3.4 - Biological Resources

3.4.1 - Introduction

This section describes the existing biological setting and potential effects from project implementation on the site and its surrounding area. Descriptions and analysis in this section are based on a site reconnaissance performed by Michael Brandman Associates on July 23, 2012.

3.4.2 - Environmental Setting

Regional Setting

Yolo County encompasses a portion of the Sacramento Valley and eastern edge of the Inner Coast Range. As such, the subregions of the county vary in topography, climate, and plant communities. The eastern and southern portions of the County are located on the relatively level valley floor. Yolo County has a Mediterranean climate characterized by hot, dry summers and temperate, wet winters. There are several main types of habitats within Yolo County:

- Croplands/Agricultural
- Wetlands
- Riparian
- Oak Woodland/Chaparral
- Grassland Prairies/Valley Oak Savannah
- Remnant Oak Trees, Groves, and Tree Rows
- Urban

Grasslands Site

Michael Brandman Associates (MBA) conducted a reconnaissance-level field survey on the Grasslands site on July 23, 2012. The objective of the survey was to ascertain general site conditions and identify potentially suitable habitat areas for various sensitive plant and wildlife species. These field observations were recorded in a field notebook and are summarized in the following section.

The project site consists of 41 acres of undeveloped land within Assessor's Parcel Number (APN) 033-130-03 containing 156.49 acres in an unincorporated area of Yolo County approximately 2.5 miles south of the City of Davis's city limits. The Grasslands site is designated as Open Space (OS) by the Yolo County General Plan, and is within the Agricultural General (A-1) zoning classification. The land within the project site is generally characterized as open space, having been used in the past for grazing, and is vegetated with both native and non-native grasses and forbs, and several young oak trees (*Quercus* sp.) in the northwest corner of the site. No sign of nesting activity (e.g., white wash, feathers) was detected in or around the young trees. The project site is surrounded by County Road 35 and agricultural land to the north, Grasslands Regional Park to the east, Yolo Bowmen Archery Range and Sacramento Valley Soaring Society Flying Field to the south, and Mace Boulevard/County Road 104 and agricultural land to the west. Scattered rural farm residences and farming-related buildings occur within the general vicinity of the site and within the grounds of the Grasslands Regional Park; however, no structures occur on the actual site. The nearest rural residences occur approximately 250 feet to the southwest of the site (across the street on County Road

104). No existing developments occur within the boundaries of the site. A swale and drainage channel are located onsite. The swale is located above the elevation of the channel, as the channel has coarser textured soil, while the uplands has surface deposits of clay loams to clay textured soils that retain water. The channel was a former flood channel of Putah Creek and no longer supports wetlands, because of the flood control levees that keep Putah Creek from flooding the area. The clay soils in the swale pond during the rainy season from precipitation.

Topographic Features

Grasslands Regional Park is situated on the lower reaches of an old floodplain of Putah Creek that is covered with small basins and shallow drainages that trend to the southeast towards the Yolo Basin. The project site generally comprises flat, undeveloped annual grassland that contains several young oaks in the northwestern portion of the site, with an elevation range of approximately 33 to 34 feet above sea level. There is one small depression in the eastern portion of the site, as well as the remnants of a former flood control channel of Putah Creek; it no longer supports wetlands, as Putah Creek no longer floods the area due to flood control levees that are now in place. There are a few undulating areas throughout the project site. On aerial photographs, these areas appeared to convey water flow throughout the project site when the land previously flooded. The field visit confirmed that these areas do not show evidence of water flow and water conveyance, and do not demonstrate connectivity with any natural drainage or water course.

Soils

The Yolo County soil surveys provide soils data for the project site, including two independent soils series: Brentwood silty clay loam, 0 to 2 percent slopes; and Marvin silty clay loam. The project site is dominated by Brentwood silty clay loam, 0 to 2 percent slopes, with a small inclusion of Marvin silty clay loam in the eastern portion of the project site.

Brentwood silty clay loam, 0 to 2 percent slopes occurs on nearly level to gently sloping fans, formed in valley fill from sedimentary rocks. This is a moderately well drained soil with associated vegetation such as annual grasses, forbs, and scattered oaks.

Marvin silty clay loam is found on nearly level floodplains at elevations of 10 to 100 feet under annual grasses and forbs. It is a moderately well drained to somewhat poorly drained soil, formed in fine textured alluvium from mixed sources.

Plant Communities

The vast majority of the 41-acre survey area consists of annual grassland that has been used in the past for grazing. This plant community is an upland plant community typically dominated by non-native annual grasses, but contains a diverse assemblage of native and nonnative grasses and forbs. Plants observed onsite include yellow starthistle (*Centaurea solastis*), prickly lettuce (*Lactuca serriola*), brome (*Bromus* sp.), lamb's ear (*Stachys byzantina*), barbed goat grass (*Aegilops*

triuncialis), wild oat (*Avena fatua*), Italian rye grass (*Lolium multiflorum*), and red-stemmed filaree (*Erodium cicutarium*).

Wildlife

The existing conditions and plant communities onsite provide suitable habitat for a number of local wildlife species that occur in open-space and agricultural settings. Small mammal burrows were observed scattered throughout the project site. The following wildlife species were observed and/or detected on the project site during the reconnaissance-level field survey.

Reptiles

- Western fence lizard (*Sceloporus occidentalis*)

Birds

- Red-tailed hawk (*Buteo jamaicensis*)
- Turkey vulture (*Cathhartes aura*)
- Rock dove (*Coumba livia*)
- Common raven (*Corvus corax*)
- House sparrow (*Passer domesticus*)
- Brewer's blackbird (*Euphagus cyanocephalus*)
- Northern mockingbird (*Mimus polyglottos*)
- Mourning dove (*Zenaida macroura*)

Mammals

- Black-tailed jackrabbit (*Lepus californicus*)
- Ground squirrel (*Otospermophilus beecheyi*)

Beamer/Cottonwood Site

MBA conducted a reconnaissance-level field survey on the Beamer/Cottonwood site on July 23, 2012. The objective of the survey was to ascertain general site conditions and identify potentially suitable habitat areas for various sensitive plant and wildlife species. These field observations were recorded in a field notebook and are summarized in the following section.

The project site consists of Assessor's Parcel Number (APN) 064-010-32 containing approximately 6.53-acres of undeveloped land within the City of Woodland. The Beamer/Cottonwood site is designated as Public Service by the City of Woodland General Plan, and is classified as Single-Family Zone (R-1). Currently, the site is primarily ruderal in nature, with native and non-native grasses and forbs. Several small trees and an elderberry bush are found along the fence on the southern boundary of the site. No sign of recent nesting activity (e.g., white wash, feathers) was detected in or around the site. The project site is generally bounded by Woodland Avenue and a residential neighborhood (north); Yolo County Health Department building (east); Yolo County Department of Employment and Social Services building, and the Joint Powers Authority (JPA)

building (southeast); the County Corporation Yard (south); and Ashley Drive and a residential neighborhood (west).

Because of the previous disturbances resulting from the surrounding urban development and weed abatement, the project site provides limited plant species diversity.

Topographic Features

The project site generally comprises undeveloped, flat vacant land, with an elevation range of approximately 70 to 72 feet above sea level. There are no significant or natural topographic features within the project site. There are a few undulating areas throughout the project site.

Soils

The Yolo County soil surveys provide soils data for the project site including two independent soils series: Brentwood silty clay loam, 0 to 2 percent slopes, and Marvin silty clay loam. The western portion of the project site consists of Brentwood silty clay loam, 0 to 2 percent slopes, and the eastern portion of the project site consists of Marvin silty clay loam.

Brentwood silty clay loam, 0 to 2 percent slopes occurs on nearly level to gently sloping fans, formed in valley fill from sedimentary rocks. This is a moderately well drained soil with associated vegetation such as annual grasses, forbs, and scattered oaks.

Marvin silty clay loam is found on nearly level floodplains at elevations of 10 to 100 feet under annual grasses and forbs. It is a moderately well drained to somewhat poorly drained soil, formed in fine textured alluvium from mixed sources.

Plant Communities

The vast majority of the survey area consists of disturbed ground that is regularly disked for weed abatement purposes by the County. The plant communities within the project site are characterized as ruderal and disturbed habitat. The plant communities within the survey area and project site have been significantly disturbed by regular weed abatement by the County. Plant species observed onsite include yellow starthistle (*Centaurea solastis*), prickly lettuce (*Lactuca serriola*), brome (*Bromus sp.)*, wild oat *(Avena fatua)*, cheeseweed *(Malva parviflora)*, bindweed *(Convolvulus arvensis)*, milk thistle (*Silybum* sp.), California poppy (*Eschscholzia californica*), shortpod mustard (*Hirschfeldia incana*), blue elderberry (*Sambucus mexicanus*), black walnut (*Juglans nigra*), and oak (*Quercus* sp.).

Wildlife

The existing conditions and plant communities onsite provide suitable habitat for a number of local wildlife species that occur in disturbed and urban settings. The following wildlife species were observed and/or detected on the project site during the reconnaissance-level field survey.

