

## 4.7

# BIOLOGICAL RESOURCES

### INTRODUCTION

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This section of the EIR evaluates potential biological resource impacts associated with the implementation of the proposed Second Street Crossing (Target Store) Project and includes a discussion of the mitigation measures necessary to reduce impacts to a less-than-significant level where applicable. The information contained in this analysis is based upon the *Biological Resource Assessment*<sup>1</sup> and the *Preliminary Assessment of Waters of the United States*<sup>2</sup> prepared by Gallaway Consulting, Inc. In addition to analyzing potential on-site impacts to biological resources, the Biological Resources Assessment also analyzes the potential off-site impacts created by the development of project infrastructure based on data collected during field surveys of the proposed site and a review of existing literature, maps, and aerial photography pertaining to the biological resources of the area.

### ENVIRONMENTAL SETTING

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The following sections describe the regional and local setting of the site as well as the biological resources occurring on the Second Street Crossing (Target Store) project areas.

#### Regional Setting

The project site is located within the Great Central Valley region of California within southeastern Yolo County. The Great Central Valley is a north-south oriented valley that extends approximately 430 miles from southern Tehama County to south-central Kern County in southern California. Elevations in the Great Central Valley range from approximately zero to 400 feet above Mean Sea Level (MSL). In general, the borders of the Great Central Valley are considered to be those areas where alluvial soils grade into bedrock features. The landscape is dominated by woodland biological communities, typically referred to as the foothills. Now predominantly agricultural, biological communities in the Great Central Valley once supported vast areas of grassland, marshes, and riparian woodland.

The dominant biological community found throughout the Great Central Valley is annual grassland. This type of habitat generally occupies what was once native grassland dominated by native perennial bunch grasses. However, annual grassland habitats today are composed largely of non-native annuals which have effectively displaced the native perennial species. Typical herbaceous species observed throughout the Great Central Valley are non-native grasses and forbs such as medusa head (*Taeniatherum caput medusae*), soft chess (*Bromus hordeaceus*), wild oats (*Avena fatua*), and star thistle (*Centaurea solstitialis*). Freshwater marsh habitat typically occurs in flatlands where water accumulates in shallow depressions and supports a predominance of rushes (*Juncus*

spp.), bulrushes (*Scirpus* spp.), sedges (*Carex* spp.), and willows (*Salix* spp.) Riparian woodland occurs along permanent bodies of freshwater and is dominated by water-loving trees and shrubs such as western sycamore (*Platanus racemosa*), box elder (*Acer negundo*), cottonwood (*Populus fremontii*), willows (*Salix* spp.), and valley oak (*Quercus lobata*). Additionally, the Great Central Valley is situated in the Pacific Flyway, a major migration route for waterfowl and other birds in North America (City of Davis General Plan, 2001).

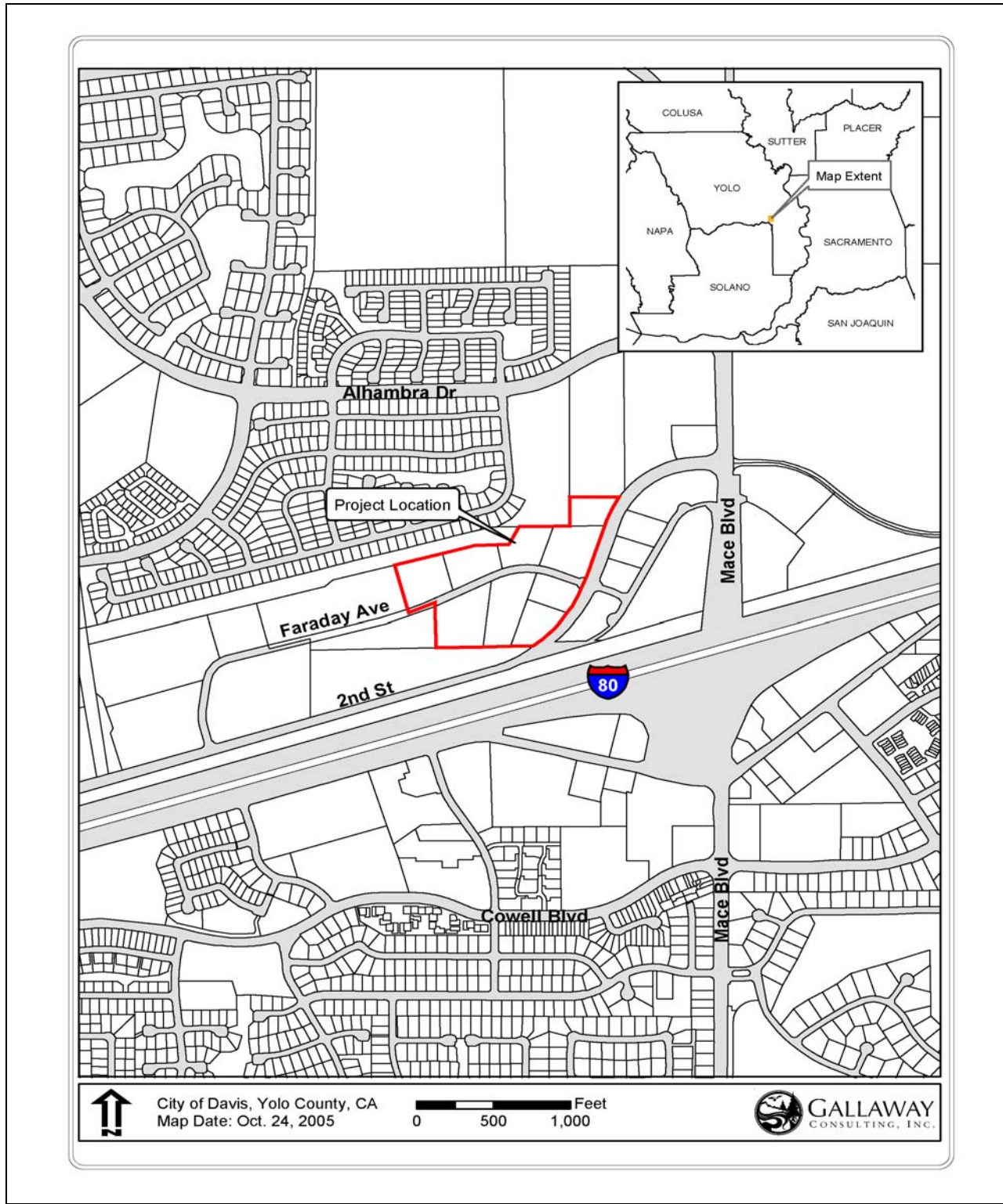
### **Local Setting**

The project site is located approximately at the intersection of Second Street and Faraday Avenue in the eastern portion of the City of Davis, in southeastern Yolo County within Township 8 north, Range 2 east, Section 12 of the USGS 7.5-minute series Davis, California quadrangle (Figure 4.7-1). The valley landscape that once existed in this region was predominantly a mixture of native valley grassland types, with small groves and scattered oak trees as well as bands of riparian woodland along natural drainageways. Today the area does not consist of pristine biological conditions because most of the non-urbanized land has been converted to agriculture uses (City of Davis General Plan, 2001).

The 19.06-acre project site is characterized by open, undeveloped land. At the eastern boundary of the site, Faraday Avenue connects to Second Street and at the western end of the site Faraday Avenue terminates in a cul-de-sac. However, Faraday Avenue is intended for extension to the west once remediation activities are completed for the Frontier Fertilizer site. Surrounding land uses include existing single-family and multi-family housing and a community park to the north of the site. A drainage channel and bike path run along the northwestern portion of the site. Second Street, a Union Pacific Railroad rail line, and Interstate 80 are located south of the site. Light industrial and office buildings exist to the east of the site. The property to the west is vacant.

Site topography is flat to slightly undulating. Site soils are comprised of the Sycamore series, which includes the drained complex and silty loam sub-series. Sycamore soils occur on nearly level flood plains at elevations of 10-100 feet and are used for orchard, row, and field crops excluding rice. Sycamore soils naturally support annual grassland and oak savannah. Vegetation on-site consists of disturbed annual grassland dominated by invasive fennel (*Foeniculum vulgare*). Additional plant species observed include alkali-mallow (*Malvella leprosa*), bindweed (*Convolvulus arvensis*), and black mustard (*Brassica nigra*). Eight beefwood trees (*Casuarina cunninghamiana*) with a diameter at breast height of >5-inches and three coast live oaks (*Quercus agrifolia*) <5-inches dbh occur onsite. Natural hydrological features are not present onsite.

