4.2 BIOLOGICAL RESOURCES

4.2.1 INTRODUCTION

This section evaluates the potential impacts to biological resources from the construction and occupancy of the proposed Green Valley II Mixed-use project ("proposed project"). The biological resources addressed in this section include special-status plants and wildlife, sensitive habitats, and conservation plans. Regulations and policies for the protection of biological resources in the City of Fairfield are also described. Information presented in this section is based on a Biological Resources Assessment prepared for the project by WRA Environmental Consultants (WRA). This report is included in **Appendix 4.2** of this Draft EIR**.**

4.2.2 ENVIRONMENTAL SETTING

4.2.2.1 Project Site and Surrounding Land Uses

The proposed project consists of approximately 13 acres of disturbed, disked, and mowed land located in the City of Fairfield, northwest of Interstate-80 (I-80) at the southwestern corner of Business Center Drive and Suisun Valley Road in the Green Valley Corporate Park. The site is bounded by major and minor arterial roads, including Business Center Drive along the western and northern property lines, and Neitzel Road and Suisun Valley Road along the eastern property line.

The site is within a mixed urban and rural setting, bounded to the north by Business Center Drive and office uses, to the east by Suisun Valley Road and vacant land, to the south by properties undergoing development with office buildings, and to the west by Business Center Drive and office uses. Historical imagery shows no evidence of previous development activities, including grading and road development after 1993.

4.2.2.2 Project Site Survey

Prior to conducting field surveys, available reference materials were reviewed, including online soil survey data for the project area, the USGS 7.5-minute quadrangle map for Cordelia, the U.S. Fish and Wildlife Service (USFWS) National Wetland Inventory (NWI) data, rainfall and precipitation data, and available aerial photographs of the site. A survey of the project site was conducted by WRA on February 12, 2018. The site survey included walking the entire project site to obtain 100 percent visual coverage, to determine whether any sensitive plant communities were present within the project area, if existing conditions provided suitable habitat for any special-status plant or wildlife species, and if sensitive habitats are present (WRA 2019).

4.2.2.3 Project Site Conditions and Biological Communities

Following the site visit, biological communities present on the project site were classified based on existing plant community descriptions described in A Manual of California Vegetation, Online Edition. However, in some cases, it was necessary to identify variants of community types or to describe non-vegetated areas that are not described in the literature. Biological communities were classified as sensitive or non-sensitive as defined by CEQA and other applicable laws and regulations (WRA 2019).

Only one biological community type, ruderal herbaceous grassland, was observed on the project site. This non-sensitive biological community covers the entire project site. No sensitive biological community types, such as wetlands, native grasslands, or riparian habitat, were observed during a site survey conducted on February 12, 2018 on the project site (WRA 2019).

Ruderal herbaceous grassland includes areas that have been heavily altered by humans by historic and current land management activities, including agriculture, disking, and mowing. The project site is composed of approximately 13 acres of ruderal habitat, comprised primarily of disked fields, mowed areas, and areas of disturbed vegetation surrounded in part by a dirt berm. Ruderal herbaceous also includes two small paved areas along the western boundary of the project site. Ruderal herbaceous areas are comprised primarily of ruderal herbaceous vegetation and dominated by non-native annual species such as ripgut brome (*Bromus diandrus*), soft chess (*Bromus madritensis*), slender wild oat (*Avena barbata*), Italian thistle (*Carduus pycnocephalus*), and black mustard (*Brassica nigra*). A mature valley oak (*Quercus lobata*) is present in the western portion of the project site (WRA 2019). Areas surrounding the oak tree are elevated about 1-foot or more above the surrounding disked areas.

Due to the regular disking of the project site, no ground squirrels (*Otospermophilus beecheyi*), ground squirrel burrows or burrow complexes were observed. No piles of debris that could be used in place of burrows were observed. Based on aerial imagery, the site is regularly disked which reduces both the suitability of the site for prey species and likelihood for ground squirrels to establish burrow complexes.

A shallow drainage ditch lined with plastic tarping surrounds the northern and eastern boundaries of the disked field. Though the ditch appeared to be designed to drain runoff from the berm to the disked field, indicators of hydrophytic vegetation, hydric soil, and wetland hydrology were not observed. Adjacent to this ditch were scattered individuals of coyote brush (*Baccharis pilularis*) and grape (*Vitis* sp.), as well as ruderal herbaceous species such as those listed above. A concrete culvert inlet at the base of a manmade depression, the banks of which were lined with boulder rip rap, was present in the southwestern corner of the project site. A vertical plastic, perforated culvert was present in a manmade depression in the northwestern portion of the project site and was surrounded by uplands vegetation (WRA 2019).

