA, CDFW may also authorize impacts to CESA species by issuing a Consistency Determination under Section 2080.1 of the Fish and Game Code.

California Code of Regulations Title 14 and California Fish and Game Code

The official listing of endangered and threatened animals and plants is contained in the California Code of Regulations Title 14 §670.5. A state candidate species is one that the California Fish and Game Code has formally noticed as being under review by CDFW to include in the state list pursuant to Sections 2074.2 and 2075.5 of the California Fish and Game Code.



Legal protection is also provided for wildlife species in California that are identified as "fully protected animals." These species are protected under Sections 3511 (birds), 4700 (mammals), 5050 (reptiles and amphibians), and 5515 (fish) of the California Fish and Game Code. These statutes prohibit take or possession of fully protected species at any time. CDFW is unable to authorize incidental take of fully protected species unless any such take authorization is issued in conjunction with the approval of a Natural Community Conservation Plan that covers the fully protected species (California Fish and Game Code Section 2835).

California Environmental Quality Act

Under the California Environmental Quality Act of 1970 (CEQA; Public Resources Code Section 21000 *et seq*.), lead agencies analyze whether projects would have a substantial adverse effect on a candidate, sensitive, or special-status species (Public Resources Code Section 21001(c)). These "special-status" species generally include those listed under FESA and CESA, and species that are not currently protected by statute or regulation, but would be considered rare, threatened, or endangered under the criteria included CEQA Guidelines Section 15380. Therefore, species that are considered rare are addressed under CEQA regardless of whether they are afforded protection through any other statute or regulation. The California Native Plant Society (CNPS) inventories the native flora of California and ranks species according to rarity; plants ranked as 1A, 1B, 2A, 2B, and 3 are generally considered special-status species under CEQA.¹

Although threatened and endangered species are protected by specific federal and state statutes, CEQA Guidelines Section 15380(d) provides that a species not listed on the federal or state list of protected species may be considered rare if it can be shown to meet certain specified criteria. These criteria have been modeled after the definition in FESA and the section of the California Fish and Game Code dealing with rare or endangered plants and animals. Section 15380(d) allows a public agency to undertake a review to determine if a significant effect on species that have not yet been listed by either the USFWS or CDFW (*i.e.*, candidate species) would occur.

California Native Plant Protection Act

The California Native Plant Protection Act of 1977 (California Fish and Game Code Sections 1900-1913) empowers the Fish and Game Commission to list native plant species, subspecies, or varieties as endangered or rare following a public hearing. To the extent that the location of such plants is known, CDFW must notify property owners that a listed plant is known to occur on their property. Where a property owner has been so notified by CDFW, the owner must notify CDFW at least 10 days in advance of any change in land use (other than changing from one agricultural use to another), in order that CDFW may salvage listed plants that would otherwise be destroyed. Currently, 64 taxa of native plants have been listed as rare under the act.

Nesting Birds

California Fish and Game Code Subsections 3503 and 3800 prohibit the possession, take, or needless destruction of birds, their nests, and eggs, and the salvage of dead nongame birds. California Fish and Game Code Subsection 3503.5 protects all birds in the orders of Falconiformes and Strigiformes (birds of prey). Fish and Game Code Subsection 3513 states that it is unlawful to take or possess any migratory nongame bird as designated in the Migratory Bird Treaty Act or any part of

¹ The California Rare Plant Rank system can be found online at < http://www.cnps.org/cnps/rareplants/ranking.php>



such migratory nongame bird except as provided by rules and regulations adopted by the Secretary of the Interior under provisions of the Migratory Bird Treaty Act. The Attorney General of California has released an opinion that the Fish and Game Code prohibits incidental take.

Porter-Cologne Act and State/Regional Water Quality Control Board

The Porter-Cologne Water Quality Control Act (Porter-Cologne Act, Water Code Section 13000 *et seq.*) is California's statutory authority for the protection of water quality in conjunction with the federal CWA. The Porter-Cologne Act requires the State Water Resources Control Board (SWRCB) and RWQCBs under the CWA to adopt and periodically update water quality control plans, or basin plans. Basin plans are plans in which beneficial uses, water quality objectives, and implementation programs are established for each of the nine regions in California. The Porter-Cologne Act also requires dischargers of pollutants or dredged or fill material to notify the RWQCBs of such activities by filing Reports of Waste Discharge and authorizes the SWRCB and RWQCBs to issue and enforce waste discharge requirements, National Pollution Discharge Elimination System (NPDES) permits, Section 401 water quality certifications, or other approvals. The RWQCB will assert jurisdiction over any waters of the state, including wetlands, regardless of whether or not the feature qualifies as waters of the U.S.

Discharges of fill or waste material to waters of the State are regulated by the State Water Resources Control Board (SWRCB) through its Regional Water Quality Control Board (RWQCB) under Section 401 of the CWA and the Porter-Cologne Water Quality Control Act (contained in the California Water Code). All waters of the U.S. are also considered waters of the State. In addition, other aquatic features that are not subject to USACE jurisdiction, such as roadside ditches or isolated wetlands, may be considered waters of the State. This determination will be made by RWQCB staff on a case-by-case basis.

Section 401 of the CWA requires an applicant to obtain "water quality certification" to ensure compliance with State water quality standards before certain federal licenses or permits may be issued. Section 13260(a) of the Porter-Cologne Water Quality Control Act requires any person discharging waste, including dredged or fill material, or proposing to discharge waste, other than to a community sewer system, within any region that could affect the quality of the waters of the State (all surface and subsurface waters) to file a report of waste discharge. The permits subject to Section 401 include CWA Section 404 permits issued by the USACE. Waste discharge requirements under the Porter-Cologne Water Quality Control Act were typically waived for projects that required certification. Discharges to waters of the State that are not subject to a CWA Section 404 permit rely on the report of waste discharge process.

On April 2, 2019, the SWRCB adopted a State Wetland Definition and Procedures for Discharges of Dredged or Fill Material to Waters of the State (Procedures), for inclusion in the forthcoming Water Quality Control Plan for Inland Surface Waters and Enclosed Bays and Estuaries and Ocean Waters of California. The Procedures consist of four major elements: 1) a wetland definition; 2) a framework for determining if a feature that meets the wetland definition is a water of the state; 3) wetland delineation procedures; and 4) procedures for the submittal, review and approval of applications for Water Quality Certifications and Waste Discharge Requirements for dredge or fill activities. The Office of Administrative Law approved the Procedures on August 28, 2019, and the Procedures became effective on May 28, 2020.

Under the Procedures and the State Water Code (Water Code §13050(e)), "waters of the State" are defined as "any surface water or groundwater, including saline waters, within the boundaries of the



state." Unless excluded by the Procedures, any activity that could result in discharge of dredged or fill material to waters of the State, which includes waters of the U.S. and non-federal waters of the State, requires filing of an application under the Procedures.

California Fish and Game Code Section 1602 – Lake and Streambed Alteration Program

Diversions or obstructions of the natural flow of, or substantial changes or use of material from the bed, channel, or bank of any river, stream, or lake in California that supports wildlife resources are subject to regulation by CDFW, pursuant to Section 1602 of the California Fish and Game Code. The CDFW requires notification prior to commencement of any such activities, and a Streambed Alteration Agreement (SAA) pursuant to Fish and Game Code Sections 1601-1603, if the activity may substantially adversely affect an existing fish or wildlife resource. A lake under CDFW jurisdiction is defined as "a permanent natural body of water of any size or an artificially impounded body of water of at least one acre, isolated from the sea, and having an area of open water of sufficient depth and permanency to prevent complete coverage by rooted aquatic plants" (CCR Vol. 18 Title 14, Section 1562.1). Streambeds within CDFW jurisdiction are based on the definition of a stream as "a body of water that flows at least periodically or intermittently through a bed or channel having banks and supporting fish or other aquatic life" (CCR Vol. 18 Title 14, Section 1.72).