**Figure 4.7-1: Target Biological Survey Area (BSA)**



### Special-Status Species

Special-Status species are defined as plants and wildlife that may meet one or more of the following:

- Legally protected under the Federal Endangered Species Act (FESA) and California Endangered Species Act (CESA) or under other regulations;
- Considered sufficiently rare by the scientific community to qualify for such listing; or,
- Considered sensitive because they are unique, declining regionally or locally, or at the extent of their natural range.

Special-status plant species may meet one or more of the following:

- Plants listed or proposed for listing as threatened or endangered under the FESA (50 CFR 17.12 for listed plants and various notices in the Federal Register for proposed species);
- Plants that are candidates for possible future listing as threatened or endangered under the FESA (64 FR 205, October 25, 1999; 57533-57547);
- Plants that meet the definitions of rare or endangered species under the California Environmental Quality Act (CEQA) (CEQA Guidelines, Section 15380);
- Plants considered by the California Native Plant Society (CNPS) to be “rare, threatened, or endangered” in California (Lists 1B and 2 species in CNPS [2001]);
- Locally important occurrences of plants listed by CNPS as plants for which more information is needed and plants of limited distribution (Lists 3 and 4, respectively, species in CNPS [2001]);
- Plants listed or proposed for listing by the State of California as threatened or endangered under the CESA (14 CCR 670.5);
- Plants listed under the California Native Plant Protection Act (California Fish and Game Code 1900 et seq.). Plants considered sensitive by other federal agencies (i.e., U.S. Forest Service, Bureau of Land Management) or state and local agencies or jurisdictions; or,
- Plants considered sensitive or unique by the scientific community or occurring at the limits of its natural range (CEQA Guidelines, Appendix G).

Special-status wildlife species may meet one or more of the following:

- Wildlife listed or proposed for listing as threatened or endangered under the FESA (50 CFR 17.11 for listed wildlife and various notices in the Federal Register for proposed species);
- Wildlife that are candidates for possible future listing as threatened or endangered under the FESA (54 CFR 554);
- Wildlife that meet the definitions of rare or endangered species under the CEQA (CEQA Guidelines, Section 15380);

- Wildlife listed or proposed for listing by the State of California as threatened and endangered under the CESA (14 CCR 670.5);
- Wildlife species of special concern to the California Department of Fish and Game (Remsen [1978] for birds; Williams [1986] for mammals); or,
- Wildlife species that are fully protected in California (California Fish and Game Code, Section 3511 [birds], 4700 [mammals], and 5050 [reptiles and amphibians]).

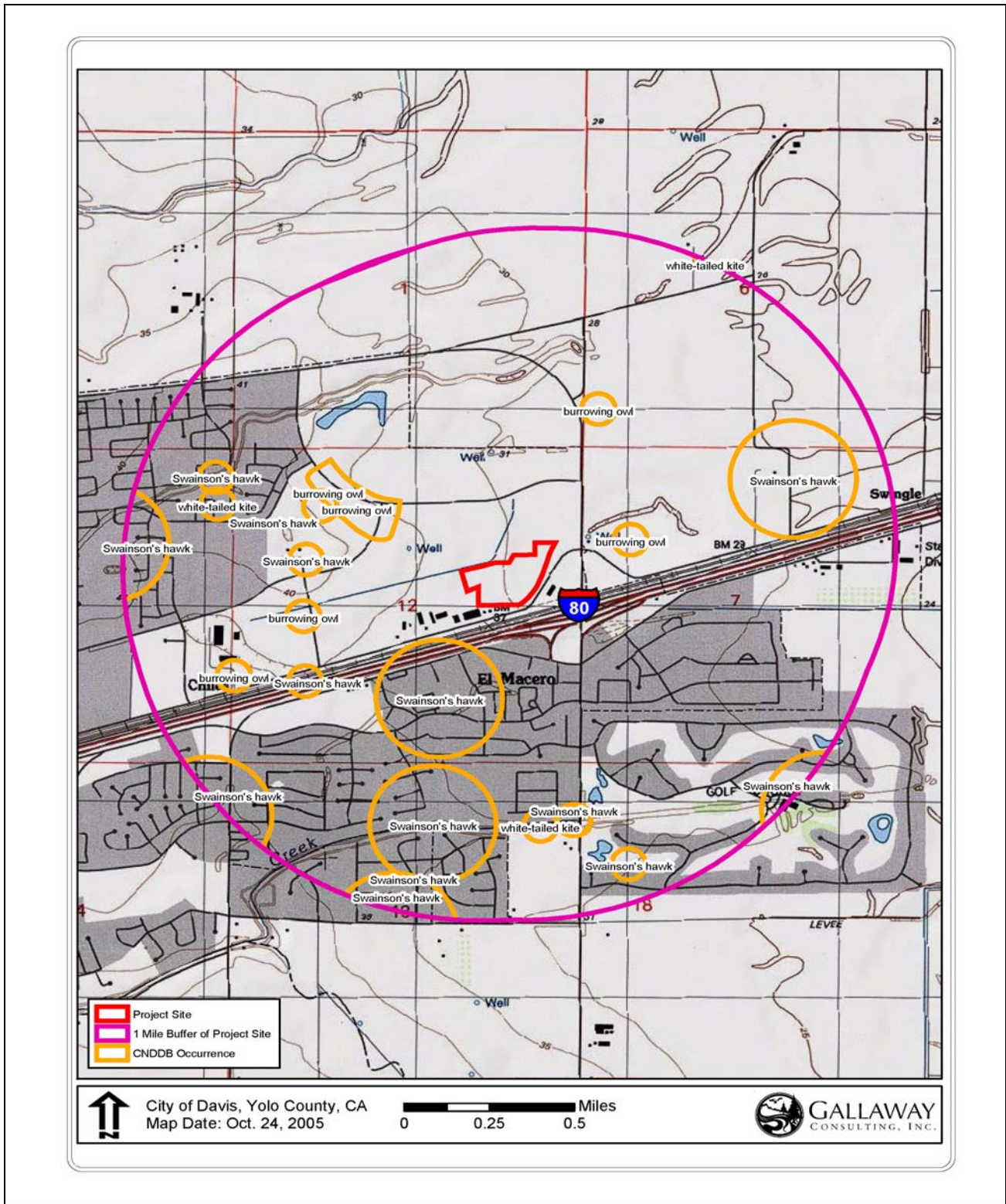
Table 4.7-1 lists special-status species that occur, or may occur in the vicinity of the site.

<b>Table 4.7-1 Special-Status Species that Occur, or May Occur Within the Target BSA</b>			
Common Name <i>(Scientific Name)</i>	Status Fed, State, CNPS	Assorted Habitats	Potential For Occurrence
<b>PLANTS</b>			
ALKALI MILK-VETCH <i>(Astragalus tener var.tener)</i>	FSC, CNPS 1B	Playas, valley foothill grassland, adobe and alkaline soils, vernal pools.	<u>Low</u> ; sub-marginal habitat occurs onsite.
HEARTSCALE <i>(Atriplex cordulata)</i>	CNPS 1B	Chenopod scrub, meadows, valley and foothill grassland with sandy soils, alkaline or saline soils.	<u>Low</u> ; sub-marginal habitat occurs onsite; was not observed during protocol-level surveys.
BRITTLESCALE <i>(Atriplex depressa)</i>	FSC, CNPS 1B	Chenopod scrub, meadows, playas, valley and foothill grassland, vernal pools, alkaline or clay soils.	<u>Low</u> ; sub-marginal habitat occurs onsite; was not observed during protocol-level surveys.
SAN JOAQUIN SPEARSCALE <i>(Atriplex joaquiniana)</i>	FSC, CNPS 1B	Chenopod scrub, meadows, playas, valley and foothill grassland, alkaline soils.	<u>Low</u> ; sub-marginal habitat occurs onsite; was not observed during protocol-level surveys.
HECKARD'S PEPPER-GRASS <i>(Lepidium latipesvar heckardii)</i>	SLC, CNPS 1B	Valley and foothill grassland, alkaline flats.	<u>Low</u> ; sub-marginal habitat occurs onsite.
SOLANO GRASS <i>(Tuctoria mucronata)</i>	FE, SE, CNPS 1B	Valley and foothill grassland, vernal pools.	<u>Low</u> ; sub-marginal habitat occurs onsite; was not observed during protocol-level surveys.
<b>MAMMALS</b>			
AMERICAN BADGER <i>(Taxidea taxus)</i>	CSC	Most abundant in drier open stages of most shrub, forest, and herbaceous habitats, with friable soils.	<u>Low</u> ; sub-marginal habitat occurs onsite.
SAN JOAQUIN POCKET MOUSE <i>(Perognathus inornatus)</i>	FSC	Occurs in dry, open grasslands or scrub areas on fine-textured soils between 350 and 600 m (1100 and 2000 ft) in the Central and Salinas valleys.	<u>Low</u> ; sub-marginal habitat occurs onsite.
<b>BIRDS</b>			
WHITE-TAILED KITE <i>(Elanus leucurus)</i>	FSC	Inhabits herbaceous and open stages of most habitats in valley grassland habitats.	<u>Moderate</u> ; suitable foraging habitat occurs onsite.