4.2.2.4 Special-Status Species

Special-status plant and wildlife species are defined as those that are state or federally listed as Rare, Threatened or Endangered or are candidates or proposed for such listing, a state Species of Special Concern, a state Fully Protected Animal, plants included on Lists 1 and 2 of the California Native Plant Society (CNPS) Inventory of Rare and Endangered Plants of California (CNPS Inventory), or a species that may otherwise be considered "Rare" under Section 15380 of the *State CEQA Guidelines*.

Reported occurrences of special-status plants and wildlife species are documented in a number of databases, including but not limited to, the California Natural Diversity Data Base (CNDDB), CNPS Inventory, USFWS Information for Planning and Conservation Species Lists, USFWS Critical Habitat Mapper, Western Bat Working Group, species accounts. To identify special-status plant or wildlife species that have been reported as occurring in the vicinity of the project site, the databases were reviewed for the USGS 7.5-minute quadrangle on which the project site is located (Cordelia) and three surrounding quadrangles (Mt. George, Fairfield South, and Fairfield North) before the site survey was conducted.

Special-Status Plant Species

The project site is regularly disked. The limited portions of the site that are not regularly disked (i.e., the berm) are also in a heavily disturbed condition, and these areas contain a dense growth of non-native species characteristic of disturbed areas. No special-status plant species were observed during the site survey. However, based on a review of the resource databases, 36 special-status plant species have been documented in the vicinity of the project site, which was defined to include the Cordelia, Mt George, Fairfield North, and Fairfield South USGS 7.5-minute quadrangles. Of the 36 special-status plant species, one special-status plant species was determined to have a moderate potential to occur within the project site (WRA 2019).

Pappose tarplant (*Centromadia parryi* ssp. *parryi*) (CNPS Rank 1B.02[1]). Pappose tarplant is an annual herb in the sunflower family (Asteraceae) that blooms from May to November. It typically occurs in vernally mesic, often alkaline areas in coastal prairie, meadow, seep, coastal salt marsh, and valley and foothill grassland habitat at elevations ranging from 5 to 1,380 feet. Known associated species include bristly ox-tongue (*Helminthotheca echioides*), wild radish (*Raphanus sativus*), foxtail fescue (*Festuca myuros)*, willow leaf dock (*Rumex salicifolius*), toad rush (*Juncus bufonius*), Italian rye grass (*Festuca perennis*), Mediterranean barley (*Hordeum marinum*), salt grass (*Distichlis spicata*), alkali heath (*Frankenia salina*),

1 This California Rare Plant Ranks (formerly known as CNPS Lists) ranking is defined as follows: 1B – Rare, threatened, or endangered in California and elsewhere; Threat Rank 0.2 – Moderately threatened in California.

perennial pepperweed (*Lepidium latifolium*), yellow star thistle (*Centaurea solstitialis*), alkali mallow (*Malvella leprosa*), and alkali weed (*Cressa truxillensis*). Pappose tarplant has a moderate potential to occur on the project site due to the presence of suitable soil conditions, the presence of associated species, and the relative locations of documented occurrences in the greater vicinity (WRA 2019).

Special-Status Wildlife Species

Based on a review of the resources databases, 27 special-status wildlife species have been documented in the vicinity of the project site (i.e., within the four USGS 7.5-minute quadrangles). Of these, 20 species have also been documented in the CNDDB as occurring within a 5-mile radius of the project site. Appendix B in the Biological Resources Assessment summarizes the potential for each of these species to occur within the project site. All of the 27 species except one are considered unlikely, or have no potential, to occur on the project site because of one or more of the following reasons: the project site is outside of the known or historical range of the species; the project site lacks suitable aquatic habitat (e.g., rivers, streams, vernal pools); the project site lacks suitable foraging habitat (e.g., marshes, fossorial mammal population); the project site lacks suitable tall nesting structures (e.g., trees or snags); the project site lacks suitable soil for den development; the project site lacks mine shafts, caves or abandoned buildings; the project site lacks connectivity with suitable habitat in the region (WRA 2019). One special-status wildlife species, which has a moderate potential to occur on the project site, is discussed below; information regarding two other locally valued species is also included.

White-tailed kite (*Elanus leucurus*) (California Department of Fish and Wildlife [CDFW] Fully Protected Species). White-tailed kite is a resident in open to semi-open habitats throughout the lower elevations of California, including grasslands, savannahs, woodlands, agricultural areas and wetlands. Vegetative structure and prey availability seem to be more important habitat elements than associations with specific plants or vegetative communities. Nests are constructed mostly of twigs and placed in trees, often at habitat edges. Nest trees are highly variable in size, structure, and immediate surroundings, ranging from shrubs to trees greater than 150 feet tall. This species preys upon a variety of small mammals, as well as other vertebrates and invertebrates. The project site contains open habitat for foraging by this species as well as shrubs and a tree suitable for nesting. The nearest recorded nesting occurrence of this species is within 1.5 miles of the project site from 2004. White-tailed kite has a moderate potential to occur on the site. The project site contains one tree suitable for nesting, and the species may forage in the open grassland present within the project site. (WRA 2019).