Birds

- Red-tailed hawk (*Buteo jamaicensis*)
- House finch (*Haemorhous mexicanus*)
- Song sparrow (*Melospiza melodia*)
- Mourning dove (*Zenaida macroura*).

Mammals

- Dog (*Canis lupis familiaris*)
- Cat (*Felis silvesteris catus*)
- Ground squirrel (*Otospermophilus beecheyi*)

3.4.3 - Regulatory Framework

Federal

Federal Endangered Species Act

The Federal Endangered Species Act (FESA) protects plants and wildlife listed by the United States Fish and Wildlife Service (USFWS) and National Oceanic and Atmospheric Administration Fisheries as endangered or threatened. Section 9 of the FESA prohibits the taking of listed wildlife, where taking is defined as "harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, collect, or attempt to engage in such conduct" (50 CFR 17.3). For plants, this statute governs removing, possessing, maliciously damaging, or destroying any listed plant on federal land and removing, cutting, digging-up, damaging, or destroying any listed plant on non-federal land in knowing violation of state law (16USC1538). Pursuant to Section 7 of the FESA, federal agencies are required to consult with the USFWS if their actions, including permit approvals or funding, could adversely affect a listed plant or wildlife species or its critical habitat. Through consultation and the issuance of a biological opinion, the USFWS may issue an incidental take statement allowing take of the species that is incidental to another authorized activity, provided the action will not jeopardize the continued existence of the species. Section 10 of the FESA provides for issuance of incidental take permits to private parties, provided a Habitat Conservation Plan (HCP) is developed.

Migratory Bird Treaty Act

The Migratory Bird Treaty Act (MBTA) implements international treaties devised to protect migratory birds and any of their parts, eggs, and nests from activities such as hunting, pursuing, capturing, killing, selling, and shipping, unless expressly authorized in the regulations or by permit. As authorized by the MBTA, the USFWS issues permits to qualified applicants for the following types of activities: falconry, raptor propagation, scientific collecting, special purposes (rehabilitation, education, migratory game bird propagation, and salvage), take of depredating birds, taxidermy, and waterfowl sale and disposal. The regulations governing migratory bird permits are in 50 CFR part 13 General Permit Procedures and 50 CFR part 21 Migratory Bird Permits. The State of California has incorporated the protection of birds of prey in Sections 3800, 3513, and 3503.5 of the California Department of Fish and Game (CDFG) Code.

Federal Clean Water Act - Section 404

The United States Army Corps of Engineers (USACE) administers Section 404 of the federal Clean Water Act (CWA). This section regulates the discharge of dredge and fill material into waters of the U.S. The USACE has established a series of nationwide permits that authorize certain activities in waters of the U.S., if a proposed activity can demonstrate compliance with standard conditions. Normally, the USACE requires an individual permit for an activity that will affect an area equal to or in excess of 0.5 acre of waters of the U.S. Projects that result in impacts to less than 0.5 acre can normally be conducted pursuant to one of the nationwide permits, if consistent with the standard permit conditions. The USACE also has discretionary authority to require an Environmental Impact Statement for projects that result in impacts to an area between 0.1 and 0.5 acre. Use of any nationwide permit is contingent on the activities having no impacts to endangered species.

State

California Endangered Species Act

The California Endangered Species Act (CESA) generally parallels the main provisions of the FESA, but unlike its federal counterpart, the CESA applies the take prohibitions to species proposed for listing (called candidates by the State). Section 2080 of the CDFG Code prohibits the taking, possession, purchase, sale, and import or export of endangered, threatened, or candidate species, unless otherwise authorized by permit or in the regulations. Take is defined in Section 86 of the CDFG Code as to "hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill." The CESA allows for take incidental to otherwise lawful development projects. State lead agencies are required to consult with the CDFG to ensure that any action they undertake is not likely to jeopardize the continued existence of any endangered, threatened, or candidate species or result in destruction or adverse modification of essential habitat. The CDFG administers the act and authorizes take through Section 2081 agreements (except for designated fully protected species).

California Native Plant Society

The California Native Plant Society (CNPS) is a California resource conservation organization that has developed and inventory of California's sensitive plant species. This inventory summarizes information on the distribution, rarity, and endangerment of California's vascular plants. The inventory is divided into four lists based on the rarity of the species. In addition, the CNPS provides an inventory of plant communities that are considered sensitive by the state and federal resource agencies, academic institutions, and various conservation groups. Determination of the level of sensitivity is based on the number and size of remaining occurrences as well as recognized threats.

California Fish and Game Code - Section 3503 and Section 3511

The CDFG administers the California Fish and Game Code (CFG Code). There are particular sections of the CFG Code that are applicable to natural resource management. For example, Section 3503 of the CFG Code states it is unlawful to take, possess, or needlessly destroy the nest or eggs of any bird that is protected under the MBTA. CFG Code Section 3503.5 further protects all birds in the orders Falconiformes and Strigiformes, birds of prey such as hawks and owls, and their eggs and

nests from any form of take. CFG Code Section 3511 lists fully protected bird species where the CDFG is unable to authorize the issuance of permits or licenses to take these species.

California Fish and Game Code - Section 1600 to Section 1603

The CFG Code mandates that "it is unlawful for any person to substantially divert or obstruct the natural flow or substantially change the bed, channel, or bank of any river, stream, or lake designated by the department, or use any material from the streambeds, without first notifying the department of such activity." CDFG jurisdiction includes ephemeral, intermittent, and perennial watercourses, including dry washes, characterized by the presence of hydrophytic vegetation, the location of definable bed and banks, and the presence of existing fish or wildlife resources.

Furthermore, CDFG jurisdiction is often extended to habitats adjacent to watercourses, such as oak woodlands in canyon bottoms or willow woodlands that function as part of the riparian system. Historic court cases have further extended CDFG jurisdiction to include watercourses that seemingly disappear, but re-emerge elsewhere. Under the CDFG definition, a watercourse need not exhibit evidence of an OHWM to be claimed as jurisdiction. However, CDFG does not regulate isolated wetlands; that is, those that are not associated with a river, stream, or lake.

Clean Water Act - Section 401

According to Section 401 of the CWA, "any applicant for a Federal permit for activities that involve a discharge to waters of the State, shall provide the Federal permitting agency a certification from the State in which the discharge is proposed that states that the discharge will comply with the applicable provisions under the Federal Clean Water Act." Therefore, before the USACE will issue a Section 404 permit, applicants must apply for and receive a Section 401 water quality certification from the Regional Water Quality Control Board (RWQCB).

Porter-Cologne Water Quality Act

The RWQCB regulates actions that would involve "discharging waste, or proposing to discharge waste, within any region that could affect the water of the state" (Water Code Section 13260(a)), pursuant to provisions of the Porter-Cologne Water Quality Act. "Waters of the State" are defined as "any surface water or groundwater, including saline waters, within the boundaries of the state" (Water Code Section 13050(e)).

Local

Yolo County Natural Community Conservation Plan and Habitat Conservation Plan

The Yolo County Natural Community Conservation Plan/Habitat Conservation Plan (NCCP/HCP) Joint Powers Agency (JPA) is preparing the Yolo Natural Heritage Program (Yolo NHP), which is a countywide conservation planning effort designated to serve as an effective comprehensive Habitat Conservation Plan (HCP) and Natural Community Conservation Plan (NCCP) for a 653,820-acre planning area. The NHP Plan will establish a mechanism for conserving the natural open space and

agricultural landscapes that provide habitat for many species protected by FESA and CESA, and at-risk species found within the habitats and natural communities of the County.

Although the Yolo NHP is still in the planning and preparation stage, it will likely include a broad conservation strategy that promotes a diverse array of agricultural crop types and preserves riparian and upland areas that provide suitable habitat for a variety of species. This would include preservation of large blocks of contiguous habitat that provide linkages between species' habitats and buffers from less desirable areas. The NHP also will likely include opportunities to enhance riparian and upland habitats as part of the conservation program.

Swainson's Hawk Mitigation Program

The JPA administers a program for the County and the cities of Davis, Woodland, Winters, and West Sacramento, to implement the agreement with CDFG regarding impacts to Swainson's hawk foraging habitat. The JPA reviews applications for development of open land within the NCCP/HCP planning area and collects acreage-based mitigation fees for development of the lands. The mitigation fees are to be sufficient to fund the acquisition, enhancement, and long-term management of 1 acre of Swainson's hawk foraging habitat for every 1 acre of foraging habitat that is lost to urban development. The fee is currently $8,660 per acre. The interim program, which is dependant on the completion of the Yolo County NCCP/HCP, is limited to providing mitigation for impacts to foraging habitat and does not authorize incidental take of Swainson's hawks.

Yolo County General Plan

The Yolo County General Plan contains numerous goals, policies, and actions to protect biological resources. Goals, policies, and actions that directly relate to biological resources protection are listed below.

