

## 4.5 BIOLOGICAL RESOURCES

Common and sensitive biological resources known or with potential to occur in the project area are discussed in this section, along with potential impacts to these resources that could result from implementation of the project. The biological evaluation is based on data collected during reconnaissance-level field surveys, supplemented by reviews of aerial photographs and information from studies and analyses previously completed by Kleinfelder, Inc. (2005). A reconnaissance-level field survey was conducted by an EDAW botanist and wildlife biologist on January 10, 2007 to characterize common biological resources present on the project site and document areas that could support special-status species and sensitive habitats, as well as verify results of the report prepared by Kleinfelder, Inc.

### 4.5.1 ENVIRONMENTAL SETTING

At the time of the EDAW survey, the approximately 16-acre project site was a fallow agricultural field that had been recently used for cultivation of watermelons (*Citrullus colocynthus*). Site topography is mostly level with the exception of some mounded dirt used to cover underground utility lines and a slight grade change on the southeastern end of the site. Surrounding land uses are residential and commercial.

#### COMMON BIOLOGICAL RESOURCES

##### Vegetation

Vegetation on the site during the survey was characterized by ruderal (weedy) species with watermelons interspersed throughout. Dominant plant species observed include short-podded mustard (*Hirschfeldia incana*), common fiddleneck (*Amsinckia menziesii* var. *intermedia*), filaree (*Erodium* spp.), yellow star thistle (*Centaurea solstitialis*), tumbleweed (*Salsola tragus*), and dead-nettle (*Lamium amplexicaule*).

##### Wildlife

The overall wildlife habitat value of the project area is limited by the lack of habitat diversity, which supports a relatively low diversity of wildlife species. However, agricultural fields can be heavily utilized by some species. Wildlife species observed on the project site included black-tailed jackrabbit (*Lepus californicus*), western meadowlark (*Sturnella neglecta*), ring-billed gull (*Larus delawarensis*), killdeer (*Charadrius montanus*), American pipit (*Anthus rubescens*), lesser goldfinch (*Carduelis psaltria*), and mourning dove (*Zenaida macroura*). In addition, these fields are expected to support common mammals such as Botta's pocket gopher (*Thomomys bottae*), western harvest mouse (*Reithrodontomys megalotis*), and California meadow vole (*Microtus californicus*). These small mammals are prey for a variety of raptor species likely to occur in the vicinity, including American kestrel (*Falco sparverius*), Swainson's hawk (*Buteo swainsoni*), and red-tailed hawk (*Buteo jamaicensis*). A variety of other birds are expected to forage on the project site, including western kingbird (*Tyrannus verticalis*), barn swallow (*Hirundo rustica*), European starling (*Sturnus vulgaris*), western meadowlark, and Brewer's blackbird (*Euphagus cyanocephalus*).

#### SENSITIVE BIOLOGICAL RESOURCES

Sensitive biological resources include special-status species and sensitive natural habitats identified by the California Department of Fish and Game (DFG), California Native Plant Society (CNPS), and U.S. Fish and Wildlife Service (USFWS). Sensitive biological resources for this project also include those afforded protection under the San Joaquin County Multi-species Habitat Conservation and Open Space Plan (SJMSCP).

## Special-Status Species

Special-status species include plants and animals in the following categories:

- ▶ species listed or proposed for listing as threatened or endangered under the federal Endangered Species Act (ESA) or the California Endangered Species Act (CESA);
- ▶ species considered candidates for listing as threatened or endangered under ESA or CESA;
- ▶ wildlife species identified by DFG as California Species of Special Concern;
- ▶ animals fully protected in California under the California Fish and Game Code;
- ▶ plants listed as Endangered or Rare under the California Native Plant Protection Act;
- ▶ plants on CNPS Lists 1A, 1B, or 2; and
- ▶ plants and animals covered under the SJMSCP.