Burrowing owl (*Athene cunicularia*) (**CDFW Species of Special Concern [nesting and some wintering sites]).** Burrowing owl occurs in association with open, dry grasslands, deserts, agricultural areas, and rangeland throughout the Central Valley. The species often occurs where numerous burrowing mammals

are present and frequently occupy California ground squirrel burrows (Shuford and Gardali 2008). Burrowing owls may also use man-made structures such as debris piles, culverts, and cement piles for cover. The CNDDB documents burrowing owl as occurring within a five-mile radius of the study area (CNDDB 2018). There are no recorded occurrences of the species on or near the project site. No evidence of occurrence of this species was observed during the field assessment, and as the site is regularly disked, no suitable habitat, such as ground squirrel burrows, was observed. Thus, there is no potential for burrowing owl to occur on the project site.

Swainson's hawk *(Buteo swainsoni)* **(CDFW Threatened).** This hawk is an uncommon breeding resident and migrant in the Central Valley, where breeding and nesting primarily occurs in riparian woodland habitats and oak savannah and often near water (Beedy et al. 2013). Some nesting in urban woodland areas has also been recorded. Suitable foraging habitat for Swainson's hawk includes annual grassland, agricultural fields, fallow fields, low-growing row or field crops, and dry-land and irrigated pasture. The CNDDB documents one previous observation of an adult Swainson's hawk within 5 miles of the study area. One isolated oak tree is present, but it has never been a nest tree in the past. A nest tree within one mile has not been active for more than 14 years (nest trees inactive for 10 years may be considered for removal; Solano Multispecies Habitat Conservation Plan [Solano HCP]). No other nest trees are closer than seven miles (WRA 2019). The site is regularly disturbed by disking which reduces the suitability of the site for prey occurrence, and none were observed. Due to limited foraging opportunities, few occurrences nesting in the vicinity, and long duration since last nesting activity at the nearest nest, Swainson's hawk is unlikely to occur in or near the Project Area.

4.2.2.5 Wildlife Movement Corridors

Wildlife corridors are described as pathways or habitat linkages that connect discrete areas of natural open space otherwise separated or fragmented by topography, changes in vegetation, and other natural or manmade obstacles such as urbanization. Fragmentation of natural habitat creates isolated "islands" of habitat that may not provide sufficient area or resources to accommodate sustainable populations for a number of species, adversely affecting both genetic and species diversity.

Development, such as highways and commercial/office development, occurs a short distance to the north, south, east, and west of the project site. Additionally, the project site lacks creeks, woodlands and other habitat features often associated with wildlife movement corridors. The site is also bordered on all sides by heavily traveled roads. Therefore, the project site does not link areas of open space and would not serve as part of a wildlife movement corridor.

4.2.2.6 Waters of the United States and Waters of the State

Wetlands, creeks, streams, and permanent and intermittent drainages are subject to the jurisdiction of the U.S. Army Corps of Engineers (USACE) under Section 404 of the Federal Clean Water Act. The CDFW also generally has jurisdiction over these resources pursuant to Sections 1602-1603 of the California Fish and Game Code, and the Regional Water Quality Control Board has jurisdiction over the waters of the state pursuant to the Porter Cologne Act. As noted above, no wetlands or other state or federally protected waters were observed on the project site during the site survey.

4.2.3 REGULATORY CONSIDERATIONS

4.2.3.1 Federal and State Laws and Regulations

Federal Endangered Species Act

Under the federal Endangered Species Act (FESA), the Secretary of the Interior and the Secretary of Commerce have joint authority to list a species as Threatened or Endangered (16 United States Code [USC] § 1533[c]). Pursuant to the requirements of the FESA, an agency reviewing a proposed project within its jurisdiction must determine whether any federally listed or proposed species may be present in the project region, and whether the proposed project would result in a "take" of such species. The "take" provision of the FESA applies to actions that would result in injury, death, or harassment of a single member of a species protected under the Act. In addition, the agency is required to determine whether the project is likely to jeopardize the continued existence of any species proposed to be listed under the FESA or result in the destruction or adverse modification of critical habitat for such species (16 USC § 1536[3][4]). If it is determined that a project may result in the "take" of a federally listed species, a permit from the U.S. Fish and Wildlife Service (USFWS) would be required under Section 7 or Section 10 of the FESA. Section 7 applies if there is a federal nexus (e.g., the project is on federal land, the lead agency is a federal entity, a permit is required from a federal agency, or federal funds are being used). Section 10 applies if there is no federal nexus.