- **Policy LU-7.2:** Support and participate in Countywide, regional and other multi-agency planning efforts related to housing, tourism, air quality, open space, green infrastructure, recreation, agriculture, habitat conservation, energy, emergency preparedness and flood protection.
- **Policy LU-7.3:** Coordinate with other stakeholder agencies and entities to continue local and regional planning efforts to preserve agriculture, open space and natural resources while meeting housing needs, basic infrastructure and service levels, County economic development goals and County fiscal objectives.
- **Policy LU-7.4:** Work with SACOG and its other member jurisdictions to develop a mutually-acceptable plan for open space conservation, habitat protection and mitigation banking, to ensure that Yolo County is appropriately compensated when its land is used to achieve regionwide environmental benefits.
- **Policy CC-1.5:** Significant site features, such as trees, water courses, rock outcroppings, historic structures, and scenic views shall be used to guide site planning and design in new development. Where possible, these features shall become focal points of the development.

- **Policy CC-4.11:** Require site specific information appropriate to each application to enable informed decision-making, including but not limited to the following: biological resources assessment, noise analysis, traffic and circulation assessment, air quality calculations (including greenhouse gases), cultural resources assessment, geotechnical study, Phase One environmental site assessment, title report, storm drainage analysis, flood risk analysis, water supply assessment sewer/septic capacity and service analysis and fiscal impact analysis.
- **Goal CO-1:** Natural Open Space. Provide a diverse, connected and accessible network of open space to enhance natural resources and their appropriate use.
- **Policy CO-1.1:** Expand and enhance an integrated network of open space to support, recreation, natural resources, historic and tribal resources, habitat, water management, aesthetics, and other beneficial uses.
- **Policy CO-1.3:** Create a network of regional parks and open space corridors that highlight unique natural resources and recreational opportunities for a variety of users.
- **Policy CO-1.14:** Support the preservation of open space consistent with this General Plan, via acquisition of fee title or easement interest by land trusts, government agencies, and conservancies from willing landowners.
- **Policy CO-1.22:** Emphasize the use of native grasses, shrubs and trees as the primary focus of landscaping work within resource parks and other open spaces.
- **Policy CO-1.25:** Allow for specified areas of resource parks to be preserved, enhanced and/or restored as mitigation sites for public agencies only, consistent with the requirements of appropriate regulatory and funding agencies, provided that adequate compensation, including funding for operations and maintenance of the mitigation, is provided.
- **Policy CO-1.29:** Balance the needs of agriculture with recreation, flood management, and habitat, within the Yolo Bypass.
- **Policy CO-1.30:** Require clustering and creative site planning in new development areas to preserve and enhance areas of contiguous open space to the extent feasible.
- **Action CO-A19:** Allow public agencies to establish protect, and/or enhance habitat for mitigation purposes within specific areas of resource parks, consistent with the requirements of appropriate regulatory agencies, where an endowment is created to fund the monitoring and maintenance of the habitat. Allow non-profit organizations to manage such areas where appropriate. (Policy CO-1.1, Policy CO-1.15, Policy CO-1.26)
- **Goal CO-2:** Biological Resources. Protect and enhance biological resources through the conservation, maintenance, and restoration of key habitat areas and corresponding connections that represent the diverse geography, topography, biological communities, and ecological integrity of the landscape.
- **Policy CO-2.1:** Consider and maintain the ecological function of landscapes, connecting features, watersheds, and wildlife movement corridors.
- **Policy CO-2.2:** Focus conservation efforts on high priority conservation areas (core reserves) that consider and promote the protection and enhancement of species diversity and habitat

values, and that contribute to sustainable landscapes connected to each other and to regional resources.

- **Policy CO-2.3:** Preserve and enhance those biological communities that contribute to the County's rich biodiversity including blue oak and mixed oak wood-lands, native grassland prairies, wetlands, riparian areas , aquatic habitat, agricultural lands, heritage valley oak trees, remnant valley oak groves, and roadside tree rows.
- **Policy CO-2.4:** Coordinate with other regional efforts (e.g., Yolo County HCP/NCCP) to sustain or recover special-status species populations by preserving and enhancing habitats for special-status species.
- **Policy CO-2.9:** Protect riparian areas to maintain and balance wildlife values.
- **Policy CO-2.10**: Encourage the restoration of native habitat.
- **Policy CO-2.11:** Ensure that open space buffers are provided between sensitive habitat and planned development.
- **Policy CO-2.14:** Ensure no net loss of oak woodlands, alkali sinks, rare soils, vernal pools or geological substrates that support rare endemic species. The limited loss of blue oak woodland and grasslands may be acceptable, where the fragmentation of large forests exceeding 10 acres is avoided and losses are mitigated to the extent feasible.
- **Policy CO-2.16:** Existing native vegetation shall be conserved where possible and integrated into new development if appropriate.
- **Policy CO-2.20:** Encourage the use of wildlife-friendly Best Management Practices to minimize unintentional killing of wildlife such as restricting mowing during nesting season for ground-nesting birds or draining of flooded fields before fledging of wetland species.
- **Policy CO-2.22:** Prohibit development within a minimum of 100 feet from the top of banks for all lakes, perennial ponds, rivers, creeks, sloughs, and perennial streams. The setback will allow for fire and flood protection, a natural riparian corridor (or wetland vegetation), a planned recreational trail where applicable, and vegetated landscape for stormwater to pass through before it enters the water body. Exceptions to this action include irrigation pumps, roads and bridges, levees, docks, boat ramps, and similar uses, so long as these uses are sited and operated in a manner that minimizes impacts to aquatic and riparian features.
- **Policy CO-2.30:** Promote native perennial grass habitat restoration and controlled fire management in grazing lands to reduce invasive species cover and enhance rangeland forage.
- **Policy CO-2.31:** Protect and enhance streams, channels, seasonal and permanent marshland, wetlands, sloughs, riparian habitat and vernal pools in land planning and community design.
- **Policy CO-2.32:** Protect wetland ecosystems by minimizing erosion and pollution from grading, especially during grading and construction projects.
- **Policy CO-2.36:** Consider potential effects of climate change on the locations and connections between wildlife migration routes.
- **Action CO-A25:** Develop a conservation strategy that considers the preservation and protection of intact functioning landscapes, watersheds, and landscape corridors. The approach should be based on the initial identification of high value habitat areas (core areas) and how

these areas could be physically linked across the landscape. Coordinate with the NHP to ensure that the basic landscape-level conservation concepts are incorporated into the HCP/NCCP. (Policy CO-2.1 through 2.4, Policy CO-2.14, Policy CO-2.19 through CO-2.24, Policy CO-2.27, Policy CO-2.29, Policy CO-2.30, Policy CO-2.31, Policy CO-2.33, Policy CO-2.34)

- **Action CO-A26:** Adopt and implement the Habitat Conservation Plan/Natural Communities Conservation Plan developed through the Yolo Natural Heritage Program. Integrate the HCP/NCCP (Natural Heritage Program) into the General Plan as appropriate. Direct habitat mitigation to strategic areas that implement the Yolo Natural Heritage Program and are consistent with the County's conservation strategy. Avoid the conversion of agricultural areas and focus on lands where wildlife values and farming practices are complementary. (Policy CO-2.1 through CO-2.4, Policy CO-2.14)
- **Action CO-A27:** Protect the habitat value and biological function of oak woodlands, grasslands, riparian areas, and wetland habitats. Avoid activities that remove or degrade these habitats and establishment buffers to avoid encroachment into sensitive areas. (Policy CO-2.4, Policy CO-2.14, Policy CO-2.15, Policy CO-2.18, Policy CO-2.19, Policy CO-2.20 through CO-2.24)
- **Action CO-A28:** Create a program to encourage the planting of new oak seedlings in appropriate locations and the protection of plantings from damage by animals and people until seedlings are of sufficient size. (Policy CO-2.13, Policy CO-2.16, Policy CO-2.17)
- **Policy CO-9.21:** Work to ensure that State and federal habitat restoration efforts recognize and support the Yolo Natural Heritage Program.

City of Woodland General Plan

The City of Woodland General Plan contains numerous goals, policies, and actions to protect biological resources. Goals, policies, and actions that directly relate to biological resources protection are listed below.

- **Goal 7.B:** To protect, restore, and enhance habitats that support fish and wildlife species so as to maintain populations at viable levels.
- **Policy 7.B.1:** The City shall participate in the countywide Habitat Conservation Plan/Natural Community Conservation Plan and Joint Powers Agency to mitigate the impacts of growth projected under the General Plan on wildlife habitats in the Woodland area.
- **Policy 7.B.2:** Until the countywide Habitat Conversation Plan/Natural Community Conservation Plan is adopted, prior to approval of discretionary development permits involving parcels within a significant ecological resource area, the City shall require, as part of the environmental review process, a biotic resources evaluation of the site by a wildlife biologist. The evaluation shall be based upon field reconnaissance performed at the appropriate time of year to determine the presence or absence of federally- or state-listed rare, threatened, or endangered species of plants or animals. Such evaluation will consider the potential for

significant impact on these resources, and will identify feasible measures to mitigate such impacts or indicate why mitigation is not feasible. In approving any such discretionary development permit, the City shall determine the feasibility of the identified mitigation measures.