<b>Table 4.7-1</b>			
<b>Special-Status Species that Occur, or May Occur Within the Target BSA</b>			
<b>Common Name</b> <i>(Scientific Name)</i>	<b>Status</b> Fed, State, CNPS	<b>Assorted</b> <b>Habitats</b>	<b>Potential For</b> <b>Occurrence</b>
SWAINSON'S HAWK <i>(Buteo swainsoni)</i>	ST	Breeds in stands with few trees in juniper-sage flats, riparian areas, and in oak savannah in the Central Valley. Forages in adjacent grasslands or suitable grain or alfalfa fields, or livestock pasture.	<u>High</u> ; suitable foraging habitat occurs onsite; known nest sites occur within 0.5 mile.
WESTERN BURROWING OWL <i>(Athene cunicularia hypugaea)</i>	FSC, CSC	Open grasslands and chaparral at lower elevations.	<u>Moderate</u> ; sub-marginal habitat occurs onsite, however, known occurrences in close proximity.
GREATER SANDHILL CRANE <i>(Grus canadensis tabida)</i>	ST	Frequents annual and perennial grassland habitats, moist croplands with rice or corn stubble, and open, emergent wetlands. Moist sites commonly used, but also feeds on dry plains far from water.	<u>Low</u> ; sub-marginal wintering/foraging habitat occurs onsite.
<p><b>SOURCES</b></p> <ul style="list-style-type: none"> <li>• CNDDDB (2005).</li> <li>• USFWS, Sacramento Office Website: <a href="http://www.fws.gov/sacramento/es/spp_info.htm">http://www.fws.gov/sacramento/es/spp_info.htm</a></li> <li>• NOAA Fisheries Website: <a href="http://www.nmfs.noaa.gov/">http://www.nmfs.noaa.gov/</a></li> <li>• CNPS (2005). Inventory of Rare and Endangered Plants (online edition). Rare Plant Scientific Advisory Committee, David P. Tibor, Convening Editor. Sacramento, CA.</li> </ul> <p><b>CODE DESIGNATIONS</b></p> <p><b>FE</b> = Federally listed as Endangered; in danger of extinction.  <b>FT</b> = Federally listed as Threatened; likely to become endangered in the foreseeable future.  <b>FPE</b> = Federally proposed for listing as Endangered  <b>FPT</b> = Federally proposed for listing as Threatened  <b>FD</b> = Federally delisted.  <b>FPD</b> = Federally proposed for delisting.  <b>FC</b> = Federal candidate species; candidate to become a proposed species.  <b>FX</b> = Critical Habitat has been designated for this species.  <b>PX</b> = Proposed Critical Habitat; this species has already been listed and critical habitat is being proposed for it.  <b>FSC</b> = Federal Species of Concern.  <b>SE</b> = State-listed as Endangered.  <b>ST</b> = State-listed as Threatened.  <b>SCE</b> = State candidate for listing as Endangered.  <b>SCT</b> = State candidate for listing as Threatened.  <b>CSC</b> = California Species of Concern.  <b>CNPS 1B</b> = Rare or Endangered in California and Elsewhere.  <b>CNPS 1A</b> = Plants presumed extinct in California.  <b>CNPS List 2</b> = Rare, threatened, or endangered in California, but more common elsewhere.</p>			

Figure 4.7-2 shows the California Natural Diversity Database (CNDDDB) occurrences within one mile of the project site.

**Figure 4.7-2: California Natural Diversity Database Occurrences within 1 mile of the Project Site**



Special-status Species Known or Expected to Occur in the Biological Survey Area (BSA)

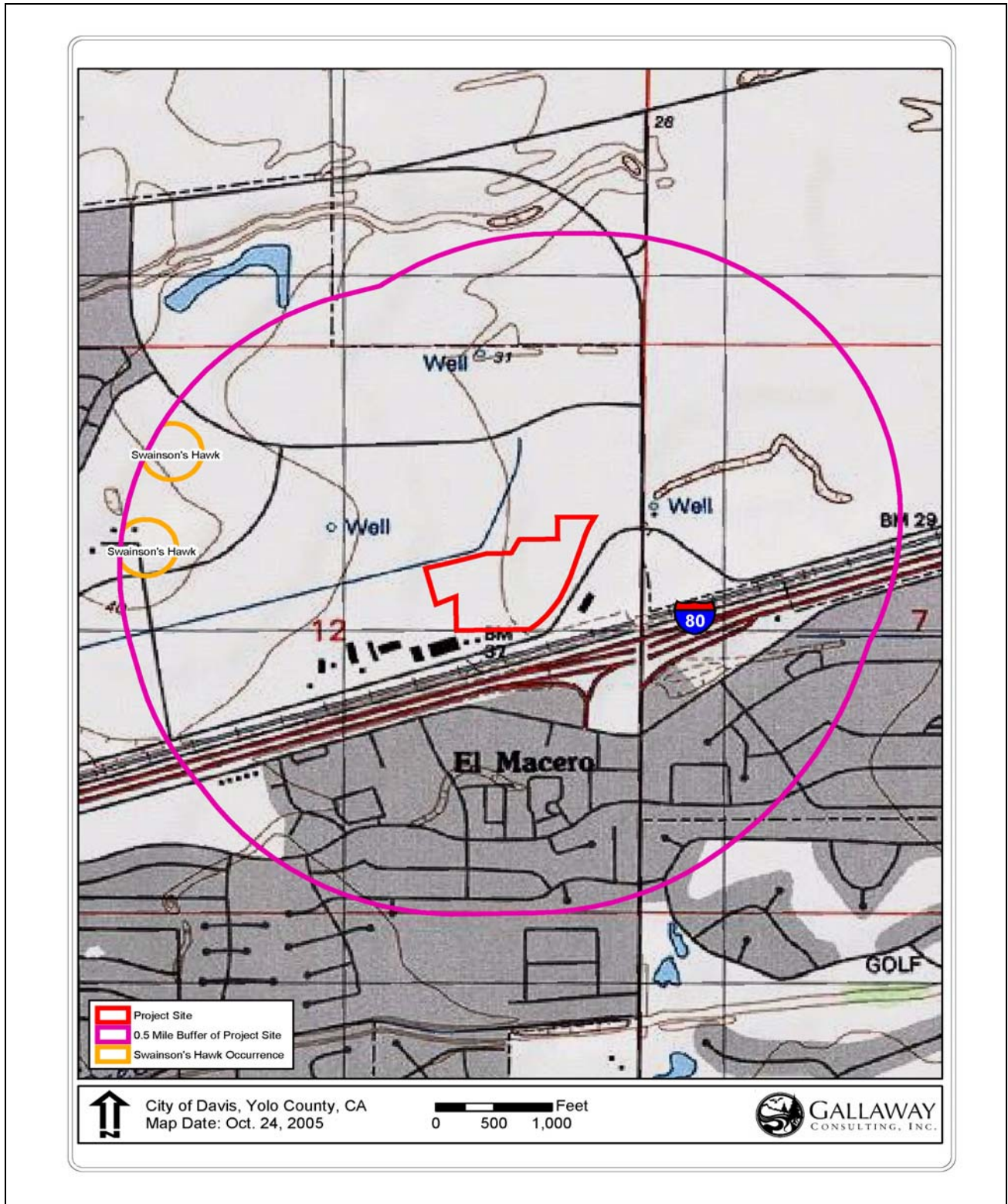
*Swainson's Hawk Status: State Threatened*