Clean Water Act

The Federal Water Pollution Control Act of 1972, often referred to as the Clean Water Act, is the nation's primary law for regulating discharges of pollutants into waters of the United States. The objective of the Clean Water Act is to restore and maintain the chemical, physical, and biological integrity of the nation's waters. The regulations adopted pursuant to the Act deal extensively with the permitting of actions in waters of the United States, including wetlands. The U.S. Environmental Protection Agency (US EPA) has primary authority under the Clean Water Act to set standards for water quality and for effluents, but the

U.S. Army Corps of Engineers (USACE) has primary responsibility for permitting the discharge of dredge or fill materials into streams, rivers, wetlands, and other waters of the United States.

Migratory Bird Treaty Act

The federal Migratory Bird Treaty Act (16 USC, Section 703, Supplement I, 1989) prohibits killing, possessing, or trading in migratory birds, except in accordance with regulations prescribed by the Secretary of the Interior. The Act encompasses whole birds, parts of birds, and bird nests and eggs. With a few exceptions, most birds are considered migratory under the MBTA. Disturbances that causes nest abandonment and/or loss of reproductive effort or loss of habitat upon which these birds depend could be in violation of the MBTA. A December 2017 opinion from the Office of the Solicitor for the U.S. Department of the Interior concluded the MBTA restrictions apply only to affirmative and purposeful actions, such as hunting and poaching that reduce migratory birds and their nests and eggs, and not incidental taking. Guidance from the Principal Deputy Director of the USFWS, dated April 2018, provides further guidance on revisions to past policies and guidance regarding the MBTA, and concludes the MBTA's prohibitions on the take of migratory birds apply only when the purpose of the action is to take migratory birds, their eggs, or their nests.

Porter-Cologne Water Quality Control Act

The RWQCB is responsible for protecting surface, ground, and coastal waters within its boundaries, pursuant to the Porter-Cologne Water Quality Control Act of the California Water Code. The RWQCB has jurisdiction under Section 401 of the Clean Water Act for activities that could result in a discharge of dredged or fill material to a water body. Federal authority is exercised whenever a proposed project requires a Clean Water Act Section 404 permit from the USACE in the form of a Section 401 Water Quality Certification. State authority is exercised when a proposed project is not subject to federal authority, in the form of a Notice of Coverage, Waiver of Waste Discharge Requirements. Many wetlands fall into RWQCB jurisdiction, including some wetlands and waters that are not subject to USACE jurisdiction. RWQCB jurisdiction of other waters, such as streams and lakes, extends to all areas below the ordinary high water mark.

Under the Porter-Cologne Water Quality Control Act, the SWRCB and the nine RWQCBs also have the responsibility of granting Clean Water Act National Pollutant Discharge Elimination System (NPDES) permits and waste discharge requirements for certain point-source and non-point discharges to waters. These regulations limit impacts on aquatic and riparian habitats from a variety of urban sources.

As stated above, any activities within the project site that impact waters of the United States or State will require 401 Certification and/or a Waste Discharge Requirement from the RWQCB. On the project site,

drainages and wetlands that are considered waters of the United States are also considered waters of the State. However, no wetlands were identified that would likely be considered waters of the State but not waters of the U.S. (e.g., isolated wetlands).

California Endangered Species Act

Under the California Endangered Species Act (CESA), the CDFW has the responsibility for maintaining a list of Threatened and Endangered species (California Fish and Game Code Section 2070). The CDFW also maintains a list of "candidate species," which are species formally under review for addition to either the list of Endangered species or the list of Threatened species. In addition, the CDFW maintains lists of "species of special concern," which serve as watch lists. Pursuant to the requirements of the CESA, an agency reviewing a proposed project within its jurisdiction must determine whether any state-listed Endangered or Threatened species could be present on the project site and determine whether the proposed project could have a potentially significant impact on such species.

California Native Plant Protection Act

State listing of plant species began in 1977 with the passage of the California Native Plant Protection Act (NPPA), which directed the CDFW to carry out the legislature's intent to "preserve, protect, and enhance Endangered plants in this state." The NPPA gave the California Fish and Wildlife Commission the power to designate native plants as Endangered or Rare and to require permits for collecting, transporting, or selling such plants. The CESA expanded upon the original NPPA and enhanced legal protection for plants. There are three listing categories for plants in California: Rare, Threatened, and Endangered.