Significant ecological resource areas shall, at a minimum, include the following:

a. Any habitat for federally- or state-listed rare, threatened or endangered animals or plants.
b. Large areas of non-fragmented natural habitat
c. Identifiable wildlife movement zones, including but not limited to, non-fragmented stream environment zones, avian and mammalian migratory routes, and known concentration areas of waterfowl within the Pacific Flyway

- **Policy 7.B.3:** In connection with the countywide Habitat Conservation Plan/Natural Communities Conservation Plan, the City shall identify and protect significant ecological resource areas and other unique wildlife habitats critical to protecting and sustaining wildlife populations.
- **Policy 7.B.4:** The City shall require that development in areas known to have particular value for wildlife be carefully planned and, where possible, located so that the reasonable value of the habitat for wildlife is maintained.
- **Policy 7.B.5:** The City shall encourage the control of residual pesticides to prevent potential damage to water quality, vegetation, and wildlife.
- **Policy 7.B.6:** The City shall support preservation of the habitats of federally or state-listed rare, threatened, endangered, and/or other special status species. Federal and state agencies, as well as other resource conservation organizations, shall be encouraged to acquire and manage endangered species' habitats.
- **Policy 7.B.7:** The City shall cooperate with, encourage, and support the plans of other public agencies to acquire fee title or conservation easements to privately-owned lands in order to preserve important wildlife corridors and to provide habitat protection of California Species for Concern and state or federally-listed rare, threatened, or endangered plant and animal species.
- **Policy 7.B.8:** The City shall support and cooperate with efforts of other local, state, and federal agencies and private entities engaged in the preservation and protection of significant biological resources from incompatible land uses and development. Significant biological resources include endangered, threatened, or rare species and their habitats, wetland habitats, wildlife migration corridors, and locally-important species/communities.
- **Policy 7.B.9:** The City shall support the management efforts of the California Department of Fish and Game to maintain and enhance the productivity of important fish and game species by protecting identified critical habitat for these species from incompatible suburban, rural residential, or recreational development.
- **Goal 7.C:** To preserve and protect the valuable vegetation resources of the Woodland area.

- **Policy 7.C.1:** The City shall participate in the countywide Habitat Conservation Plan/Natural Communities Conservation Plan to mitigate the impacts of growth projected under the General Plan on vegetation habitats in the Woodland area.
- **Policy 7.C.2:** The City shall encourage landowners and developers to preserve natural vegetation in visually-sensitive areas and along important transportation corridors.
- **Policy 7.C.3:** The City shall require developers to use native and compatible non-native species, especially drought- resistant species, to the extent possible in fulfilling landscaping requirements imposed as conditions of permits or for project mitigation.
- Policy 7.C.4: The City shall support the preservation of outstanding areas of natural vegetation, including, but not limited to, oak woodlands, riparian areas, and vernal pools.
- **Policy 7.C.5:** The City shall establish procedures for identifying and preserving rare, threatened, and endangered plant species that may be adversely affected by public or private development projects, including those identified by the countywide Habitat Conservation Plan.
- **Policy 7.C.6:** The City shall encourage the conservation of sufficiently large, continuous expanses of native vegetation to provide suitable habitat for maintaining abundant and diverse wildlife.
- **Policy 7.C.7:** The City shall support the management of wetland and riparian plant communities for passive recreation, groundwater recharge, nutrient catchment, and wildlife habitats. Such communities shall be restored or expanded, where possible and as appropriate.
- **Policy 7.C.8:** The City shall require that new development preserve natural woodlands to the maximum extent possible.
- **Policy 7.C.9:** The City shall encourage the planting of native trees, shrubs, and grasslands in order to preserve the visual integrity of the landscape, provide habitat conditions suitable for native wildlife, and ensure that a maximum number and variety of well-adapted plants are maintained.
- **Policy 7.C.10:** The City shall require that new development avoid, as much as possible, ecologically-fragile areas (e.g., areas of rare or endangered species of plants, riparian areas, alkali sinks). Where feasible, these areas should be protected through public acquisition of fee title or conservation easements to ensure protection.

City of Woodland Tree Ordinance (Section 20A-1-10 of the Code of the City of Woodland)

In recognition that the planting and preservation of trees enhance the natural scenic beauty of the City, increase life-giving oxygen, promote ecological balance, provide natural ventilation and air filtration, temper the effect of extreme temperatures, increase property values, improve the lifestyle of residents, and enhance the identity of the City, it was necessary to enact regulations governing the planting, removal, and preservation of street trees, heritage trees, specimen trees, and landmark trees on public property and specified private property within the City. Under this ordinance, except as otherwise provided, it is unlawful for any person (other than a city worker performing his assigned duties) to do any of the following activities without a permit:

(1) Plant any tree within a tree maintenance strip;

(2) Move, remove, cut down, poison, set fire to, or permit fire to burn in proximity, or perform any act which results in the unnatural death or destruction of a street tree;

(3) Perform any activity that will interfere with or retard the natural growth of any street tree;

(4) Perform any work or permit any work to be performed within the drip line area of a street tree which would endanger the tree;

(5) Perform maintenance on a street tree.

3.4.4 - Methodology

The biological assessment performed herein included describing the wildlife habitat present (Mayer and Laudenslayer 1988); identifying common plant and wildlife species observed; determining the potential presence of any special habitat features, such as waters of the U.S. or state, including wetlands; and identifying any linkages within the project site to important adjacent wildlife habitats. Habitat types were evaluated for their potential to support special-status plant and wildlife species and any other sensitive biological resources.

The following information sources were reviewed:

- The Davis, California USGS 7.5-minute topographic quadrangle (Davis)
- Aerial photography of the project site (Google Earth undated)
- A Natural Resource Conservation Service (NRCS) soils map of the project site (Soil Survey Staff undated)
- CDFG California Natural Diversity Data Base (CNDDB) records for the Davis, California 7.5-minute topographic quadrangle and the surrounding eight quadrangles (CNDDB 2012)
- CDFG California Wildlife Habitat Relationship System (CWHR) (CDFG 2012)
- U.S. Fish and Wildlife Service (USFWS) list of endangered and threatened species that may occur, or be affected by the project, in the Davis, California quadrangle (USFWS 2012)
- The California Native Plant Society (CNPS) online Inventory of Rare and Endangered Vascular Plants of California (CNPS 2012)

Pertinent literature includes the Jepson Manual, Higher Plants of California (Hickman 1993), Amphibian and Reptile Species of Special Concern in California (Jennings and Hayes 1994), California Birds: Their Status and Distribution (Small 1994), California Bird Species of Special Concern (Shuford and Gardali, eds. 2008), and Mammalian Species of Special Concern in California (Williams 1986).

3.4.5 - Thresholds of Significance

According to Appendix G, Environmental Checklist, of the CEQA Guidelines, biological resources impacts resulting from the implementation of the proposed project would be considered significant if the project would:

1. Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?
2. Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, and regulations or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?
3. Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?
4. 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 wildlife nursery sites?
5. Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?
6. Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?

3.4.6 - Project Impacts and Mitigation Measures

This section discusses potential impacts associated with the development of the project and provides mitigation measures where appropriate.

Special-Status Species

Impact BIO-1:	**The proposed project will have a less than significant effect, either directly or through habitat modifications, on species identified as candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service.**

Impact Analysis

Grasslands Site

Based on the results of the literature review and reconnaissance-level field survey of the project site, MBA documented existing project site conditions and determined whether rare, threatened, or endangered plants and wildlife; species of concern; or those listed on non-government "watch" lists (hereafter referred to collectively as special-status species) occur or could potentially occur within the project site). Exhibit 3.4-1 provides a map of CNDDB-recorded occurrences of special-status species

within 5 miles of the Grasslands project site. Detailed special-status species information can be found in Appendix D.

Sensitive Plants

Sensitive Plant Communities

Plant communities are considered to be sensitive biological resources based upon federal, state, or local laws regulating their development, limited distributions, and habitat requirements of sensitive plant or wildlife species that occur within them. No sensitive plant communities occur on the project site.

Sensitive Plant Species

Several sensitive plant species were recorded as occurring within 5 miles of the project site. In particular, San Joaquin spearscale, Colusa grass, Solano grass, and alkali milkvetch are known to occur southeast of the project site within Grasslands Regional Park in areas of the park identified for vernal pool conservation. No sensitive plant species were observed on the project site during the reconnaissance-level survey, nor were previous surveys completed by the Yolo Natural Heritage Program. In California, these species appear to be restricted to the confines of clay bottom vernal pools; however, because there are no vernal pool complexes within the project site itself, San Joaquin spearscale Colusa grass, Solano grass, and alkali milkvetch have a low potential to occur onsite. A discussion of each sensitive wildlife species with the potential to occur onsite is presented in Table 3.4-1.

Sensitive Wildlife Species

Based on the results of the literature review and knowledge of the species that occur in the Central Valley, 35 sensitive wildlife species have been previously recorded or known to occur within the Davis USGS Quad, on which the project is located. The project site supports foraging habitat for special-status avian species such as Swainson's hawk and burrowing owl, and it supports habitat for the burrowing owl because of the presence of small mammal burrows onsite and proximity to a burrowing owl conservation area and known sightings. A discussion of each sensitive wildlife species recognized as potentially present on the project site is presented in Table 3.4-1.