Local Requirements

Protected Trees

The City of Folsom regulates trees under Section 12.16 of the Folsom Municipal Code (Tree Preservation Ordinance). A permit is required to remove native oaks (defined as valley oak [*Quercus lobata*], blue oak [*Quercus douglasii*], interior live oak [*Quercus wislizeni*], and coast live oak [*Quercus agrifolia*]) measuring six inches in diameter at standard height (i.e. 54 inches above natural grade, DSH), or a multistemmed native oak measuring a total of 20 inches at DSH. For a tree with a common root system that branches at the ground, DSH is defined as the sum of the diameter of the largest trunk and one-half the cumulative diameter of the remaining trunks measured at 4.5 feet above natural grade. If protected trees will be removed by the proposed project mitigation will be required per Section 12.16.150.



Attachment C

Database Query Results





 Query Criteria:
 Quad IS (Folsom (3812162) OR Folsom SE (3812151) OR Clarksville (3812161) OR Buffalo Creek (3812152))

Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
Accipiter cooperii	ABNKC12040	None	None	G5	S4	WL
Cooper's hawk						
Agelaius tricolor	ABPBXB0020	None	Threatened	G2G3	S1S2	SSC
tricolored blackbird						
Ammodramus savannarum	ABPBXA0020	None	None	G5	S3	SSC
grasshopper sparrow						
Andrena blennospermatis	IIHYM35030	None	None	G2	S2	
Blennosperma vernal pool andrenid bee						
Antrozous pallidus	AMACC10010	None	None	G5	S3	SSC
pallid bat						
Aquila chrysaetos	ABNKC22010	None	None	G5	S3	FP
golden eagle						
Ardea alba	ABNGA04040	None	None	G5	S4	
great egret						
Ardea herodias	ABNGA04010	None	None	G5	S4	
great blue heron						
Athene cunicularia	ABNSB10010	None	None	G4	S3	SSC
burrowing owl						
Branchinecta lynchi	ICBRA03030	Threatened	None	G3	S3	
vernal pool fairy shrimp						
Branchinecta mesovallensis	ICBRA03150	None	None	G2	S2S3	
midvalley fairy shrimp						
Buteo regalis	ABNKC19120	None	None	G4	S3S4	WL
ferruginous hawk						
Buteo swainsoni	ABNKC19070	None	Threatened	G5	S3	
Swainson's hawk						
Ceanothus roderickii	PDRHA04190	Endangered	Rare	G1	S1	1B.1
Pine Hill ceanothus						
Chlorogalum grandiflorum	PMLIL0G020	None	None	G3	S3	1B.2
Red Hills soaproot						
Clarkia biloba ssp. brandegeeae	PDONA05053	None	None	G4G5T4	S4	4.2
Brandegee's clarkia						
Crocanthemum suffrutescens	PDCIS020F0	None	None	G2?Q	S2?	3.2
Bisbee Peak rush-rose						
Desmocerus californicus dimorphus	IICOL48011	Threatened	None	G3T2	S2	
valley elderberry longhorn beetle						
Downingia pusilla	PDCAM060C0	None	None	GU	S2	2B.2
dwarf downingia						



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
Dumontia oregonensis	ICBRA23010	None	None	G1G3	S1	
hairy water flea						
Elanus leucurus	ABNKC06010	None	None	G5	S3S4	FP
white-tailed kite						
Emys marmorata	ARAAD02030	None	None	G3G4	S3	SSC
western pond turtle						
Erethizon dorsatum	AMAFJ01010	None	None	G5	S3	
North American porcupine						
Eryngium pinnatisectum	PDAPI0Z0P0	None	None	G2	S2	1B.2
Tuolumne button-celery						
Falco columbarius	ABNKD06030	None	None	G5	S3S4	WL
merlin						
Fremontodendron decumbens	PDSTE03030	Endangered	Rare	G1	S1	1B.2
Pine Hill flannelbush						
Galium californicum ssp. sierrae	PDRUB0N0E7	Endangered	Rare	G5T1	S1	1B.2
El Dorado bedstraw						
Gratiola heterosepala	PDSCR0R060	None	Endangered	G2	S2	1B.2
Boggs Lake hedge-hyssop						
Haliaeetus leucocephalus	ABNKC10010	Delisted	Endangered	G5	S3	FP
bald eagle						
Hydrochara rickseckeri	IICOL5V010	None	None	G2?	S2?	
Ricksecker's water scavenger beetle						
Juncus leiospermus var. ahartii	PMJUN011L1	None	None	G2T1	S1	1B.2
Ahart's dwarf rush						
Lasionycteris noctivagans	AMACC02010	None	None	G5	S3S4	
silver-haired bat						
Laterallus jamaicensis coturniculus California black rail	ABNME03041	None	Threatened	G3G4T1	S1	FP
Legenere limosa	PDCAM0C010	None	None	G2	S2	1B.1
legenere						
Lepidurus packardi vernal pool tadpole shrimp	ICBRA10010	Endangered	None	G4	S3S4	
Linderiella occidentalis California linderiella	ICBRA06010	None	None	G2G3	S2S3	
Navarretia myersii ssp. myersii pincushion navarretia	PDPLM0C0X1	None	None	G2T2	S2	1B.1
Northern Hardpan Vernal Pool	CTT44110CA	None	None	G3	S3.1	
Northern Hardpan Vernal Pool						
Northern Volcanic Mud Flow Vernal Pool	CTT44132CA	None	None	G1	S1.1	
Northern Volcanic Mud Flow Vernal Pool				-	-	
Oncorhynchus mykiss irideus pop. 11 steelhead - Central Valley DPS	AFCHA0209K	Threatened	None	G5T2Q	S2	



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
Orcuttia tenuis	PMPOA4G050	Threatened	Endangered	G2	S2	1B.1
slender Orcutt grass						
Orcuttia viscida	PMPOA4G070	Endangered	Endangered	G1	S1	1B.1
Sacramento Orcutt grass						
Packera layneae	PDAST8H1V0	Threatened	Rare	G2	S2	1B.2
Layne's ragwort						
Phalacrocorax auritus	ABNFD01020	None	None	G5	S4	WL
double-crested cormorant						
Rana boylii	AAABH01050	None	Endangered	G3	S3	SSC
foothill yellow-legged frog						
Rana draytonii	AAABH01022	Threatened	None	G2G3	S2S3	SSC
California red-legged frog						
Sagittaria sanfordii	PMALI040Q0	None	None	G3	S3	1B.2
Sanford's arrowhead						
Spea hammondii	AAABF02020	None	None	G3	S3	SSC
western spadefoot						
Taxidea taxus	AMAJF04010	None	None	G5	S3	SSC
American badger						
Thamnophis gigas	ARADB36150	Threatened	Threatened	G2	S2	
giant gartersnake						
Valley Needlegrass Grassland	CTT42110CA	None	None	G3	S3.1	
Valley Needlegrass Grassland						
Wyethia reticulata	PDAST9X0D0	None	None	G2	S2	1B.2
El Dorado County mule ears						

Record Count: 52



*The database used to provide updates to the Online Inventory is under construction. <u>View updates and changes made since May 2019 here</u>.