Plant inventories prepared by the CNPS provide one source of substantial evidence used by lead agencies to determine what plants meet the definition of endangered, rare, or threatened species, as described in Section 15380 of the State CEQA Guidelines. For purposes of this document, the relevant inventories include List 1A (plants presumed extinct in California), List 1B (plants that are rare, threatened, or endangered in California and elsewhere), and List 2 (plants that are rare, threatened, or endangered in California but more common elsewhere).

Recent and historical reports of special-status species occurrences in the vicinity of the project site were identified through a search of the DFG's California Natural Diversity Database (CNDDDB 2006) and the CNPS Inventory of Rare and Endangered Plants of California (CNPS 2006). Database searches were conducted for the Manteca and Lathrop 7.5-minute U.S. Geological Survey quadrangles. The CNDDDB is a statewide inventory managed by DFG, which is continually updated with the locations and condition of the state's rare and declining species and habitats. Although the CNDDDB is a reliable tool for site-specific information on sensitive biological resources, it should be noted that it contains only those records that have been submitted to DFG and is not always current or comprehensive.

Tables 4.5-1 and 4.5-2 provide complete lists of special-status plants and animals with potential to occur on the project site. These lists were based on results of database searches, review of biological studies previously conducted in the Manteca area and vicinity, and observations made during field surveys conducted for this project.

### Special-Status Plant Species

A total of five special-status plant species were identified in the CNDDDB and CNPS searches for the project vicinity (Table 4.5-1). All of these species, with the exception of slough thistle, are confined to wetland or riparian habitats not found on the project site. Slough thistle can occur in chenopod scrub habitats, but these habitat types are also absent from the project site. Therefore, none of the special-status plant species known from the project vicinity have potential to occur on the project site.

**Table 4.5-1  
Special-status Plant Species with Potential to Occur on the Stadium Center Phase III Project Site**

Common Name	Scientific Name	Status	Habitat	Potential for Occurrence
Suisun marsh aster	<i>Aster lentus</i>	CNPS: 1B SJMSCP: covered	Brackish and freshwater marshes and swamps	None; there is no suitable habitat present on the project site.
Slough thistle	<i>Cirsium crassicaule</i>	CNPS: 1B SJMSCP: covered	Chenopod scrub, marshes and swamps, riparian scrub, sloughs, and riverbanks	None; there is no suitable habitat present on the project site.
Delta button-celery	<i>Eryngium recemosum</i>	CNPS: 1B CA: Endangered SJMSCP: covered	Vernally mesic clay depressions in riparian scrub	None; there is no suitable habitat present on the project site.
Sanford's arrowhead	<i>Sagittaria sanfordii</i>	CNPS: 1B SJMSCP: covered	Freshwater ponds, marshes and ditches	None; there is no suitable habitat present on the project site.
Wright's trichocoronis	<i>Trichocoronis wrightii</i> var. <i>wrightii</i>	CNPS: 2 SJMSCP: covered	Marshes and swamps, meadows and seeps, riparian forest, and vernal pools, often in alkaline areas	None; there is no suitable habitat present on the project site.

California Native Plant Society (CNPS) Listing Categories:

1B Plants considered rare, threatened, or endangered in California and elsewhere

2 Plants considered rare, threatened, or endangered in California but more common elsewhere

Sources: CNPS 2006, California Natural Diversity Database 2006, Hickman 1993, Kleinfelder, Inc. 2005

### Special-Status Wildlife Species

A total of 10 special-status wildlife species were determined to have potential to occur in the project vicinity (Table 4.5-2). Many of these species, such as riparian brush rabbit (*Sylvilagus bachmani riparius*), tricolored blackbird (*Agelaius tricolor*), California tiger salamander (*Ambystoma californiense*), western spadefoot (*Spea hammondi*), and Valley elderberry longhorn beetle (*Desmocerus californicus dimorphus*) are included in Table 4.5-2 but are not evaluated further in this section because there is no suitable habitat for them on or adjacent to the project site. These species are restricted to habitats that are not present in the project area, such as vernal pools, marshes, and riparian forests. Species for which habitat is present and that could potentially occur on the project site are discussed further below.