Source: ESRI Aerial Imagery. CNDDB Data, July 2012.

Legend

- Grasslands_project_point
- Grasslands_CNDDB_5mile_buffer

Common Name - Scientific Name

- American badger - Taxidea taxus
- Antioch multilid wasp - Myrmosula pacifica
- Baker's navarretia - Navarretia leucocephala ssp. bakeri
- California linderiella - Linderiella occidentalis
- Colusa grass - Neostapfia colusana
- Conservancy fairy shrimp - Branchinecta conservatio
- Crampton's tuctoria or Solano grass - Tuctoria mucronata
- Ferris' milk-vetch - Astragalus tener var. ferrisiae
- Heckard's pepper-grass - Lepidium latipes var. heckardii
- Sacramento Valley tiger beetle - Cicindela hirticollis abrupta
- San Joaquin spearscale - Atriplex joaquinana
- Swainson's hawk - Buteo swainsoni
- alkali milk-vetch - Astragalus tener var. tener
- bearded popcorn-flower - Plagiobothrys hystriculus
- burrowing owl - Athene cunicularia
- giant garter snake - Thamnophis gigas
- hoary bat - Lasiurus cinereus
- least Bell's vireo - Vireo bellii pusillus
- midvalley fairy shrimp - Branchinecta mesovallensis
- pallid bat - Antrozous pallidus
- saline clover - Trifolium hydrophilum
- silver-haired bat - Lasionycteris noctivagans
- vernal pool fairy shrimp - Branchinecta lynchi
- vernal pool tadpole shrimp - Lepidurus packardi
- western pond turtle - Emys marmorata
- white-tailed kite - Elanus leucurus

NORTH

1 0.5 0 1 Miles

Michael Brandman Associates

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Exhibit 3.4-1
CNDDB-Recorded Occurrences of Special-Status Species Within Five Miles of the Grasslands Project Site

Table 3.4-1: Grasslands Site Sensitive Plant and Wildlife Species

Species		Status			Preferred Habitat	Potential to Occur/ Known Occurrence/ Suitable Habitat
Scientific Name	Common Name	ESA	CESA	Other		
Plants						
Astragalus tener var. *tener*	Alkali milkvetch	None	None	1B.2	Low ground, alkali flats, and flooded lands in alkali playas, grasslands, and vernal pools. 1 to 170 meters in elevation. Blooms from March to June.	**Low potential to occur.** CNDDB records in vernal pool complexes. While this species has not been observed within the project site as there are no vernal pools where project activities are proposed, the Yolo Natural Heritage Program has recorded occurrences of this species within the Grasslands Regional Park property (southeast of project activities).
Atriplex joaquinana	San Joaquin spearscale	None	None	1B.2	Seasonal alkali wetlands or alkali sink scrub in chenopod scrub, alkali meadow, and grasslands. 1 to 250 meters in elevation. Blooms from April to October.	**Low potential to occur.** This species has not been observed within the project site, as there are no vernal pools where project activities are proposed; however, the Yolo Natural Heritage Program has recorded occurrences of this species within the Grasslands Regional Park property (southeast of project activities).
Neostapfia colusana	Colusa grass	FT	SE	1B.1	Large or deep vernal pool bottoms with adobe soils. 2 to 200 meters in elevation. Blooms from May to August	**Low potential to occur.** CNDDB records in vernal pool complexes. While this species has not been observed within the project site as there are no vernal pools where project activities are proposed, the Yolo Natural Heritage Program has recorded occurrences of this species within the Grasslands Regional Park property (southeast of project activities).

Table 3.4-1 (cont.): Grasslands Site Sensitive Plant and Wildlife Species

Species		Status			Preferred Habitat	Potential to Occur/ Known Occurrence/ Suitable Habitat
Scientific Name	Common Name	ESA	CESA	Other		
Tuctoria mucronata	Solano grass	FE	SE	1B.1	Solano grass only grows on salt affected clay soils in alkaline vernal pools or alkaline playas that are subject to long periods of inundation. Occurs at elevations from 5 to 11 meters. Blooms from April through July.	**Low potential to occur.** CNDDB records in vernal pool complexes. While this species has not been observed within the project site as there are no vernal pools where project activities are proposed, the Yolo Natural Heritage Program has recorded occurrences of this species within the Grasslands Regional Park property (southeast of project activities).
Wildlife						
Athene cunicularia	Burrowing owl	None	None	CSC	Favors flat, open grassland or gentle slopes and sparse-shrub land ecosystems. Mainly utilize ground squirrel burrows for nesting and avoiding predators, though also known to utilize debris piles and old pipes for breeding and refuge.	**High potential to occur**. While the project site supports some small mammal activity, no individual owls or their sign (white wash, pellets, feathers) were observed during the reconnaissance surveys. There more than 10 recorded occurrences within 5 miles of the site, within the agricultural and open space found in the region.
Buteo swainsoni	Swainson's hawk	None	ST	None	Typically nest at edge of narrow bands of riparian vegetation, in isolated oak woodland, in lone trees, and in trees associated with roads, farmyards, as well as in adjacent urban residential areas. This hawk forages in open stands of grass-dominated vegetation, sparse shrublands, and small open woodlands. In agricultural lands, its preferred foraging grounds are alfalfa fields.	**High potential to occur.** The project site provides low quality foraging habitat for the Swainson's hawk. There are more than 10 recorded occurrences within 5 miles of the project site, within the open space and agricultural lands found in the region.

Table 3.4-1 (cont.): Grasslands Site Sensitive Plant and Wildlife Species

Species		Status			Preferred Habitat	Potential to Occur/ Known Occurrence/ Suitable Habitat
Scientific Name	**Common Name**	**ESA**	**CESA**	**Other**		

ESA
FE Federally listed endangered
FT Federally listed threatened
FPE Federally proposed endangered
FPT Federally proposed threatened
FC Federal candidate

CESA
SE State listed endangered
ST State listed threatened

Other
CDFG:CSC California Species of Concern
CDFG:FP Fully Protected Species
CDFG:P Protected Species
CNPS: 1B.1/2 Rare, threatened or endangered in California or elsewhere

Species Present - The species was observed on the project site at the time of the survey or during a previous biological survey.
High Potential to Occur - There is both suitable habitat associated with the species and a historical record of the species on or in the immediate vicinity of the project site, within 3 miles.
Moderate Potential to Occur - The diagnostic habitats associated with the species occur on or in the immediate vicinity of the project site, but there is not a recorded occurrence of the species within the immediate vicinity, within 3 miles. Some species that contain extremely limited distributions may be considered moderate, even if there is a recorded occurrence in the immediate vicinity.
Low Potential to Occur - There is a historical record of the species in the vicinity of the project site and potentially suitable habitat onsite, but existing conditions, such as density of cover, prevalence of non-native species, evidence of disturbance, limited habitat area, isolation, substantially reduce the possibility that the species may occur. The site is above or below the recognized elevation limits for this species.
Not Likely to Occur - A combination of the nearest recorded occurrence of the species is not within the near vicinity of the site, and the habitat onsite is marginally suitable at best. There is virtually no potential for this species to occur on the project site and further discussion is excluded from this report.

Construction Phase

Swainson's Hawk

The open field within the project site provides highly suitable foraging habitat for Swainson's hawk, a State Threatened species. The construction phase of the proposed project will result in a significant physical alteration to the existing land use and will result in the loss of Swainson's hawk foraging habitat. Therefore, Mitigation Measure BIO-1a is recommended to reduce potential impacts to a less than significant level.

Burrowing Owl

The project site is open, annual grassland with small mammal burrows. The construction phase of the proposed project will result in a significant physical alteration to the existing land use and will result in the loss of burrowing owl habitat if found present onsite. Since suitable burrowing owl habitat occurs on the project site, and burrowing owls may migrate onto the site given the site's proximity to a burrowing owl conservation area to the east and regional sightings of the species, Mitigation Measures BIO-1b, BIO-1c, and BIO-1d are recommended to reduce potential impacts to a less than significant level.

Special-Status Plants

Several special-status plants (San Joaquin spearscale, Colusa grass, Solano grass, and alkali milkvetch) are known to occur southeast of project activities within the grasslands site. As previously discussed, no sensitive plant species were observed on the project site during the reconnaissance-level survey, nor have previous surveys completed by the Yolo Natural Heritage Program identified such species. Furthermore, San Joaquin spearscale, Colusa grass, Solano grass, and alkali milkvetch have a low potential to occur onsite because there are no vernal pool complexes onsite in which they are typically found. As such, impacts to San Joaquin spearscale, Colusa grass, Solano grass, and alkali milkvetch would be less than significant.

Nesting Birds

The open ruderal and grassland habitat found on the undeveloped parcel and surrounding trees offsite may provide suitable nesting habitat for several ground and tree-nesting avian species known to occur in the area such as Northern harrier (*Circus cyaneus*) and white-tailed kite (*Elanus leucurus*). Additionally, the undeveloped field may provide marginal foraging habitat for a number of raptor species such as red-tailed hawk.