The Swainson's hawk is a medium-sized hawk with relatively long, pointed wings and a long, square tail. Adult females weigh 28 to 34 ounces and males 25 to 31 ounces. Central Valley birds winter in Mexico and Columbia and hawks from northeastern California have been satellite transmitter tracked to Argentina. The diet of the Swainson's hawk is varied with the California vole being the staple in the Central Valley. A variety of bird and insect species are also taken. Over 85 percent of Swainson's hawk territories in the Central Valley are in riparian systems adjacent to suitable foraging habitats. Swainson's hawks often nest peripherally to riparian systems of the Valley as well as utilizing lone trees or groves of trees in agricultural fields. Valley oak, Fremont cottonwood, walnut, and large willow with an average height of about 58 feet, and ranging from 41 to 82 feet, are the most commonly used nest trees in the Central Valley. Swainson's hawks require large, open grasslands with abundant prey in association with suitable nest trees. Suitable foraging areas include native grasslands or lightly grazed pastures, alfalfa and other hay crops, and certain grain and row croplands. Unsuitable foraging habitat includes crops such as vineyards, orchards, certain row crops, rice, corn, and cotton crops. Suitable nest sites may be found in mature riparian forest, lone trees or groves of oaks, other trees in agricultural fields, and mature roadside trees (CDFG 1983).

Swainson's hawks were once found throughout lowland California and were absent only from the Sierra Nevada, north Coast Ranges and Klamath Mountains, and portions of the desert regions of the State. Today, Swainson's hawks are restricted to portions of the Central Valley and Great Basin regions where suitable nesting and foraging habitat is still available. Central Valley populations are centered on Sacramento, San Joaquin, and Yolo counties. During historical times (pre-1900), Swainson's hawks may have maintained a population in excess of 17,000 pairs. Based on a study conducted in 1994, the statewide population is estimated to be approximately 800 pairs. Surveys in 1998 and 1999 in the Owens Valley area of the State revealed a larger population (about 20 pairs) than previously documented, centered around alfalfa fields in the area (CDFG 1983). The loss of agricultural lands to various residential and commercial developments is a serious threat to Swainson's hawks throughout California. Additional threats are habitat loss due to riverbank protection projects, conversion from agricultural crops that provide abundant foraging opportunities to crops such as vineyards and orchards which provide fewer foraging opportunities, shooting, pesticide poisoning of prey animals and hawks on wintering grounds, competition from other raptors, and human disturbance at nest sites (CDFG 1983).

The project area includes mixed and short disturbed annual grasslands with a few trees along the southern boundary of the project site, and scattered shrubs, which are suitable for perching. The environmental setting allows for abundant prey, although few areas for suitable nest trees exist onsite. Noteworthy is the fact that 184 active Swainson's hawk nests occur within 10 miles of the Biological Survey Area (BSA) including two within 0.5-mile of the BSA (See Figure 4.7-3).

Figure 4.7-3: Swainson's Hawk Occurrences within 0.5 Miles of the Project Site



*Western Burrowing Owl Status: Federal and State Species of Concern*

Western burrowing owls inhabit dry, open grasslands and typically nest in small burrows that have been constructed and abandoned by burrowing mammals such as ground squirrels or badgers. Burrowing owls are year-long residents; their breeding season is from late February through August with peak breeding occurring between mid-April and mid-July. Clutch size is difficult to determine, but this species is thought to lay an indeterminate number of eggs in response to prey abundance, typically ranging from 4-12, with an average of 7. Their diet consists of insects, small reptiles or amphibians and small mammals. Direct mortality of juvenile and adult burrowing owls has been known to result from destruction, plugging, and flooding of occupied burrows, collisions with motor vehicles, aircraft, and wind turbines, predation by native and domestic animals, exposure to certain insecticides and rodenticides, and shooting (CDFG 2003).

Currently, the western burrowing owl is a federal and state Species of Concern; however, a petition for listing the owl as threatened or endangered under the California Endangered Species Act was submitted to the CDFG in December 2003 by the Center for Biological Diversity. Although the petition was later found unwarranted by the California Fish and Game Commission, a new petition is expected to be submitted in 2006 and listing may be found warranted in light of new information. If this occurs and the western burrowing owl is listed prior to the start of construction of the project, additional mitigation and monitoring may be required.

The BSA was densely vegetated with approximately 3-4 ft. tall fennel over a majority of the site. Burrowing owls prefer open habitat with low-growing vegetation; therefore, the substantial vegetative coverage may deter them from occupying the site. However, according to Gallaway Consulting, California ground squirrel burrows, which are suitable habitat for burrowing owls, occur onsite and known occurrences have been documented in close proximity. More specifically, according to the City staff biologist, a pair of burrowing owls were detected within Mace Channel northwest of the project site in August of 2002.<sup>3</sup> In addition, burrowing owls were detected in October 2005 southeast of the project site, on the earthen berm at the northwest corner of the Mace Boulevard overcrossing.

*White-tailed kite Status: Federal Species of Concern; CDFG: Fully Protected*

The white-tailed kite is a yearlong resident in coastal and valley lowlands and is rarely found away from agricultural areas. In California, these raptors inhabit herbaceous and open stages of most habitats primarily west of the Sierra Nevada. They prey mostly on voles and other small, diurnal mammals, but will occasionally prey on birds, insects, reptiles, and amphibians as well. Suitable foraging habitat includes undisturbed, open grasslands, meadows, farmlands and emergent wetlands. Breeding takes place from February to October, peaking May to August. The female incubates for about 28 days and young fledge in about 35-40 days. Nests are placed near the tops of dense oak, willow, or

other tree stands, usually 6-20 m (20-100 ft) above ground (Dixon et al. 1957), and are located near suitable foraging habitat. Suitable foraging habitat for white-tailed kite occurs on-site, including, but not limited to, suitable cover for small rodents, which serve as a prey base for white-tailed kite. In addition, the species is known to occur within a 1-mile radius of the BSA.

### *Trees*

Approximately ten beefwood trees (*Casuarina cunninghamiana*) with a diameter at breast height (dbh) of >5-inches and five coast live oaks (*Quercus agrifolia*) <5-inches dbh occur along the southern boundary of the project site. According to Chapter 37 of the Davis Code, beefwood trees >5-inches dbh are considered “trees of significance” and the project proponent would have to obtain a Tree Removal Request and/or Tree Modification Permit from the City of Davis prior to removing the beefwood trees. However, the project applicant has indicated that the existing trees are not intended for removal but would be incorporated into the landscaping plan.

### Waters of the United States, Including Seasonal Wetlands

The Mace drainage channel (also known as Line “A”) is currently located north of the project site. The drainage system for the proposed project includes installing an outfall in the Mace Channel to discharge the project’s stormwater runoff. The project site was included as part of the overall *Mace Ranch Park Master Drainage Study* (prepared in September 1991), and the project site’s contributing drainage was part of the Line ‘A’ drainage system. Line “A” was excavated in an upland area for the purpose of receiving drainage from the Mace Ranch Park project, which includes the project site. The ditch is not under the jurisdiction of the Army Corps of Engineers or CDFG.

## **REGULATORY CONTEXT**

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The following is a description of federal, state, and local environmental laws and policies that are relevant to the California Environmental Quality Act (CEQA) review process.

### **Federal**

#### Federal Endangered Species Act

The United States Congress passed the Federal Endangered Species Act (FESA) in 1973 to protect those species that are endangered or threatened with extinction. The FESA is intended to operate in conjunction with the National Environmental Policy Act (NEPA) to help protect the ecosystems upon which endangered and threatened species depend.

The FESA prohibits the “take” of endangered or threatened wildlife species. “Take” is defined as harassing, harming (including significantly modifying or degrading habitat), pursuing, hunting, shooting, wounding, killing, trapping, capturing, or collecting wildlife

species, or any attempt to engage in such conduct (16 USC 1532, 50 CFR 17.3). Taking can result in civil or criminal penalties.

