

## 4.4

## BIOLOGICAL RESOURCES

### 4.4.1 INTRODUCTION

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The Biological Resources chapter of the EIR evaluates the biological resources that occur in the Eastview Specific Plan & Annexation project area. Existing plant communities, wetlands, wildlife habitats, and potential for special-status species and communities are discussed. The information contained in this analysis is primarily based on the *Biological Resources Impact and Mitigation Report, Eastview Specific Plan*, prepared by Cardno ENTRIX (see Appendix E),<sup>1</sup> the *Review of Cardno ENTRIX's Biological Resources Impact & Mitigation Report and Appendices memo* prepared by Barnett Environmental,<sup>2</sup> the California Natural Diversity Database,<sup>3</sup> the U.S. Fish and Wildlife Service Special-Status Species Database website,<sup>4</sup> and the *2030 Galt General Plan*.<sup>5</sup>

### 4.4.2 EXISTING ENVIRONMENTAL SETTING

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The following sections describe the existing environmental setting and biological resources occurring, or potentially occurring, in the proposed project area.

#### **Project Setting**

The proposed project site is located within Sacramento County, California, east of the City of Galt, but within the City's Sphere of Influence. The City of Galt is located on State Route (SR) 99 in southern Sacramento County between the cities of Elk Grove and Lodi. The City is located 26 miles south of the Sacramento metro area, 24 miles north of Stockton metro area, and approximately 100 miles east of the San Francisco Bay Area. The City of Galt is surrounded by agricultural lands on the north, south, and east, and the Cosumnes River Preserve on the northwest and west. The proposed project site is located in the northeastern section of the City of Galt, on the southern side of Twin Cities Road and west of SR 99. The existing land uses surrounding the project site are as follows:

- North: Agricultural, open space, rural residential, and Twin Cities Road;
- South: Agricultural, open space, rural residential, and Union Pacific Railroad (UPRR) tracks;
- East: Agricultural, rural residential, and Cherokee Lane; and
- West: Twin Cities Estates development, McCaffrey Middle School, Marengo Road, and Cherokee Lane.

The proposed project site includes a total of 504 acres with various uses, including both urban and agricultural. The 338-acre area proposed for development is known as Liberty Ranch. The remaining portion of the project site consists of non-participating properties (148 acres) and the

“Future Growth Area” (17.4 acres) which are not currently proposed for development. The existing land uses on the non-participating properties, “Future Growth Area,” and the Liberty Ranch site are discussed in further detail below.

### Non-Participating Properties

The existing land uses on the non-participating properties include 13 rural residences, two schools (Liberty Ranch High School and Estrellita Continuation High School), and vacant land. Each residence consists of a house, a garage, a barn/storage structure, and other single-room structures. The 13 single-family agricultural residences were constructed from as early as 1907 to as recent as 1987.<sup>6</sup>

The non-native annual grasslands on the non-participating properties support some grazing of livestock, but the grass is mostly mowed down each year to prevent fire and thatch build up. The majority of the developed portions of the non-participating properties have been previously graded or disturbed. Potential habitat within the non-participating properties includes scattered trees near the residences along Twin Cities Road and open grassland north of Liberty Ranch High School and Estrellita Continuation High School.

### Future Growth Area

The existing land uses on the “Future Growth Area” includes the UPRR tracks and vacant land. The two triangular areas that make up the “Future Growth Area” consist of sparse, ruderal vegetation, which indicate periodic disking or other similar ground disturbance. An intervening channel is located on the “Future Growth Area.” Potential habitat within the vicinity of the “Future Growth Area” includes scattered trees near the UPRR tracks.

### Liberty Ranch

The Liberty Ranch property, historically used for agricultural purposes, consists almost entirely of active agricultural fields. Wetlands and other aquatic features are limited to Deadman Gulch and a series of irrigation canals that appear to originate from three separate natural drainages. The majority of the Liberty Ranch site contains row crops. Three portions of the Liberty Ranch site are not actively cultivated, including the area associated with the residence on Cherokee Lane, a second residence adjacent to the UPRR tracks near Cherokee Lane, and the area along the western portion of Deadman Gulch adjacent to Liberty Ranch High School and Estrellita Continuation High School. Habitat in the aforementioned areas consists of either landscaping or ruderal, non-native grasses or forbs and ornamental trees associated primarily with residential dwellings on and adjacent to the project area.

The field at the southwest corner of the project area, adjacent to Marengo Road, was not in active cultivation at the time of the site survey, but is clearly disked and cultivated for crops on a regular basis. A total of 128 trees are located on the Liberty Ranch site. The most common trees found on the Liberty Ranch site are northern California black walnut and eucalyptus. Other on-site trees include cottonwoods, a few valley oaks and a variety of ornamental species, along with

willow thickets present along Deadman Gulch and one of the irrigation canals. The on-site trees are discussed in further detail below.

### **Special-Status Species**

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

- Legally protected under the Federal Endangered Species Act (FESA) and/or 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 criteria:

- 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 Wildlife 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.

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

- 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 Wildlife (CDFW) (Remsen [1978] for birds; Williams [1986] for mammals); or,
- Wildlife species that are fully protected in California (California Fish and Wildlife Code, Section 3511 [birds], 4700 [mammals], and 5050 [reptiles and amphibians]).

Several species of plants and animals within the State of California have low populations, limited distributions, or both. Such species may be considered “rare” and are vulnerable to extirpation as the State’s human population grows and the habitats these species occupy are converted to agricultural and urban uses. As described below, State and federal laws have provided the CDFW and the U.S. Fish and Wildlife Service (USFWS) with a mechanism for conserving and protecting the diversity of plant and animal species native to the State. A number of native plants and animals have been formally designated as threatened or endangered under state and federal endangered species legislation. Others have been designated as “candidates” for such listing. Still others have been designated as “species of special concern” by the CDFW. In addition, the CNPS has developed a set of lists of native plants considered rare, threatened, or endangered (CNPS 2001). Collectively, these plants and animals are referred to as “special-status species.”

Sensitive plants are those that are designated rare, threatened, or endangered and candidate species for listing by the USFWS. Sensitive plants also include species considered rare or endangered under the conditions of Section 15380 of the CEQA Guidelines, such as those plant species identified on Lists 1A, 1B, and 2 in the Inventory of Rare and Endangered Vascular Plants of California by the CNPS (CNPS, 2001). Finally, sensitive plants may include other species that are considered sensitive or of special concern due to limited distribution or lack of adequate information to permit listing or rejection for state or federal status, such as those included on List 3 in the CNPS Inventory.

The *Biological Resources Impact and Mitigation Report* prepared by Cardno ENTRIX queried the CDFW California Natural Diversity Database (CNDDDB) and the USFWS Special-Status Species Database website. The queries of the CNDDDB and USFWS species lists show that 58 special-status species have the potential to occur in the vicinity of the project site. The species include 21 plants, eight invertebrates, six fish, four amphibians, two reptiles, 15 birds, and two mammals. Additionally, five sensitive habitats are known to occur in the vicinity of the project site. Additional discussion of the species and habitats most likely to be present is provided in the following sections.

It should be noted that the term “project vicinity” referred to herein includes the area within the Galt, Sloughouse, Elk Grove, Florin, Bruceville, Thornton, Lodi North, Lockeford, and Clay U.S. Geological Survey (USGS) 7.5 minute quadrangle maps. The aforementioned quadrangles include the area within an approximate 15-mile radius of the project site.

Listed and Special-Status Plants

Although the project site may contain sensitive plant species, the highly managed and frequently disturbed nature of the fields within the project area has substantially modified natural habitats in the project area. Table 4.4-1 summarizes the 21 plant species that appeared on the queries of the CNDDDB and USFWS species list and have the potential to occur in the vicinity of the project site. Information including common and scientific name, habitat requirements, and an assessment of potential for occurrence within the project area are detailed in the table. The evaluation of the potential for occurrence of each species is based on the distribution of regional occurrences (if any), habitat suitability of the site, and field observations.

<b>Table 4.4-1 Special-Status Plants with Potential to Occur within Project Site</b>		
<b>Scientific and Common Name</b>	<b>Habitat Requirements</b>	<b>Potential for Occurrence</b>
<i>Brasenia schreberi</i> Watershield	Occurs in freshwater marshes and swamps. Blooms from June to September. Elevation range extends from 30 to 2,200 meters.	Low: Marsh vegetation along Deadman Gulch could potentially provide habitat for the species; however, the history of disturbance related to agriculture in combination with the relatively small extent of marsh habitat makes presence of the species unlikely.
<i>Carex comosa</i> Bristly sedge	Occurs in coastal prairie, marshes, and swamps along lake margins and in valley and foothill grassland. Blooms from May to September. Elevation ranges from zero to 625 meters.	Low: Marsh vegetation along Deadman Gulch could potentially provide habitat for the species; however, the history of disturbance related to agriculture in combination with the relatively small extent of marsh habitat makes presence of the species unlikely.
<i>Castilleja campestris ssp. succulenta</i> Succulent owl's-clover	Occurs in vernal pools, often on acidic soils. Blooms from April to May. Ranges in elevation from 50 to 750 meters.	None: Vernal pool habitat is not present in the project area.
<i>Cicuta maculata var. bolanderi</i> Bolander's water-hemlock	Occurs in coastal, fresh or brackish water marshes and swamps. Blooms from July to September. Elevation range extends from zero to 200 meters.	Low: Marsh vegetation along Deadman Gulch could potentially provide habitat for the species; however, the history of disturbance related to agriculture in combination with the relatively small extent of marsh habitat makes presence of the species unlikely.
<i>Cuscuta obtusiflora var. glandulosa</i> Peruvian dodder	Occurs in freshwater marshes and swamps. Blooms from July to October. Elevation ranges from 15 to 280 meters.	Low: Marsh vegetation along Deadman Gulch could potentially provide habitat for the species; however, the history of disturbance related to agriculture in combination with the relatively small extent of marsh habitat makes presence of the species unlikely.

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**Table 4.4-1  
Special-Status Plants with Potential to Occur within Project Site**

Scientific and Common Name	Habitat Requirements	Potential for Occurrence
<i>Downingia pusilla</i> Dwarf downingia	Occurs in mesic sites in valley and foothill grassland and vernal pools. Blooms from March to May. Elevation ranges from zero to 445 meters.	None: Vernal pool habitat is not present in the project area.
<i>Gratiola heterosepala</i> Boggs Lake hedge-hyssop	Occurs in marshes and swamps (lake margins), as well as vernal pools on clay soils. Blooms April to August. Elevation ranges from 10 to 2,375 meters.	None: Vernal pool or lake margin habitats are not present in the project area.
<i>Hibiscus lasiocarpus</i> var. <i>occidentalis</i> Woolly rose-mallow	Occurs in freshwater marshes and swamps. Blooms June to September. Elevation ranges from zero to 120 meters.	Low: Marsh vegetation along Deadman Gulch could potentially provide habitat for the species; however, the history of disturbance related to agriculture in combination with the relatively small extent of marsh habitat makes presence of the species unlikely.
<i>Juglans hindsii</i> Northern California black walnut	Occurs in riparian forest and riparian woodland. Blooms from April to May. Elevation ranges from zero to 440 meters. Only one confirmed, native occurrence appears viable as of 2003, located in the Jericho Valley USGS 7.5 minute quadrangle.	None: While northern California black walnuts are present in the project area, the trees do not represent native stands; therefore, the trees are not protected. The project area is outside the currently known range for the species.
<i>Lathyrus jepsonii</i> var. <i>jepsonii</i> Delta tulle pea	Occurs in fresh and brackish water marshes and swamps. Blooms from May to July, but occasionally to September. Elevation range extends from zero to four meters.	None: The project area is outside the known elevation range for the species. Vernal pool habitat is not present in the project area.
<i>Ledipidium latipes</i> var. <i>heckardii</i> Heckard's pepper-grass	Occurs in grasslands and on the edges of vernal pools in alkaline soils. Blooms from March to May. Elevation ranges from two to 200 meters.	None: Alkaline soils are not present in the project area.
<i>Legenere limosa</i> Legenere	Occurs in vernal pools. Blooms April to June. Elevation ranges from zero to 880 meters.	None: Vernal pool habitat is not present in the project area.
<i>Lilaeopsis masonii</i> Mason's lilaeopsis	Occurs in fresh or brackish water marshes and swamps, as well as riparian scrub. Blooms from April to November. Elevation range extends from zero to 10 meters.	None: The project area is outside the known elevation range for the species. Suitable habitat is not present in the project area.
<i>Limosella australis</i> Delta mudwort	Occurs in marshes and swamps. Blooms May to August. Elevation ranges from zero to three meters.	None: The project area is outside the known elevation range for the species. Suitable habitat is not present in the project area.

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**Table 4.4-1  
Special-Status Plants with Potential to Occur within Project Site**

Scientific and Common Name	Habitat Requirements	Potential for Occurrence
<i>Orcuttia tenuis</i> Slender Orcutt grass	Occurs in vernal pools, often on a gravelly substrate. Blooms May to October. Ranges in elevation from 35 to 1,760 meters	None: Vernal pool habitat is not present in the project area.
<i>Orcuttia viscida</i> Sacramento Orcutt grass	Occurs in vernal pools. Blooms from April to September. Ranges in elevation from 30 to 100 meters.	None: Vernal pool habitat is not present in the project area.
<i>Sagittaria sanfordii</i> Sanford's arrowhead	Occurs in shallow freshwater marshes, swamps, and slow gradient streams at elevations less than 610 meters. Blooms from May to October.	Low: Marsh vegetation along Deadman Gulch could potentially provide habitat for the species; however, the history of disturbance related to agriculture in combination with the relatively small extent of marsh habitat makes presence of the species unlikely.
<i>Scutellaria galericulata</i> Marsh skullcap	Occurs in lower montane coniferous forest, mesic meadows and seeps, and marshes and swamps. Blooms June to September. Elevation ranges from zero to 2,100 meters	Low: Meadow or seep habitat is not present in the project area. Marsh vegetation along Deadman Gulch could potentially provide habitat for the species; however, the history of disturbance related to agriculture in combination with the relatively small extent of marsh habitat makes presence of the species unlikely.
<i>Scutellaria lateriflora</i> Side-flowering skullcap	Occurs in mesic meadows and seeps, as well as marshes and swamps. Blooms July to September. Elevation ranges from zero to 500 meters. Known in California from only three occurrences (more populations occur outside the state).	Low: Meadow or seep habitat is not present in the project area. Marsh vegetation along Deadman Gulch could potentially provide habitat for the species; however, the history of disturbance related to agriculture in combination with the relatively small extent of marsh habitat makes presence of the species unlikely.
<i>Symphyotrichum lentum</i> Suisun Marsh aster	Occurs in fresh and brackish water marshes and swamps. Blooms from May to November. Elevation range extends from zero to three meters.	None: The project area is outside the known elevation range for this species. Suitable habitat is not present in the project area.
<i>Trifolium hydrophilum</i> Saline clover	Occurs in vernal pools, marshes and swamps, and in mesic, alkaline valley and foothill grassland. Blooms from April to June. Ranges in elevation from zero to 300 meters.	None: Vernal pools, marshes, swamps, or alkaline grassland habitat are not present in the project area.