Plant List

20 matches found. Click on scientific name for details

Search Criteria

California Rare Plant Rank is one of [1A, 1B, 2A, 2B, 3, 4], FESA is one of [Endangered, Threatened, Candidate, Not Listed], CESA is one of [Endangered, Threatened, Rare, Not Listed], Found in Quads 3812162, 3812151 3812161 and 3812152;

🔍 Modify Search Criteria 🖏 Export to Excel 🖓 Modify Columns 💱 Modify Sort 📼 Display Photos

Scientific Name	Common Name	Family	Lifeform	Blooming Period	CA Rare Plant Rank	State Rank	Global Rank
<u>Brodiaea rosea ssp.</u> <u>vallicola</u>	valley brodiaea	Themidaceae	perennial bulbiferous herb	Apr- May(Jun)	4.2	S3	G5T3
<u>Calandrinia breweri</u>	Brewer's calandrinia	Montiaceae	annual herb	(Jan)Mar- Jun	4.2	S4	G4
Ceanothus roderickii	Pine Hill ceanothus	Rhamnaceae	perennial evergreen shrub	Apr-Jun	1B.1	S1	G1
<u>Chlorogalum</u> g <u>randiflorum</u>	Red Hills soaproot	Agavaceae	perennial bulbiferous herb	May-Jun	1B.2	S3	G3
<u>Clarkia biloba ssp.</u> <u>brandegeeae</u>	Brandegee's clarkia	Onagraceae	annual herb	May-Jul	4.2	S4	G4G5T4
<u>Crocanthemum</u> <u>suffrutescens</u>	Bisbee Peak rush- rose	Cistaceae	perennial evergreen shrub	Apr-Aug	3.2	S2?	G2?Q
<u>Downingia pusilla</u>	dwarf downingia	Campanulaceae	annual herb	Mar-May	2B.2	S2	GU
<u>Eriophyllum jepsonii</u>	Jepson's woolly sunflower	Asteraceae	perennial herb	Apr-Jun	4.3	S3	G3
<u>Eryngium</u> pinnatisectum	Tuolumne button- celery	Apiaceae	annual / perennial herb	May-Aug	1B.2	S2	G2
<u>Fremontodendron</u> <u>decumbens</u>	Pine Hill flannelbush	Malvaceae	perennial evergreen shrub	Apr-Jul	1B.2	S1	G1
<u>Galium californicum</u> <u>ssp. sierrae</u>	El Dorado bedstraw	Rubiaceae	perennial herb	May-Jun	1B.2	S1	G5T1
Gratiola heterosepala	Boggs Lake hedge- hyssop	Plantaginaceae	annual herb	Apr-Aug	1B.2	S2	G2
<u>Juncus leiospermus</u> var. ahartii	Ahart's dwarf rush	Juncaceae	annual herb	Mar-May	1B.2	S1	G2T1
<u>Legenere limosa</u>	legenere	Campanulaceae	annual herb	Apr-Jun	1B.1	S2	G2
	pincushion	Polemoniaceae	annual herb	Apr-May	1B.1	S2	G2T2

			· · · · · · · · · ·				
<u>Navarretia myersii</u> <u>ssp. myersii</u>	navarretia						
Orcuttia tenuis	slender Orcutt grass	Poaceae	annual herb	May- Sep(Oct)	1B.1	S2	G2
Orcuttia viscida	Sacramento Orcutt grass	Poaceae	annual herb	Apr- Jul(Sep)	1B.1	S1	G1
<u>Packera layneae</u>	Layne's ragwort	Asteraceae	perennial herb	Apr-Aug	1B.2	S2	G2
<u>Sagittaria sanfordii</u>	Sanford's arrowhead	Alismataceae	perennial rhizomatous herb (emergent)	May- Oct(Nov)	1B.2	S3	G3
<u>Wyethia reticulata</u>	El Dorado County mule ears	Asteraceae	perennial herb	Apr-Aug	1B.2	S2	G2

CNPS Inventory Results

Suggested Citation

10/1/2020

California Native Plant Society, Rare Plant Program. 2020. Inventory of Rare and Endangered Plants of California (online edition, v8-03 0.39). Website http://www.rareplants.cnps.org [accessed 01 October 2020].

- Search the Inventory Simple Search Advanced Search Glossary
- Information About the Inventory About the Rare Plant Program CNPS Home Page About CNPS Join CNPS

Contributors

The California Lichen Society California Natural Diversity Database The Jepson Flora Project The Consortium of California Herbaria CalPhotos

Questions and Comments rareplants@cnps.org

© Copyright 2010-2018 California Native Plant Society. All rights reserved.

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.

Location

Sacramento County, California



Local office

Sacramento Fish And Wildlife Office

└ (916) 414-6600**i** (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 species¹ and their critical habitats are managed by the <u>Ecological Services Program</u> of the U.S. Fish and Wildlife Service (USFWS) and the fisheries division of the National Oceanic and Atmospheric Administration (NOAA Fisheries²).

Species and critical habitats under the sole responsibility of NOAA Fisheries are **not** shown on this list. Please contact <u>NOAA Fisheries</u> for <u>species under their jurisdiction</u>.

- 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.
- 2. <u>NOAA Fisheries</u>, also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

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



STATUS

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

Amphibians

NAME	STATUS
California Red-legged Frog Rana draytonii There is final critical habitat for this species. Your location is outside the critical habitat. <u>https://ecos.fws.gov/ecp/species/2891</u>	Threatened
California Tiger Salamander Ambystoma californiense There is final critical habitat for this species. Your location is outside the critical habitat. <u>https://ecos.fws.gov/ecp/species/2076</u>	Threatened
Fishes 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	Threatened
NAME	STATUS
Valley Elderberry Longhorn Beetle Desmocerus californicus dimorphus There is final critical habitat for this species. Your location is outside the critical habitat. https://ecos.fws.gov/ecp/species/7850	Threatened
NAME	STATUS
Conservancy Fairy Shrimp Branchinecta conservatio There is final critical habitat for this species. Your location is outside the critical habitat. <u>https://ecos.fws.gov/ecp/species/8246</u>	Endangered
Vernal Pool Fairy Shrimp Branchinecta lynchi There is final critical habitat for this species. Your location is outside the critical habitat. <u>https://ecos.fws.gov/ecp/species/498</u>	Threatened

Endangered

Vernal Pool Tadpole Shrimp Lepidurus packardi There is final critical habitat for this species. Your location is outside the critical habitat. <u>https://ecos.fws.gov/ecp/species/2246</u>

Flowering Plants

NAME

STATUS

Endangered

Sacramento Orcutt Grass Orcuttia viscida There is final critical habitat for this species. Your location is outside the critical habitat. <u>https://ecos.fws.gov/ecp/species/5507</u>

Critical habitats

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

NSU

THERE ARE NO CRITICAL HABITATS AT THIS LOCATION.

Migratory birds

Certain birds are protected under the Migratory Bird Treaty Act^{1} and the Bald and Golden Eagle Protection Act^{2} .

Any person or organization who plans or conducts activities that may result in impacts to migratory birds, eagles, and their habitats should follow appropriate regulations and consider implementing appropriate conservation measures, as described <u>below</u>.

1. The <u>Migratory Birds Treaty Act</u> of 1918.

2. The <u>Bald and Golden Eagle Protection Act</u> of 1940.

Additional information can be found using the following links:

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

The birds listed below are birds of particular concern either because they occur on the <u>USFWS Birds</u> <u>of Conservation Concern</u> (BCC) list or warrant special attention in your project location. To learn more about the levels of concern for birds on your list and how this list is generated, see the FAQ

10/1/2020

IPaC: Explore Location

<u>below</u>. This is not a list of every bird you may find in this location, nor a guarantee that every bird on this list will be found in your project area. To see exact locations of where birders and the general public have sighted birds in and around your project area, visit the <u>E-bird data mapping tool</u> (Tip: enter your location, desired date range and a species on your list). For projects that occur off the Atlantic Coast, additional maps and models detailing the relative occurrence and abundance of bird species on your list are available. Links to additional information about Atlantic Coast birds, and other important information about your migratory bird list, including how to properly interpret and use your migratory bird report, can be found <u>below</u>.

For guidance on when to schedule activities or implement avoidance and minimization measures to reduce impacts to migratory birds on your list, click on the PROBABILITY OF PRESENCE SUMMARY at the top of your list to see when these birds are most likely to be present and breeding in your project area.

NAME

BREEDING SEASON (IF A BREEDING SEASON IS INDICATED FOR A BIRD ON YOUR LIST, THE BIRD MAY BREED IN YOUR PROJECT AREA SOMETIME WITHIN THE TIMEFRAME SPECIFIED, WHICH IS A VERY LIBERAL ESTIMATE OF THE DATES INSIDE WHICH THE BIRD BREEDS ACROSS ITS ENTIRE RANGE. "BREEDS ELSEWHERE" INDICATES THAT THE BIRD DOES NOT LIKELY BREED IN YOUR PROJECT AREA.)