The FESA and NEPA Section 404 guidelines prohibit the issuance of wetland permits for projects that would jeopardize the existence of threatened or endangered wildlife or plant species. The U.S. Army Corps of Engineers must consult with the U.S. Fish and Wildlife Service (USFWS) and National Oceanic Atmospheric Administration (NOAA) when threatened or endangered species may be affected by a proposed project to determine whether issuance of a Section 404 permit would jeopardize the species.

#### Migratory Bird Treaty Act

Raptors (birds of prey), migratory birds, and other avian species are protected by a number of state and federal laws. The federal Migratory Bird Treaty Act (MBTA) prohibits the killing, possessing, or trading of migratory birds except in accordance with regulations prescribed by the Secretary of Interior. Section 3503.5 of the California Fish and Game Code states that it is “unlawful to take, possess, or destroy any birds in the order Falconiformes or Strigiformes or to take, possess, or destroy the nest or eggs of any such bird except as otherwise provided by this code or any regulation adopted pursuant thereto.”

#### Clean Water Act

The U.S. Army Corps of Engineers regulates discharge of dredged or fill material into Waters of the United States under Section 404 of the Clean Water Act (CWA). “Discharge of fill material” is defined as the addition of fill material into Waters of the U.S., including but not limited to the following: placement of fill that is necessary for the construction of any structure, or impoundment requiring rock, sand, dirt, or other material for its construction; site-development fills for recreational, industrial, commercial, residential, and other uses; causeways or road fills; and fill for intake and outfall pipes and sub-aqueous utility lines (33 C.F.R. §328.2(f)). In addition, Section 401 of the CWA (33 U.S.C. 1341) requires any applicant for a federal license or permit to conduct any activity that may result in a discharge of a pollutant into Waters of the United States to obtain a certification that the discharge will comply with the applicable effluent limitations and water quality standards.

Waters of the U.S. include a range of wet environments such as lakes, rivers, streams (including intermittent streams), mudflats, sandflats, wetlands, sloughs, and wet meadows. Wetlands are defined as “those areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support and under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions” (33 C.F.R. §328.3(b)).

Furthermore, Jurisdictional Waters of the U.S. can be defined by exhibiting a defined bed and bank and ordinary high water mark (OHWM). The OHWM is defined by the Corps as “that line on shore established by the fluctuations of water and indicated by physical

character of the soil, destruction of terrestrial vegetation, the presence of litter and debris, or other appropriate means that consider the characteristics of the surrounding areas” (33 C.F.R. §328.3(e)).

## **State**

### California Endangered Species Act

The State of California enacted the California Endangered Species Act (CESA) in 1984. The CESA is similar to the FESA but pertains to state-listed endangered and threatened species. CESA requires state agencies to consult with the California Department of Fish and Game (CDFG) when preparing California Environmental Quality Act (CEQA) documents to ensure that the state lead agency actions do not jeopardize the existence of listed species. CESA directs agencies to consult with CDFG on projects or actions that could affect listed species, directs CDFG to determine whether jeopardy would occur, and allows CDFG to identify “reasonable and prudent alternatives” to the project consistent with conserving the species. Agencies can approve a project that affects a listed species if they determine that “overriding considerations” exist; however, the agencies are prohibited from approving projects that would result in the extinction of a listed species.

The CESA prohibits the taking of state-listed endangered or threatened plant and wildlife species. CDFG exercises authority over mitigation projects involving state-listed species, including those resulting from CEQA mitigation requirements. CDFG may authorize taking if an approved habitat management plan or management agreement that avoids or compensates for possible jeopardy is implemented. CDFG requires preparation of mitigation plans in accordance with published guidelines.

### CDFG Species of Special Concern

In addition to formal listing under FESA and CESA, plant and wildlife species receive additional consideration during the CEQA process. Species that may be considered for review are included on a list of “Species of Special Concern” developed by the CDFG. CDFG tracks species in California whose numbers, reproductive success, or habitat may be threatened.

### Natural Community Conservation Planning Act

The Natural Communities Conservation Planning Act (NCCP) program is an unprecedented effort by the State of California, as well as numerous private and public partners that takes a broad-based ecosystem approach to planning for the protection and perpetuation of biological diversity. The program, which began in 1991 under the California Natural Community Conservation Planning Act, is broader in its orientation and objectives than CESA and ESA; these laws are designed to identify and protect individual species that are already listed as threatened or endangered. The primary

objective of the NCCP program is to conserve natural communities at the ecosystem scale while accommodating compatible land use (CDFG, 2003).

In 1991, Yolo County and its member cities began the process of developing a Habitat Conservation Plan (HCP) to obtain an incidental take permit under §10(a) (1) (B) of ESA. In 2001, the participating jurisdictions agreed with a request from the CDFG to extend the planning process so that the HCP could be rewritten as an NCCP.

In 2002, Yolo County was awarded USFWS Section 6 funding to complete the NCCP. However, at this time, when and exactly how much funding will actually be available for this effort is unclear. Yolo County is currently seeking additional funding to update the biological data, rewrite the HCP into an NCCP document, and develop an EIR and EIS. Currently, the date of the NCCP's completion is unknown (EDAW, 2003).

## **Local**

### Draft Yolo County Habitat Conservation Plan

The Draft Yolo County Habitat Conservation Plan (HCP) addresses impacts resulting from 11,672 acres of development within a 403,052-acre plan area in eastern Yolo County. The Draft Yolo County Habitat Conservation Plan is under development to comply with the requirements of the federal Endangered Species Act (ESA) of 1973, as amended, and the California Endangered Species Act (CESA). Specifically, the Draft HCP is designed to mitigate for the "take" of threatened and endangered species as a result of urban development. The Draft HCP will also establish a long-range strategy or framework for the conservation and enhancement of the habitats of the Plan's 26 covered species. The Draft HCP has not yet been adopted; however, a 2001 draft is currently out for review.

### Yolo County Habitat Conservation JPA

The Yolo County Habitat Conservation Joint Powers Agency (JPA) facilitates mitigation for impacts to the foraging habitat of the Swainson's hawk as a result of urban development by assisting in the acquisition of conservation easements. The Swainson's hawk forages in open areas, fallowed lands, and throughout various row crops and agricultural fields. Through the collection of impact fees by its member agencies, the JPA is responsible for identifying and acquiring conservation easements, in partnership with the Yolo Land Trust and DFG. The Yolo Land Trust will hold the easements, under a cooperative arrangement with the JPA.

The JPA also assists in the planning, preparation, and subsequent administration of a County-wide Natural Communities Conservation Plan/Habitat Conservation Plan (NCCP/HCP).

### City of Davis General Plan

In addition to federal and state regulations, the City of Davis General Plan (May 2001) identifies the following goals, objectives, and policies to provide further protection to biological resources within the City's limits:

#### *Habitat and Natural Areas*

- Goal HAB 1 Identify, protect, restore, enhance, and create natural habitats. Protect and improve biodiversity consistent with the natural biodiversity of the region.
- Policy HAB 1.1 Protect existing natural habitat areas, including designated Natural Habitat Areas.
- Policy HAB 1.2 Enhance and restore natural areas and create new wildlife habitat areas.
- Policy HAB 1.3 Commit adequate City resources and staff time so as to protect habitat and other natural resources.
- Goal HAB 2 Increase public awareness of habitat, wildlife, and sensitive species.
- Policy HAB 2.1 Develop environmental educational programs and public access areas and programs to allow viewing of wildlife and habitat through controlled interactions of people with natural areas.

### City of Davis Zoning Ordinance

#### *Trees*

The City of Davis acknowledges the importance of trees to the community's health, safety, welfare, and tranquility. Much of the City's admired and valued appearance and ambiance is due to its tree canopy, a dominant visual and spatial element of the landscape and urban form. Trees maintain an aesthetically pleasing environment and can provide environmental, aesthetic, social, and economic benefits. Specifically, trees increase property values, provide visual continuity, provide shade and cooling, decrease wind velocities, provide erosion control, conserve energy, reduce stormwater runoff, act as filters for airborne pollutants, reduce noise, provide privacy, provide habitat and food value, and release oxygen. The community forest shall be prudently protected and managed to secure these benefits.

The intent of Chapter 37, *Tree Planting, Preservation, and Protection*, is to regulate the planting of new trees and the preservation and protection of street trees, City trees (trees in parks, greenbelts, open spaces, on City property or easements, etc.), landmark trees, trees of significance, parking lot trees, and certain private trees in order to retain and augment the health of the existing community forest.