*Source: Cardno ENTRIX. Biological Resources Impact and Mitigation Report. October 16, 2014.*

Intensive agricultural practices in the project area preclude the presence of most of the special-status plant species identified in Table 4.4-1 as habitat for the species (primarily associated with

vernal pools) is not present. Marshy aquatic vegetation along Deadman Gulch and some of the associated irrigation canals could potentially support eight species associated with marsh habitats including watershield, bristly sedge, Bolander's water-hemlock, Peruvian dodder, woolly rose-mallow, Sanford's arrowhead, marsh skullcap, and side-flowering skullcap.

Listed and Special-Status Wildlife

The queries of the CNDDDB and USFWS species lists show that eight invertebrates, six fish, four amphibians, two reptiles, 15 birds, and two mammals have the potential to occur in the vicinity of the project site. Information including common and scientific name, habitat requirements, and an assessment of potential for occurrence within the project area are detailed in Table 4.4-2. The evaluation of the potential for occurrence of each species is based on the distribution of regional occurrences (if any), habitat suitability of the site, and field observations.

<b>Table 4.4-2 Special-Status Wildlife with Potential to Occur within Project Site</b>		
<b>Scientific and Common Name</b>	<b>Habitat Requirements</b>	<b>Potential for Occurrence</b>
INVERTEBRATES		
<i>Andrena blennospermatis</i> Blennosperma vernal pool andrenid bee	Occurs in grasslands associated with vernal pools.	None: Vernal pool habitat is not present in the project area.
<i>Branchinecta conservatio</i> Conservancy fairy shrimp	Occurs in large alkaline playa pools in open grasslands.	None: The project area is outside the known range of the species. Suitable habitat is not present in the project area.
<i>Branchinecta lynchi</i> Vernal pool fairy shrimp	Endemic to the grasslands of the central valley, central coast mountains, and south coast mountains, in astatic rain-filled pools. Typically inhabit small, clear-water sandstone-depression pools and grassed swale, earth slump, or basalt-flow depression pools.	None: Vernal pool habitat is not present in the project area.
<i>Branchinecta mesovallensis</i> Midvalley fairy shrimp	Endemic to the grasslands of the central valley, in astatic rain-filled vernal pools.	None: Vernal pool habitat is not present in the project area.
<i>Desmocerus californicus dimorphus</i> Valley elderberry longhorn beetle	Entirely dependent on elderberry shrubs ( <i>Sambucus spp.</i> ) for all stages of the life cycle. Occurs in or near riparian habitats where the elderberry host plant is present.	None: Elderberry shrubs are not present on the Liberty Ranch site. Elderberry shrubs are unlikely to exist on the non-participating properties.

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<b>Table 4.4-2 Special-Status Wildlife with Potential to Occur within Project Site</b>		
<b>Scientific and Common Name</b>	<b>Habitat Requirements</b>	<b>Potential for Occurrence</b>
<i>Hydrochara rickseckeri</i> Ricksecker's water scavenger beetle	The species is an aquatic beetle that lives in weedy, shallow, open water, associated fresh water seeps, springs, farm ponds, vernal pools, and slow moving stream habitats. Appears to primarily use playa-type vernal pools in Solano County.	Low: Vernal pool or freshwater seeps or springs are not present in the project area. Aquatic habitat along Deadman Gulch could potentially support the species, but the project site is several miles east of where the species is typically known to occur.
<i>Lepidurus packardi</i> Vernal pool tadpole shrimp	Occurs in vernal pools and other seasonal wetlands in open grasslands. Does not occur in areas subject to flooding from large rivers or other waterways.	None: Vernal pool habitat is not present in the project area.
<i>Linderiella occidentalis</i> California linderiella	Occurs in vernal pools in unplowed grasslands with old alluvial soils underlain by hardpan or in sandstone depressions. Water in the pools has very low alkalinity, conductivity, and total dissolved solids.	None: Vernal pool habitat is not present in the project area.
<b>FISH</b>		
<i>Acipenser medirostris</i> Green sturgeon	Requires deep, slow moving canals and rivers.	None: Suitable habitat is not present in the project area.
<i>Hypomesus transpacificus</i> Delta smelt	Occurs in the Sacramento-San Joaquin Delta and seasonally in Suisun Bay, Carquinez Strait, and San Pablo Bay. Seldom found at salinities less than 10 parts per thousand (ppt), most often at salinities less than two ppt.	None: The project area is outside the known range of the species. Suitable habitat is not present in the project area.
<i>Oncorhynchus mykiss</i> Central Valley steelhead	Requires beds of loose, silt-free, coarse gravel for spawning. Requires cover, cool water, and sufficient dissolved oxygen. Passes through the San Francisco Bay during migrations to upstream spawning habitat.	None: Suitable habitat is not present in the project area.
<i>Oncorhynchus tshawytscha</i> Chinook salmon (Central Valley spring-run and winter-run chinook salmon, Sacramento River)	Spawning and rearing restricted to a few tributaries to the Sacramento River basin. Requires clean, cold water with gravel beds.	None: Suitable habitat is not present in the project area.

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**Table 4.4-2  
Special-Status Wildlife with Potential to Occur within Project Site**

Scientific and Common Name	Habitat Requirements	Potential for Occurrence
<i>Pogonichthys macrolepidotus</i> Sacramento splittail	Occurs in slow moving rivers and dead end sloughs. Requires flooded vegetation for spawning and foraging for young.	None: The project area is outside the known range of the species. Suitable habitat is not present in the project area.
<i>Spirinchus Thaleichthys</i> Longfin smelt	Occurs in the Sacramento-San Joaquin Delta and seasonally in the Suisun Bay, Carquinez Strait, and San Pablo Bay. Seldom found at salinities less than 10 parts per thousand (ppt), most often at salinities less than 2 ppt.	None: Project area is outside the known range of the species. Suitable habitat is not present in the project area.
<b>AMPHIBIANS</b>		
<i>Ambystoma californiense</i> California tiger salamander	Occurs in grasslands and open oak woodland that provide suitable aestivation (i.e., summer retreats) and/or breeding habitat in close proximity to vernal pools, seasonal wetlands, or artificial impoundments (e.g., stock ponds). Threatened by predation from Centrarchid fish species (e.g., sunfish, bluegill, large-mouth bass), bullfrogs, and signal and red swamp crayfish.	None: Suitable upland or aquatic habitat is not present in the project area. The intensity of cultivation and other development in the project site and surrounding area limits burrowing mammal habitat. Nearest record for the species is within three miles, but is considered extirpated by development.
<i>Rana boylei</i> Foothill yellow-legged frog	Occurs in partially shaded, rocky streams at low to moderate elevations, in areas of chaparral, open woodland, and forest. Breeds in pools of streams. Eggs usually are attached to gravel or rocks at edge of pools or streams.	None: Chaparral, open woodland, and forest areas do not exist on the project site. Suitable habitat does not exist within the project area.
<i>Rana draytonii</i> California red-legged frog	Occurs in low-flowing portions of perennial streams, ephemeral streams, and hillside seeps that maintain pool environments (including ponds) or saturated soils throughout the summer months.	None: Suitable habitat does not exist within the project area. All known population east of the Central Valley occurs above 800 feet average mean sea level.
<i>Spea hammondi</i> Western spadefoot	Vernal pools and other seasonal wetlands in open grassland habitat. Aestivates by burrowing into mud at bottom of seasonal pools, or entering small mammal burrows to endure the dry season.	None: Vernal pool habitat does not exist within the project area.

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<b>Table 4.4-2 Special-Status Wildlife with Potential to Occur within Project Site</b>		
<b>Scientific and Common Name</b>	<b>Habitat Requirements</b>	<b>Potential for Occurrence</b>
<b>REPTILES</b>		
<i>Actinemys marmorata</i> Western pond turtle	Occurs in permanent or nearly permanent water in a wide variety of aquatic habitats. Requires basking sites. Nest sites may be found up to 0.5 kilometers from water.	Low to Moderate: Deadman Gulch and some of the associated irrigation canals could provide suitable habitat for the species. The species was not observed during the site surveys.
<i>Thamnophis gigas</i> Giant garter snake	Historically occurs in cattail and tule marshes on the central valley floor and has since adapted to a variety of artificial drainages, particularly those associated with rice farming. Requires open water supporting fish and/or amphibian prey, with vegetative cover in the water and on the banks. Also requires adjacent uplands for aestivation. Does not occur in major rivers.	Low: Deadman Gulch and some of the associated irrigation canals provide only marginal habitat for the species, as most of the aquatic habitat is densely populated by Azolla which (along with Lemna and other aquatic plant species that block out open water) is considered to be a deterrent to the species presence. Additionally, the location of the project area is further east of and at a higher elevation to areas where the majority of the records for the species exist in the region.
<b>BIRDS</b>		
<i>Accipiter cooperii</i> Cooper's hawk	Occurs in mixed deciduous forests and open woodlands, riparian woodlands, open and pinyon woodlands, and forested mountainous regions. Although once thought to avoid cities and towns, the species are now fairly common in urban and suburban areas.	Moderate: Suitable nesting and foraging habitat is present in the study area, and the species is relatively common in the region. The species was not observed during the survey.
<i>Agelaius tricolor</i> Tricolored blackbird	Nests in dense stands of tules, cattails, or blackberries adjacent to open grasslands or agricultural fields. Highly colonial species, most numerous in Central Valley and vicinity. Largely endemic to California. Requires open water, protected nesting substrate, and foraging area with insect prey within a few kilometers of the colony.	Low to Moderate: Willow thickets in the project area, primarily along Deadman Gulch, could provide nesting habitat for the species. However, the small size of the habitat, the proximity of intensive agriculture, and existing development would make the project area less suitable for the species.
<i>Ardea alba</i> Great egret	Colonial nesters in tall trees, cliff sides, and sequestered spots on marshes. Rookery sites in close proximity to foraging areas: marshes, lake margins, tide-flats, rivers and streams, wet meadows.	Low: The species are commonly seen in the vicinity of the project area, and Eucalyptus trees present on the site could support heron and egret rookeries. However, large bodies of water are not present nearby, and none were observed during the survey.
<i>Ardea herodias</i> Great blue heron		

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<b>Table 4.4-2 Special-Status Wildlife with Potential to Occur within Project Site</b>		
<b>Scientific and Common Name</b>	<b>Habitat Requirements</b>	<b>Potential for Occurrence</b>
<i>Athene cunicularia</i> Burrowing owl	Nests in small mammal burrows that are in or adjacent to open dry annual or perennial grasslands, deserts and scrublands characterized by low-growing vegetation. Subterranean nester, dependent upon burrowing mammals, most notably, the California ground squirrel.	None: Intensive cultivation and lack of small mammal burrows makes the project area unsuitable for the species.
<i>Bufo regalis</i> Ferruginous hawk	Open grasslands, sagebrush flats, desert scrub, and low foothills and fringes of pinyon-juniper habitats. Mostly eats lagomorphs, ground squirrels, and mice. Populations trends may follow lagomorphs population cycles.	Low: Agricultural fields could provide suitable foraging habitat when low growing crops are present. Better quality foraging habitat is widely available to the east.
<i>Buteo swainsoni</i> Swainson's hawk	Forages in a wide variety of open habitats such as grasslands, open scrub, and agricultural fields. Nests in large, typically riparian trees, but will occasionally utilize ornamental species such as Eucalyptus if they are near foraging habitat.	High: While the current crop (at the time of the site survey) of sorghum does not provide suitable foraging habitat for the species, 16 records for Swainson's hawk exist within three miles of the project area. As such, the project area may provide foraging habitat during years where more suitable crops are planted. Suitable nest trees are present within the project area and four raptor nests were observed within the project area during a raptor survey completed in 2014. A subsequent survey confirmed a nesting Swainson's hawk pair in one of the nests.
<i>Dendroica petechia brewsteri</i> Yellow warbler	Typically occurs in riparian areas with dense growth of small trees such as willows ( <i>Salix spp.</i> ).	Low: Willow thickets in the project area, primarily along Deadman Gulch, could provide nesting habitat for the species. However, the small size of the habitat, the proximity of intensive agriculture, and existing development would make the project area less suitable for the species.

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**Table 4.4-2  
Special-Status Wildlife with Potential to Occur within Project Site**

Scientific and Common Name	Habitat Requirements	Potential for Occurrence
<i>Elanus leucurus</i> White-tailed kite	Occurs in rolling foothills/valley margins with scattered oaks, river bottomlands, riparian woodlands, partially cleared or cultivated fields, or marshes next to deciduous woodland. Open grasslands, meadows, or marshes required for foraging close to isolated, dense-topped trees for nesting and perching. Nests placed near tops of dense oak, willow or other tree stands.	Moderate: The species is relatively common in the region, but was not observed during the site survey. Evidence of a nesting colony was not observed during the survey.
<i>Falco columbarius</i> Merlin	Occurs in open country such as grasslands, seashores, sand dunes, marshlands, steppes, and deserts.	Low: The species could potentially occur in the region. Current crops in the project area are unsuitable foraging habitat for the species, but more suitable grasslands are abundant to the east of the project area.
<i>Melospiza melodia</i> Song sparrow (Modesto population)	Found in moderately open grasslands and prairies with patchy bare ground.	None: The project area is outside the known range of the species.
<i>Nycticorax nycticorax</i> Black-crowned night heron	Colonial nesters in tall trees, cliff sides, and sequestered spots on marshes. Rookery sites in close proximity to foraging areas: marshes, lake margins, tide-flats, rivers and streams, wet meadows.	Low: The species is commonly seen in the vicinity of the project area, and Eucalyptus trees present on the site could support night heron rookeries. However, large bodies of water are not present nearby, and none were observed during the site survey.
<i>Phalacrocorax auritus</i> Double-crested cormorant	Colonial nester on coastal cliffs, but also nests along coast on sequestered islets, usually on ground with sloping surface or in tall trees along the water margin.	None: Suitable nesting habitat is not present in the project area.
<i>Riparia riparia</i> Bank swallow	Colonial nester; nests primarily in riparian and other lowland habitats west of the desert. Requires vertical banks/cliffs with fine-textured/sandy soils near streams, rivers, lakes, ocean to dig nesting hole.	None: Suitable nesting habitat is not present in the project area.
<i>Xanthocephalus xanthocephalus</i> Yellow-headed blackbird	Breeds and roosts in freshwater wetlands with dense, emergent vegetation such as cattails. The species typically forages in fields, and, during the winter, in large, open agricultural areas.	Low: The marsh vegetation on the site is relatively small in area compared to the size of marsh habitat the species typically prefers.