Since the project site contains suitable nesting and foraging habitat for several tree and ground-nesting avian species, Mitigation Measure BIO-1e is deemed necessary to reduce potential impacts to a less than significant level during the construction phase.

Operations Phase

Ground-disturbing activities will not occur during the operations phase of the project. Sensitive plant or wildlife species will not be impacted during this phase. Therefore, less than significant impacts would result.

Beamer/Cottonwood Site

Based on the results of the literature review and reconnaissance-level field survey of the project site, MBA documented existing project site conditions and determined whether rare, threatened, or endangered plants and wildlife; species of concern; or those listed on non-government "watch" lists (hereafter referred to collectively as special-status species) occur or could potentially occur within the project site. Exhibit 3.4-2 provides a map of CNDDB-recorded occurrences of special-status species within 5 miles of the Beamer-Cottonwood project site. Detailed special-status species information can be found in Appendix D.

Sensitive Plants

Sensitive Plant Communities

Plant communities are considered to be sensitive biological resources, based upon federal, state, or local laws regulating their development, limited distributions, and habitat requirements of sensitive plant or wildlife species that occur within them. No sensitive plant communities occur on the project site.

Sensitive Plant Species

Several sensitive plant species were recorded as occurring within 5 miles of the project site. However, because of the highly disturbed nature of the project site and lack of suitable soils caused by significant physical alteration, no suitable habitat for any sensitive plant species occurs within the site. No sensitive plant species were observed on the project site during the reconnaissance-level survey.

Sensitive Wildlife Species

On the basis of results of the literature review and knowledge of the species that occur in the Central Valley, 25 sensitive wildlife species have been previously recorded or known to occur within the Woodland USGS Quad, on which the project is located. The project site supports marginal foraging habitat for one special-status avian species, Swainson's hawk; marginal habitat for the burrowing owl because of the presence of small mammal burrows onsite; and—because an elderberry bush is found on the southern border of the site—marginal habitat for the valley elderberry longhorn beetle. A discussion of each sensitive wildlife species recognized as potentially present on the project site is presented in Table 3.4-2.

Table 3.4-2: Sensitive Wildlife Species

Species		Status			Preferred Habitat	Potential to Occur/ Known Occurrence/ Suitable Habitat
Scientific Name	Common Name	ESA	CESA	Other		
Athene cunicularia	Burrowing owl	None	None	CSC	Favors flat, open grassland or gentle slopes and sparse-shrub land ecosystems. Mainly utilize ground squirrel burrows for nesting and avoiding predators, though also known to utilize debris piles and old pipes for breeding and refuge.	**Low potential to occur**. While the project site supports some small mammal activity, no individual owls or their sign (white wash, pellets, feathers) were observed during the reconnaissance surveys. Furthermore, the site is surrounded by urban development and regularly disked for weed abatement purposes. there are no known occurrences within 5 miles of the site.
Buteo swainsoni	Swainson's hawk	None	ST	None	Typically nest at edge of narrow bands of riparian vegetation, in isolated oak woodland, in lone trees, and in trees associated with roads, farmyards, as well as in adjacent urban residential areas. This hawk forages in open stands of grass-dominated vegetation, sparse shrublands, and small open woodlands. In agricultural lands, its preferred foraging grounds are alfalfa fields.	**Low potential to occur.** The project site provides low quality foraging habitat for the Swainson's hawk. Because of the lack of trees, little vegetation, and surrounding urban development, no suitable nesting habitat occurs onsite. There are more than 10 recorded occurrences within 5 miles of the project site, throughout the open space and agricultural lands found outside of City of Woodland city limits.
Desmocerus californicus dimorphus	Valley elderberry longhorn beetle (VELB)	FT	None	None	Endemic to the Central Valley of California, in association with blue elderberry (*Sambucus mexicana*) shrubs.	**Low potential to occur**. CNDDB records indicate that the beetle is primarily found on riparian corridors of the Sacramento River, Cache Creek, and Putah Creek. These are areas likely to contain the most suitable habitat. While a blue elderberry bush is present onsite, this appears to be an isolated bush, likely from bird droppings at the southern fence of the site. The closest occurrence of VELB is 4.5-miles from the site.

Table 3.4-2 (cont.): Sensitive Wildlife Species

Species		Status			Preferred Habitat	Potential to Occur/ Known Occurrence/ Suitable Habitat
Scientific Name	Common Name	ESA	CESA	Other		

ESA		CESA		Other	
FE	Federally listed endangered	SE	State listed endangered	CDFG:CSC	California Species of Concern
FT	Federally listed threatened	ST	State listed threatened	CDFG:FP	Fully Protected Species
FPE	Federally proposed endangered			CDFG:P	Protected Species
FPT	Federally proposed threatened				
FC	Federal candidate				

Species Present - The species was observed on the project site at the time of the survey or during a previous biological survey.
High Potential to Occur - There is both suitable habitat associated with the species and a historical record of the species on or in the immediate vicinity of the project site, within 3 miles.
Moderate Potential to Occur - The diagnostic habitats associated with the species occur on or in the immediate vicinity of the project site, but there is not a recorded occurrence of the species within the immediate vicinity, within 3 miles. Some species that contain extremely limited distributions may be considered moderate, even if there is a recorded occurrence in the immediate vicinity.
Low Potential to Occur - There is a historical record of the species in the vicinity of the project site and potentially suitable habitat onsite, but existing conditions, such as density of cover, prevalence of non-native species, evidence of disturbance, limited habitat area, isolation, substantially reduce the possibility that the species may occur. The site is above or below the recognized elevation limits for this species.
Not Likely to Occur - A combination of the nearest recorded occurrence of the species is not within the near vicinity of the site, and the habitat onsite is marginally suitable at best. There is virtually no potential for this species to occur on the project site and further discussion is excluded from this report.

Construction Phase

Swainson's Hawk

The open field within the project site provides marginally suitable foraging habitat for Swainson's hawk, a State Threatened species. The construction phase of the proposed project will result in a significant physical alteration to the existing land use and will result in the loss of Swainson's hawk foraging habitat. Therefore, Mitigation Measure BIO-1a is recommended to reduce potential impacts to a less than significant level.

Burrowing Owl

The project site is open, dry ruderal/grassland with low-growing vegetation and small mammal burrows. The construction phase of the proposed project will result in a significant physical alteration to the existing land use and will result in the loss of burrowing owl habitat if found present onsite. Since suitable burrowing owl habitat occurs on the project site, and burrowing owls may migrate onto the site, Mitigation Measures BIO-1b, BIO-1c, and BIO-1d are recommended to reduce potential impacts to a less than significant level.

Nesting Birds

The open ruderal and grassland habitat found on the undeveloped parcel and surrounding trees offsite may provide suitable nesting habitat for several ground- and tree-nesting avian species known to occur in the area. Additionally, the undeveloped field may provide marginal foraging habitat for a number of raptor species, such as red-tailed hawk.

Since the project site contains suitable nesting and foraging habitat for several tree- and ground-nesting avian species, Mitigation Measure BIO-1e is deemed necessary to reduce potential impacts to a less than significant level during the construction phase.

Valley Elderberry Longhorn Beetle (VELB)

The Valley elderberry longhorn beetle (*Desmocerus californicus dimorphus*) or VELB is listed as a threatened species under the federal Endangered Species Act. The geographic range of the VELB is limited to California's Central Valley, where it is found in association with elderberry shrubs (*Sambucus* sp.), which are the host plants for the larval stages of this beetle. Elderberry shrubs naturally occur in riparian forests and in elderberry savannas adjacent to riparian vegetation. Since suitable VELB habitat occurs on the project site in the form of a single blue elderberry bush found along the southern fence of the site, and VELB may migrate onto the site, Mitigation Measure BIO-1f is recommended to reduce potential impacts to a less than significant level.

Operations Phase

Ground-disturbing activities will not occur during the operations phase of the project. Sensitive plant or wildlife species will not be impacted during this phase. Therefore, less than significant impacts would result.

Source: ESRI Aerial Imagery. CNDDB Data, July 2012.

Legend

- Beamer_Cottonwood_project_point
- Beamer_Cottonwood_CNDDB_5mile_buffer

Common Name - Scientific Name

- American badger - Taxidea taxus
- Heckard's pepper-grass - Lepidium latipes var. heckardii
- San Joaquin spearscale - Atriplex joaquinana
- Swainson's hawk - Buteo swainsoni
- Valley Oak Woodland - Valley Oak Woodland
- brittlescale - Atriplex depressa
- hoary bat - Lasiurus cinereus
- merlin - Falco columbarius
- mountain plover - Charadrius montanus
- pallid bat - Antrozous pallidus
- palmate-bracted bird's-beak - Chloropyron palmatum
- saline clover - Trifolium hydrophilum
- silver-haired bat - Lasionycteris noctivagans
- tricolored blackbird - Agelaius tricolor
- valley elderberry longhorn beetle - Desmocerus californicus dimorphus
- western snowy plover - Charadrius alexandrinus nivosus
- white-faced ibis - Plegadis chihi

NORTH

1 0.5 0 1 Miles

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Exhibit 3.4-2
CNDDB-Recorded Occurrences of Special-Status Species Within Five Miles of the Beamer-Cottonwood Project Site

YOLO COUNTY DEPARTMENT OF GENERAL SERVICES
ENVIRONMENTAL EDUCATION AND SUSTAINABILITY PARK PROJECT
DRAFT ENVIRONMENTAL IMPACT REPORT

Level of Significance Before Mitigation

Potentially significant impact.