Per Sections 37.02.050 and 37.02.070 of the *Tree Planting, Preservation, and Protection* Chapter, project applicants must obtain a Tree Removal Request and/or Tree Modification Permit from the City prior to removing trees.

### *Grading*

City of Davis Ordinance No. 2091 is an ordinance prohibiting disking, tilling or grading of property within the City except as set forth in Ordinance 2091. The Ordinance establishes penalties for violation and declares that the ordinance is necessary to the public health, safety, and welfare which shall provide continued protection for sensitive wildlife species and remain in effect until a comprehensive grading and disking ordinance is adopted by the City Council.

### **Other Statutes, Codes, and Policies Affording Limited Species Protection**

#### California Native Plant Society

The California Native Plant Society (CNPS) maintains a list of plant species native to California that have low numbers, limited distribution, or are otherwise threatened with extinction. This information is published in the Inventory of Rare and Endangered Plants of California (Tibor, 2001). Potential impacts to populations of CNPS-listed plants may receive consideration under CEQA review. The following identifies the definitions of the CNPS listings:

List 1A:	Plants believed extinct.
List 1B:	Plants rare, threatened, or endangered in California and elsewhere.
List 2:	Plants rare, threatened, or endangered in California, but more numerous elsewhere.
List 3:	Plants about which we need more information - a review list.
List 4:	Plants of limited distribution - a watch list.

### **IMPACTS AND MITIGATION MEASURES**

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#### **Standards of Significance**

For the purposes of this EIR, impacts are considered significant if implementation of the proposed project would do any one or more of the following:

- Have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of an endangered, rare, or threatened species, or eliminate important examples of the major periods of California history or prehistory (CEQA Guidelines Section 15065(a)).
- Adversely affect, either directly or through habitat modification, any endangered, threatened or rare species, as listed in Title 14 of the California Code of Regulations

- (Sections 670.5) or in Title 50, Code of Regulations (Sections 17.11 or 17.12) or their habitats (including but not limited to plants, fish, insects, animals, and birds);
- Have a substantial adverse impact, either directly or through habitat modification, on any species identified as a candidate, sensitive or special-status species in local or regional plans, policies, or regulations or by the CDFG or USFWS, including CNPS plants listed as 1B;
  - Have a substantial adverse impact on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulation or by the CDFG or USFWS;
  - Allow development that would be inconsistent with other City plans, policies, or ordinances;
  - Adversely affect federally protected wetlands (including but not limited to, marsh, vernal pool, coastal, etc.) either individually or in combination with the known or probable impacts of other activities through direct removal, filling, hydrological interruption, or other means;
  - Have a substantial adverse effect on significant ecological resources including:
    - Wetland areas including vernal pools;
    - Large areas of non-fragmented natural communities that support endangered, threatened or rare species;
    - Wildlife movement zones, including but not limited to, non-fragmented stream environment zones, avian and mammalian routes, and known concentration areas of waterfowl within the Pacific Flyway;
  - Interfere substantially with the movement of any resident or migratory fish or wildlife species or with established resident or migratory wildlife corridors, or impede the use of wildlife nursery sites;
  - Conflict with any local or regional policies or ordinances designed to protect or enhance biological resources, such as a tree preservation policy or ordinance;
  - Substantially fragment, eliminate or otherwise disrupt foraging areas, access to food sources, range and/or movement;
  - Disrupt critical time periods (i.e., nesting and breeding) for fish and other wildlife species; or,
  - Conflict with local, state, or federal resource conservation plans, goals, or regulations that would result in a physical impact on the environment.

An evaluation of whether or not an impact on biological resources would be substantial must consider both the resource itself and how that resource fits into a regional or local context. Substantial impacts would be those that would diminish or result in the loss of an important biological resource, or those that would obviously conflict with local, state, or federal resource conservation plans, goals, or regulations. Impacts are sometimes locally important, but not significant according to CEQA. The reason for this is that although the impacts would result in an adverse alteration of existing conditions, they would not substantially diminish or result in the permanent loss of a defined important resource on a population-wide or region-wide basis.

## Method of Analysis

### Field Surveys

On July 5, 2005, biological resource surveys were conducted using east-west transects spaced 15 meters apart to cover the prescribed BSA. Protocol-level surveys were conducted for the following species:

- Heartscale (*Atriplex cordulata*)
- Brittscale (*Atriplex depressa*)
- Colusa grass (*Neostapfia colusana*)
- Solano grass (*Tuctoria mucronata*)

Botanical surveys were conducted in accordance with *Guidelines for Assessing the Effects of Proposed Projects on Rare, Threatened, and Endangered Plants and Natural Communities* (CDFG 2000a). Other protocol-level surveys were not conducted.

Special-status or sensitive species were not observed within the BSA. However, 184 active Swainson's hawk (*Buteo swainsoni*) nests occur within 10 miles of the BSA including two within 0.5-mile of the BSA (See Figure 4.7-2). Burrowing owls (*Athene cunicularia hypugaea*), a state and federal species of concern, also occur in close proximity to the survey area and California ground squirrel (*Spermophilus beecheyi*) burrows, a key component of burrowing owl habitat, occur onsite. In addition, white-tailed kite (*Elanus leucurus*) is known to occur within a 1-mile radius of the BSA and suitable foraging habitat exists onsite constituting a high potential for raptors to occur within the BSA (See Figure 4.7-2).

Floristic windows for two special-status plants species, alkali milk-vetch (*Astragalus tener var tener*) and Heckard's pepper-grass (*Lepidium latipes*), had already passed at the time of surveys, but little to no habitat for these species occurs onsite and potential for occurrence is low.

### Sources for Special-Status Plant and Wildlife Species Review

Gallaway Consulting, Inc. consulted with both the USFWS and the CNDDDB, a positive-sighting database managed by the California Department of Fish and Game (CDFG), to identify special-status species occurring, or potentially occurring within a 1-mile radius of the BSA. Gallaway Consulting, Inc. also performed a 10-mile radius search for active (i.e., within 5 years) Swainson's hawk nests per the Staff report regarding mitigation for impacts to Swainson's hawks in the Central Valley of California (CDFG 1994).

The results of the search included species falling into one of the following categories (see Appendix A to the BRA attached as Appendix H to the DEIR report for a complete listing by USGS quadrangle):

- Designated as rare, threatened, endangered, proposed or candidates for listing by the state and/or federal governments Endangered Species Acts (ESA, 50 CFR 17.12 for listed plants and various notices in the Federal Register, California ESA, 14 CCR 670.5);
- Listed as Species of Concern by state or federal governments;
- Included on the California Native Plant Society (CNPS) List 1A, 1B, and 2 (Skinner and Pavlik 2001);
- Plants and wildlife that meet the definitions of rare or endangered species under the California Environmental Quality Act (State CEQA Guidelines, Section 15380).

Species of Concern are unlisted species that have the potential for listing under state and/or federal ESA's if negative population trends continue. By considering them early in the planning process, problems can be avoided if these species are listed before the completion of a project.

#### Sensitive Natural Communities

Gallaway Consulting, Inc. consulted the CNDDDB (2005) to identify sensitive natural communities occurring within a 1-mile radius of the BSA. The California Office of Planning and Research and the Office of Permit Assistance (1986) define project effects that substantially diminish habitat for fish, wildlife, or plants, or that disrupt or divide the physical arrangement of an established community as significant impacts under CEQA. This definition applies to certain natural communities because of their scarcity and ecological values and because the remaining occurrences are vulnerable to elimination. For this study, the term "sensitive natural community" includes those communities that, if eliminated or substantially degraded, would sustain a significant adverse impact as defined under CEQA. Sensitive natural communities are important ecologically because their degradation and destruction could threaten populations of dependent plant and wildlife species and significantly reduce the regional distribution and viability of the community. If the number and extent of sensitive natural communities continue to diminish, the status of rare, threatened, or endangered species could become more precarious, and populations of common species (i.e., non special-status species) could become less viable. Loss of sensitive natural communities can also eliminate or reduce important ecosystem functions, such as water filtration by wetlands and bank stabilization by riparian woodlands.