(Continued on next page)

<b>Table 4.4-2 Special-Status Wildlife with Potential to Occur within Project Site</b>		
<b>Scientific and Common Name</b>	<b>Habitat Requirements</b>	<b>Potential for Occurrence</b>
MAMMALS		
<i>Sylvilagus bachmani riparius</i> Riparian brush rabbit	Occupies dense thickets of wild rose, willows, and blackberries on the San Joaquin River in northern Stanislaus County.	None: Suitable habitat is not present in the project area.
<i>Taxidea taxus</i> American badger	Occupies a diversity of habitats throughout the State; principal habitat requirements include sufficient prey base, friable soils, and relatively open, uncultivated ground.	None: Open, uncultivated ground is not present. Therefore, suitable habitat is not present in the project area.
<i>Source: Cardno ENTRIX. Biological Resources Impact and Mitigation Report. October 16, 2014.</i>		

As noted previously, the highly managed and frequently disturbed nature of the fields within the project area severely limits the ability to support any special-status wildlife species. The CNDDDB search showed that each special-status species recorded within five miles of the project site has specific habitat requirements, only a few of which occur on-site. For example, many of the occurring special-status species require an aquatic or riparian habitat (e.g., blennosperma vernal pool andrenid bee, vernal pool fairy shrimp, and western spadefoot). Vernal pool and freshwater seeps or springs do not exist on the Liberty Ranch site. Therefore, the above-mentioned species, among others, would not occur on the Liberty Ranch site due to lack of suitable aquatic habitat. Other special-status species identified in the CNDDDB search require dense-growth trees or a chaparral habitat (e.g., foothill yellow-legged frog and yellow warbler). The project site is not located in a chaparral area and would therefore not be suited to support the previously mentioned species.

The absence of vernal pool, emergent marsh, slough, and other niche habitats preclude the presence of the majority of special-status wildlife species recorded in the CNDDDB. The open grasslands in the vicinity of the project site could, however, provide potentially suitable foraging habitat for several raptor species that have been recorded in the vicinity, such as the Swainson’s hawk. Western pond turtle, giant garter snake, Cooper’s hawk, tricolored blackbird, Swainson’s hawk, white-tailed kite, Ricksecker’s water scavenger beetle, burrowing owl, valley elderberry longhorn beetle (VELB), and vernal pool crustaceans will be addressed in detail below.

*Western Pond Turtle (Actinemys marmorata)*

Western pond turtle is a State Species of Special Concern. Western pond turtle occurs in ponds and slow streams throughout western California, and requires a reliable source of water. Although the species was not observed within the project area, the aquatic habitat along Deadman Gulch, irrigation canals, and ponds in the project area provide suitable habitat for this species. The CNDDDB contains one occurrence record for western pond turtle within five miles of the project area.

*Giant Garter Snake (Thamnophis gigas)*

Giant garter snake (GGS) is a federally- and State-listed threatened species. Deadman Gulch and some of the associated irrigation canals provide marginal habitat for GGS. During the site survey, nearly the entire surface of the open water habitat was covered with mosquito fern (*Azolla sp.*) and duckweed (*Lemna sp.*). The presence of dense surface vegetation is typically considered a deterrent to the presence of GGS.<sup>7</sup> The upland habitats adjacent to the project site are subject to regular disturbance related to agricultural cultivation and would not provide suitable upland refugia for GGS. Eric Hansen, a consulting biologist who is considered by the natural resource agencies to be an expert with GGS, was consulted regarding the suitability of the project area. Mr. Hansen provided a Technical Memorandum specific to GGS habitat suitability and likelihood of occurrence. Based on the above information and Mr. Hansen's memorandum, GGS is unlikely to occur in the project area.

*Cooper's Hawk (Accipiter cooperii)*

Cooper's hawk is on the CDFW Watch List and is covered by the Migratory Bird Treaty Act (MBTA). The CDFW Watch List consists of taxa that were previously Species of Special Concern but no longer merit the Species of Special Concern status or do not meet the criteria.<sup>8</sup> Watch List species are still of concern and require additional information to clarify the status. Cooper's hawk occur in mixed deciduous forests and open woodlands, riparian woodlands, open and pinyon woodlands, forested mountainous regions, and also nests in many cities. Although the species was not observed during the site survey, the species is relatively common in the region and suitable nesting and foraging habitat is present in the project area.

*Tricolored Blackbird (Agelaius tricolor)*

A Petition to list the Tricolored Blackbird as Endangered with Emergency Regulations was submitted to the CDFW by the Center for Biological Diversity on October 8, 2014.<sup>9</sup> Subsequently, the tricolored blackbird was granted as State-listed endangered on December 3, 2014.<sup>10</sup> The willow thickets along Deadman Gulch and associated irrigation canals may be too small to support tricolored blackbird, and the species was not observed during the site survey. However, the tricolored blackbird species migrates through the State, and the site survey was conducted at a time when tricolored blackbird would not be expected to be present. While unlikely, the possibility exists for small numbers of tricolored blackbirds to use the project area for nesting and foraging.

*Swainson's hawk (Buteo swainsoni)*

Swainson's hawk is a State-listed threatened species. The CNDDDB contains 16 records for Swainson's hawk within five miles of the project area. While the crop present at the time of the survey is not considered suitable foraging habitat for Swainson's hawk, the agricultural fields could provide suitable foraging habitat if low growing crops are present in other years. Suitable nest trees are present within the project area and four raptor nests were observed within the project area during a raptor survey completed in early 2014. A subsequent survey confirmed a nesting Swainson's hawk pair in one of the nests. While determining which species made the

nests was unclear, the potential for the on-site trees to provide nesting habitat for Swainson's hawk exists.

*White-Tailed Kite (Elanus laucurus)*

White-tailed kite is State-listed as S3S4, which means that the species is apparently secure within California but factors exist to cause some concern (e.g., narrow habitat and/or limited occurrences). The open fields on-site could support foraging habitat for white-tailed kite and the species is relatively common in the region. However, evidence of nesting was not observed during the site survey and the species was not observed during the survey. While unlikely, the possibility exists for white-tailed kite to use the project area for foraging.

*Ricksecker's Water Scavenger Beetle (Hydrochara rickseckeri)*

Ricksecker's water scavenger beetle is a small aquatic beetle in the family *Hydrophilidae* (water scavenger beetles). The species has no state or federal status, but is a California Species of Special Concern. Ricksecker's water scavenger beetle occur in freshwater ponds, vernal pools, and quiet shallow areas of streams primarily within the Bay Area, though the species has been recorded at a number of inland locations as well. Threats include loss of habitat due to overgrazing, pollution, conversion to development, and agriculture. Potential habitat for the species is present along Deadman Gulch and in associated irrigation canals in the Liberty Ranch portion of the project area. Suitable habitat for Ricksecker's water scavenger beetle may be present in the non-participating properties.

*Burrowing Owl (Athene cunicularia)*

Burrowing Owl is Species of Special Concern, which means that the species is declining in population levels, has limited ranges, and/or continuing threats have made them vulnerable to extinction. Burrowing owls are year-long residents in generally flat, open, dry grasslands, pastures, deserts, and shrub lands, and in grass, forbs and open-shrub stages of pinyon-juniper and ponderosa pine habitats. The owls use communal ground squirrel and other small mammal burrows for nesting and cover, as well as artificial structures such as roadside embankments, levees, and berms. The species prefers open, dry, nearly-level grassland or prairie habitat and can exhibit high site fidelity, often reusing burrows year after year. Occupancy of suitable burrowing owl habitat can be verified at a site by observation of a pair of burrowing owls during their breeding season (March to August) or, alternatively, by the presence of molted feathers, cast pellets, prey remains (rodents, small reptiles, and large insects), eggshell fragments, or whitewash (guano), at or near a burrow. Burrowing owls are fairly tolerant of human activity near their nest burrows as long as suitable foraging habitat exists nearby. Habitat for burrowing owl was not present in the Liberty Ranch portion of the project area during the site surveys due to intensive cultivation occurring on-site. However, if fields are left fallow, the owls could colonize the site prior to development. In addition, suitable habitat for burrowing owl may be present in the non-participating properties. For example, communal ground squirrel and other small mammal burrows as well suitable grassland habitat may be located on the non-participating properties.

### *Valley Elderberry Longhorn Beetle (Desmocerus californicus dimorphus)*

VELB occurs in riparian woodlands and other Central Valley habitats containing elderberry shrubs (*Sambucus spp.*), upon which the VELB are completely dependent for all stages of their life cycle. The females lay their eggs in crevices in the bark. After hatching, the larvae burrow into the stems of the tree where the eggs feed on the interior wood for the next one to two years until they form pupae, from which the adults emerge. The adults bore their way out of the stems, leaving a distinctive oval-shaped hole. As the larvae and adults are rarely seen, these borer holes are often the only evidence of this species' presence. After emergence from the stems, the adults remain in association with the elderberries, where they will feed on the elderberry foliage and eventually reproduce. All elderberry shrubs within the known range of VELB that have one or more stems with diameters of one inch or greater at ground level, are considered potential habitat for the species. Habitat for VELB was not present in the Liberty Ranch portion of the project area during the site surveys. Suitable habitat for VELB may be present in the non-participating properties if elderberry shrubs are located on the properties.

### *Vernal Pool Crustaceans*

Vernal pool crustaceans occurring within the area include vernal pool fairy shrimp (*Branchinecta lynchi*), mid valley fairy shrimp (*Branchinecta mesoallensis*), California linderiella (*Linderiella occidentalis*), and vernal pool tadpole shrimp (*Lepidurus packardi*). The small crustaceans are adapted to survive the annual flooding and drying of vernal pools and other seasonal wetlands in valley or foothill grasslands by hatching from encysted eggs embedded in the soil in the bottom of the pools when the pools fill with rainwater. After reaching maturity, the crustaceans breed, release their eggs into the water, and die as the vernal pool dries up. The dormant eggs are protected by thick outer coverings that resist cold, heat, and desiccation. Habitat for vernal pool crustaceans was not present in the Liberty Ranch portion of the project area during the site surveys. Suitable habitat for vernal pool crustaceans may be present in the non-participating properties if vernal pool or seasonal wetlands are determined to be on the properties.

### **Trees**

The on-site trees and their condition ratings on the Liberty Ranch site (including the "Future Growth Area") are shown in Table 4.4-3.

As summarized in Table 4.4-3, approximately 128 trees were observed on the Liberty Ranch site and the "Future Growth Area" by the Cardno ENTRIX biologist/arborist during the reconnaissance-level field survey in August 2013 and the official arborist survey in March 2014. Trees are not located within the "Future Growth Area;" however, some trees are located along the UPRR tracks. In addition to the individual trees, several willow (*Salix lasiolepis*) thickets occur along drainages throughout the project area. The trees on the Liberty Ranch site are primarily confined to the margins of fields and irrigation canals, as well as residential plots (see Figure 4.4-1). Although an arborist report has not been completed for the non-participating properties, various trees exist near the rural residences along Marengo Road and Twin Cities Road as well as at Liberty Ranch High School and Estrellita Continuation High School.

**Table 4.4-3  
Trees Observed On Liberty Ranch Site**

Common Name	Scientific Name	Condition Rating						# of Trees
		Poor	Poor-Fair	Fair	Fair-Good	Good	Excellent	
Boxelder**	<i>Acer negundo</i>	6	1	0	0	0	0	7
Silver Maple	<i>Acer saccharinum</i>	1	0	1	0	0	0	2
Blue Gum Eucalyptus	<i>Eucalyptus globulus</i>	4	2	10	1	22	0	43
European Ash	<i>Fraxinus excelsior</i>	0	0	0	2	0	0	2
N. California Black Walnut**	<i>Juglans hindsii</i>	10	5	20	2	3	0	40
White Mulberry	<i>Morus alba</i>	1	1	1	0	4	0	7
Monterey Pine**	<i>Pinus radiata</i>	0	0	0	0	1	0	1
Hybrid Plane	<i>Platanus x acerifolia</i>	0	0	0	0	1	0	1
Fremont Cottonwood**	<i>Populus fremontii</i>	6	2	3	1	0	0	12
Almond	<i>Prunus amygdalus</i>	0	0	1	0	0	0	1
California Valley Oak**	<i>Quercus lobata</i>	0	0	4	0	0	0	4
Willow**	<i>Salix lasiolepis</i>	0	0	2	0	0	0	2
Coast Redwood**	<i>Sequoia sempervirens</i>	0	1	0	0	0	0	1
American Elm	<i>Ulmus americana</i>	2	2	1	0	0	0	5
<b>Total</b>		<b>30</b>	<b>14</b>	<b>43</b>	<b>6</b>	<b>31</b>	<b>0</b>	<b>128</b>

Notes:

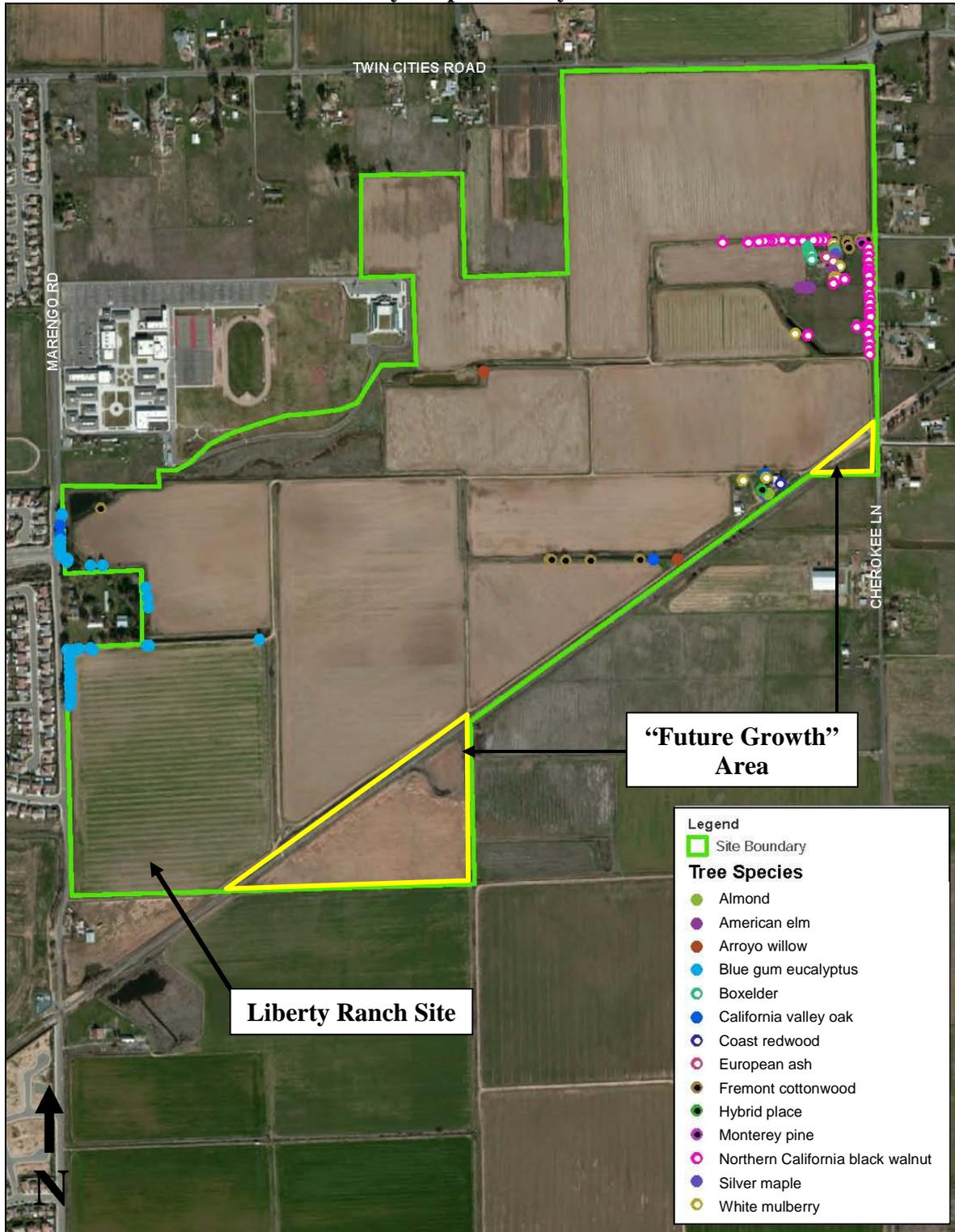
Only trees with single trunk dbh greater than six inches or multi-trunk dbh greater than 10 inches are included in this table.