Swainson's hawk is state listed as threatened, and the remaining species in Table 4.5-2 are California Species of Special Concern. Swainson's hawk, burrowing owl, white-tailed kite, and northern harrier are special-status raptor species that could occur in the project vicinity. Fallow agricultural fields on the project site provide suitable foraging habitat for all of these raptors, and the nearest CNDDDB occurrence of a Swainson's hawk nest is only 1 mile northwest of the project site (CNDDDB 2006). Swainson's hawks and white-tailed kites typically nest in riparian habitat or scattered trees adjacent to foraging habitat. A group of trees are located approximately 100 feet south of the project site's southern boundary, south of the State Route (SR) 120 westbound off-ramp and north of State Route 120 (see Exhibit 3-2 in Chapter 3, "Project Description"). These trees provide suitable nest sites for both of these species.

**Table 4.5-2  
Special-status Wildlife Species with Potential to Occur on the Stadium Center Phase III Project Site**

Common Name	Scientific Name	Status	Habitat	Potential for Occurrence
<b>Invertebrates</b>				
Valley elderberry longhorn beetle	<i>Desmocerus californicus dimorphus</i>	Fed: Threatened SJMSCP: covered	Elderberry shrubs, typically in riparian habitats	None; there are no elderberry shrubs present on the project site
<b>Amphibians</b>				
California tiger salamander	<i>Ambystoma californiense</i>	Fed: Threatened CA: Species of Special Concern SJMSCP: covered	Vernal pools and seasonal wetlands in upland with burrows and other below-ground refuge	None; there is no suitable habitat present on the project site
Western spadefoot	<i>Spea hammondi</i>	CA: Species of Special Concern SJMSCP: covered	Vernal pools in upland with burrows and other below-ground refuge	None; there is no suitable habitat present on the project site
<b>Birds</b>				
Tricolored blackbird	<i>Agelaius tricolor</i>	CA: Species of Special Concern SJMSCP: covered	Forage in grasslands and agricultural fields; nest in freshwater marsh, riparian scrub, and other dense shrubs and herbs	Unlikely; there is no suitable nesting habitat present on or in the vicinity of the project site
Burrowing owl	<i>Athene cunicularia</i>	CA: Species of Special Concern SJMSCP: covered	Grasslands and agricultural fields	Could occur; suitable foraging and nesting habitat present
Swainson's hawk	<i>Buteo swainsoni</i>	CA: Threatened SJMSCP: covered	Forage in grasslands and agricultural fields; nest in open woodland or scattered trees	Likely to occur; suitable foraging habitat present onsite and known nest sites nearby
Northern harrier	<i>Circus cyaneus</i>	CA: Species of Special Concern SJMSCP: covered	Forage and nest in grassland, agricultural fields, and marshes	Could occur; suitable foraging and nesting habitat present onsite
White-tailed kite	<i>Elanus leucurus</i>	CA: Fully Protected SJMSCP: covered	Forage in grasslands and agricultural fields; nest in isolated trees or small woodland patches	Likely to occur; suitable foraging habitat present onsite and known nest sites nearby
Loggerhead shrike	<i>Lanius ludovicianus</i>	CA: Species of Special Concern SJMSCP: covered	Forage in grasslands and agricultural fields; nest in scattered shrubs and trees	Likely to occur; suitable foraging habitat present onsite and known nest sites nearby
<b>Mammals</b>				
Riparian brush rabbit	<i>Sylvilagus bachmani riparius</i>	Fed: Endangered CA: Endangered SJMSCP: covered	Forage in dense, brushy areas of Valley riparian forest	None; there is no suitable habitat present on the project site

SJMSCP = San Joaquin Multi Species Habitat Conservation Plan  
Sources: CNDDDB 2006, Kleinfelder, Inc. 2005