#### Waters of the United States, Including Wetlands

The U.S. Army Corps of Engineers (ACOE) and the U.S. Environmental Protection Agency (EPA) regulate the discharge of dredged or fill material into jurisdictional waters of the United States, under Section 404 of the Clean Water Act. The term "Waters of the United States" is an encompassing term that includes "wetlands" and "Other Waters." Wetlands have been defined for regulatory purposes as follows: "those areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation

typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs, and similar areas.” Other Waters of the United States are seasonal or perennial water bodies, including lakes, stream channels, drainages, ponds, and other surface water features, that exhibit an ordinary high-water mark but lack positive indicators for one or more of the three wetland parameters (i.e., hydrophytic vegetation, hydric soil, and wetland hydrology) (33 CFR 328.4).

Gallaway Consulting, Inc. conducted an informal survey for Waters of the United States on July 5, 2005, to determine the presence of jurisdictional wetland features within and in close proximity to the BSA.

## **Project Impacts and Mitigation Measures**

### **4.7-1 Impacts to Swainson’s hawk nesting habitat.**

Swainson’s hawk nests are located within a ten-mile radius of the site, including two within a 0.5 mile of the site (See Figure 4.7-3). Trees are located along the southern boundary of the project site that could support Swainson’s hawk nests. The project applicant has indicated that the trees are not intended to be removed but would be incorporated into the landscaping for the project. However, if Swainson’s hawk are found nesting in these trees prior to on-site construction, construction activities would result in disturbances to nesting activities. Therefore, the project would be considered to have a *significant* impact to Swainson’s hawk nesting habitat.

#### Mitigation Measure(s)

The following mitigation measures would reduce adverse effects to Swainson’s hawk to a *less-than-significant* level.

4.7-1 *If construction occurs during the breeding season (March-September 15), the project proponent shall conduct CDFG-recommended protocol-level surveys prior to construction per the Recommended Timing and Methodology for Swainson’s Hawk Nesting Surveys in California’s Central Valley (CDFG 2000b). The area to be surveyed shall include a 0.5-mile radius area including and surrounding the project site and a qualified biologist should conduct the surveys. If no active nests are found during the protocol-level surveys, no further mitigation shall be required. If active nests are found, mitigation measures consistent with the Staff Report Regarding Mitigation for Impacts to Swainson’s Hawks in the Central Valley of California (CDFG 1994) shall be incorporated in the following manner:*

- *No construction activities or other project-related activities that may cause nest abandonment or forced fledging, shall take place within 0.25 miles (buffer zone) of an active nest until the*

*young have fledged. Weekly monitoring reports summarizing nest activities shall be submitted to the City of Davis and CDFG until the young have fledged and the nest is determined to be inactive.*

- *Nest trees shall not be removed unless there is no feasible way of avoiding it. If a nest tree must be removed, a Management Authorization (including conditions to offset the loss of the nest tree) must be obtained from CDFG with the tree removal period specified in the management Authorization, generally between October 1 and February 1.*

#### **4.7-2 Loss of suitable Swainson's hawk foraging habitat.**

Potential suitable foraging habitat for the Swainson's hawk is present in and near the agricultural fields of the study area. Because 184 CNDDDB occurrences of active Swainson's hawk nests have been recorded within ten miles of the project site, 62 within two miles of the project site, and 4 of the occurrences within one mile of the site, Swainson's hawks most likely use the site for foraging. Additionally, the existence of trees at the project site could provide suitable nesting habitat for Swainson's hawk.

CDFG's *Staff Report Regarding Mitigation for Impacts to Swainson's Hawk in the Central Valley of California* (CDFG, 1994) identifies loss of known nest trees and foraging habitat through conversion of farmland to development as a significant impact requiring mitigation in the form of providing Habitat Management Lands to CDFG. Generally, mitigation is accomplished by protecting off-site lands from development in perpetuity through establishing a conservation easement.

Due to the recorded occurrence of nearby Swainson's hawk nests, the entire site is considered Swainson's hawk foraging habitat. Therefore, impacts to Swainson's hawk foraging habitat would be ***significant***.

##### Mitigation Measure(s)

The following mitigation measures would reduce adverse effects to Swainson's hawk to a *less-than-significant* level.

- 4.7-2 *The applicant shall be responsible for mitigating the loss of any Swainson's hawk foraging habitat. The extent of any necessary mitigation shall be determined by the City in consultation with CDFG; past recommended mitigation for loss of foraging habitat has been at a ratio of one acre of suitable foraging habitat for every one acre utilized by the proposed project.*

*The project proponent will compensate for the loss of Swainson's hawk foraging habitat by providing Habitat Management lands (HM lands) to DFG as defined in the Staff Report Regarding Mitigation for Impacts to Swainson's Hawks in the Central Valley of California (published by California Department of Fish and Game in 1994). If the proposed project is located within 1 mile of an active nest (to be determined with preconstruction surveys) the loss of habitat will be compensated at a ratio of 1:1 (HM lands:urban development). The project proponent will provide HM lands through an in-lieu fee process prior to groundbreaking. Credits will be purchased through the in-lieu fee program due to the lack of mitigation credits currently available at a bank. As of February 2006, the cost per acre for the in-lieu fee is \$ 8,500 payable to the Joint Power Agency. Should the in-lieu fee be increased prior to clearance to grade the project site, the project proponent shall pay the in-lieu fee in effect at that time. The project proponent will issue a check to the Joint Power Agency if mitigation is required. It is estimated that a total of 19 acres of Swainson's hawk foraging habitat would be removed as a result of the project. The applicant shall pay the in-lieu fee for the 19 acres based on the removal of this Swainson's hawk foraging habitat.*

*-Or-*

*Prior to obtaining clearance to grade the site or conducting any earthmoving activity for the proposed project, the project proponent shall place and record one or more Conservation Easements that meet the acreage requirements of CDFG's Swainson's Hawk foraging habitat mitigation guidelines. The conservation easement(s) shall be executed by the project proponent and a Conservation operator. The City may, at its discretion, also be a party to the conservation easement(s). The conservation easement(s) shall be reviewed and approved in writing by CDFG prior to the 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.*

#### **4.7-3 Loss of western burrowing owl nesting and foraging habitat.**

As previously discussed, suitable nesting habitat for western burrowing owl occurs on-site. The BSA was densely vegetated with approximately 3-4 ft. tall fennel over a majority of the site. Burrowing owls prefer open habitat with low-growing vegetation; therefore, the substantial vegetative coverage may deter them from occupying the site. However, California ground squirrel burrows and other suitable habitat for burrowing owls occurs onsite; and known occurrences have

been documented in close proximity to the site. For example, in October 2005 the City of Davis staff biologist detected two owls off-site at the northwestern corner of the Mace Boulevard overcrossing. Implementation of the proposed project would result in the loss of potential nests sites and could displace nesting owls if present during construction. Consequently, this impact would be considered *significant*.

Mitigation Measure(s)

The following mitigation measures would reduce adverse effects to western burrowing owl to a *less-than-significant* level.

- 4.7-3(a) *The Staff Report on Burrowing Owl Mitigation, published by CDFG (1995), recommends pre-construction surveys shall be conducted to locate active burrowing owl burrows. Prior to issuance of grading permits, this preconstruction survey shall be conducted by a qualified biologist or ornithologist during both the wintering and nesting season, unless the species is detected on the first survey. If possible, the winter survey shall be conducted between December 1 and January 31 (when wintering owls are most likely to be present) and the nesting season survey should be conducted between April 15 and July 15 (the peak of breeding season). Surveys conducted from two hours before sunset to one hour after, or from one hour before to two hours after sunrise, are preferable. The survey techniques shall be consistent with the Staff Report survey protocol and include a 260-foot-wide buffer zone surrounding the project area. Repeat surveys should also be conducted not more than 30 days prior to initial ground disturbance to inspect for re-occupation and the need for additional protection measures. The survey(s) shall be paid by the applicant and approved by the City.*
- 4.7-3(b) *If no burrowing owls are detected during preconstruction surveys, then no further mitigation is required. If active burrowing owl burrows are identified, project activities shall not disturb the burrow during the nesting season (February 1–August 31) or until a qualified biologist has determined that the young have fledged or the burrow has been abandoned. A no disturbance buffer zone of 160-feet is required to be established around each burrow with an active nest until the young have fledged the burrow as determined by a qualified biologist.*
- 4.7-3(c) *If destruction of the occupied burrow is unavoidable during the non-breeding season, September 1– January 31, passive relocation of the burrowing owls shall be conducted. Passive relocation involves installing a one-way door at the burrow entrance, encouraging owls to move from the occupied burrow. No permit is*