Mitigation Measures

Grasslands Site

MM BIO-1a To offset impacts to suitable foraging habitat for Swainson's hawk the County of Yolo shall implement one of the following two options:

a. Pursuant to the Solar Facility Ordinance of Yolo County, if more than 2.5 acres of Swainson's hawk foraging habitat is impacted, a Minor Use Permit shall be required and include conditions for mitigation for the permanent loss of such habitat as required under the Yolo Natural Heritage Program. The Yolo National Heritage Program reviews applications for development within the planning area, and it collects acreage-based mitigation fees for development of the lands, which are sufficient to fund the acquisition, enhancement, and long-term management of 1 acre of Swainson's hawk foraging habitat for every 1 acre of foraging habitat lost to development.

b. Prior to any ground disturbance, the County of Yolo shall place and record one or more Conservation Easements within Grasslands Regional Park that meet the acreage requirements of California Department of Fish and Game's Swainson's hawk foraging habitat mitigation guidelines. The conservation easement(s) shall be executed by the County of Yolo and Conservation operator. The conservation easement(s) shall be reviewed and approved in writing by the California Department of Fish and Game prior to recordation for the purpose of confirming consistency. The purpose of the conservation easement(s) shall be to preserve the value of the land as foraging habitat for the Swainson's hawk.

MM BIO-1b Since suitable burrowing owl habitat occurs on the project site, and burrowing owls may migrate onto the site, a pre-construction clearance survey shall be conducted to determine if burrowing owls currently occupy the project site. The pre-construction clearance survey shall be conducted within 14 days prior to ground-disturbing activities. Survey methodology shall be consistent with the new California Department of Fish and Game 2012 Staff Report on Burrowing Owl Mitigation. Since no suitable burrows were discovered during the initial biological reconnaissance survey, the pre-construction survey shall consist of a one-day survey effort within all suitable habitat and within 500 feet of the project site. If burrowing owls are observed onsite, Mitigation Measure BIO-1c shall be implemented to reduce any potential project impact.

MM BIO-1c If burrowing owl(s) are observed onsite during the pre-construction clearance survey, consultation with CDFG shall occur to determine the next appropriate steps. Additional focused surveys may be warranted as determined by CDFG to determine the quantity and location of nesting/migrating burrowing owls. Areas currently occupied by burrowing owls shall be avoided for the duration of residing onsite and/or nesting period. If burrowing owls cannot be avoided by the proposed project, implementation of Mitigation Measure BIO-1d shall be warranted to reduce any potential project-related impacts to less than significant.

MM BIO-1d If burrowing owls are determined to occupy the project site prior to construction activities and these occupied areas cannot be avoided, then additional measures such as passive relocation during the non-breeding season may be utilized to reduce any potential impacts. Burrow exclusion involves the installation of one-way doors in burrow openings during the non-breeding season to temporarily exclude burrowing owls, or permanently exclude burrowing owls and close burrows after verifying burrows are empty by site monitoring and scoping. Existing or artificial burrows situated less than 75 meters from the project site is the ideal scenario for successful passive relocation. Additional factors for successful passive relocation are included in the California Department of Fish and Game 2012 Staff Report on Burrowing Owl Mitigation. When a qualified biologist is able to determine that burrowing owls are no longer occupying the project site and passive relocation deemed successful, construction activities may continue.

MM BIO-1e Pursuant to the Migratory Bird Treaty Act and California Department of Fish and Game Code, removal of any trees, shrubs, or any other potential nesting habitat shall be conducted outside of the avian nesting season. The nesting season generally extends from early February through August, but can vary slightly from year to year based upon seasonal weather conditions. Construction generally occurs during the dry season in the spring and summer months (during nesting season) to avoid inclement weather. If construction is planned during the nesting season (between February and August), the County will be required to conduct pre-construction presence/absence surveys to determine if any birds or raptors are nesting within or adjacent to the project site.

A qualified biologist shall conduct a pre-construction survey for nesting migratory birds and raptors within all suitable habitat on the project site, and within 500 feet of the project site. The pre-construction survey shall be conducted within 30 days of ground-disturbing activities if construction occurs within the breeding season. If an active nest is discovered during the pre-construction survey, no construction activities should encroach within a 500-foot buffer from the active nest, until the nestlings have fledged. If construction activities must occur within 500 feet of the active nest, a

biological monitor will be required to be onsite during the construction phase to ensure no direct or incidental take of the active nest occurs. If the biological monitor determines that construction activities will result in take of the active nest, then all construction activities must halt within the established buffer for the nest.

Beamer/Cottonwood Site

Implement Mitigation Measures BIO-1a, BIO-1b, BIO-1c, BIO-1d, and BIO-1e, and the following:

MM BIO-1f Prior to any ground-disturbing or construction activities within 100 feet of the identified elderberry shrub, the County shall consult with the U.S. Fish and Wildlife Service. The County shall install and maintain a 4-foot-high construction fence around the perimeter of the elderberry shrub. No grading or any other ground-disturbing activities shall be conducted within the fenced protected area without prior verification that the requirements of the United States Fish and Wildlife Service have been satisfied including the issuance of any necessary permits.

The County shall avoid and protect the Valley elderberry longhorn beetle (VELB) habitat (elderberry stalks 1 inch in diameter or greater) where feasible. Complete avoidance may be assumed for VELB if activities occur outside of a 100-foot buffer of the plant found onsite. Where avoidance is infeasible, the County shall develop and implement a VELB mitigation plan in accordance with the most current USFWS mitigation guidelines for unavoidable take of VELB habitat pursuant to either Section 7 or Section 10(a) of the Federal Endangered Species Act. The mitigation plan shall include but not be limited to relocation of elderberry shrubs, planting of elderberry shrubs, and monitoring of relocated and planted elderberry shrubs.

Level of Significance After Mitigation

Less than significant impact.

Sensitive Natural Communities

Impact BIO-2:	**The proposed project will not have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, and regulations or by the California Department of Fish and Game or the U.S. Fish and Wildlife Service.**

Impact Analysis

Grasslands Site

Seasonal wetlands are plant communities typically characterized by any number of seasonal wetland generalist plants, many of which are non-native and adapted to frequent disturbance, and may be found within Grasslands Regional Park. The Yolo NHP conducted mapping of wetlands within Grasslands Regional Park in 2010 and 2011. There is a former drainage channel that runs along the southern border of the project site; the channel was a former flood channel of Putah Creek and currently no longer supports wetlands, since because of flood levees, Putah Creek no longer floods

the area. However, there is a mapped swale that is located above the elevation of the channel that has surface deposits of clay loams to clay textured soils that retain water and salts located north of the channel. A mid-summer 2012 informal wetland determination was conducted by qualified MBA biologists to verify the findings of the County's mapping efforts. During this determination, MBA biologists found that the swale is a seasonal wetland; conditions observed do not indicate that the swale is a vernal pool or supports vernal pool habitat. Species observed included rabbit's foot grass (*Polypogon monspeliensis*), Italian ryegrass (*Lolium perenne* ssp. *multiflorum*), curly dock (*Rumex crispus*), and perennial pepperweed (*Lepidium latifolium*).

The Yolo County General Plan contains a variety of goals, policies, and actions that protect, restore, and enhance seasonal wetlands and the plants and wildlife that live in these habitats. Policies CO-2.1, CO-2.2 and CO-2.3 call for the protection and enhancement of biological resources through conservation, and restoration of high potential biological resources (including seasonal wetlands) and the connections between them. Policies CO-2.1 and CO-2.2 promote landscape-level approaches to conservation of plants, animals, and their habitats on a countywide basis. Policy CO-2.3 requires preservation of those resources contributing to biodiversity of the County. A policy of "no net loss" has been adopted to assure that there is no loss of such sensitive habitats. Implementation of Mitigation Measure BIO-2a would reduce any impacts to the identified seasonal wetland swale onsite to a level that is less than significant.

Beamer/Cottonwood Site

Plant communities are considered to be sensitive biological resources based upon federal, state, or local laws regulating their development, limited distributions, and habitat requirements of sensitive plant or wildlife species that occur within them. No sensitive plant communities, including riparian habitat or other sensitive natural community, occur on the Beamer/Cottonwood site. Therefore, potential impacts associated with riparian habitat or other sensitive natural community would be less than significant during the construction and operation of the project.

Level of Significance Before Mitigation

Potentially significant impact.