\*\* Native species

Source: Cardno ENTRIX. Biological Resources Impact and Mitigation Report. October 16, 2014.

Of the 128 trees located on the Liberty Ranch site, 111 were tagged, 31 percent of which were blue gum eucalyptus (*Eucalyptus globulus*), 34 percent were northern California black walnut (*Juglans hindsii*), nine percent were Fremont cottonwood (*Populus fremontii*), five percent were boxelder (*Acer negundo*), and five percent were white mulberry (*Morus alba*). The remaining 16 percent consisted of American elm (*Ulmus americana*), hybrid plane (*Platanus x acerifolius*), California valley oaks (*Quercus lobata*), willow (*Salix lasiolepis*), silver maple (*Acer saccharinum*), European ash (*Fraxinus excelsior*), Monterey pine (*Pinus radiata*), almond (*Prunus dulcis*), and coast redwood (*Sequoia sempervirens*).

**Figure 4.4-1  
 Tree Survey Map – Liberty Ranch Site**



Source: Cardno ENTRIX. Biological Resources Impact and Mitigation Report. October 16, 2014.

A total of four trees on the Liberty Ranch property qualify for protection under the City of Galt's Municipal Code having a diameter at breast height (dbh) of six or more inches and being one of the four species listed for protection. All four trees were California valley oaks (*Quercus lobata*) and include tree tag numbers 64, 70, 76, and 77. The remaining 124 trees on the property are not considered protected due to either insufficient dbh or lack of the listed species for protection by Galt's Municipal Code.

### **Sensitive Natural Communities**

Sensitive natural communities are those that are considered rare in the region, support special-status plant or wildlife species, or receive regulatory protection (i.e., wetlands and other waters under Sections 404 and 401 of the Clean Water Act (CWA), Section 1600 *et seq.* of the California Fish and Wildlife Code, and/or the Porter-Cologne Act). In addition, the CNDDDB has designated a number of communities as rare; these communities are given the highest inventory priority (Holland 1986, CDFW 2003e).

#### Sensitive Habitats

The *Biological Resources Impact and Mitigation Report* prepared by Cardno ENTRIX indicates that the following special-status natural communities were identified by the CNDDDB and are known to occur in the vicinity of the project site: coastal and valley freshwater marsh, great valley (mixed) riparian forest, great valley (valley oak) riparian forest, northern hardpan vernal pool, and valley oak woodland. According to Cardno ENTRIX, none of the aforementioned habitats exist on the Liberty Ranch site or the "Future Growth Area."

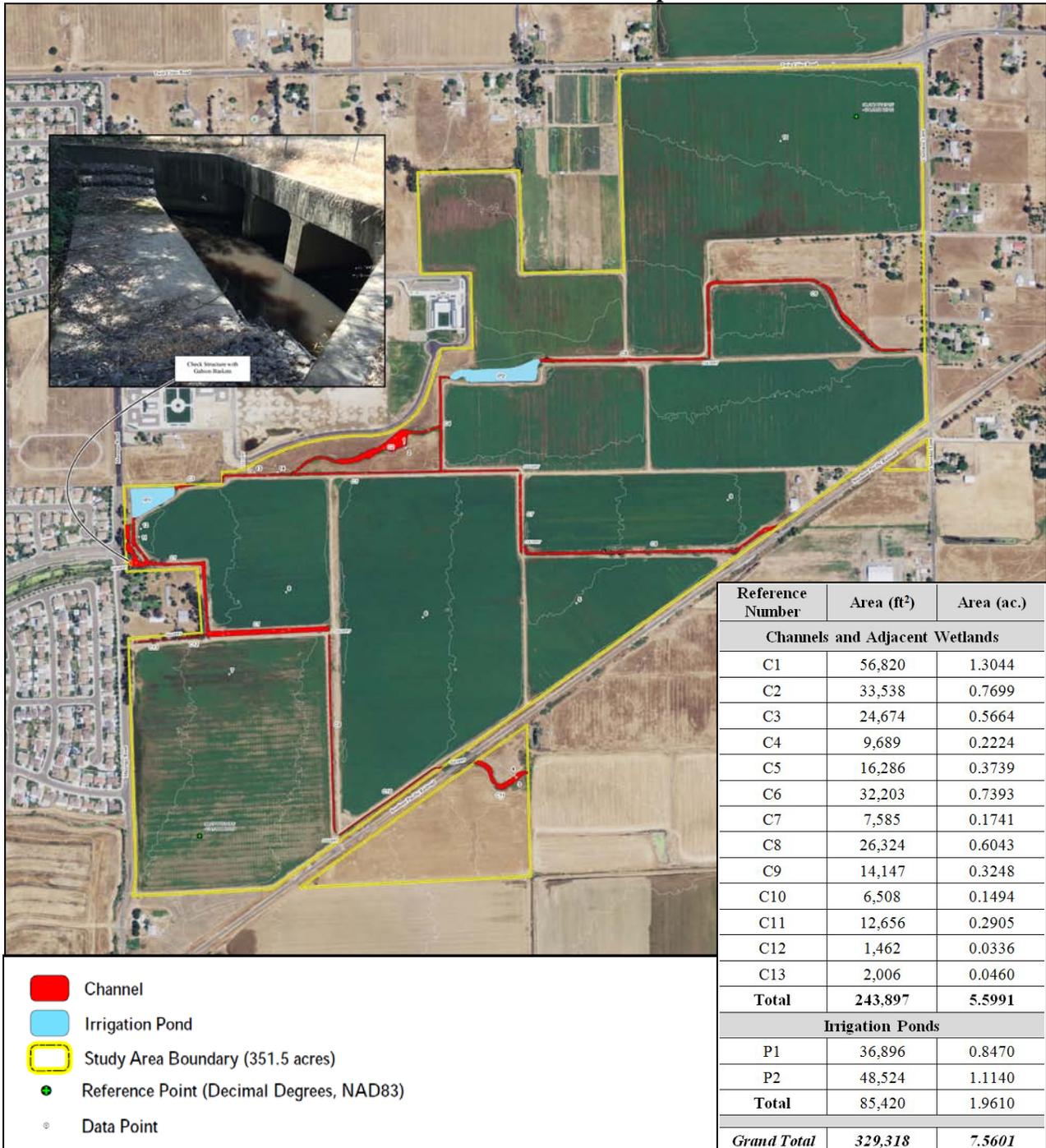
#### Wetlands and Other Water of the United States

Wetlands include those areas that are inundated or saturated by surface or ground water 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.<sup>11</sup> Waters of the United States include a range of wet environments such as lakes, rivers, streams (including intermittent streams), mudflats, sandflats, wetlands, sloughs, and wet meadows.

A summary of wetland type and acreages for the Liberty Ranch site, the "Future Growth Area" and the non-participating properties is presented in Table 4.4-4 and shown in Figure 4.4-2. Two irrigation ponds and 13 canals are present in the Liberty Ranch site and "Future Growth Area," totaling approximately 7.56 acres. Within the non-participating properties, two ponds, one canal, and a roadside ditch were mapped using aerial imagery, totaling approximately 0.98 acres. The total amount of wetlands and other waters within the Liberty Ranch site, the "Future Growth Area," and the non-participating properties is approximately 8.54 acres.

<b>Table 4.4-4 Wetlands and Other Waters</b>	
<b>Wetlands and Other Water Types</b>	<b>Acreage</b>
<b>Liberty Ranch Site and “Future Growth Area”</b>	
Canal 01	1.3044
Canal 02	0.7699
Canal 03	0.5664
Canal 04	0.2224
Canal 05	0.3739
Canal 06	0.7393
Canal 07	0.1741
Canal 08	0.6043
Canal 09	0.3248
Canal 10	0.1494
Canal 11	0.2905
Canal 12	0.0336
Canal 13	0.0460
Irrigation Pond 01	0.8470
Irrigation Pond 02	1.1140
<b>Total Wetlands and Other Waters within the Liberty Ranch Site and “Future Growth Area”</b>	<b>7.5601</b>
<b>Non-Participating Properties</b>	
Canal 1	0.02
Pond 1	0.52
Pond 2	0.29
Roadside Ditch	0.15
<b>Total Wetlands and Other Waters within the Non-Participating Properties</b>	<b>0.98</b>
<b><i>Total Wetlands and Other Waters within the Total Project Site</i></b>	<b><i>8.5401</i></b>
<i>Source: Cardno ENTRIX. Biological Resources Impact and Mitigation Report. October 16, 2014.</i>	

**Figure 4.4-2  
 Wetland Delineation Map**



Source: Gibson & Skordal, LLC. Jurisdictional Delineation, Liberty Ranch. May 2014.<sup>12</sup>

While wetland vegetation occurs along the edge of most of the agricultural fields, the presence of the vegetation is likely the result of flood irrigation. Deadman Gulch is a historically natural drainage originating from a large wetland approximately 1,500 feet east of the project site that enters the site from the east through a culvert under Cherokee Lane. Water was not flowing at the time of the site survey, but much of the drainage was inundated. Two other smaller unnamed drainages enter the project site from the southeast through culverts under the UPRR tracks. The drainages are immediately routed into the irrigation drainage network in the project site, and eventually connect with Deadman Gulch at the west end of the site. Discussions with farmers using the fields indicate that the drainages would be unlikely to contain water during the dry months if water was not actively pumped into the drainages. However, because the three drainages appear to have been historically natural and convey water during the rainy season, the drainages are likely to be jurisdictional. Jurisdictional wetlands are those regulated by the U.S. Army Corps of Engineers (USACE) under Section 404 of the CWA.

#### **4.4.3 REGULATORY CONTEXT**

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A number of Federal, State, and local policies provide the regulatory framework that guides the protection of biological resources. The following discussion summarizes those laws that are most relevant to biological resources in the vicinity of the project site.

##### **Federal Regulations**

The following are the Federal environmental laws and policies relevant to biological resources.

##### Federal Endangered Species Act

The United States Congress passed the 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 USACE must consult with the 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 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 Wildlife Code states, “It is unlawful to take, possess, or destroy any birds in the order Falconiformes or Strigiformes (birds-of-prey) 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 USACE regulates discharge of dredged or fill material into Waters of the United States under Section 404 of the 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 United States 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 United States can be defined by exhibiting a defined bed and bank and ordinary high water mark (OHWM). The OHWM is defined by the USACE 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 Regulations**

The following are the State environmental laws and policies relevant to biological resources.

#### California Endangered Species Act and California Department of Fish and Wildlife

The State of California enacted the 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 CDFW when preparing CEQA documents to ensure that the state lead agency actions do not

jeopardize the existence of listed species. CESA directs agencies to consult with CDFW on projects or actions that could affect listed species, directs CDFW to determine whether jeopardy would occur, and allows CDFW 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. CDFW exercises authority over mitigation projects involving state-listed species, including those resulting from CEQA mitigation requirements. CDFW may authorize taking if an approved habitat management plan or management agreement that avoids or compensates for possible jeopardy is implemented. CDFW requires preparation of mitigation plans in accordance with published guidelines.

The CDFW exercises jurisdiction over wetland and riparian resources associated with rivers, streams, and lakes under California Fish and Wildlife Code Sections 1600 to 1607. The CDFW has the authority to regulate work that will substantially divert, obstruct, or change the natural flow of a river, stream, or lake; substantially change the bed, channel, or bank of a river, stream, or lake; or use material from a streambed.

In addition, CDFW enforces the Fish and Wildlife Code of California, which provides protection for “fully protected birds” (§3511), “fully protected mammals” (§4700), “fully protected reptiles and amphibians” (§5050), and “fully protected fish” (§5515). The California Code of Federal Regulations (Title 14) prohibits the take of Protected amphibians (Chapter 5, §41), Protected reptiles (Chapter 5, §42) and Protected furbearers (Chapter 5, §460). The California Endangered Species Act, which prohibits ‘take’ of state-listed Endangered or Threatened species, is also enforced by CDFW.

For projects resulting in significant impacts to biological resources, mitigation measures are required to minimize adverse environmental effects. Mitigation measures often include, for example, replacement of removed trees and mitigation for impacts to wetlands and/or waters. Depending on the quality and extent of the area impacted, the mitigation ratio can vary between 1:1 (mitigation: impact) and 5:1. For non-water-dependent projects located near creeks, the CDFW also typically requires the establishment of a buffer zone immediately adjacent to creeks and wetlands. Depending upon the specific project components and the presence of State- or federally-listed species, the buffer zone may be as little as 50 feet or as much as 300 feet.

#### CDFW 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 CDFW. CDFW tracks species in California whose numbers, reproductive success, or habitat may be threatened.

## Local Regulations

The following are the local environmental laws and policies relevant to biological resources.

### South Sacramento Habitat Conservation Plan

The South Sacramento Habitat Conservation Plan (SSHCP) is a regional approach to addressing issues related to urban development, habitat conservation and agricultural protection. The City of Galt is working with surrounding jurisdictions to prepare the SSHCP, which is not yet an adopted Plan. A Notice of Intent was published by the USFWS on November 4, 2013. The SSHCP will consolidate environmental efforts to protect and enhance wetlands (primarily vernal pools) and upland habitats to provide ecologically viable conservation areas. In addition, the Plan will minimize regulatory hurdles and streamline the permitting process for development projects.

The SSHCP will cover 40 different species of plants and wildlife including 10 that are State or federally listed as threatened or endangered. The SSHCP will be an agreement between state/federal wildlife and wetland regulators and local jurisdictions, which will allow land owners to engage in the "incidental take" of listed species (i.e., to destroy or degrade habitat) in return for conservation commitments from local jurisdictions. The options for securing the commitments are currently being developed and will be identified prior to the adoption of the SSHCP. The geographic scope of the SSHCP includes the area bounded by and including U.S. 50 to the north, Interstate 5 to the west, the Sacramento County line with El Dorado and Amador Counties to the east, and San Joaquin County to the south. The proposed project site is located within the aforementioned geographic scope of the SSHCP. The Study Area excludes the City of Sacramento, the City of Folsom and Folsom's Sphere of Influence, the Sacramento-San Joaquin Delta, and the Sacramento County community of Rancho Murieta.

### 2030 Galt General Plan

The following applicable goals and policies are taken from the Conservation and Open Space Element of the *2030 Galt General Plan*.

- Goal COS-1 To protect and enhance the qualities of the area's rivers, creeks, sloughs, and groundwater.
- Policy COS-1.10 The City shall retain to the extent feasible the ecological features of the creeks, sloughs, and rivers in their natural state.
- Policy COS-1.11 The City shall endeavor to protect, preserve, and improve riparian corridors.
- Policy COS-1.13 The City shall review development proposals in accordance with applicable local, State, and Federal statutes protecting jurisdictional wetlands (Section 404 of the Clean Water

Act) and require that new developments have no net loss of existing wetland habitats.