The California Native Plant Society (CNPS), a non-governmental conservation organization, has developed a California rare plant ranking (CRPR) system species of concern. Vascular plants included on these lists are defined as follows:

- Rank 1A: Plants presumed extirpated in California and either rare or extinct elsewhere.
- Rank 1B: Plants rare, threatened, or endangered in California and elsewhere.
- Rank 2A: Plants presumed extirpated in California, but common elsewhere.
- Rank 2B: Plants rare, threatened, or endangered in California, but more common elsewhere.
- Rank 3: Plants about which more information is needed—a review list.
- Rank 4: Plants of limited distribution—a watch list.

These CRPR threat ranks are further described by the following threat code extensions:

- 0.1: seriously threatened in California.
- 0.2: moderately threatened in California.
- 0.3: not very threatened in California.

Although the CNPS is not a regulatory agency and plants on these lists have no formal regulatory protection, plants appearing in Rank 1 or Rank 2 are, in general, considered to meet the CEQA criteria to have adverse effects on these species considered significant. Impacts on plants that are listed by the CNPS on Rank 3 or Rank 4 are also considered during CEQA review, although because these species are typically not as rare as those on Rank 1 or Rank 2, impacts on them are less frequently considered significant.

California Fish and Game Code

The California Fish and Game Code provides a variety of protections for species that are not federally or state-listed as Threatened, Endangered, or of special concern.

- Section 3503 protects all breeding native bird species in California by prohibiting the take,[2] possession, or needless destruction of nests and eggs of any bird, with the exception of non-native English sparrows and European starlings (Section 3801).
- Section 3503.5 protects all birds of prey (in the orders Falconiformes and Strigiformes) by prohibiting the take, possession, or killing of raptors and owls, their nests, and their eggs.
- Section 3513 of the code prohibits the take or possession of migratory nongame birds as designated in the MBTA or any parts of such birds except in accordance with regulations prescribed by the Secretary of the Interior.
- Section 3800 of the code prohibits the taking of nongame birds, which are defined as birds occurring naturally in California that are not game birds or fully protected species.
- Section 3511 (birds), Section 5050 (reptiles and amphibians), and Section 4700 (mammals) designate certain wildlife species as fully protected in California.

2 *"Take" in this context is defined in Section 86 of the California Fish and Game Code as to "hunt, pursue, catch, capture, or kill, or to attempt to hunt, pursue, catch, capture, or kill."*

4.2.3.2 Local Plans and Policies

City of Fairfield General Plan

The following presents guiding and implementing policies from the current City of Fairfield General Plan relevant to biological resources and contained within the Open Space, Conservation, and Recreation Element (2013).

Objective OS 7 Identify and protect sensitive biological habitat and resources.

Policy OS 7.1 Establish policies to protect indigenous wildlife and their habitats.

Policy OS 7.7 Promote the preservation of existing mature trees and encourage the planting of appropriate shade trees in new developments.

City of Fairfield Municipal Code

The City has established specific standards, such as the Tree Preservation Ordinance (Fairfield Code, Chapter 25, Sections 25.36.1-11), that further implement the *CEQA Guidelines*. The Tree Conservation Ordinance was created to improve public health and welfare by conserving tree resources by protecting significant trees from unnecessary destruction or removal, encouraging the replacement of trees lost to disease, natural hazards, or human intervention. On undeveloped private properties, individuals of the following trees are considered "protected" by the City of Fairfield Tree Ordinance if they measure greater than 6 inches in diameter at 4.5 feet above the ground level of the tree: native oaks (*Quercus* spp.), bay laurel (*Umbellularia californica*), madrone (*Arbutus menziesii*) and buckeye (*Aesculus californicus*). Any person proposing to remove a protected tree on private land must apply for a tree removal permit with the City of Fairfield.

Solano Multispecies Habitat Conservation Plan

The project site is located within the proposed Solano Multispecies Habitat Conservation Plan (Solano HCP) Area. The Solano HCP is designed to establish a framework for complying with state and federal endangered species regulations while accommodating future urban growth, development of infrastructure, and ongoing operations and maintenance activities associated with flood control, irrigation facilities, and other public infrastructure undertaken by or under the permitting authority/control of the Plan Participants within Solano County over the next 30 years. The Solano HCP has not been adopted; however, participating agencies are following the mitigation guidelines. Plan adoption is not anticipated until late 2019 at the earliest. According to the Solano HCP, the project site is located with the boundaries of the Valley Floor Grassland and Vernal Pool natural communities.

4.2.4 IMPACTS AND MITIGATION MEASURES

4.2.4.1 Significance Criteria

In accordance with Appendix G of the *State CEQA Guidelines*, the impact of the proposed project on biological resources would be considered significant if it would:

- have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by CDFW or USFWS;
- have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by CDFW or USFWS;
- have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means;
- interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites;
- conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance; or
- conflict with the provisions of an adopted habitat conservation plan, natural community conservation plan, or other approved local, regional, or state habitat conservation plan.