*required to conduct passive relocation; however, this process shall be conducted by a qualified biologist and in accordance with CDFG mitigation measures. In addition, to offset the loss of foraging and burrow habitat on the project site, a minimum of 6.5 acres of foraging habitat (calculated on a 300-ft foraging radius around the burrow) per pair or unpaired resident bird, shall be acquired and permanently protected at a location acceptable to the CDFG.*

- 4.7-3(d) *If burrowing owls are identified on the project site, the City of Davis must receive copies of the Mitigation Agreement by and between the applicant and CDFG, prior to the issuance of grading permits for the proposed project.*

#### **4.7-4 Impacts to Waters of the U.S. and Waters of the State.**

The Mace drainage channel (also known as Line “A”) is currently located north of the project site. The drainage system for the proposed project includes installing an outfall in the Mace Channel to discharge the project’s stormwater runoff. The project site was included as part of the overall *Mace Ranch Park Master Drainage Study* (prepared in September 1991) and the project site’s contributing drainage was part of the Line ‘A’ drainage system. Line “A” was excavated in an upland area for the purpose of receiving drainage from the Mace Ranch Park project, which includes the project site. The ditch is not under the jurisdiction of the Army Corps of Engineers or CDFG. The project would have a *less-than-significant* impact to jurisdictional Waters of the U.S or other Waters of the State.

Mitigation Measure(s)

*None required.*

#### **4.7-5 Impacts to raptors and migratory birds.**

Potential suitable nesting habitat for avian species listed under the Migratory Bird Treaty Act (MBTA) and State Fish and Game Code, Section 3503.5 is present within the project site. A cluster of trees are located on the southern boundary on the project site, which may provide suitable nesting habitat. According to the project proponent, these trees are not proposed for removal. However, construction activities on the project site during the nesting season (February-August) could result in the disturbance of a nest or disrupt nesting behavior. Construction of the project has the potential to result in a “take” of migratory birds or raptors; therefore a *significant* impact could occur.

Mitigation Measure(s)

The following mitigation measures would reduce adverse effects to raptors and vegetation-nesting migratory birds to a *less-than-significant* level.

4.7-5 *If site disturbance is proposed by the project proponent during the non-nesting season (Aug. 16 to Jan. 31), no additional action is required; however, if site disturbance is proposed by the project proponent during the nesting season (Feb. 1 to Aug. 15), the following shall be implemented:*

- *A preconstruction survey shall be conducted by a qualified wildlife biologist within 15 days of the start of project-related activities. If nests of migratory birds or raptors are detected on-site, or within 75 feet (for migratory passerine birds) or 250 feet (for birds of prey) of the site, the developer shall consult with USFWS and CDFG to determine the size of a suitable buffer in which no new site disturbance is permitted until August 15, or the qualified biologist determines that the young are foraging independently, or the nest has been abandoned.*

#### **4.7-6 Impacts to onsite trees.**

Approximately ten beefwood trees (*Casuarina cunninghamiana*) with a diameter at breast height (dbh) of >5-inches and five coast live oaks (*Quercus agrifolia*) <5-inches dbh occur along the southern boundary of the project site. According to Chapter 37 of the Davis Code, beefwood trees >5-inches dbh are considered “trees of significance” and the project proponent would have to obtain a Tree Removal Request and/or Tree Modification Permit from the City of Davis prior to removing the beefwood trees. However, the project applicant has indicated that the existing trees are not intended for removal but would be incorporated into the landscaping plan. Though not proposed for removal, the possibility exists that during construction, existing trees could be damaged. Due to the potential of trees being damaged, the project would have a *significant* impact.

#### Mitigation Measure(s)

The following mitigation measures would reduce adverse effects to raptors and vegetation-nesting migratory birds to a *less-than-significant* level.

4.7-6(a) *Prior to obtaining clearance to grade the site or conducting any earthwork activity, a tree preservation plan, in compliance with Ordinance 37.03.010 in the City of Davis Municipal Code, shall be submitted to the Community Development Department and City arborist for review and approval, which shall ensure the following measures:*

- *Trees shall be fenced prior to construction as specified;*
- *Soil compaction under trees is to be avoided;*
- *The fence shall prevent equipment traffic and storage under the trees and should extend beyond the drip-line;*

- *Excavation within this zone shall be accomplished by hand, and roots ½” and larger shall be preserved;*
- *Proper fertilization and irrigation prior to and during the construction period shall be provided as specified;*
- *New landscaping under existing trees shall be carefully planned to avoid any grade changes and any excess moisture in trunk area. Existing plants which have compatible irrigation requirements and which complement the trees’ color, texture and form are to be saved;*
- *Trenching with drip-line shall be performed only with prior approval of the Park and Community Services Department. Boring is preferred when feasible;*
- *All paving plans and specifications shall clearly prohibit the use of soil sterilants adjacent to preserved trees;*
- *Grade changes greater than one foot within the drip-line shall be avoided, and nothing other than a saw shall be used for root cutting;*

4.7-6(b) *Prior to issuance of a grading permit, a sheet shall be included with the project plans, which indicate all of the trees identified. The tree report with corresponding descriptions of each tree by species, health, etc. should also be included. In addition, notes shall be included on the plans, which clearly state protection procedures for trees that are to be preserved. Any tree care practices, such as cutting of roots, pruning the top, etc., shall be adequately described and shall have the approval of a representative of the Parks and Community Services Department prior to execution. A penalty clause in event of damage to existing trees shall be replacement tree(s) of equal size in D.B.H. unless specified otherwise by the Parks and Community Services Department.*

## **Cumulative Impacts and Mitigation Measures**

### **4.7-7 Cumulative loss of biological resources in the City of Davis and the effects of ongoing urbanization in the region.**

“Cumulative impacts” refers to two or more individual effects which, when considered together, are considerable or which compound or increase other environmental impacts (CEQA Guidelines 15355). The individual effects may be changes resulting from a single project or a number of separate projects. The cumulative impact from several projects is the change in the environment that results from the incremental impact of the project when added to other closely related past, present, and reasonably foreseeable probable future projects (CEQA Guidelines 15355).

The City of Davis, like other urban communities in the Central Valley, is experiencing growth. Several housing/commercial developments are already approved or planned in areas surrounding the City. Cumulatively, these projects would reduce common wildlife habitat and the numbers of special-status plant and animal species. Therefore, the cumulative impact on the environment must consider not only development within the project site, but also those developments occurring in surrounding areas such as the City of West Sacramento, City of Winters, the City of Woodland, as well as surrounding counties.

The majority of the project site is highly disturbed as a result of urban encroachment and historical on-site farming activities, like many of the surrounding land uses. However, disturbed lands provide habitat for many common species and may provide habitat for several special-status species. Many of the species potentially occurring on-site are not only a concern in the City of Davis, but also regionally throughout Yolo County.

Impacts on wildlife species resulting from the implementation of the proposed project include migratory and listed bird species. While additional impacts may result from the implementation of individual projects within the City of Davis and surrounding areas, mitigation would be required of any discretionary projects impacting natural resources. The establishment of mitigation requirements such as those recommended in this document would adequately address these impacts. The pending Yolo County HCP and the City of Davis General Plan policies and guidelines for preservation of wildlife habitats would ensure that the cumulative impacts would be properly mitigated for by preserving mitigation lands for wildlife and sensitive communities within Yolo County. With these measures in place the Proposed Project would not have substantial adverse effects to the populations of the special-status species and sensitive habitats, and therefore *less-than-significant* cumulative impacts are expected.

Mitigation Measure(s)

*None required.*

## Endnotes

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<sup>1</sup> *Biological Resource Assessment, Target Corporation Commercial Development Site, City of Davis, Yolo County, California*, Gallaway Consulting, Inc., October 2005

<sup>2</sup> *Preliminary Assessment of the Waters of the United States – Target Corporation Commercial Development Site, Davis, California*, Gallaway Consulting, October 19, 2005

<sup>3</sup> Personal communication with John McNerney, City of Davis staff biologist, January 17, 2006.