Goal COS-2 To protect, restore, and enhance habitats that support fish and wildlife species

Policy COS-2.1 The City should require minimization of impacts to protect mature trees, vernal pools, and any threatened endangered or other sensitive species when approving new development.

Policy COS-2.3 The City should require new development in areas that are known to have particular value for biological resources to maximize preservation of sensitive vegetation and wildlife habitat.

Policy COS-2.4 The City shall review development proposals in accordance with applicable Federal, State, and local statutes protecting special-status species and jurisdictional wetlands.

Policy COS-2.5 The City shall, in its role as lead agency, take into consideration mitigation standards and policies of resource and regulatory agencies with jurisdiction over biological resources (e.g., USFWS, CDFG, etc.).

Policy COS-2.6 On sites that have the potential to contain critical or sensitive habitats or special species, the City shall require the project applicant to have the site surveyed by a qualified biologist. A report on the findings of this survey shall be submitted to the City as part of the application process.

Goal COS-3 To preserve and protect the valuable vegetation resources of the Galt area.

Policy COS-3.1 The City should require the protection of existing riparian vegetation along stream courses in the city.

Policy COS-3.2 The City shall encourage retention of mature trees and woodlands to the maximum extent possible.

### Galt Municipal Code

Chapter 18.52, Landscape Standards, contains definitions for protected trees, permitting requirements for removal of protected trees, trees prohibited from removal, as well as penalties for violating the ordinance. The following applicable definitions and criteria are taken from the Galt Municipal Code.

*18.52.060.B Definitions.*

“Heritage oak tree” includes, but is not limited to, any of the following: Valley Oak (*Quercus lobata*), Interior Live Oak (*Quercus wislizenii*), Blue Oak (*Quercus douglasii*), Coast Live Oak (*Quercus agrifolia*) or Oracle Oak (*Quercus morehus*) having at least one trunk of six inch diameter measured four feet above the ground, or multi-trunks with an aggregate diameter of eight inches or more, measured four feet above ground.

“Tree” means any Heritage Oak tree or public tree.

“Tree permit” is a written authorization by the Community Development Director or his designee for the removal of the tree.

*18.52.060.H Permit application criteria.*

Prior to the issuance of the permit, the approving body shall ascertain whether or not the tree(s) cannot or should not be retained. The determination of the approving body in granting or denying a permit shall be based upon reasonable criteria, including, but not limited to, the following:

1. The condition of the Heritage Oak tree or public tree with respect to its general health, status as a public nuisance, danger of falling, proximity to existing or proposed structures, interference with utility services and its status as a host for plant, pest or disease endangering other species of trees or plants with infection or infestations;
2. The necessity of the requested action to allow construction of improvements necessary for the reasonable economic or other reasonable enjoyment of property;
3. The topography of the land and the effect of the requested action on soil retention, water retention and diversion or increased flow of surface waters;
4. The number, species, size and location of existing trees in the area and the effect of the requested action on shade areas, air pollution, historic values, scenic beauty and the general welfare of the City as a whole;
5. Good forestry practices such as, but not limited to, the number of healthy trees the subject parcel of land will support.

#### **4.4.4 IMPACTS AND MITIGATION MEASURES**

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This section describes the standards of significance and methodology utilized to analyze and determine the proposed project’s potential impacts related to biological resources.

##### **Standards of Significance**

Consistent with Appendix G of the CEQA Guidelines, the City’s General Plan, and professional judgment, a significant impact would occur if the proposed project would result in the following:

- Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by CDFW or USFWS;
- Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the CDFW or USFWS;
- Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the CWA (including, but not limited to marshes, vernal pools, coastal, etc.) through direct removal, filling, hydrological interruption, or other means;
- Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites;
- Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance;
- Conflict with the provisions of an adopted Habitat Conservation Plan (HCP), Natural Community Conservation Plan (NCCP), or other local, regional, or State habitat conservation plan; or
- Substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, or threaten to eliminate a plant or animal community.

### **Method of Analysis**

The information contained in this analysis is primarily based on a Biological Constraints Survey report and an Arborist Survey report prepared for the proposed project.

### **Biological Resources Report**

The following biological reconnaissance-level field survey studies were prepared for the Liberty Ranch site (including the “Future Growth Area”) and the non-participating properties:

- *Jurisdictional Delineation Report – Liberty Ranch*, Gibson & Skordal, LLC., February 2014 (Appendix A of Appendix E);
- *Preliminary Biological Constraints Survey of the Eastview Specific Plan Project Site*, Cardno ENTRIX, June 23, 2014 (Appendix B of Appendix E)
- *Eastview- Liberty Ranch Project Site- Summary of Giant Garter Snake Habitat Potential*, Eric Hansen, Consulting Environmental Biologist, March 20, 2014 (Appendix D of Appendix E);
- *Arborist Report of Findings Eastview-Liberty Ranch*, Cardno ENTRIX, April 1, 2014 (Appendix E of Appendix E);
- *Preliminary Biological Constraints Survey of the Eastview- Liberty Ranch Project*, Cardno ENTRIX, April 1, 2014 (Appendix F of Appendix E);
- *Nesting Raptor and Tricolor Blackbird Surveys- Liberty Ranch*, Gibson & Skordal, LLC, April 22, 2014 (Appendix G of Appendix E); and

- *Special-Status Plant Surveys, Liberty Ranch – Sacramento County, California* by Gibson & Skordal, LLC; (Appendix H of Appendix E)

Potential impacts of the proposed project on biological resources were identified by first comparing the habitat requirements of those species identified during the above data reviews to the habitat available on and adjacent to the proposed project site. Cardno ENTRIX queried the CDFW CNDDDB for the Galt, Bruceville, Clay, Florin, Elk Grove, Sloughhouse, Thornton, Lodi North, and Lockeford USGS 7.5 minute quadrangles, as well as the USFWS Species List website for the Galt USGS 7.5 minute topographic quadrangle for any recorded occurrences of special-status plant or wildlife species in the vicinity of the project site (see Appendix E).

On August 7, 2013, Cardno ENTRIX (including a staff biologist and staff arborist) conducted a reconnaissance-level field survey of the project site (including Liberty Ranch and the “Future Growth Area”) to record biological resources and to assess the likelihood of regulated habitat types on the project site. The survey consisted of walking or driving the perimeter and interior farm roads through the site to characterize aquatic and terrestrial habitat types and to identify plant and animal species observed during the survey. During the survey, plant and animal species observed were recorded in field notes, and photographs were taken of the habitat features in the project area. The photos are presented as Attachment A in Appendix E. In addition, a seasonally-timed, focused survey of the Liberty Ranch portion of the project site was conducted by a botanist from Gibson & Skordal, LLC on September 10, 2013. Furthermore, the data review was supplemented with a field survey on August 2014 to determine which of the potential wildlife species occurs or whether potential habitat for the species is present in the project site. The Biological Resources Report was peer-reviewed by the City of Galt consulting biologist.

### *Special-Status Species*

As shown above in Table 4.4-1 and 4.4-2, a list of special-status plant and wildlife species was compiled from the CNDDDB and USFWS Species List queries. The tables describe the common and scientific names of each of the species identified in the above queries, along with their habitat requirements and a brief assessment of the likelihood that the species would occur in the project area. Cardno ENTRIX cross-referenced the habitats found on the project site against the habitat requirements of local or regionally known special-status species to determine if the proposed project could directly or indirectly impact such species.

### Wetlands and Waters of the U.S.

An evaluation of potential wetlands and other Waters of the U.S. in the project area was conducted concurrently with the *Jurisdictional Delineation Report – Liberty Ranch*. Boundaries of features were recorded using a hand-held Global Positioning System (GPS) unit, with additional boundaries digitized using GIS software. General characteristics of the on-site waters features were recorded in field notes. The goal of the exercise was to map the boundaries of any potential wetlands or other waters in the project area to a level of detail that the resulting map could be used, in combination with additional data collected at a later date, in a jurisdictional wetland delineation, if required. Because the wetland evaluation was preliminary and all waters observed in the project area were other Waters of the U.S., (i.e., not wetlands), standardized

wetland data points were not recorded. The Jurisdictional Delineation Report was peer-reviewed by the City of Galt consulting biologist.

### Preliminary Arborist Evaluation

The preliminary evaluation of potential arboricultural constraints performed on August 7, 2013 included a pedestrian survey of the entire project site. Trees were visually assessed to determine species and locations were recorded using a hand-held GPS unit. Data from the pedestrian survey was then overlain on an aerial to produce a map of tree locations. The data was utilized primarily for identification of potential arboricultural resources that may require further evaluation per Chapter 12.28, Cutting and Removal of Oak Trees, of the Galt Municipal Code.

The *Arborist Report Findings* prepared by Cardno ENTRIX (see Appendix E of Appendix E) for the project site includes the results of an official arborist survey performed on March 19, 2014. The survey consisted of walking the project area (including Liberty Ranch and the “Future Growth Area”) and identifying and recording trees that may qualify for protection under the City’s Municipal Code. In addition, the following data was collected for all trees with dbh of six inches or greater: botanical and common name, location, dbh, condition, and any other characteristics of note. Condition ratings are based on the following scale: poor, fair to poor, fair, fair to good, good, and excellent. A metal tree tag was then affixed to the north side, when conditions allowed, of each surveyed tree using a nail and hammer. For reference, trees discussed in this chapter are identified by the corresponding tag number affixed to the tree in the field. Tree locations were plotted on a map of the property (as shown in Figure 4.4-1 above).

A third site visit was performed on March 24, 2014 to address questions that arose when the two tree location data sets were compared to each other. During the third visit, the arborist discovered that some trees had been removed between the August 7, 2013 and the March 19, 2014 visits. Trees missed by previous surveys were identified and data collected as stated above.

### **Project-Specific Impacts and Mitigation Measures**

The following discussion of impacts related to biological resources is based on implementation of the proposed project in comparison to existing conditions and the standards of significance presented above. The discussions and mitigation measures presented below apply to the Liberty Ranch, “Future Growth Area,” and non-participating properties portions of the proposed project unless otherwise stated.

#### **4.4-1 Impacts related to special-status plant species. Based on the analysis below and with implementation of mitigation, the impact is *less than significant*.**

##### Non-Participating Properties

As discussed previously, the existing land uses on the non-participating properties include approximately 13 rural residences, two schools (Liberty Ranch High School and Estrellita Continuation High School), and vacant land. The majority of the developed portions of the non-participating properties have been previously graded or disturbed.

Potential habitat within the non-participating properties includes scattered trees near the residences along Twin Cities Road and open grassland north of Liberty Ranch High School and Estrellita Continuation High School.

A site survey has not been completed for the non-participating properties. Based on a review of aerial photography of the non-participating properties, the presence of special-status plant species appears to be unlikely due to the existing alterations to the site related to agricultural and rural residential activities. However, presence of suitable habitat for special-status plants cannot be ruled out until a qualified biologist determines whether suitable habitat is present. Should special-status plant species be located on the non-participating properties, future development of the properties may impact the plant species if measures are not established to avoid or relocate the species.

#### Future Growth Area

According to the Biological Report prepared for the proposed project by Cardno ENTRIX, the CNDDDB queries for the Galt, Bruceville, Clay, Florin, Elk Grove, Sloughhouse, Thornton, Lodi North, and Lockeford USGS 7.5 minute quadrangles revealed a total of 21 special-status plants recorded in the project vicinity. As discussed in Table 4.4-1, some of the irrigation canals associated with Deadman Gulch could potentially support species associated with marsh habitats including watershield, bristly sedge, Bolander's water-hemlock, Peruvian dodder, woolly rose-mallow, Sanford's arrowhead, marsh skullcap, and side-flowering skullcap.

A seasonally-timed, focused survey of the "Future Growth Area" portion of the project site was conducted for the eight aforementioned special-status plant species by a botanist on September 10, 2013. None of the species were observed during the survey. Therefore, future development of the "Future Growth Area" portion of the project site would result in no impact to special-status plants.

#### Liberty Ranch

As noted above, the CNDDDB queries for the Galt, Bruceville, Clay, Florin, Elk Grove, Sloughhouse, Thornton, Lodi North, and Lockeford USGS 7.5 minute quadrangles revealed a total of 21 special-status plants recorded in the project vicinity. As discussed in Table 4.4-1, marshy aquatic vegetation along Deadman Gulch and some of the associated irrigation canals could potentially support species associated with marsh habitats including watershield, bristly sedge, Bolander's water-hemlock, Peruvian dodder, woolly rose-mallow, Sanford's arrowhead, marsh skullcap, and side-flowering skullcap.

A seasonally-timed, focused survey of the Liberty Ranch portion of the project site was conducted for the eight aforementioned special-status plant species by a botanist on September 10, 2013. None of the species were observed during the survey. Therefore, development of the Liberty Ranch portion of the project site and future development of the "Future Growth Area" would result in no impact to special-status plants.

## Conclusion

Because some of the special-status plant species generated by the CNDDDB and USFWS species list may be supported on the non-participating properties in the current condition, the proposed project would have a *potentially significant* impact to special-status plant species.

## Mitigation Measure(s)

Implementation of the following mitigation measure would reduce the above impact to a *less-than-significant* level.

### *Non-Participating Properties*

4.4-1 *In conjunction with submittal of an application for future development within the non-participating properties, the future project applicant shall retain a qualified biologist/botanist to conduct a preconstruction survey to determine if the following special-status plant species are present: watershield, bristley sedge, Bolander's water-hemlock, Peruvian dodder, woolly rose-mallow, Northern California black walnut, Delta tule pea, Mason's lilaeopsis, Delta mudwort, Sanford's arrowhead, marsh skullcap, side-flowering skullcap, and Suisun Marsh aster. The surveys shall be included in a Biological Report which shall be submitted to the City of Galt Community Development Department for review and approval. If the aforementioned plant species are not found on-site during the surveys, then additional action would not be necessary. If any of the above species are found, then the biologist/botanist shall include specific mitigation measures in the Biological Report should the plant populations need to be removed during development of the site. The removal actions could include, but are not limited to, avoidance through preserving the population in place, collection of seed or plant materials for transfer to a suitable off-site habitat area, and/or payment into a mitigation bank for the preservation of the species in perpetuity.*

**4.4-2 Impacts related to special-status wildlife species. Based on the analysis below and with implementation of mitigation, the impact is *less than significant*.**

### Non-Participating Properties

As discussed previously, focused surveys have not been completed for the non-participating properties. However, utilizing the results of the Biological Report prepared for the proposed project by Cardno ENTRIX, some special-status wildlife species would not be likely to exist on the non-participating properties. For example, the following special-status wildlife species do not have the potential to occur on the non-participating properties due to their known ranges or lack of suitable upland or aquatic habitat: Delta smelt, Sacramento splittail, California tiger salamander, foothill yellow-legged frog, and GGS. VELB, western pond turtle, Ricksecker's water scavenger beetle, and vernal pool

crustaceans may occur on the non-participating properties and will be addressed in detail below.