CONSC	WHICH THE BIRD BREEDS AC ITS ENTIRE RANGE. "BREEDS ELSEWHERE" INDICATES THA THE BIRD DOES NOT LIKELY BREED IN YOUR PROJECT AR
Bald Eagle Haliaeetus leucocephalus This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities. https://ecos.fws.gov/ecp/species/1626	Breeds Jan 1 to Aug 31
California Thrasher Toxostoma redivivum This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.	Breeds Jan 1 to Jul 31
Clark's Grebe Aechmophorus clarkii This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.	Breeds Jan 1 to Dec 31
Golden Eagle Aquila chrysaetos This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities.	Breeds Jan 1 to Aug 31

Lawrence's Goldfinch Carduelis lawrencei This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. <u>https://ecos.fws.gov/ecp/species/9464</u>	Breeds Mar 20 to Sep 20
Lewis's Woodpecker Melanerpes lewis This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. <u>https://ecos.fws.gov/ecp/species/9408</u>	Breeds Apr 20 to Sep 30
Nuttall's Woodpecker Picoides nuttallii This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA <u>https://ecos.fws.gov/ecp/species/9410</u>	Breeds Apr 1 to Jul 20
Oak Titmouse Baeolophus inornatus This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. <u>https://ecos.fws.gov/ecp/species/9656</u>	Breeds Mar 15 to Jul 15
Rufous Hummingbird selasphorus rufus This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. <u>https://ecos.fws.gov/ecp/species/8002</u>	Breeds elsewhere
Song Sparrow Melospiza melodia This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA	Breeds Feb 20 to Sep 5
Spotted Towhee Pipilo maculatus clementae This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA <u>https://ecos.fws.gov/ecp/species/4243</u>	Breeds Apr 15 to Jul 20
Wrentit Chamaea fasciata This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.	Breeds Mar 15 to Aug 10
Yellow-billed Magpie Pica nuttalli This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. <u>https://ecos.fws.gov/ecp/species/9726</u>	Breeds Apr 1 to Jul 31

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. Please make sure you read and understand the FAQ "Proper Interpretation and Use of Your Migratory Bird Report" before using or attempting to interpret this report.

Probability of Presence (

Each green bar represents the bird's relative probability of presence in the 10km grid cell(s) your project overlaps 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 a very liberal estimate of the time-frame inside which the bird breeds across its entire range. If there are no yellow bars shown for a bird, it does not breed in your project area.

Survey Effort (|)

Vertical black lines superimposed on probability of presence bars indicate the number of surveys performed for that species in the 10km grid cell(s) your project area overlaps. 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 (–)

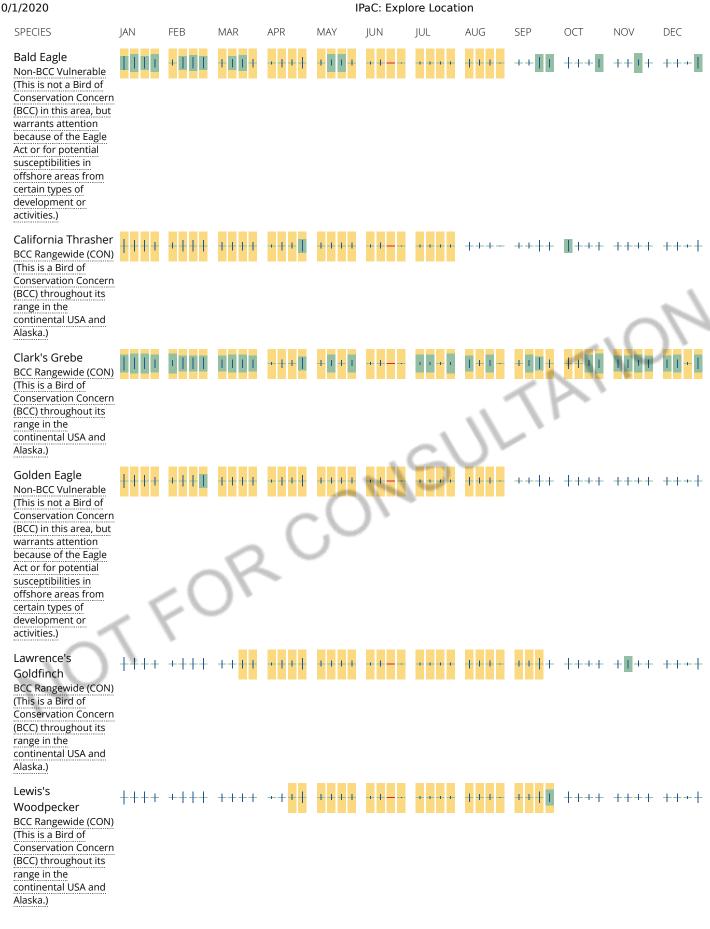
A week is marked as having no data if there were no survey events for that week.

Survey Timeframe

Surveys from only the last 10 years are used in order to ensure delivery of currently relevant information. The exception to this is areas off the Atlantic coast, where bird returns are based on all years of available data, since data in these areas is currently much more sparse.

■ probability of presence breeding season survey effort no data

10/1	/2020
10/1	/2020



IPaC: Explore Location

Nuttall's Woodpecker BCC - BCR (This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA)		****	111	111	111+	• 1 - 1	÷	111-	1111	1111	111+	111
Oak Titmouse BCC Rangewide (CON (This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.)			1111	111	1111	1 1	111+	111	+	111	1111	1111
Rufous Hummingbird BCC Rangewide (CON (This is a Bird of Conservation Concer (BCC) throughout its range in the continental USA and Alaska.)	<u>)</u>	++++	++++	+ +	++++	++	++++	11+	+ 1++	+++++	++++ C	+++++
Song Sparrow BCC - BCR (This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA)		1111	+ 1 1 +	1111	. (S		<mark>.</mark>		11++	+
Spotted Towhee BCC - BCR (This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA)		-111			MT	-1-1	111+	11+	++11	1+11	11+1	ш
Wrentit BCC Rangewide (CON (This is a Bird of Conservation Concerr (BCC) throughout its range in the continental USA and Alaska.)		++++	++++	+ [] [] +	+11+	• + - -	+ + + +	+ ++	++++	++	+ # + #	+++
SPECIES Yellow-billed Magpie BCC Rangewide (CON (This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.))	FEB ++++	MAR ++++	APR + + + + +	MAY +++++	JUN	JUL + + + +	AUG +++	SEP +++++	ост + I ++	NOV ++++	DEC ++++

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

IPaC: Explore Location

<u>Nationwide Conservation Measures</u> describes measures that can help avoid and minimize impacts to all birds at any location year round. Implementation of these measures is particularly important when birds are most likely to occur in the project area. When birds may be breeding in the area, identifying the locations of any active nests and avoiding their destruction is a very helpful impact minimization measure. To see when birds are most likely to occur and be breeding in your project area, view the Probability of Presence Summary. <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> and other species that may warrant special attention in your project location.

The migratory bird list generated for your project is derived from data provided by the <u>Avian Knowledge Network</u> (<u>AKN</u>). The AKN data is based on a growing collection of <u>survey</u>, <u>banding</u>, <u>and citizen science datasets</u> and is queried and filtered to return a list of those birds reported as occurring in the 10km grid cell(s) which your project intersects, and that have been identified as warranting special attention because they are a BCC species in that area, an eagle (<u>Eagle Act</u> requirements may apply), or a species that has a particular vulnerability to offshore activities or development.

Again, the Migratory Bird Resource list includes only a subset of birds that may occur in your project area. It is not representative of all birds that may occur in your project area. To get a list of all birds potentially present in your project area, please visit the <u>AKN Phenology Tool</u>.