In contrast to the tree-nesting raptors, harriers nest on the ground in dense, low-lying vegetation (e.g., grassland, marsh, and field crops). Fallow agricultural fields on the project site could provide suitable nesting habitat for northern harriers if ruderal vegetation is allowed to grow tall enough. Burrowing owls nest and roost in burrow systems created by medium-sized mammals (e.g., ground squirrels), artificial sites (e.g., drain pipes and culverts), or self-dug burrows where soil conditions are appropriate. The nearest documented burrowing occurrence is approximately 1 mile northwest of the project site (CNDDDB 2006). No burrowing owls or signs of active burrowing owl burrows were observed during either the EDAW or Kleinfelder surveys, but a number of potentially suitable burrows were present when the EDAW survey was conducted. Therefore, burrowing owls could occupy the site in the future.

Loggerhead shrikes inhabit lowland and foothill areas with scattered shrubs and trees. They nest in shrubs and small trees and typically forage in grasslands and agricultural fields. Suitable foraging habitat is present throughout the project site, and trees adjacent to the site provide suitable nesting habitat.

### **Sensitive Habitats**

Sensitive habitat types include those that are of special concern to DFG, or that are afforded specific consideration through CEQA, Section 1602 of the California Fish and Game Code, and/or Section 404 of the Clean Water Act (CWA). There are no wetland habitats, riparian communities, or any other sensitive natural communities on or adjacent to the project site. A preliminary wetland survey (Kleinfelder, Inc. 2005) determined that the site contains no obvious surface hydrology or apparent water source and that the majority of plant species present are upland species that are not indicative of wetland habitats. These results were verified by EDAW biologists during the January 2007 survey.

## **4.5.2 REGULATORY SETTING**

Biological resources in California are protected and/or regulated by a variety of federal and state laws and policies. In addition, in many parts of California there are local or regional habitat and species conservation planning efforts in which a project applicant may participate. Key regulatory and conservation planning issues applicable to the proposed project are discussed below.

### **FEDERAL PLANS, POLICIES, REGULATIONS, AND LAWS**

#### **FEDERAL ENDANGERED SPECIES ACT**

The USFWS and the National Oceanic and Atmospheric Administration (NOAA) Fisheries have authority over projects that may result in take of a species listed as threatened or endangered under the federal ESA. Under the ESA, the definition of “take” is to “harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct.” USFWS has also interpreted the definition of “harm” to include significant habitat modification that could result in take. If a project has a likelihood that it would result in take of a federally listed species, either an incidental take permit, under Section 10(a) of the ESA, or a federal interagency consultation, under Section 7 of the ESA, is required before the take may occur. Such a permit typically requires various types of mitigation to compensate for or to minimize the take.

### **STATE PLANS, POLICIES, REGULATIONS, AND LAWS**

#### **CALIFORNIA ENDANGERED SPECIES ACT**

Pursuant to the CESA and Section 2081 of the California Fish and Game Code, a permit from DFG is required for projects that could result in the take of a state-listed threatened or endangered species (i.e., species listed under CESA). Under CESA, “take” is defined as an activity that would directly or indirectly kill an individual of a

species, but the definition does not include “harm” or “harass,” as the ESA does. As a result, the threshold for take under the CESA is typically higher than that under the ESA.

### **CALIFORNIA FISH AND GAME CODE SECTIONS 3503 AND 3503.5**

Section 3503 of the California Fish and Game Code states that it is unlawful to take, possess, or needlessly destroy the nest or eggs of any bird. Section 3503.5 specifically states that it is unlawful to take, possess, or destroy any raptors (i.e., species in the orders Falconiformes and Strigiformes), including their nests or eggs. Typical violations of these codes include destruction of active nests resulting from removal of vegetation in which the nests are located. Violation of Section 3503.5 could also include failure of active raptor nests resulting from disturbance of nesting pairs by nearby project construction. This statute does not provide for the issuance of any type of incidental take permit.