#### *Valley Elderberry Longhorn Beetle*

Based on a review of aerial photography of the non-participating properties, presence of elderberry shrubs appears to be unlikely due to the presence of alterations to the habitat related to agricultural and rural residential activities. However, presence of suitable VELB habitat cannot be ruled out until biological surveys have been conducted.

#### *Western Pond Turtle*

Based on a review of aerial photography of the non-participating properties, habitat for western pond turtle is not present on the properties. The habitat would be limited to ponds deep enough and persistent enough to support western pond turtle. The presence of suitable western pond turtle habitat cannot be ruled out until biological surveys have been conducted.

#### *Ricksecker's Water Scavenger Beetle*

The non-participating properties contain a small area of seasonal pond habitat. In addition, non-native annual grasslands that may contain seasonal wetlands and vernal pools may exist within a few of the residential lots. The aforementioned aquatic habitats could support Ricksecker's water scavenger beetle. The potential acreage of the habitat within the non-participating properties cannot be quantified at this time because focused surveys have not been completed on the properties.

#### *Vernal Pool Crustaceans*

Based on a review of aerial photography of the non-participating properties, habitat for special-status vernal pool crustaceans, including vernal pool fairy shrimp, mid-valley fairy shrimp, California linderiella or vernal pool tadpole shrimp, is not present on the properties. However, future focused, on the ground surveys may reveal the presence of vernal pool or seasonal wetlands that could provide habitat for the aforementioned species that were not apparent on the available aerial photographs.

Should any of the above special-status wildlife species be located on the non-participating properties, future development of the properties may impact the wildlife species if measures are not established to avoid or relocate the species.

#### Future Growth Area

According to the Biological Report prepared for the proposed project by Cardno ENTRIX, the CNDDDB and USFWS Species List for the Galt, Bruceville, Clay, Florin, Elk Grove, Sloughhouse, Thornton, Lodi North, and Lockeford USGS 7.5 minute quadrangles revealed several special-status wildlife species recorded in the project

vicinity. The absence of vernal pools, emergent marshes, sloughs, and other niche habitats preclude the presence of the majority of special-status wildlife species recorded in the CNDDDB. For example, many of the occurring special-status species require an aquatic or riparian habitat (e.g., blennosperma vernal pool andrenid bee, vernal pool fairy shrimp, western spadefoot, and California tiger salamander). Vernal pool and freshwater seeps or springs do not exist on the “Future Growth Area.” Therefore, the above-mentioned species, among others, would not occur on the “Future Growth Area” due to lack of suitable aquatic habitat. Other special-status species identified in the CNDDDB search require dense-growth trees or a chaparral habitat (e.g., foothill yellow-legged frog). The “Future Growth Area” is not located in a chaparral area and would therefore not be suited to support the previously mentioned species. In addition, GGS was determined to be unlikely to occur in the area due to the presence of dense surface vegetation on the “Future Growth Area.”

The “Future Growth Area” does contain an environment suitable for Western pond turtle and Ricksecker’s water scavenger beetle. Although not observed during the site surveys, Western pond turtle may occur near Deadman Gulch or the associated irrigation canals. In addition, the “Future Growth Area” contains a channel with potentially suitable habitat for Ricksecker’s water scavenger beetle.

#### Liberty Ranch

As noted above, the CNDDDB and USFWS Species List for the Galt, Bruceville, Clay, Florin, Elk Grove, Sloughhouse, Thornton, Lodi North, and Lockeford USGS 7.5 minute quadrangles revealed several special-status wildlife species recorded in the project vicinity. The absence of vernal pools, emergent marshes, sloughs, and other niche habitats preclude the presence of the majority of special-status wildlife species recorded in the CNDDDB. For example, many of the occurring special-status species require an aquatic or riparian habitat (e.g., blennosperma vernal pool andrenid bee, vernal pool fairy shrimp, western spadefoot, and California tiger salamander). Vernal pool and freshwater seeps or springs do not exist on-site. Therefore, the above-mentioned species, among others, would not occur on the project site due to lack of suitable aquatic habitat. Other special-status species identified in the CNDDDB search require dense-growth trees or a chaparral habitat (e.g., foothill yellow-legged frog). The project site is not located in a chaparral area and would therefore not be suited to support the previously mentioned species. In addition, GGS was determined to be unlikely to occur in the area due to the presence of dense surface vegetation on the project site.

The Liberty Ranch site does contain an environment suitable for Western pond turtle and Ricksecker’s water scavenger beetle. As noted previously, although not observed during the site surveys, Western pond turtle may occur near Deadman Gulch or the associated irrigation canals. In addition, although the project site is several miles east of where Ricksecker’s water scavenger beetle is known to occur, aquatic habitat along Deadman Gulch could provide potential habitat for the beetle.

## Conclusion

VELB, Western pond turtle, Ricksecker's water scavenger beetle, and vernal pool crustaceans have the potential to occur on the non-participating properties. If the aforementioned species are determined to be absent from the properties, an impact to special-status wildlife would not occur. In addition, the Liberty Ranch site and the "Future Growth Area" may contain suitable habitat for Western pond turtle or Ricksecker's water scavenger beetle. Without surveys to determine whether or not the aforementioned species are located on the project site, the proposed project could have a *potentially significant* impact to special-status wildlife species.

## Mitigation Measure(s)

Implementation of the following mitigation measures would reduce the proposed project's potential impact to special-status wildlife to a *less-than-significant* level.

### *Non-Participating Properties*

4.4-2(a) *In conjunction with submittal of an application for future development within the non-participating properties, the future project applicant shall retain a qualified biologist to conduct a preconstruction survey to determine if the following special-status wildlife species are present: valley elderberry longhorn beetle, Western pond turtle, Ricksecker's water scavenger beetle, and vernal pool crustaceans (e.g., vernal pool fairy shrimp, mid-valley fairy shrimp, California linderiella, or vernal pool tadpole shrimp). The survey shall be included in a Biological Report which shall be submitted to the City of Galt Community Development Department for review and approval. If the aforementioned wildlife species are not found on-site during the surveys, the biologist shall document the findings in a letter report to CDFW and the City of Galt, and additional action would not be necessary. If any of the above species are found, then the biologist shall include specific mitigation measures in the Biological Report should the wildlife populations or their habitat be located on the non-participating properties. Mitigation measures may include relocation of species, construction monitoring, or preserving and enhancing existing populations.*

### *Future Growth Area*

4.4-2(b) *In conjunction with submittal of an application for future development within the "Future Growth Area," the future project applicant shall retain a qualified biologist to conduct a preconstruction survey to determine if Western pond turtle or Ricksecker's water scavenger beetle are present. The survey shall be included in a Biological Report which shall be submitted to the City of Galt Community Development Department for review and approval. If the aforementioned wildlife species are not found on-site during the surveys, the biologist shall document the findings in a*

*letter report to CDFW and the City of Galt, and additional action would not be necessary. If either of the above species are found, then the biologist shall include specific mitigation measures in the Biological Report should the wildlife populations or their habitat be located on the "Future Growth Area." Mitigation measures may include relocation of species, construction monitoring, or preserving and enhancing existing populations.*

*Liberty Ranch*

4.4-2(c) *The project applicant shall retain a qualified biologist to conduct a preconstruction survey for Western pond turtle within 48 hours of the initiation of construction activities for each phase of development. The preconstruction surveys shall evaluate suitable habitats for this species, as determined by the qualified biologist. If no Western pond turtle individuals are found during the preconstruction survey, the biologist shall document the findings in a letter report to CDFW and the City of Galt, and no further mitigation shall be required.*

*If Western pond turtle individuals are found, the qualified biologist shall consult with CDFW to determine appropriate avoidances measures. Mitigation measures may include relocation to a suitable body of water in Sacramento County to the satisfaction of the CDFW.*

*If Western pond turtles are determined to be present within drainages or ponds, and the feature is to be retained, exclusionary fencing shall be used to prevent the turtle(s) from entering the construction area. The location of the fence shall be determined by a qualified biologist. Any turtles found in or near the construction zone shall be relocated to an appropriate area of suitable habitat a minimum of 100 feet from any active construction zone. Measures shall be implemented to ensure that the drainages or stock ponds will continue to provide adequate habitat for the Western pond turtles by protecting water quality and ensuring that the reduction of drainage from the project site does not substantially diminish the water levels in the pond.*

*If the drainages or stock pond cannot be retained, the project applicant shall relocate any Western pond turtles found during surveys in a manner developed by a qualified biologist and approved by the CDFW.*

4.4-2(d) *The project applicant shall retain a qualified biologist to conduct a preconstruction survey for Ricksecker's water scavenger beetle within 48 hours of the initiation of construction activities for each phase of development. The preconstruction surveys shall evaluate suitable habitats for this species, as determined by the qualified biologist. If no Ricksecker's water scavenger beetle individuals are found during the*

*preconstruction survey, the biologist shall document the findings in a letter report to CDFW and the City of Galt, and no further mitigation shall be required.*

*If Ricksecker's water scavenger beetle individuals are found, the qualified biologist shall consult with CDFW to determine appropriate avoidances measures. Mitigation measures may include relocation of larvae, construction monitoring, or preserving and enhancing existing populations.*

**4.4-3 Impacts related to raptors, nesting birds, or other birds protected under the MBTA. Based on the analysis below and with implementation of mitigation, the impact is less than significant.**

Birds and their nests are protected under California Fish and Wildlife Code (Sections 3503, 3503.5, 3513), and the MBTA. Due to the fact that most birds can fly out of harms-way, development of the project site would not be expected to harm adult birds. However, nesting birds are susceptible to take through disturbance that harms eggs or young.

Swainson's hawk, white tailed kite, and other raptors forage (i.e., search for food) over non-native annual grassland, agricultural fields, and other open habitats that support prey species. The aforementioned habitats are present on the majority of the Liberty Ranch site as well as a portion of the non-participating properties.

Non-Participating Properties

As discussed previously, focused surveys have not been done for the non-participating properties. However, utilizing the results of the Biological Report prepared for the proposed project by Cardno ENTRIX, some raptors, nesting birds, or other birds protected under the MBTA would not be likely to exist on the non-participating properties due to the lack of suitable habitat on the properties. For example, coastal cliffs or vertical bank/cliff habitat is required for double-crested cormorant and bank swallow. The remaining bird species that do not require coastal cliffs or vertical bank/cliff habitat and that have the potential to occur in the project vicinity include: Cooper's hawk, tricolored blackbird, great egret, great blue heron, burrowing owl, ferruginous hawk, Swainson's hawk, yellow warbler, white-tailed kite, merlin, black-crowned night heron, and yellow-headed blackbird. However, focused surveys have not been done for the aforementioned bird species. Should any of the above species be located on the non-participating properties, future development of the properties may impact the wildlife species if measures are not established to avoid the species.

### Future Growth Area

As discussed previously, trees are not located within the “Future Growth Area;” however, some trees area located along the UPRR tracks. Because trees are not located on the “Future Growth Area,” nesting migratory bird species could not be supported on the “Future Growth Area.” For example, tricolored blackbird, great egret, and great blue heron would not be impacted by future construction of the “Future Growth Area.”

The agricultural fields in the project area could provide suitable foraging habitat for ferruginous hawk when low growing crops are present. Although higher quality foraging habitat is widely available in the grasslands to the south and east of the “Future Growth Area;” the possibility exists for ferruginous hawk to use the project area for foraging. In addition, although Cooper’s hawk was not observed during the site survey, the species is relatively common in the region and suitable foraging habitat is present in the project area. Furthermore, although not observed on-site, white-tailed kite and Swainson’s hawk foraging habitat exists in the project area.

Biological surveys conducted in the “Future Growth Area” determined that suitable habitat for burrowing owl is not present on the site. However, to address the possibility that suitable habitat, such as ground squirrel burrows, may develop prior to future groundbreaking activities, a biologist should inspect the “Future Growth Area” prior to groundbreaking.

### Liberty Ranch

While the intensive agricultural operations on-site contains marginal habitat for migratory birds, the on-site trees could support nesting migratory bird species. Willow thickets in the project area, primarily along Deadman Gulch, could provide nesting habitat for tricolored blackbird. The tricolored blackbird, a State-designated endangered species with emergency regulations, could be impacted by construction of the proposed project due to disturbance from noise which could disrupt nesting behavior. In addition, although not observed on-site, white-tailed kite foraging habitat exists in the project area. Furthermore, the project site could support great egret and great blue heron due to their common presence in the area as well as the existing eucalyptus trees on-site. Although large bodies of water are not present on the project site and neither species was observed during the site survey, great egret and great blue heron could potentially nest on-site.

Swainson’s hawk, a federal Species of Concern and State-listed threatened species, could forage on the project site. Four raptor nests were observed within the project area during a raptor survey completed in early 2014. A subsequent survey confirmed a nesting Swainson’s hawk pair in one of the nests. While determining which species made the nests was unclear, the potential for the on-site trees to provide nesting habitat for Swainson’s hawk exists.

The agricultural fields in the project area could provide suitable foraging habitat for ferruginous hawk when low growing crops are present. Although higher quality foraging

habitat is widely available in the grasslands to the east of the project site, the possibility exists for ferruginous hawk to use the project area for foraging. In addition, although Cooper's hawk was not observed during the site survey, the species is relatively common in the region and suitable nesting and foraging habitat is present in the project area. Furthermore, while the project site contains little habitat for nesting migratory birds, a remote potential exists for migratory birds to nest on-site.

Biological surveys conducted in the Liberty Ranch portion of the project site determined that suitable habitat for burrowing owl is not present on the site. However, to address the possibility that suitable habitat, such as ground squirrel burrows, may develop prior to groundbreaking activities, a biologist should inspect each phase of development prior to groundbreaking.

### Conclusion

Cooper's hawk, tricolored blackbird, great egret, great blue heron, burrowing owl, ferruginous hawk, Swainson's hawk, yellow warbler, white-tailed kite, merlin, black-crowned night heron, and yellow-headed blackbird have the potential to occur on the non-participating properties. In addition, ferruginous hawk, Cooper's hawk, white-tailed kite, Swainson's hawk, and burrowing owl have the potential to occur on the "Future Growth Area." Furthermore, the Liberty Ranch site contains suitable nesting or foraging habitat for tricolored blackbird, burrowing owl, great egret, great blue heron, white-tailed kite, Swainson's hawk, ferruginous hawk, and Cooper's hawk. Without surveys to determine whether or not the project site contain raptors, nesting birds, or other birds protected under the MBTA, the proposed project could have a *potentially significant* impact to raptors, migratory birds, their eggs, and/or young.

### Mitigation Measure(s)

Implementation of the following mitigation measures would reduce the proposed project's potential impact to raptors, nesting birds, or other birds protected under the MBTA to a *less-than-significant* level.