4.2.4.2 Methodology

The analysis below compares identified impacts to the standards of significance stated above and determines the impact's level of significance under CEQA. If the impact is determined to be significant, the analysis identifies feasible mitigation measures to eliminate or reduce the impact to a less than significant level. If the impact cannot be reduced to a less than significant level after implementation of all feasible mitigation measures, then the impact is identified as significant and unavoidable.

4.2.4.3 Project Impacts and Mitigation Measures

Impact BIO-1: **The proposed project could adversely affect candidate, sensitive, or special-status plant species or their habitat. (*Potentially Significant; Less than Significant with Mitigation*)**

As discussed above, the project site is regularly disked and the limited portions of the site that are not regularly disked are also in a heavily disturbed condition, and these areas contain a dense growth of non-

native species characteristic of disturbed areas. Although a number of special-status plant species have been documented in surrounding areas, due to lack of appropriate habitat, none of the special-status plants except one are considered likely to occur on the project site. One special-status plant species, pappose tarplant, has a moderate potential to occur on the project site due to the presence of suitable soil conditions, the presence of associated species, and the relative locations of documented occurrences in the greater vicinity. If the plant is present on the site and removed in order to construct the proposed development, its removal would represent a significant impact. However, the impact would be reduced to a less than significant level with mitigation.

Mitigation Measures:

BIO-1 A pre-construction special-status plant survey shall be conducted by a qualified biologist during the blooming period of the pappose tarplant, ideally during the summer months. If no plants are found, then no further action is required.

If this species is observed on the project site, then appropriate avoidance and minimization and/or mitigation measures shall be implemented, dependent upon the results of the survey, which could include one or more of the following:

1) Avoiding areas where the plants occur. The avoidance area will consist of the locations of the plants and a 15-foot buffer around each plant. During project implementation, the avoidance area may be delineated by the use of orange construction fencing and/or silt fencing. Following completion of the project, the avoidance area will be delineated by permanent fencing.

2) Preserving land where the species is known to exist.

3) Collecting mature seeds of the species on-site and establishing a similar sized population at a different suitable location. The new, CDFW-approved location will be monitored for five (5) years to ensure that pappose tarplant has established. Specific monitoring conditions will be followed according to regulatory permits.

Significance after Mitigation: Less than significant

Impact BIO-2: The proposed project could have a substantial effect, either directly or through habitat modifications, on raptors, nesting birds, or other birds protected under

the California Fish and Game Code and MBTA. (*Potentially Significant; Less than Significant with Mitigation*)

Birds and their nests are protected under California Fish and Wildlife Code (Sections 3503, 3503.5, 3513), and the MBTA. Due to the fact that most birds can fly out of harm's way, development of the project site would not be expected to harm adult birds. However, nesting birds are susceptible to take through disturbance that harms eggs or young. As mentioned above, although the valley oak tree on the project site is not a documented nest site for any special-status bird species, it provides potential suitable nesting habitat for the white-tailed kite. In addition, various common bird species could nest on or near the project site. Therefore, if project activities occur during the nesting season, which generally extends from February 1 through August 15, and should an active white-tailed kite nest or other protected bird nest occur on the project site, or in a nearby location, project-related vegetation removal, ground disturbance and/or construction noise could result in the loss of an active nest or in the disruption of nesting activities and a potentially significant impact would occur. **Mitigation Measure BIO-2**, which would require that a pre-construction survey be conducted if construction commences during the nesting season, would reduce this impact to a less than significant level.

Mitigation Measures:

BIO-2 The removal of trees and shrubbery on-site, as well as initial ground disturbance, shall be conducted between August 16 and January 31 (outside of the February 1 to August 15 nesting season) to the extent feasible, which would avoid impacts to nesting birds.

If such activities must be conducted during the nesting season, a pre-disturbance nesting-bird survey shall be conducted by a qualified biologist approved by CDFW no more than 14 days prior to vegetation removal or initial ground disturbance. The CDFW protocol survey shall include the disturbance area and surrounding 250 feet to identify the location and status of any nests that could potentially be affected either directly or indirectly by project activities.

If active nests of protected species are found within the survey area, a work exclusion zone shall be established around each nest by the qualified biologist. Established exclusion zones shall remain in place until all young in the nest have fledged or the nest otherwise becomes inactive (e.g., due to predation). Appropriate exclusion zone sizes shall be determined by a qualified biologist and vary dependent upon the species, nest location, existing visual buffers, noise levels, and other factors. An exclusion zone radius

may be as small as 50 feet for common, disturbance-adapted species or as large as 250 feet or more for raptors. Exclusion zone size may be reduced from established levels if nest monitoring by a qualified biologist indicates that work activities outside the reduced radius are not adversely impacting the nest and that a reduced exclusion zone would not adversely affect the subject nest upon consultation with, and to the satisfaction of the CDFW.