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</u> <u>Knowledge Network (AKN)</u>. This data is derived from a growing collection of <u>survey</u>, <u>banding</u>, <u>and citizen science</u> <u>datasets</u>.

Probability of presence data is continuously being updated as new and better information becomes available. To learn more about how the probability of presence graphs are produced and how to interpret them, go the Probability of Presence Summary and then click on the "Tell me about these graphs" link.

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: <u>The Cornell Lab of Ornithology All About Birds Bird Guide</u>, or (if you are unsuccessful in locating the bird of interest there), the <u>Cornell Lab of Ornithology Neotropical Birds</u> <u>guide</u>. If a bird on your migratory bird species list has a breeding season associated with it, if that bird does occur in your project area, there may be nests present at some point within the timeframe specified. If "Breeds elsewhere" is indicated, then the bird likely does not breed in your project area.

What are the levels of concern for migratory birds?

Migratory birds delivered through IPaC fall into the following distinct categories of concern:

- 1. "BCC Rangewide" birds are <u>Birds of Conservation Concern</u> (BCC) that are of concern throughout their range anywhere within the USA (including Hawaii, the Pacific Islands, Puerto Rico, and the Virgin Islands);
- 2. "BCC BCR" birds are BCCs that are of concern only in particular Bird Conservation Regions (BCRs) in the continental USA; and
- 3. "Non-BCC Vulnerable" birds are not BCC species in your project area, but appear on your list either because of the <u>Eagle Act</u> requirements (for eagles) or (for non-eagles) potential susceptibilities in offshore areas from certain types of development or activities (e.g. offshore energy development or longline fishing).

IPaC: Explore Location

Although it is important to try to avoid and minimize impacts to all birds, efforts should be made, in particular, to avoid and minimize impacts to the birds on this list, especially eagles and BCC species of rangewide concern. For more information on conservation measures you can implement to help avoid and minimize migratory bird impacts and requirements for eagles, please see the FAQs for these topics.

Details about birds that are potentially affected by offshore projects

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 <u>Northeast Ocean Data Portal</u>. 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 <u>NOAA NCCOS</u> <u>Integrative Statistical Modeling and Predictive Mapping of Marine Bird Distributions and Abundance on the Atlantic Outer Continental Shelf</u> project webpage.

Bird tracking data can also provide additional details about occurrence and habitat use throughout the year, including migration. Models relying on survey data may not include this information. For additional information on marine bird tracking data, see the <u>Diving Bird Study</u> and the <u>nanotag studies</u> or contact <u>Caleb Spiegel</u> or <u>Pam</u> <u>Loring</u>.

What if I have eagles on my list?

If your project has the potential to disturb or kill eagles, you may need to <u>obtain a permit</u> to avoid violating the Eagle Act should such impacts occur.

Proper Interpretation and Use of Your Migratory Bird Report

The migratory bird list generated is not a list of all birds in your project area, only a subset of birds of priority concern. To learn more about how your list is generated, and see options for identifying what other birds may be in your project area, please see the FAQ "What does IPaC use to generate the migratory birds potentially occurring in my specified location". Please be aware this report provides the "probability of presence" of birds within the 10 km grid cell(s) that overlap your project; not your exact project footprint. On the graphs provided, please also look carefully at the survey effort (indicated by the black vertical bar) and for the existence of the "no data" indicator (a red horizontal bar). A high survey effort is the key component. If the survey effort bar or no data bar means a lack of data and, therefore, a lack of certainty about presence of the species. This list is not perfect; it is simply a starting point for identifying what birds of concern have the potential to be in your project area, when they might be there, and if they might be breeding (which means nests might be present). The list helps you know what to look for to confirm presence, and helps guide you in knowing when to implement conservation measures to avoid or minimize potential impacts from your project activities, should presence be confirmed. To learn more about conservation measures to migratory birds" at the bottom of your migratory bird trust resources page.

Facilities

National Wildlife Refuge lands

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

THERE ARE NO REFUGE LANDS AT THIS LOCATION.

Fish hatcheries

THERE ARE NO FISH HATCHERIES AT THIS LOCATION.

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</u> <u>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.

https://ecos.fws.gov/ipac/location/3WLN5HQYPZERVAIU5PMTRNZG7I/resources

Attachment D

Potential for Regionally Occurring Specialstatus species to Occur on the Project Site

Species Name/ Common Name ¹	Status ²	Habit, Ecology and Life History	Potential to Occur
Plants			
<i>Ceanothus roderickii</i> Pine Hill ceanothus	FE/SR/1B.1	A perennial evergreen shrub found in serpentinite or nutrient-deficient forms of gabbro-derived soils characterized by low concentrations of available K, P, S, Fe, and Zn. Occurs in chaparral and cismontane woodland. Blooms April – June (CNPS 2020).	Will not occur. There are no suitable chaparral or woodland habitats with suitable soils within the Study Area.
<i>Chlorogalum grandiflorum</i> Red Hills soaproot	//1B.2	A perennial bulbiferous herb found in serpentinite, gabbroic, and other soils and occurs in chaparral, cismontane woodland, and lower montane coniferous forest. Blooms May – June (CNPS 2020).	Will not occur. There are no suitable chaparral or woodland habitats with suitable soils within the Study Area.
Chloropyron molle ssp. hispidum hispid bird's-beak	//1B.1	An annual hemiparasitic herb found in alkaline habitats in meadows, seeps, playas, and valley and foothill grassland from 1 – 155 meters elevation in the Central Valley. Blooms June – September (CNPS 2020).	Will not occur. There are no suitable meadow or grassland habitat within the Study Area.
<i>Crocanthemum suffrutescens</i> Bisbee Peak rush-rose	//3.2	A perennial evergreen shrub found in chaparral, often in burned or disturbed openings on gabbroic or Ione soils, from 75 – 670 meters elevation. Blooms April – August (CNPS 2020).	Will not occur. There are no suitable chaparral or disturbed openings on gabbroic or lone soils within the Study Area.
<i>Downingia pusilla</i> dwarf downingia	//-2B.2	An annual herb that occurs in mesic valley and foothill grassland and vernal pools. Blooms March – May (CNPS 2020).	Will not occur. There is no suitable vernal pool habitat within the Study Area.
<i>Eryngium pinnatisectum</i> Tuolumne button-celery	//1B.2	An annual/perennial herb found in vernal pools in cismontane woodland and lower montane coniferous forest from 70 – 915 meters elevation. Blooms May – August (CNPS 2020).	Will not occur. There is no suitable vernal pool habitat within the Study Area.



Species Name/ Common Name ¹	Status ²	Habit, Ecology and Life History	Potential to Occur
Fremontodendron decumbens Pine Hill flannelbush	FE/SR/1B.2	A perennial evergreen shrub found in rocky gabbroic or serpentinite soils and occurs in chaparral and cismontane woodland. Blooms April – July (CNPS 2020).	Will not occur. There are no suitable chaparral or woodland habitats with suitable soils within the Study Area.
<i>Galium californicum</i> ssp. <i>sierrae</i> El Dorado bedstraw	FE/SR/1B.2	A perennial herb found in gabbroic soil and occurs in chaparral, cismontane woodland, and lower montane coniferous forest. Blooms May – June (CNPS 2020).	Will not occur. There are no suitable chaparral or woodland habitats with suitable soils within the Study Area.
<i>Gratiola heterosepala</i> Boggs Lake hedge-hyssop	/SE/1B.2	An annual herb found on clay soils in marshes and swamps at lake margins, and in vernal pools from 10 – 2,375 meters elevation. Blooms April – August (CNPS 2020).	Will not occur. There is no suitable marsh, swamp, or vernal pool habitat within the Study Area.
<i>Juncus leiospermus</i> var. <i>ahartii</i> Ahart's dwarf rush	//1B.2	An annual herb found in vernal pools in the eastern Sacramento Valley from 30 – 229 meters elevation. Blooms March – May (CNPS 2020).	Will not occur. There is no suitable vernal pool habitat within the Study Area.
<i>Legenere limosa</i> legenere	//1B.1	An annual herb found in vernal pools from 1 – 880 meters elevation. Blooms April – June (CNPS 2020).	Will not occur. There is no suitable vernal pool habitat within the Study Area.
Navarretia myserii ssp. myserii pincushion navarretia	//1B.1	An annual herb found often in acidic soils and occurs in vernal pools. Blooms April – May (CNPS 2020).	Will not occur. There is no suitable vernal pool habitat within the Study Area.
<i>Orcuttia tenuis</i> slender Orcutt grass	FT/SE/1B.1	An annual herb found in vernal pools from 35 – 1,760 meters elevation. Blooms May to October (CNPS 2020).	Will not occur. There is no suitable vernal pool habitat within the Study Area.
<i>Orcuttia viscida</i> Sacramento Orcutt grass	FE/SE/1B.1	An annual herb that occurs in vernal pools. Blooms April – July (September) (CNPS 2020).	Will not occur. There is no suitable vernal pool habitat within the Study Area.