#### *Non-Participating Properties*

4.4-3(a) *In conjunction with submittal of an application for future development within the non-participating properties, the future project applicant shall retain a qualified biologist to conduct a preconstruction survey to determine if the following bird species, suitable nesting habitat, or suitable foraging habitat, are present: Cooper's hawk, tricolored blackbird, great egret, great blue heron, burrowing owl, ferruginous hawk, Swainson's hawk, yellow warbler, white-tailed kite, merlin, black-crowned night heron, and yellow-headed blackbird. The surveys shall be included in a Biological Report which shall be submitted to the City of Galt Community Development Department for review and approval. If the aforementioned bird species or their habitat are not found on-site during the surveys, then additional action would not be necessary. If any of the*

*above species or their habitat are found, then the biologist shall include specific mitigation measures in the Biological Report should the wildlife populations or their habitat be located on the non-participating properties. Mitigation measures may include relocation of species, non-disturbance buffers, construction monitoring, or preserving and enhancing existing populations. Any additional mitigation measures shall be completed in compliance with the MBTA and State regulation.*

#### *Future Growth Area*

- 4.4-3(b) *In conjunction with submittal of an application for future development within the “Future Growth Area,” the future project applicant shall retain a qualified biologist to conduct a preconstruction survey to determine if the following bird species, suitable nesting habitat, or suitable foraging habitat, are present: ferruginous hawk, Cooper’s hawk, white-tailed kite, Swainson’s hawk, and burrowing owl. The surveys shall be included in a Biological Report which shall be submitted to the City of Galt Community Development Department for review and approval. If the aforementioned bird species or their habitat are not found on-site during the surveys, then additional action would not be necessary. If any of the above species or their habitat are found, then the biologist shall include specific mitigation measures in the Biological Report should the wildlife populations or their habitat be located on the Future Growth Area.” Mitigation measures may include relocation of species, non-disturbance buffers, construction monitoring, or preserving and enhancing existing populations. Any additional mitigation measures shall be completed in compliance with the MBTA and State regulation.*

#### *Liberty Ranch*

- 4.4-3(c) *Prior to issuance of a grading permit for development, the project applicant shall retain a qualified biologist to conduct a pre-construction nesting bird survey on-site within 15 days prior to construction if construction associated with the project would commence between March 1<sup>st</sup> and September 1<sup>st</sup> (“the nesting season”). The survey shall focus on whether or not the following bird species or their nests are present on the Liberty Ranch site: great egret, great blue heron, white-tailed kite, ferruginous hawk, and Cooper’s hawk. If disturbance associated with the project would occur outside of the nesting season, surveys shall not be required. The written results of the pre-construction survey shall be submitted to the City of Galt Community Development Department for review. If migratory birds are identified as nesting on the project site, a non-disturbance buffer of 75-feet shall be established or as otherwise prescribed by a qualified ornithologist. The buffer shall be demarcated with painted orange lath or via the installation of orange construction fencing. Disturbance within the buffer shall be postponed until a qualified*

*ornithologist has determined that the young have attained sufficient flight skills to leave the area or that the nesting cycle has otherwise completed.*

*The project applicant, in consultation with CDFW, shall mitigate for loss of any raptor foraging habitat at a ratio of one acre of suitable foraging habitat for every one acre utilized by the project. Project proponents shall provide for the long-term endowment of compensatory mitigation lands by funding a management endowment (the interest on which shall be used for managing the mitigation lands) at a per acre rate (adjusted annually for inflation and varying interest rates). The project proponent shall submit a letter of approval from CDFW for the mitigation program to the City of Galt prior to the issuance of grading permits; or, the project applicant shall purchase conservation easements or fee title to suitable raptor foraging habitat to protect the habitat from urban development; or the project applicant shall purchase mitigation credits at an agency-approved mitigation bank.*

- 4.4-3(d) *For portions of the project where the onset of construction occurs between April 1 and August 31, the project applicant shall retain a qualified biologist to conduct preconstruction nesting surveys for tricolored blackbird colonies within the disturbance areas on the project site. The survey shall be conducted no more than 30 days from the onset of construction. If ground-disturbing activities are delayed or suspended for more than 30 days after the preconstruction survey, the site shall be re-surveyed. If the survey does not identify any colonies of nesting tricolor blackbirds on the project site, no further mitigation would be required.*

*Should any active tricolored blackbird colonies be found nesting on the project site, the project applicant, in consultation with the City of Galt and CDFW, shall avoid all active nest sites located in the project site during the breeding season while the nest site is occupied with adults and/or young. The avoidance could consist of delaying construction to avoid the nesting season or establishing a buffer around the nest site. If the construction cannot be delayed, avoidance shall include the establishment of a non-disturbance buffer zone around the nest site. The size of the buffer zone will be determined in consultation with the City and CDFW, and will be, at a minimum, 250 feet. The buffer zone shall be delineated by highly visible temporary construction fencing. Any occupied nest shall be monitored by a qualified biologist to determine when the nest is no longer used.*

- 4.4-3(e) *Prior to issuance of a grading permit for development, the project applicant shall retain a qualified biologist to conduct a pre-construction survey for Swainson's hawk and to identify active nests on and within 0.25-mile of the project area. The written results of the pre-construction survey shall be submitted to the City of Galt Community Development*

*Department for review. The surveys shall be conducted before the approval of grading and/or improvement plans (as applicable) and no less than 14 days and no more than 30 days before the beginning of construction. To the extent feasible, guidelines provided in Recommended Timing and Methodology for Swainson's Hawk Nesting Surveys in the Central Valley (Swainson's Hawk Technical Advisory Committee 2000) shall be followed for surveys for Swainson's hawk. If nests are not found, further mitigation is not required.*

*Should any active Swainson's hawk nests be located within 0.25-mile of the disturbance area, no intensive new disturbances (e.g. heavy equipment operation associated with construction, use of cranes or draglines, etc.) or other project-related activities that could cause nest abandonment or forced fledging, shall be initiated within the 0.25-mile (buffer zone) of an active nest between March 1 - September 15 (or until August 15 if a Management Authorization or Biological Opinion is obtained for the project). The buffer zone shall be increased to 0.5-mile in nesting areas away from urban development (i.e., in areas where disturbance [e.g., heavy equipment operation associated with construction, use of cranes or draglines, new rock crushing activities] is not a normal occurrence during the nesting season).*

*Nest trees shall not be removed to the extent feasible. If a nest tree must be removed, a Management Authorization (including conditions to off-set the loss of the nest tree) shall be obtained with the tree removal period specified in the Management Authorization, generally from October 1 to February 1. If construction or other project-related activities that could cause nest abandonment or forced fledging are necessary within the buffer zone, then the project applicant shall retain a qualified biologist to monitor the nest site (to determine if the nest is abandoned).*

*If an active nest is abandoned and if the nestlings are still alive, the project sponsor shall fund the recovery and hacking (controlled release of captive reared young) of the nestling(s). Routine disturbances such as agricultural activities, commuter traffic, and routine facility maintenance activities within 0.25-mile of an active nest shall not be prohibited.*

*The project proponent shall be responsible for offsetting the loss of any Swainson's hawk nesting trees. The extent of any necessary compensatory mitigation shall be determined by the project proponent in consultation with the CDFW. Past recommended mitigation for the loss of nesting trees has been at a ratio of three trees for each nest tree removed during the non-nesting season.*

4.4-3(f)

*Prior to issuance of a grading permit for development, the project applicant shall retain a qualified biologist to determine if suitable*

*burrowing owl habitat occurs within the project site. If suitable habitat is not located during the surveys, no further mitigation would be required.*

*If suitable habitat is present, the project applicant shall retain a qualified biologist to conduct both nesting and wintering season surveys for burrowing owl to determine if potential habitat within 500 feet of ground disturbance is used by the burrowing owl species. The timing and methodology for the surveys shall be based on the CDFW/Burrowing Owl Consortium Survey Guidelines and are detailed below. CDFW may require that these surveys be repeated annually if project construction is expected to span over two or more years.*

- *Winter Season (December 1 through January 31): Four site visits on separate days, two hours before to one hour after sunset or one hour before to two hours after sunrise.*
- *Nesting Season (February 1 to August 31): Four site visits on separate days, two hours before to one hour after sunset or one hour before to two hours after sunrise. At least two of the surveys shall be conducted during the peak nesting season between April 15 and July 15.*

*In addition to the wintering and nesting season surveys, pre-construction surveys shall be conducted by an experienced biologist within 30-days prior to the start of work activities where land conversions are planned in known or suitable habitat areas. If construction activities are delayed for more than 30 days after the preconstruction surveys, then a new preconstruction survey will be required. All surveys shall be conducted in accordance with the CDFW/Burrowing Owl Consortium survey protocols (Burrowing Owl Consortium, 2012).*

*If burrowing owls are discovered in the Liberty Ranch site, the project applicant shall notify the City and CDFW. A qualified biologist shall implement a routine monitoring program and establish a fenced exclusion zone around each occupied burrow. Construction activities shall not be allowed within the exclusion zone until such time that the burrows are determined to be unoccupied. The buffer zones shall be a minimum of 150 feet from an occupied burrow during the non-breeding season (September 1 through January 31), and a minimum of 250 feet from an occupied burrow during the breeding season (February 1 through August 31).*

*In addition, the project applicant shall provide appropriate mitigation for project related effects on burrowing owl in consultation with CDFW. Mitigation can be conducted either onsite, or at an off-site location that is approved by the CDFW. Preference is for onsite within open space areas, if possible.*

*The CDFW shall be consulted regarding the implementation of avoidance or passive relocation methods. All activities that will result in a disturbance to burrows shall be approved by CDFW prior to implementation.*

**4.4-4 Impacts related to any riparian habitat or other sensitive natural community identified in local or regional plans, policies, and regulations or by the CDFW or USFWS or federally protected wetlands as defined by Section 404 of the CWA (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means. Based on the analysis below and with implementation of mitigation, the impact is *less than significant*.**

Riparian habitats are described as the land and vegetation that is situated along the bank of a stream or river. Wetlands are areas where water covers the soil, or is present either at or near the surface of the soil all year or for varying periods of time during the year. Wetlands usually must possess hydrophytic vegetation (i.e., plants adapted to inundated or saturated conditions), wetland hydrology (e.g., topographic low areas, exposed water tables, stream channels), and hydric soils (i.e., soils that are periodically or permanently saturated, inundated or flooded). Vernal pools are seasonal depressional wetlands that are covered by shallow water for variable periods from winter to spring, but may be completely dry for most of the summer and fall. The vernal pool wetlands range in size from small puddles to shallow lakes and are usually found in a gently sloping plain of grassland.

Non-Participating Properties

The following special-status natural communities identified by the CNDDDB do not exist on the project site: coastal and valley freshwater marsh, great valley (mixed) riparian forest, great valley (valley oak) riparian forest, and valley oak woodland. As such, development of the project site would not impact riparian or the other aforementioned sensitive habitats.

A wetland delineation has not been conducted on the non-participating properties. An estimate of wetlands and Waters of the U.S., based on a review of aerial photography, indicates that approximately 0.98 acres are present (primarily a ditch along Twin Cities Road, a detention pond south of Liberty Ranch High School and Estrellita Continuation High School, and a man-made stock pond behind a residence). Because the project does not include development of the non-participating properties, the proposed project would not directly authorize any alterations to potential wetlands on the properties. Should future development projects result in an impact to wetlands and Waters of the U.S., then the activity may be considered potentially significant.

### Future Growth Area

As noted previously, the Biological Report indicates that special-status natural communities identified by the CNDDDB do not exist on the “Future Growth Area.” As such, future development of the site would not impact riparian or other sensitive habitats. During the reconnaissance-level field survey of the “Future Growth Area” on August 7, 2013 conducted by Cardno ENTRIX, riparian habitat was not observed on the project area.

As stated above, wetlands and other Waters of the U.S. were determined to be limited to Deadman Gulch and the associated irrigation canals. A wetland delineation has been conducted for the “Future Growth Area” and determined that Canal 11 is located on the “Future Growth Area.” The report has been verified by the USACE, and has documented a total of approximately 0.2905 acres of wetlands and other Waters of the U.S. in the “Future Growth Area.”

Because the project does not include development of the “Future Growth Area,” the proposed project would not directly authorize any alterations to potential wetlands on the properties. Should future development projects result in an impact to wetlands and Waters of the U.S., then the activity may be considered potentially significant.

### Liberty Ranch

As noted previously, the Biological Report indicates that the following special-status natural communities identified by the CNDDDB do not exist on the project site: coastal and valley freshwater marsh, great valley (mixed) riparian forest, great valley (valley oak) riparian forest, northern hardpan vernal pool, and valley oak woodland. As such, development of the project site would not impact riparian or the other aforementioned sensitive habitats.

During the reconnaissance-level field survey of the Liberty Ranch site on August 7, 2013 conducted by Cardno ENTRIX, riparian habitat was not observed on the project area. As stated above, wetlands and other Waters of the U.S. were determined to be limited to Deadman Gulch and the associated irrigation canals. A wetland delineation has been conducted for the Liberty Ranch site. The report has been verified by the USACE, and has documented a total of approximately 7.27 acres of wetlands and other Waters of the U.S. in the Liberty Ranch site. Approximately 4.5 acres of wetlands comprising Deadman Gulch would be realigned and enhanced with riparian plantings, natural stream contours, and an upland buffer. The other 2.77 acres of drainage canals located in areas designated for development would be filled due to grading or other activities related to development; however, the 2.77 acres will be included in the Deadman Gulch enhancement project.

To the extent feasible, impacts to wetlands would be avoided through project design. For example, the proposed land use designation for the Deadman Gulch corridor is Open Space. As such, the corridor would be preserved and enhanced through project implementation. However, for those waters that cannot be avoided or replaced on site,

mitigation for any wetlands lost would be required. Exact acreages would be determined through the CWA Sections 404 and 401 permitting process. A Lake and Streambed Alteration Agreement from CDFW would also be required for any work in Deadman Gulch, and possibly some of the irrigation canals. Nevertheless, the fill and relocation of approximately 7.27 acres of Waters of the U.S. with the Liberty Ranch site would be considered potentially significant.

### Conclusion

In summary, federally protected wetlands may be located on the non-participating properties as well as Deadman Gulch and the associated irrigation canals. In addition, without the proper permits for the Liberty Ranch portion of the project, implementation of the proposed project would have a *potentially significant* impact to seasonal wetlands or vernal pools located on the project site.

### Mitigation Measure(s)

Implementation of the following mitigation measures would reduce the above impact to a *less-than-significant* level.