Significance after Mitigation: Less than significant

Impact BIO-3: The proposed project would not directly or indirectly affect any riparian habitat or sensitive natural community. (*No Impact)*

Sensitive plant communities are communities that are of limited distribution statewide or within a county or region and are often vulnerable to environmental effects of projects. As previously discussed, the project site is in a disturbed condition, is regularly disked, and herbaceous vegetation on the site is dominated by non-native grasses and weedy plant species. No sensitive plant communities or riparian habitat is present on the project site, and no impact would occur.

Mitigation Measures: No mitigation measures are required.

Impact BIO-4: The proposed project would not have a substantial adverse effect on state or federally protected wetlands. (*No Impact)*

Wetlands, creeks, streams, and permanent and intermittent drainages are subject to the jurisdiction of the USACE under Section 404 of the Federal Clean Water Act. The CDFW also generally has jurisdiction over these resources pursuant to Sections 1602-1603 of the California Fish and Game Code, and the Regional Water Quality Control Board has jurisdiction over waters of the state under the Porter Cologne Act. As noted above, no wetlands or other federally or state protected water features were observed on the project site during the site survey. There would be no impact.

Mitigation Measures: No mitigation measures are required.

Impact BIO-5: The proposed project would not interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established

native resident or migratory wildlife corridors or impede the use of native wildlife nursery sites. (*No Impact*)

As mentioned above, development occurs a short distance to the north, south, east, and west of the project site. Additionally, the site lacks creeks, woodlands and other habitat features often associated with wildlife movement corridors. The project site is also bordered on all sides by heavily traveled roads. Therefore, the site does not link areas of open space and does not serve as part of a wildlife movement corridor. Further there is no habitat on site that would serve as wildlife nursery site (note that nesting birds are addressed under **Impact BIO-2** above). Given the above, the proposed project would not substantially interfere with the local or regional movement of wildlife species or affect wildlife nursery sites, and no impact would occur.

Mitigation Measures: No mitigation measures are required.

Impact BIO-6: **The proposed project could conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance. (*Potentially Significant; Less than Significant with Mitigation*)**

The Fairfield Municipal Code (Section 25.36.3) defines "protected" trees, which includes native oaks (DBH greater and 6"). The large valley oak on the project site meets the criterion for a protected tree under the City's code. Except as authorized by a Tree Removal Permit as defined in Section 25.36.5, or unless authorized as part of discretionary project approval by the City, it is unlawful for any person or City department to remove, cut down, conduct excessive unnatural pruning, topping, or disfigurement of any protected tree, or perform any act which results in the premature death or decline of a protected tree. The mitigation requirements for the removal of a "protected" tree are detailed in Section 25.36.9 of the Zoning Code. As the large valley oak tree on the project site will not be removed and will be incorporated into the design of the project, the proposed project would not conflict with the City's tree ordinance. However, unless precautions are taken, project construction activities could adversely affect this tree, and the impact would be potentially significant.

Mitigation Measures:

BIO-6 The following tree protection measures shall be implemented during construction in the vicinity of the valley oak tree:

- All construction activity (grading, filling, paving, landscaping etc.) shall respect the root protection zone (RPZ) around the protected tree. The RPZ shall be a distance of 1.0 times the dripline radius measured from the trunk of the tree.

- Temporary protective fencing shall be installed around the dripline of the tree prior to commencement of any construction activity conducted within 25 feet of the tree canopy. The fence shall be clearly marked to prevent inadvertent encroachment by heavy machinery.

- Drainage shall not be allowed to pond around the base of the tree.

- An ISA-Certified Arborist or tree specialist shall be retained to perform any necessary pruning of the tree during construction activity.

- Roots exposed as a result of construction activities shall be covered with wet burlap to avoid desiccation and shall be buried as soon as practicable.

- Construction materials or heavy equipment shall not be stored within the RPZ.

- Only an ISA-Certified Arborist or tree specialist should make specific recommendations as to where the tree can safely tolerate some level of fill within the drip line.

- Trenches which are required within the RPZ of the protected tree shall be bored (tunneled) under the root(s) using an auger or drill, rather than trenched, to avoid root disturbance.

- Construction materials shall be properly stored away from the tree to avoid spillage or damage to the tree.