Species Name/ Common Name ¹	Status ²	Habit, Ecology and Life History	Potential to Occur
<i>Packera layneae</i> Layne's ragwort	FT-/SR/1B.2	A perennial herb found in rocky gabbroic or serpentinite soils and occurs in chaparral and cismontane woodland. Blooms April – August (CNPS 2020).	Will not occur. There are no suitable chaparral or woodland habitats with suitable soils within the Study Area.
Sagittaria sanfordii Sanford's arrowhead	//1B.2	An emergent perennial rhizomatous herb that occurs in assorted freshwater marshes and swamps. Blooms May – October (November) (CNPS 2020).	Will not occur. There are no suitable marsh or swamp habitats within the Study Area.
<i>Wyethia reticulata</i> El Dorado County mule ears	//1B.2	A perennial herb found in clay or gabbroic soils and occurs in chaparral, cismontane woodland, and lower montane coniferous forest. Blooms April – August (CNPS 2020).	Will not occur. There are no suitable chaparral or woodland habitats with suitable soils within the Study Area.



Species Name/ Common Name ¹	Status ²	Habit, Ecology and Life History	Potential to Occur	
Animals				
Invertebrates				
<i>Branchinecta conservatio</i> conservancy fairy shrimp	FE//	Occupies large clay bottomed vernal pools to vernal lakes with turbid water in grasslands. The historical distribution of this species is unknown and it is currently distributed throughout the Central Valley and southern coastal regions of California (USFWS 2005).	Will not occur. There is no suitable vernal pool habitat within the Study Area.	



Species Name/ Common Name ¹	Status ²	Habit, Ecology and Life History	Potential to Occur
<i>Branchinecta lynchi</i> vernal pool fairy shrimp	FT//	The range of the vernal pool fairy shrimp (VPFS) within California includes the Central Valley and southern California. (USFWS 2005). Populations are known from Stillwater Plain in Shasta County through most of the length of the Central Valley to Pixley in Tulare County (additional disjunct populations exist at various locations throughout state). VPFS occurs mostly in vernal pools, however it is also found in a variety of both natural and artificial wetland habitats, such as alkali pools, ephemeral drainages, stock ponds, roadside ditches, vernal swales, and rock outcrop pools (USFWS 2005). Occupied wetlands are typically small (ranging from 0.1 to 0.05 acres in size), and pond for a relatively short duration (3-4 weeks) (Eriksen and Belk 1999). Soil types associated with VPFS vary greatly with geography and influence the ecology of the species. This fairy shrimp occurs in pools with 48 to 481 ppm salinity, and pH from 6.3 to 8.5 (Eriksen and Belk 1999).	Will not occur. There is no suitable vernal pool habitat within the Study Area.



Species Name/ Common Name ¹	Status ²	Habit, Ecology and Life History	Potential to Occur
Desmocerus californicus californicus valley elderberry longhorn beetle	FT//	Endemic to elderberry shrubs (<i>Sambucus</i> spp.) occurring in riparian habitat in the Sacramento and San Joaquin Valleys, riparian habitats in the Sacramento and San Joaquin Valleys, and less common throughout riparian forests of the Central Valley from Redding to Fresno County (USFWS 2014) typically below 152 m amsl (USFWS 2017a).	Will not occur. There are no elderberry shrubs in or immediately adjacent to the Study Area.
<i>Lepidurus packardi</i> vernal pool tadpole shrimp	FE//	The vernal pool tadpole shrimp (VPTS) occurs within the Central Valley of California and in the San Francisco Bay area (USFWS 2005), with the majority of the populations occurring in the Sacramento Valley. Suitable habitats vary considerably, including vernal pools, clay flats, alkaline pools, ephemeral stock tanks, roadside ditches, and road ruts (Rogers 2001). Vernal pools may range in size from small, clear, and well-vegetated to highly turbid, alkali scald pools to large winter lakes ranging in size from 54 square feet to 89 acres (USFWS 2005), containing clear- to highly-turbid water. They may be seasonal or ephemeral and may exhibit a wide range of salinity levels. VPTS cysts (resting eggs) also must have the opportunity to dry out before they can hatch.	Will not occur. There is no suitable vernal pool habitat within the Study Area.
Fishes			

Species Name/ Common Name ¹	Status ²	Habit, Ecology and Life History	Potential to Occur
<i>Hypomesus transpacificus</i> Delta smelt	FT/SE/	Delta smelt are tolerant of a wide salinity range. For a large part of their one-year life span, delta smelt live along the freshwater edge of the mixing zone (saltwater-freshwater interface). Shortly before spawning, adults migrate upstream from the brackish-water habitat associated with the mixing zone and disperse into river channels and tidally-influenced backwater sloughs. They spawn in shallow, fresh or slightly brackish water upstream of the mixing zone. Most spawning happens in tidally-influenced backwater sloughs and channel edgewaters. Although spawning has not been observed in the wild, the eggs are thought to attach to substrates such as cattails, tules, tree roots and submerged branches. Delta smelt are found only from Suisun Bay upstream through the Delta in Contra Costa, Sacramento, San Joaquin, Solano and Yolo counties (USFWS 1995).	Will not occur. There is no suitable aquatic habitat for this species on the property and the property is outside of this species' known geographic range.
Oncorhynchus mykiss irideus pop. 11 Central Valley Steelhead DPS	FT//	This distinct population segment includes all naturally spawned anadromous steelhead populations below natural and manmade impassable barriers in the Sacramento and San Joaquin Rivers and their tributaries, excluding steelhead from San Francisco and San Pablo Bays and their tributaries, as well as two artificial propagation programs: the Coleman NFH,	Will not occur. There is no suitable aquatic habitat on the property.



Species Name/ Common Name ¹	Status ²	Habit, Ecology and Life History	Potential to Occur
Amphibians		and Feather River Hatchery steelhead hatchery programs (NMFS 2016). Steelhead spawn in rivers and streams with cool, clear, water and suitable silt free substrate (NMFS 2016). Generally restricted to vernal pools and seasonal ponds, including many	
<i>Ambystoma californiense</i> California tiger salamander	FT/ST/	constructed stock ponds, in grassland and oak savannah plant communities from sea level to about 1,500 feet in central California. Adults spend the majority of their lives in upland areas surrounding suitable breeding ponds, in rodent burrows. Suitable breeding habitat must be present in combination with suitable upland habitat. In the Coastal region, populations are scattered from Sonoma County in the northern San Francisco Bay Area to Santa Barbara County, and in the Central Valley and Sierra Nevada foothills from Yolo to Kern counties (USFWS 2017b).	Will not occur. The project site and surrounding area is developed and does not provide suitable breeding habitat or upland refuge sites for this species.
<i>Rana boylii</i> Foothill yellow-legged frog	/SE/SSC (Northern Sierra Nevada and Feather River Pop ST; FE along the Coast and Southern California; North coast populations are not listed)	The foothill yellow-legged frog occurs along the coast ranges from Oregon to Los Angeles and along the western side of the Sierra Nevada. This species uses perennial rocky streams in a wide variety of habitats up to 6,400 feet above msl. This species rarely ventures far from water, is usually found basking in the water, or under	Will not occur . The Study Area is outside of this species' known geographic range and there is no suitable aquatic habitat in or adjacent to the Study Area.