#### *Non-Participating Properties*

4.4-4(a) *In conjunction with submittal of an application for future development within the non-participating properties, the future project applicant shall retain a qualified biologist to conduct a preconstruction survey to determine the presence of any sensitive natural communities, wetlands, or Waters of the U.S. on the non-participating properties. The written results of the pre-construction survey shall be submitted to the City Community Development Department for review. If the aforementioned communities or waters are determined to be absent from the non-participating properties, then additional action would not be necessary. If any of the above communities or waters are found, then the biologist shall include specific mitigation measures in the Biological Report should the habitat be located on the non-participating properties. Mitigation measures may include non-disturbance buffers, construction monitoring, preserving and enhancing existing waters or sensitive communities, or obtaining the proper CWA certification.*

#### *Future Growth Area*

4.4-4(b) *If future development of the “Future Growth Area” would occur before the Jurisdictional Delineation Report has expired, the future project applicant shall implement Mitigation Measures 4.4-4(e) and 4.4-4(f).*

*If the determination is made that jurisdictional waters occur in the project vicinity and would not be impacted by the future project, no further mitigation is required.*

*If the determination is made that jurisdictional waters occur in the project vicinity and could be impacted by the future project, prior to the issuance of grading permits, a Section 404 permit for fill of jurisdictional wetlands shall be acquired, and mitigation for impacts to jurisdictional waters that cannot be avoided shall conform with the USACE “no-net-loss” policy and the USACE Regulatory Guidance Letter No. 02-2 establishing policies and guidance on appropriate mitigation for impacts to jurisdictional waters. Mitigation for impacts to both federal and State jurisdictional waters shall be addressed using these guidelines.*

- 4.4-4(c) *If future development of the “Future Growth Area” would occur after the Jurisdictional Delineation Report has expired, the future project applicant shall retain a qualified biologist to update the Jurisdictional Delineation Report to confirm the presence of wetlands or Waters of the U.S. on the “Future Growth Area.” The written results of the Jurisdictional Delineation Report shall be submitted to the City Community Development Department for review. In addition, the Jurisdictional Delineation Report shall be verified by the USACE and submitted to the City Community Development Department for review.*

*If the determination is made that jurisdictional waters occur in the project vicinity and would not be impacted by the future project, no further mitigation is required.*

*If the determination is made that jurisdictional waters occur in the project vicinity and could be impacted by the future project, prior to the issuance of grading permits, a Section 404 permit for fill of jurisdictional wetlands shall be acquired, and mitigation for impacts to jurisdictional waters that cannot be avoided shall conform with the USACE “no-net-loss” policy and the USACE Regulatory Guidance Letter No. 02-2 establishing policies and guidance on appropriate mitigation for impacts to jurisdictional waters. Mitigation for impacts to both federal and State jurisdictional waters shall be addressed using these guidelines. In addition, the project applicant shall implement Mitigation Measures 4.4-4(e) and 4.4-4(f).*

#### *Liberty Ranch*

- 4.4-4(d) *Prior to issuance of grading permits, the project applicant shall provide proof to the Galt Community Development Department and City Engineer that all necessary authorizations from the USACE and RWQCB for the discharge of dredged or fill material into the waters of the U.S. identified on the project site have been obtained. The applicant shall comply with all conditions of the authorizations.*

- 4.4-4(e) *Prior to any work affecting the bed or bank of Deadman Gulch, the*

*project applicant shall obtain a Lake or Streambed Alteration (LSA) Agreement from the CDFW, as required under Section 1602 of the Fish and Game Code. The LSA Agreement shall detail the authorized activities affecting Deadman Gulch, and provide specific terms and conditions necessary to protect fish and wildlife resources in the project site. the applicant shall comply with all requirements of the LSA Agreement, including any compensatory mitigation such as replacement of any impacted trees. A copy of the fully executed LSA Agreement shall be submitted to the Galt Community Development Department as well as the City Engineer, prior to initiation of any work impacting Deadman Gulch.*

4.4-4(f) *Prior to any groundbreaking activities affecting waters of the U.S., the applicant shall provide a USACE-approved compensatory mitigation plan for impacts to waters of the U.S. The plan shall provide for replacement of waters of the U.S. at a 1:1 ratio, or higher ratio if required by the USACE. The plan shall quantify the acreage of waters lost, describe the methods for replacement of impacted waters on site, and provide a monitoring plan, including a reporting schedule and success criteria. In addition, the project applicant shall provide a plan for the long-term management and maintenance of the Deadman Gulch corridor, including a funding source to ensure that the restored waters of the U.S. are adequately maintained. In the event the USACE determines that the compensatory mitigation for impacts to waters of the U.S. cannot be fully accomplished on site, the project applicant may purchase credits at a USACE-approved mitigation bank whose service area includes the project site. The type and amount of mitigation credits to be purchased shall be coordinated with the USACE. Proof of the purchase of any required mitigation bank credits shall be provided to the Galt Community Development Department as well as the City Engineer prior to initiation of any work impacting the waters of the U.S. on the project site.*

**4.4-5 Movement of native, resident, or migratory fish or wildlife species or established native resident or migratory wildlife corridors. Based on the analysis below, the impact is less than significant.**

Deadman Gulch and other canals traverse the Liberty Ranch portion of the project site. In addition, a ditch along Twin Cities Road, a detention pond south of Liberty Ranch High School and Estrellita Continuation High School, a man-made stock pond behind a residence, and a canal located south of the rail road track contain potential aquatic habitat. The aforementioned canals provide movement corridors for common and special-status species as described above. The habitats include freshwater marsh and open water. In addition, the areas could provide habitat for other wildlife species, such as ducks, egrets, and other waterfowl. The riparian habitat along Deadman Gulch and other canals provide important shelter, nesting and foraging habitat for both common and special-status wildlife species in the region.

The proposed project could impede the movement of wildlife through the creation of urbanized landscapes that act as barriers. While the proposed project design includes a series of open space corridors that follow Deadman Gulch and other canals to retain wildlife movement corridors through the site and retain connectivity with adjacent and regional areas of wildlife habitat, the construction of new bridges across Deadman Gulch and the installation of culverts along the gulch could result in additional barriers to wildlife movement through the corridors. The barriers could force common and special-status wildlife species to cross roadways or move through urban areas to cross from one area of natural habitat to another. However, the installation of bridges and culverts along Deadman Gulch has been designed to allow the movement of wildlife throughout the site.

The existing box culverts under Marengo Road would remain; however, the drop structure would be replaced 10 feet upstream of the crossing. The continuation of Walnut Avenue to the east within the proposed project site would require a culvert crossing of two box culverts each seven-by-six feet. The crossings would consist of four seven-by-seven-foot box culverts. Two additional arterial road crossings are proposed in the upstream half of the channel within the project site in order to connect the north and south neighborhoods of the proposed project. The downstream arterial crossing would consist of two six-by-seven-foot box culverts and the upstream arterial crossing would consist of three seven-by-seven-foot box culverts. The Cherokee Lane crossing would be improved to four twelve-by-four-foot box culverts in order to fit under the existing road elevation and improve the downstream conditions. Therefore, the culverts would be of ample size to allow animals to cross the Gulch, and a *less-than-significant* impact related to the movement of wildlife would occur.

Mitigation Measure(s)

*None required.*

**4.4-6 Conflicts with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance. Based on the analysis below and with implementation of mitigation, the impact is *less than significant*.**

As noted previously, the Galt Municipal Code contains provisions regarding the cutting and removal of oak trees. According to Section 18.52.060 of the Galt Municipal Code, protected oak trees include, but are not limited to, any of the following: valley oak (*Quercus lobata*), interior live oak (*Quercus wislizenii*), blue oak (*Quercus douglasii*) or oracle oak (*Quercus morehus*) having at least one trunk of six inch diameter measured four feet above the ground, or multi-trunks with an aggregate diameter of eight inches or more, measured four feet above ground.

Non-Participating Properties

As discussed previously, focused surveys have not been done for the non-participating properties. Various trees are located on the non-participating properties, including in the vicinity of the rural residences along Marengo Road and Twin Cities Road. Development of the non-participating properties is not proposed at this time and, therefore, the project

would not result in the direct removal of on-site trees. However, future development may require the removal of on-site trees. Should any of the on-site trees covered by Section 18.52.060 of the Galt Municipal Code require cutting or removal, a tree removal permit would be required.

### Future Growth Area

As discussed previously, trees are not located on the “Future Growth Area.” Because the “Future Growth Area” does not contain any trees on site and the proposed project does not include development of the “Future Growth Area,” the proposed project would not directly conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance.

### Liberty Ranch

The majority of the trees in the Liberty Ranch site were rated as being in fair condition. Nineteen trees are recommended for removal due to severe dieback, trunk rot, disease, or being near or fully dead. The trees consist of five northern California black walnut (tree tag numbers 14, 15, 18, 45, and 47), two American elms (tree tag numbers 31 and 32), four Fremont cottonwood (tree tag numbers 4, 21, 112, and 113), one white mulberry (tree tag number 71), and one blue gum eucalyptus (tree tag number 106).

As noted previously, a total of four trees on the property qualify for protection under the City of Galt’s Municipal Code, having a dbh of six or more inches and being one of the four species listed for protection. All four trees were California valley oaks (*Quercus lobata*) and are identified by tree tag numbers 64, 70, 76, and 77. The remaining 124 trees on the property are not considered protected due to either 1) insufficient dbh or 2) not one of the listed species for protection. It should be noted that some of the protected on-site trees may be preserved due to the proposed land use designations. For example, some of the trees are located along Deadman Gulch, which is designated as Open Space per the proposed General Plan land uses. However, the proposed project includes site work in and around Deadman Gulch, which could potentially impact the protected trees. It should be further noted that the project would provide landscaping throughout the project site, which would include the planting of numerous trees onsite.

### Conclusion

Various trees exist on the non-participating properties and the Liberty Ranch site, some of which are protected by the Galt Municipal Code. As a result, without the proper tree removal permits, the proposed project may conflict with Section 18.52.060 of the Galt Municipal Code, and a *potentially significant* impact would occur.

### Mitigation Measure(s)

Implementation of the following mitigation measures would reduce the above impact to a *less-than-significant* level.

### *Non-Participating Properties*

4.4-6(a) *In conjunction with submittal of an application for future development within the non-participating properties, the future project applicant shall retain a qualified arborist to conduct a preconstruction arborist survey to determine the number and conditions of the trees located on the non-participating properties. The written results of the pre-construction arborist survey shall be submitted to the City of Galt Community Development Department for review. If feasible, avoidance measures shall be implemented through project design. If trees protected by Section 18.52.060 of the Galt Municipal Code are identified on the project site, then the project applicant shall, to the extent feasible, design the project to retain protected trees after development is complete. If trees protected by Section 18.52.060 of the Galt Municipal Code are identified on the project site and would be cut or removed by the project, the project applicant shall apply for a tree removal permit for the protected trees, subject to approval by the City's Community Development Department.*

### *Liberty Ranch*

4.4-6(b) *Prior to issuance of a grading permit for development, the project applicant shall replace protected trees to be removed as a result of the proposed project in compliance with Chapter 18.52 of the City of Galt Municipal Code. The replacement trees shall consist of specimen trees (no less than a fifteen-gallon size) having a total combined diameter equal to the total combined diameter of the removed tree(s). If the project site is not capable of supporting all the required replacement trees, the project proponent shall pay to the City of Galt a sum equivalent to the retail cost of the number of trees that cannot be accommodated which shall not be less than \$75.00 per inch dbh of the trees removed. The funds shall be deposited in the tree preservation fund maintained by the City Finance Department as set forth in section 18.52.060.*

4.4-6(c) *Prior to issuance of a grading permit for development, the project applicant shall apply for a tree removal permit for the four California valley oaks (tree tag numbers 64, 70, 76, and 77), subject to approval by the City's Community Development Department.*

**4.4-7 Conflict with an adopted HCP, NCCP, or other approved local, regional, or state habitat conservation plan. Based on the analysis below, the project would have *no impact*.**

The project site is located in an area that does not have an approved HCP, NCCP, or local, regional, or state habitat conservation plan. As noted previously, the project site is located within the proposed SSHCP which is not yet an adopted Plan. A Notice of Intent

was published by the U.S. Fish & Wildlife Service on November 4, 2013. As such, ***no impact*** related to said Plans would occur.

Mitigation Measure(s)

*None required.*

### **Cumulative Impacts and Mitigation Measures**

The following discussion of impacts is based on the implementation of the proposed project in combination with other proposed and pending projects in the region. Other proposed and pending projects in the region under the cumulative context would include buildout of the City's General Plan, as well as development of the most recent planned land uses within the vicinity of the project area.

#### **4.4-8 Cumulative loss of biological resources in the City of Galt and the effects of ongoing urbanization in the region. Based on the analysis below and with implementation of mitigation, the impact is *less than significant*.**

As defined in Section 15355 of the State CEQA Guidelines, "cumulative impacts" refer to two or more individual effects which, when considered together, are considerable or which compound or increase other environmental impacts. 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). An assessment of cumulative impacts should consider impacts identified as significant, as well as impacts identified as less-than-significant for individual projects that may become significant in a collective sense when considering the co-occurrence of multiple projects.

The City of Galt, like other cities and communities in the region, is experiencing urban growth. Cumulatively, the most recently planned projects would reduce common and special-status plant and wildlife habitats within the City. The Galt General Plan EIR concluded that impacts to endangered, threatened, candidate, sensitive, or special-status species would be significant and unavoidable after implementation of General Plan Policies COS-2.8 and COS-2.9. The proposed project site was included as part of the Galt General Plan Area. Due to the size of the project site and the potential for endangered and threatened species to exist in the project site, without mitigation, the project's incremental contribution to the cumulative biological impact related to increasing urbanization would be ***potentially significant***.

Mitigation Measure(s)

Implementation of the following mitigation measure would reduce the above impact to a *less-than-significant* level.

- 4.4-8            *Implement Mitigation Measures 4.4-1, 4.4-2(a) through 4.4-2(d), 4.4-3(a) through 4.4-3(f), 4.4-4(a) through 4.4-4(f), and 4.4-6(a) through 4.4-6(c).*

## Endnotes

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- <sup>1</sup> Cardno ENTRIX. *Biological Resources Impact and Mitigation Report*. October 16, 2014.
- <sup>2</sup> Barnett Environmental. *Eastview Specific Plan (ESP), Galt California – Review of Cardno/Entrix’s Biological Resources Impact & Mitigation Report and Appendices*. November 11, 2014.
- <sup>3</sup> California Department of Fish and Wildlife. *California Natural Diversity Database (CNDDB) RareFind 5. Commercial Version, Version 3.0.5*, November 2013.
- <sup>4</sup> U.S. Fish and Wildlife Service. Available at: [http://www.fws.gov/sacramento/es/spp\\_list.htm](http://www.fws.gov/sacramento/es/spp_list.htm). Accessed on: December 17, 2014.
- <sup>5</sup> City of Galt. *2030 Galt General Plan Policy Document, Final*. April 2009.
- <sup>6</sup> Sacramento County. *Assessor’s Parcel Viewer Application*. 2015. Available at: <http://assessorparcelviewer.saccounty.net/jsviewer/assessor.html>. Accessed February 10, 2015.
- <sup>7</sup> Cardno ENTRIX. *Personal communication with Eric Hansen, GGS biologist*. August 9, 2013.
- <sup>8</sup> California Department of Fish and Wildlife. *Species of Special Concern*. Available at: <http://www.dfg.ca.gov/wildlife/nongame/ssc/>.
- <sup>9</sup> California Department of Fish and Wildlife. *A Petition to the State of California Fish and Game Commission*. Submitted October 8, 2014. Available at: <http://www.fgc.ca.gov/CESA/tcbpet.pdf>.
- <sup>10</sup> LA Times. *Tricolored blackbird gains endangered species protection in California*. December 4, 2014. Available at: <http://www.latimes.com/science/la-me-1204-blackbirds-20141204-story.html>.
- <sup>11</sup> USACE. *Recognizing Wetlands – An Informational Pamphlet*. Available at: [http://www.usace.army.mil/Portals/2/docs/civilworks/regulatory/rw\\_bro.pdf](http://www.usace.army.mil/Portals/2/docs/civilworks/regulatory/rw_bro.pdf).
- <sup>12</sup> Gibson & Skordal, LLC. *Jurisdictional Delineation, Liberty Ranch*. May 2014.