Mitigation Measures

Grasslands Site

MM BIO-2 Because the seasonal wetland swale is outside of the United States Army Corps of Engineers' jurisdiction, regulation of the swale falls under the State of California's Porter-Cologne Water Quality Control Act. As such, filling the seasonal wetland swale requires coordination with the Regional Water Board for the issuance of either individual or general waste discharge requirements. In addition, the Yolo County General Plan allows for loss of individual wetlands as long as the loss is fully mitigated. In order to achieve this goal, General Plan Policies CO-2.1, CO-2.2, and CO-2.3 will be implemented. To replace the impacted seasonal wetland on the

project site, a habitat restoration plan shall be developed prior to the approval of grading plans and building permits and would identify appropriate mitigation areas onsite based on underlying soils and local hydrology. This data would be used to prioritize sites for enhancement or seasonal wetland creation (such as the relocation of the seasonal wetland swale) within another portion of Grasslands Regional Park. Habitat shall be restored or replaced at a minimum ratio of 1:1 acre of habitats permanently impacted.

Beamer/Cottonwood Site
No mitigation is necessary.

Level of Significance After Mitigation
Less than significant impact.

Federally Protected Wetlands

Impact BIO-3:	**The proposed project would not have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including but not limited to marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means.**

Impact Analysis
Grasslands Site
Seasonal wetlands are plant communities typically characterized by any number of seasonal wetland generalist plants, many of which are non-native and adapted to frequent disturbance, and may be found within Grasslands Regional Park. The Yolo County NHP conducted mapping of wetlands within Grasslands Regional Park in 2010 and 2011. There is a former drainage channel that runs along the southern border of the project site; the channel was a former flood channel of Putah Creek and currently no longer supports wetlands, since because of flood levees, Putah Creek no longer floods the area. However, as previously mentioned, there is a mapped swale that is located above the elevation of the channel that has surface deposits of clay loams to clay textured soils that retain water and salts located north of the channel. A mid-summer 2012 informal wetland determination was conducted by qualified MBA biologists to verify the findings of the County's mapping efforts. During this determination, MBA biologists found that the swale is a seasonal wetland; conditions observed do not indicate that the swale is a vernal pool or supports vernal pool habitat. Species observed included rabbit's foot grass (*Polypogon monspeliensis*), Italian ryegrass (*Lolium perenne ssp. multiflorum*), curly dock (*Rumex crispus*), and perennial pepperweed (*Lepidium latifolium*).

Based upon the information gathered during the reconnaissance-level field survey and background research, the informal assessment of jurisdictional waters indicated that, while there is one seasonal wetland swale, it is isolated in nature. Thus, the project site contains no potentially jurisdictional waters of the United States or the waters of the State. Furthermore, no irrigation canals or drainages currently occur on the project site. As designed, the proposed project would not substantially impact any potentially jurisdictional drainage feature or any associated vegetation. Therefore, potential

impacts associated with federally protected wetlands would be less than significant during the construction and operation of the project.

Beamer/Cottonwood Site

An informal assessment of jurisdictional waters and wetlands was conducted to assess the need for a formal delineation. Based upon the information gathered during the reconnaissance-level field survey, the project site contains no potentially jurisdictional waters of the United States or waters of the State. No irrigation canals, drainages, or wetlands currently occur on the project site. As designed, the proposed project would not substantially impact any potentially jurisdictional drainage feature or any associated vegetation. Therefore, potential impacts associated with federally protected wetlands would be less than significant during the construction and operation of the project.

Level of Significance Before Mitigation

Less than significant impact.

Mitigation Measures

Grasslands Site

No mitigation is necessary.

Beamer/Cottonwood Site

No mitigation is necessary.

Level of Significance After Mitigation

Less than significant impact.

Migratory Wildlife Corridors

Impact BIO-4:	**The proposed project would not substantially interfere 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 wildlife nursery sites.**

Impact Analysis

Grasslands Site

The project site consists of open space and the surrounding area consists of currently active agricultural lands. These lands are open and vast, providing ample opportunity for wildlife movement across the general project area. In addition, the project site does not provide narrow connectivity between large areas of open space on either a local or regional scale. The proposed project would not obstruct movement of terrestrial species. As such, the project site does not function as an important wildlife corridor and construction of the proposed project would not create a significant physical alteration to the land that would impair the movement of wildlife. Additionally, the project will be constructed to allow terrestrial movement below and between the elevated solar panels and fencing. Therefore, potential impacts associated with wildlife corridors and movement would be less than significant during the construction and operation of the project.

Beamer/Cottonwood Site

Because the project site is regularly disked for weed abatement purposes and is surrounded by urban development, it does not support habitat for the movement of any native resident or migratory fish or wildlife species. Furthermore, there were no nests or roosts observed onsite; therefore, the proposed project would not impede the use of wildlife nursery sites. Less than significant impacts would occur.

Level of Significance Before Mitigation

Less than significant impact.

Mitigation Measures

Grasslands Site

No mitigation is necessary.

Beamer/Cottonwood Site

No mitigation is necessary.

Level of Significance After Mitigation

Less than significant impact.

Local Policies or Ordinances

Impact BIO-5:	**The proposed project will not conflict with local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance.**

Impact Analysis

Grasslands Site

The local-level authority over the project site is detailed in the provisions of the Yolo County General Plan. The General Plan specifically addresses the preservation of agricultural lands and natural habitats such as wetlands and oak woodland habitats. As designed, the construction of the proposed project would not interfere with the goals of the General Plan as they apply to projects within open space and agricultural land, and there would be no significant impact resulting from project activities.

Beamer/Cottonwood Site

The local-level authority over the project site is detailed in the provisions of the Yolo County General Plan. The General Plan specifically addresses the preservation of agricultural lands and natural habitats such as wetlands and oak woodland habitats. As designed, the construction of the proposed project would not interfere with the goals of the General Plan as they apply to projects within open space and agricultural land.

Further, the City of Woodland has a tree ordinance (Chapter 20A Trees) in place that protects street trees, heritage trees, specimen trees, and landmark trees on public property and specified private property within the City. The only trees that exist onsite are several small black walnut and oak trees along the southern fence bordering the site. Construction would remain outside the dripline of these trees and no trees would be impacted as a result of the proposed project; the project would occur in an

area that is ruderal and urban in nature. The construction or operation of the proposed project would not have an adverse impact on sensitive biological resources protected by local policies or ordinances. Therefore, impacts associated with local policies or ordinances during the construction and operation of the project would be less than significant.

Level of Significance Before Mitigation

Less than significant impact.

Mitigation Measures

Grasslands Site

No mitigation is necessary.

Beamer/Cottonwood Site

No mitigation is necessary.

Level of Significance After Mitigation

Less than significant impact.

Habitat Conservation Plan

Impact BIO-6:	**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.**

Impact Analysis

Grasslands Site

The JPA is preparing the Yolo NHP Plan, which is a countywide conservation planning effort designated to serve as an effective comprehensive HCP and NCCP for a 653,820-acre planning area. The NHP Plan will establish a mechanism for conserving the natural open space and agricultural landscapes that provide habitat for many species protected by FESA and CESA, and at-risk species found within the habitats and natural communities of the County. Although the Yolo NHP is still in the planning and preparation stage, it will likely include a broad conservation strategy that promotes a diverse array of agricultural crop types and preserves riparian and upland areas that provide suitable habitat for a variety of species. This would include preservation of large blocks of contiguous habitat that provide linkages between species' habitats and buffers from less desirable areas. The NHP also will likely include opportunities to enhance riparian and upland habitats as part of the conservation program. In implementing Mitigation Measures BIO-1a through BIO-1f and BIO-2, the proposed project demonstrates the intention of the County to coordinate with this regional conservation effort; as such, the proposed project would not conflict with the proposed provisions of the Yolo County NCCP/HCP and there would be no impacts with regards to locally adopted habitat conservation plans.

The JPA also administers a program, for the County and the cities of Davis, Woodland, Winters, and West Sacramento, to implement the agreement with CDFG regarding impacts to Swainson's hawk foraging habitat. The JPA reviews applications for development of open land within the NCCP/HCP

planning area and collects acreage-based mitigation fees for development of the lands. The mitigation fees are to be sufficient to fund the acquisition, enhancement, and long-term management of one acre of Swainson's hawk foraging habitat for every 1 acre of foraging habitat that is lost to urban development. The fee is currently $8,660 per acre. Alternately, mitigation may be provided through the provision of a title or easement protecting existing Swainson's hawk foraging habitat. The interim program, which is dependant on the completion of the Yolo County NCCP/HCP, is limited to providing mitigation for impacts to foraging habitat and does not authorize incidental take of Swainson's hawks. With the implementation of MM BIO-1a above, the project would comply with the Yolo County NCCP/HCP Swainson's hawk mitigation program, and there would be less than significant impact related to the provisions of a local habitat conservation plan.

Beamer/Cottonwood Site

As previously mentioned in the Grasslands impact discussion, The JPA is developing a Habitat Conservation Plan and currently administers a Swainson's hawk mitigation program. As previously discussed, with the implementation Mitigation Measures BIO-1a through BIO-1f and BIO-2, less than significant impacts related to locally adopted HCPs would occur.

Level of Significance Before Mitigation

Less than significant impact.

Mitigation Measures

Grasslands Site

No mitigation is necessary.

Beamer/Cottonwood Site

No mitigation is necessary.

Level of Significance After Mitigation

Less than significant impact.