Species Name/ Common Name ¹	Status ²	Habit, Ecology and Life History	Potential to Occur
		surface debris or underground within 165 feet of water. Eggs are laid in clusters attached to gravel or rocks along stream margins in flowing water. Tadpoles typically require up to four months to complete aquatic development. Breeding typically follows winter rainfall and snowmelt, which varies based upon location (Jennings and Hayes 1994).	
<i>Rana draytonii</i> California red-legged frog	FT//SSC	The California red-legged frog occupies a fairly distinct habitat, combining both specific aquatic and riparian components. The adults require dense, shrubby or emergent riparian vegetation closely associated with deep (greater than 2 1/3- foot deep) still or slow-moving water. The largest densities of California red-legged frogs are associated with deep-water pools with dense stands of overhanging willows (<i>Salix</i> spp.) and an intermixed fringe of cattails (<i>Typha latifolia</i>). Well-vegetated terrestrial areas within the riparian corridor may provide important sheltering habitat during winter. California red- legged frogs aestivate (enter a dormant state during summer or dry weather) in small mammal burrows and moist leaf litter. They have been found up to 100 feet from water in adjacent dense riparian vegetation. Studies have indicated that this species cannot inhabit water bodies	Will not occur . There is no suitable aquatic habitat in or adjacent to the Study Area.



Species Name/ Common Name ¹	Status ²	Habit, Ecology and Life History	Potential to Occur
		that exceed 70° F, especially if there are no cool, deep portions (USFWS 2002).	
<i>Spea hammondii</i> western spadefoot	//SSC	Amphibian that breeds in vernal pools and seasonal ponds or slow portions of streams in grasslands and woodlands. Adults spend most of their time in underground burrows in grasslands surrounding breeding pools (Jennings and Hayes 1994). Breeding is typically finished by the end of March. Tadpoles mature through late-spring and disperse as pools dry (Zeiner <i>et al.</i> 1990).	Will not occur. The Study Area and surrounding area is developed and does not provide suitable breeding habitat or upland refuge sites for this species.



Species Name/ Common Name ¹	Status ²	Habit, Ecology and Life History	Potential to Occur
Reptiles			
<i>Actinemys (=Emys) marmorata</i> western pond turtle	//SSC	Inhabits slow-moving water with dense submerged vegetation, abundant basking sites, gently sloping banks, and dry clay or silt soils in nearby uplands. Turtles will lay eggs up to 0.25-mile from water, but typically go no more than 600 feet (Jennings and Hayes 1994).	Will Not Occur. There is no suitable aquatic or upland habitat in the Study Area for this species.
<i>Thamnophis gigas</i> giant gartersnake	FT/ST/	Endemic to the San Joaquin and Sacramento Valley floors. Inhabits agricultural wetlands and other waterways such as irrigation and drainage canals, sloughs, ponds, small lakes, low gradient streams, and adjacent uplands. Requires adequate water during its active season (early spring through mid-fall) to provide food and cover, emergent, herbaceous wetland vegetation for foraging and cover, grassy banks and openings in waterside vegetation for basking, and higher elevation uplands for cover and refuge from flood waters during its dormant season (winter). Inhabits small mammal burrows and other soil crevices with sunny exposure along south and west facing slopes, above prevailing flood elevations when dormant. Primarily found in marshes and sloughs as well as slow-moving creeks but absent from large rivers (USFWS 2017c).	Will Not Occur. There is no suitable aquatic habitat in the Study Area for this species.
Birds			

Species Name/ Common Name ¹	Status ²	Habit, Ecology and Life History	Potential to Occur
<i>Agelaius tricolor</i> tricolored blackbird	/ST/SSC	Common locally throughout central California. Nests and seeks cover in emergent wetland vegetation and thorny vegetation such as Himalayan blackberry (<i>Rubus armeniacus</i>) as well as cattails and tules. Nesting area must be large enough to support a minimum colony of 50 pairs as they are a highly colonial species. Forages on ground in croplands, grassy fields, flooded land, and edges of ponds for insects (Shuford and Gardali 2008).	Will not occur. There is no suitable nesting or foraging habitat within the Study Area for this species.
<i>Ammodramus savannarum</i> Grasshopper sparrow	//SSC	A summer resident of foothills and lowlands west of the Cascade-Sierra Nevada crest. Occurs in grasslands with scattered shrubs or other tall structures which it utilizes as singing perches. Nests on the ground in dense grass with overhanging taller grasses and forbs (Zeiner et al. 1990).	Will not occur. There is no suitable grassland nesting habitat for this species within the Study Area.
<i>Aquila chrysaetos</i> golden eagle	//FP	Typically occurs in rolling foothills, mountain areas, deserts and other open habitats up to 3,822 m amsl. Typically nests on cliff ledges or large trees in open areas in canyons. Will occasionally use other tall structures for nesting, such as electrical transmission towers. Prey consists mostly of rodents, carrion, birds, reptiles and occasionally small livestock (Zeiner et al. 1990).	Will not occur. There is no suitable nesting habitat for this species within the Study Area.



Species Name/ Common Name ¹	Status ²	Habit, Ecology and Life History	Potential to Occur
<i>Athene cunicularia</i> burrowing owl	//SSC	Forages in grasslands, agricultural fields, and disturbed places where burrowing mammals are abundant with low and sparse vegetation. Nests in burrows, especially those of California ground squirrel, but will use other refuge sites (<i>Otospermophilus beecheyi</i> ; Shuford and Gardali 2008). In the Central Valley of California, most foraging occurs within a 600-m radius of the nest (Gervais et al. 2003).	Will not occur. There is no suitable nesting or foraging habitat for this species within the Study Area.
<i>Buteo swansoni</i> Swainson's hawk	/ST/	Forages in grasslands, suitable grain or alfalfa fields, or livestock pastures adjacent to nesting habitat. Nests on large trees in open riparian habitat, scattered trees or small groves of trees in open areas (CDFW 1994).	Will not occur. There is no suitable nesting or foraging habitat for this species within the Study Area.
<i>Elanus leucurus</i> white-tailed kite	//FP	Raptor that inhabits rolling foothills and valley margins with scattered oaks, as well as river bottomlands or marshes next to deciduous woodland. Nests in isolated, dense-topped trees in open areas. Forages in a variety of habitats including grassland, marshes, and agricultural fields (Zeiner <i>et</i> <i>al.</i> 1990).	May Occur. There are suitable nest trees in and adjacent to the Study Area. Raptor nests were not observed in any of the trees on or adjacent to the site. Nearest extant occurrence is 3 miles west near Lake Natoma (CDFW 2020).
Haliaeetus leucocephalus bald eagle	FD/SE/FP	Requires large bodies of water with an abundant fish population. Feeds on fish, carrion, small mammals, and water-fowl. Nests are usually located within a 1-mile radius of water. Nests are most often	Will not occur. There is no suitable nesting or foraging habitat for this species within the Study Area.



Species Name/ Common Name ¹	Status ²	Habit, Ecology and Life History	Potential to Occur
		situated in large trees with a commanding view of the area (Zeiner <i>et al.</i> 1990).	
<i>Laterallus jamaicensis coturniculus</i> California black rail	/ST/FP	Inhabits brackish marsh, primarily in the upper marsh zone dominated by alkali heath (<i>Frankenia salina</i>), cattail, and rush (<i>Juncus</i> spp.); prefers lower salinity environments. In the Sierra Nevada foothills, black rail is a year-round resident along wetland edges where water is 1.2 inches or less (Richmond et al. 2010). Black rail is typically associated with perennial wetlands associated with flowing water such as irrigation canals, perennial streams and springs with dense vegetation in the Sierra Nevada foothills (Richmond et al. 2010). Forages on the ground, under cover of dense vegetation (Richmond et al. 2010).	Will not occur. There is no suitable nesting or foraging habitat for this species within the Study Area.
Mammals			
<i>Antrozous pallidus</i> pallid bat	//SSC	Occurs throughout California except for the high Sierra Nevada and the northern Coast Ranges. Habitats include grasslands, shrublands, woodlands, and forests from sea level to 6,000 feet. Most common in open, dry habitats with rocky areas for roosting; roosts also include cliffs, abandoned buildings, bird boxes, and under bridges (Bolster, ed. 1998).	Will not occur. There is no suitable roosting habitat for this species within the Study Area.