### **REGIONAL AND LOCAL PLANS, POLICIES, REGULATIONS, AND ORDINANCES**

#### **SAN JOAQUIN COUNTY MULTI-SPECIES HABITAT CONSERVATION AND OPEN SPACE PLAN**

The SJMSCP provides a strategy for balancing the desires to conserve open space, maintain the agricultural economy, and allow development in San Joaquin County. It was developed to avoid, minimize, and mitigate impacts on plant and wildlife habitat projected to occur in San Joaquin County between 2001 and 2051, resulting from the anticipated conversion of as much as 109,300 acres of open space land to non-open space uses (San Joaquin County 2000). Ninety-seven species are covered by the SJMSCP, which is intended to provide comprehensive mitigation, in accordance with local, state, and federal regulations, for impacts to these species resulting from SJMSCP-permitted activities. USFWS and DFG participated in development of the SJMSCP, approved the mitigation, and issued incidental take permits for species and activities covered by the SJMSCP. Therefore, participation in the SJMSCP confers authorization for activities that result in (or may result in) incidental take of covered state-listed or federally listed species, as well as other covered but non-listed sensitive species, that may otherwise require coordination with federal or state resource agencies.

The approach of the SJMSCP is to minimize the potential for take through implementation of take avoidance and minimization measures and compensation for incidental take and habitat conversion through payment of fees (or in-lieu land dedication) for conversion of open space lands. These fees are used to preserve and create natural habitats to be managed in perpetuity through the establishment of habitat preserves.

Participation in the SJMSCP is voluntary for local jurisdictions and project applicants. The City of Manteca (City) adopted the SJMSCP on February 5, 2001, and has signed the implementation agreement. As a result, a Section 10(a)(1)(B) permit was issued by USFWS to the City. A Section 2081 permit was also issued by DFG to the City. As a result of the City’s participation in the SJMSCP and issuance of these permits, project applicants within the City’s jurisdiction have the opportunity to seek coverage under the SJMSCP.

#### **CITY OF MANTECA GENERAL PLAN**

The following biological resources policies, identified in the Resource Conservation Element of the City of Manteca General Plan, are relevant to this project:

- ▶ **Policy RC-P-31:** Minimize impact of new development on native vegetation and wildlife.
- ▶ **Policy RC-P-34:** Protect special-status species and other species that are sensitive to human activities.

### 4.5.3 ENVIRONMENTAL IMPACTS

#### ANALYSIS METHODOLOGY

Information obtained from biological studies previously conducted in the vicinity of the project site, field surveys conducted for this project, and reviews of aerial photographs, CNDDDB records, and CNPS database records were used to assess impacts on biological resources that could result from implementation of the proposed project.

#### THRESHOLDS OF SIGNIFICANCE

Thresholds for determining the significance of impacts on biological resources were based on Section 15065 and Appendix G of the State CEQA Guidelines. The proposed project would have a significant impact on biological resources if it would:

- ▶ have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by DFG or USFWS;
- ▶ have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in any local or regional plans, policies, or regulations, or by DFG or USFWS;
- ▶ have a substantial adverse effect on federally protected waters of the United States, including wetlands, as defined by Section 404 of the CWA (including but not limited to marshes, vernal pools, rivers, etc.) through direct removal, filling, hydrological interruption, or other means;
- ▶ interfere substantially with the movement of any native resident or migratory 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, natural community conservation plan, or other approved local, regional, or state habitat conservation plan; or
- ▶ substantially reduce the habitat of a fish and wildlife species, cause a fish or wildlife species to drop below self-sustaining levels, threaten to eliminate a plant or animal community, or reduce the number or restrict the range of an endangered, rare, or threatened species.

#### IMPACT ANALYSIS

The City general plan requires that the City minimize the impact of new development on native vegetation and wildlife, and protect special-status species and other species that are sensitive to human activities (policies RC-P-31 and RC-P-34). As described above, lists of special-status plants and animals with the potential to occur on the project site were developed based on database searches, a review of previously conducted biological studies, and field surveys. Mitigation measures are proposed below for potentially significant impacts. Therefore, the project would be consistent with the City's biological resources policies.