Significance after Mitigation: Less than significant

Impact BIO-7: **The proposed project would not conflict with the provisions of an adopted habitat conservation plan, natural community conservation plan, or other approved local, regional, or state habitat conservation plan. (*Less than Significant*)**

As discussed above, the project site is located within an area covered by the Solano HCP. The HCP has not been adopted; it is expected to be adopted in late 2019 at the earliest. However, participating agencies, including the City of Fairfield, are following the mitigation guidelines listed in the plan. As discussed above, the project site does not contain any sensitive natural communities, wetlands and water features. Nor does it contain suitable habitat for any of the 37 species covered by the Solano HCP. One special-status plant, pappose tarplant, and one special-status wildlife species, white-tailed kite, has potential to occur on the site. Pappose tarplant is not a covered species under the Solano HCP, and should it be encountered on the site, it would either be preserved on site or its removal would be mitigated per **Mitigation Measure BIO-1**. The white-tailed kite is a fully protected state species and impacts to the species would be avoided by the mitigation set forth under **Mitigation Measure BIO-2**. The project would not conflict with the Solano HCP, and this impact is considered less than significant.

Mitigation Measures: No mitigation measures are required.

4.2.4.4 Cumulative Impacts and Mitigation Measures

The scope of the geographical cumulative context for impacts to biological resources varies because, depending on the resources being affected, affected species and/or habitats have minimum habitat size needs, ranges where they occur, sub-populations of interest within those ranges, and other species- or habitat-specific factors that are affected by the conditions present on a project site. In the case of the proposed project, the analyses above demonstrate that the only habitat present on the site is highly-disturbed annual grassland. The grassland is isolated, as it is not connected to other grassland habitats and is surrounded by urban development. Losses of the on-site grasslands will not affect the viability of other grasslands in the region, the intactness, size, and connectedness of which will be unaffected by loss of this isolated grassland area. For this reason, the geographical cumulative context for the evaluation of cumulative impacts on biological resources has been restricted to the City of Fairfield and its Sphere of Influence (SOI), as well as portions of Solano County that adjoin the city limits.

Impact C-BIO-1: **Past, present, and reasonably foreseeable future development in the region could result in significant cumulative impacts to biological**

resources. However, with mitigation the contribution of the proposed project to impacts on biological resources would not be cumulatively considerable. (*Less than Significant*)

Past, present, and reasonably foreseeable future development in the City of Fairfield and its SOI as well as adjacent areas of unincorporated Solano County could result in significant cumulative impacts to biological resources, including impacts to special-status plant and wildlife species. Other approved and pending projects within the City and its SOI and in unincorporated Solano County would result in the development of large greenfield sites and would have the potential to affect a variety of biological resources, including filling of wetlands and other waters of the US and the state; loss of sensitive natural communities; direct impacts to special status plant and wildlife species; and loss of breeding, foraging and movement habitat for special status wildlife species. Development in the City of Fairfield would adhere to requirements set forth in the Solano HCP. In addition, each of the approved and pending projects is or has been subject to review under CEQA and required to obtain necessary permits and approvals from federal and state resource agencies. As a result of these processes, each project would be required to avoid, minimize and compensate for its impacts on sensitive biological resources, such that the cumulative impacts would be reduced although they may not be completely eliminated. Because not all such impacts from these other projects have been or can be reduced to less than significant levels, the combined residual cumulative biological resource impacts of all of these projects in the study area, together with the proposed project, could be cumulatively significant. However, the proposed project would not make a cumulatively considerable contribution to this cumulative impact. As discussed above, the project site is isolated from other biologically productive lands, is already highly disturbed, and does not provide suitable habitat for many special-status plant and wildlife species that have been documented in the region. While the project site has the potential to support one special status plant species and provide foraging and/or nesting habitat for a special-status bird species, the project would implement mitigation to avoid any direct impacts to special-status plants and active bird nests and would establish and maintain adequate buffers to reduce potential impacts from construction noise to protect birds that may nest in trees near the project site[3]. For these reasons, the incremental contribution of the proposed project to significant cumulative impacts on biological resources in the study area would not be cumulatively considerable, and therefore would be less than significant.

Mitigation Measures: No mitigation measures are required.

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[3] Refer to Section 4.7, Noise for further information and full text of **Mitigation Measures MM NOI-1** through **MM NOI-5** which are required to reduce ambient noise levels during construction.

4.2.5 REFERENCES

Beedy, Edward C., E. Pandolfino, and K. Hansen. 2013. *Birds of the Sierra Nevada*. University of California Press.

Shuford, W. David and Thomas Gardali. 2008. California Bird Species of Special Concern – A Ranked Assessment of Species, Subspecies, and Distinct Populations of Birds of Immediate Conservation Concern in California.

WRA. 2019. Biological Resources Assessment. Green Valley II Fairfield Project, Fairfield, Solano County, CA. February.