Species Name/ Common Name ¹	Status ²	Habit, Ecology and Life History	Potential to Occur
<i>Taxidea taxus</i> American badger	//SSC	Inhabits drier open stages of most shrub, forest, and herbaceous habitats with loose, friable soils. Preys on a wide variety of mammals, reptiles, birds, and carrion, and hunts mostly by digging out fossorial prey. Occasionally takes prey on the surface. Not tolerant of cultivation. No longer occur in the Central Valley except in the extreme western edge (Williams 1986).	Will not occur. There is no suitable shrub, forest, or herbaceous habitat for this species within the Study Area.

¹Sensitive species reported in CNDDB or CNPS on the "Rio Linda" USGS quads, or in USFWS lists for the project site.

²Status is as follows: Federal (ESA) listing/State (CESA) listing/other CDFW status or CRPR. F = Federal; S = State of California; E = Endangered; T =

Threatened; R = Rare; C = Candidate; FP=Fully Protected; SSC=Species of Special Concern; WL=Watch List.

CRPR = California Rare Plant Rank: 1B – rare, threatened, or endangered in California and elsewhere; 2B – rare, threatened, or endangered in California but more common elsewhere. Extension codes: .1 – seriously endangered; .2 – moderately endangered.

³Status in the Project site is assessed as follows. **Will Not Occur**: Species is either sessile (*i.e.* plants) or so limited to a particular habitat that it cannot disperse on its own and/or habitat suitable for its establishment and survival does not occur on the project site; **Not Expected**: Species moves freely and might disperse through or across the project site, but suitable habitat for residence or breeding does not occur on the project site, potential for an individual of the species to disperse through or forage in the site cannot be excluded with 100% certainty; **Presumed Absent:** Habitat suitable for residence and breeding occurs on the project site; however, focused surveys conducted for the current project were negative; **May Occur**: Species was not observed on the site and breeding habitat is not present but the species has the potential to utilize the site for dispersal, **High**: Habitat suitable for residence and breeding occurs on the species has been recorded recently on or near the project site, but was not observed during surveys for the current project and is assumed to occupy the project site or utilize the project site during some portion of its life cycle.



Attachment E

Species Observed on the Project Site

Family	Species Name	Common Name	Status
Native			
Asparagaceae	Chlorogalum pomeridianum	Wavy-leafed soap plant	
Asteraceae	Holocarpha virgata	Narrow tarplant	
Cyperaceae	Cyperus eragrostis	Tall flatsedge	
Fagaceae	Quercus douglasii	Blue oak	
	Quercus wislizeni	Interior live oak	
Juncaceae	Juncus bufonius	Toad rush	
Salicaceae	Populus fremontii	Fremont's cottonwood	
	Salix gooddingii	Gooding's black willow	
Vitaceae	Vitis californica	California grape	
Non-native			
Apiaceae	Torilis arvensis	Tall sock destroyer	Moderate
Asteraceae	Carduus pycnocephalus	Italian thistle	Moderate
	Centaurea solstitialis	Yellow star-thistle	High
	Cirsium vulgare	Spear thistle	Moderate
	Sonchus oleraceus	Sow thistle	
	Tragopogon sp.	goatsbeard	
Brassicaceae	Brassica nigra	Black mustard	Moderate
	Raphanus sativus	Wild radish	Limited
Cannabaceae	Celtis sinensis	Chinese hackberry	
Convolvulaceae	Convolvulus arvensis	Field bindweed	/C
Euphorbiaceae	Triadica sebifera	Chinese tallow	Moderate
Fabaceae	Trifolium hirtum	Rose clover	Limited
	Vicia sativa	Common vetch	
Geraniaceae	Geranium sp.	Geranium	
Hypericaceae	Hypericum perforatum	St John's wort	Moderate
Moraceae	Morus alba	mulberry	
Poaceae	Aegilops triuncialis	Barbed goatgrass	High
	Avena sp.	cultivated oats	
	Briza minor	Little quaking grass	
	Bromus hordeaceus	soft brome	Limited
	Cynosurus echinatus	bristly dogstail grass	Moderate
	Festuca perennis	Italian rye-grass	Moderate
	Holcus lanatus	common velvet grass	Moderate
	Paspalum dilatatum	Dallis grass	

Attachment E: Plant Species Observed at 102 Natoma Street, City of Folsom, CA

Family	Species Name	Common Name	Status
	Polypogon monspeliensis	annual beard-grass	Limited
	Taeniatherum caput-medusae	medusahead	
Polygonaceae	Rumex crispus	Curly dock	Limited
Rosaceae	Prunus sp.	Ornamental cherry	
	Pyrus calleryana	Callery pear	Watch
	Rubus armeniacus	Himalayan blackberry	High
Rubiaceae	Galium sp.	bedstraw	

Cal-IPC Rating = Limited -; Moderate -; High. CDFA Rating = C -

Wildlife Species Observed at 102 Natoma Street, City of Folsom, CA

Order/Family	Species Name	Common Name	Status*
Reptiles			
Squamata			
Phrynosomatidae	Sceloporus occidentalis	western fence lizard	
Birds			
Accipitriformes			
Accipitridae	Buteo lineatus	red-shouldered hawk	
Charadriiformes			
Charadriidae	Charadrius vociferus	killdeer	
Columbiformes			
Columbidae	Zenaida macroura	mourning dove	
Galliformes			
Phasianidae	Meleagris gallopavo	wild turkey	
Passeriformes			
Corvidae	Aphelocoma californica	California scrub jay	
	Pica nutalli	yellow-billed magpie	
Fringillidae	Haemorhous mexicanus	house finch	
	Spinus psaltria	Lesser goldfinch	
Icteridae	Euphagus cyanocephalus	Brewer's blackbird	
Mimidae	Mimus polyglottos	northern mockingbird	
Paridae	Baeolophus inornatus	oak titmouse	
Passeridae	Passer domesticus	house sparrow	
Sittidae	Sitta carolinensis	white-breasted nuthatch	
Tyrannidae	Sayornis nigricans	black phoebe	
Piciformes			
Picidae	Colaptes auratus	northern flicker	

Species Name	Common Name	Status*
Canis latrans	coyote (scat)	
Lepus californicus	black-tailed jackrabbit (scat)	
	Canis latrans	Canis latrans coyote (scat)

Attachment F

Site Photographs



Photo 1: View of intermittent drainage feature running through blue oak woodland. Photo taken facing northeast.



Photo 2: View of intermittent drainage feature running through blue oak woodland. Photo taken facing west.





Photo 3: View of cycling trail and traffic on Natoma Street, along the northern boundary of the project site. Photo taken facing west.



Photo 4: View along the boundary of the site at Natoma Street. Photo taken facing northeast.





Photo 5: View of electrical towers along the southern boundary of the project site. Photo taken facing southwest.



Photo 6: View of blue oak woodland habitat on the project site. Photo taken facing west.





Photo 7: View of informal bike trails and jumps constructed beneath the canopy of oak trees. Photo taken facing south.



Photo 8: View of the intermittent drainage running through the project site. Photo taken facing northeast.





Photo 9: View of the ephemeral drainage running through the project site. Photo taken facing southeast.



Photo 10: View of the "Y" intersection of the intermittent and ephemeral drainages on the project site. Photo taken facing west.