**IMPACT 4.5-1** **Biological Resources — Impacts to Special-Status Plants and Sensitive Habitats.** *Implementation of the project would not reduce populations of special-status plant species or adversely affect sensitive habitats as there are none on or adjacent to the project site. This would be a **less-than-significant** impact.*

There are no wetland habitats, riparian communities, or any other sensitive natural communities on or adjacent to the project site. Wetland surveys conducted on site by Kleinfelder, Inc. (2005) determined that the site contains no

obvious surface hydrology and that the majority of species present are upland species that are not indicative of wetland habitats. All of the special-status plant species, with the exception of slough thistle, are confined to habitats not found on the project site. Slough thistle can occur in chenopod scrub habitats, but these habitat types are also not present on the project site. Therefore, implementation of the project would not reduce populations of special-status plant species or adversely affect sensitive habitats as there are none on or adjacent to the project site. This would be a **less-than-significant** impact.

**IMPACT 4.5-2** **Biological Resources — Impacts to Special-Status Wildlife.** *Implementation of the project would result in conversion of approximately 16 acres of fallow agricultural field that could provide potential foraging habitat for special-status birds. Project implementation could also lead to the disturbance of bird nesting habitat in trees adjacent to the site, potentially resulting in the loss of active nests. This impact would be considered potentially significant.*

The project site provides potential foraging habitat for Swainson's hawk, burrowing owl, white-tailed kite, northern harrier, and loggerhead shrike. These special-status birds could potentially forage on the project site and nest on or adjacent to the site. No other special-status wildlife species have potential to occur on or adjacent to the project site because no suitable habitat for these other species is present. Approximately 16 acres of foraging habitat for special-status birds would be converted to developed land as a result of project implementation. Swainson's hawk nests have been recently documented approximately 1 mile northwest of the project area, and suitable nest trees for Swainson's hawk, white-tailed kite, and loggerhead shrike are present adjacent to the southwestern boundary of the project site. Other undeveloped areas could provide suitable nesting habitat for northern harrier and burrowing owl. Although no burrowing owls or active burrows were observed during the January 2007 survey, burrows present on the site could become occupied before project construction begins. Direct loss of active nests and nesting pairs near any construction activities could potentially result in nest abandonment and mortality of chicks and eggs. The loss of active special-status bird nests and conversion of potential Swainson's hawk foraging habitat near active nest sites would be **potentially significant** impacts.

**IMPACT 4.5-3** **Biological Resources — Impacts to Common Raptors.** *Implementation of the project could result in loss of active nests of common raptors (protected under California Fish and Game Code Section 3503.5) through the disturbance of nests and nesting pairs in nest trees adjacent to the project site. This is considered a potentially significant impact.*

Several common raptor species, including red-tailed hawk, red-shouldered hawk, and American kestrel, could nest in trees adjacent to and south of the project site. Suitable raptor nest trees are located within 150 feet of the southwest boundary of the project site. Raptors are protected under California Fish and Game Code Section 3503.5. Dust, noise, large construction vehicle movement, and general commotion associated with construction activities at the project site could disturb nearby nesting raptors. Direct loss of an active raptor nest could result from disturbance of nesting pairs in the vicinity of any construction activities, potentially resulting in nest abandonment and mortality of eggs or chicks. Loss of an active raptor nest would be considered a **potentially significant** impact.

**IMPACT 4.5-4** **Biological Resources — Impacts to Wildlife Movement.** *Implementation of the project would not substantially interfere with wildlife movement or impede the use of wildlife nursery sites. This would be a less-than-significant impact.*

The project site is surrounded by fallow agricultural land and urban development. It does not link any areas of open space that serve as important wildlife habitat and does not serve as a wildlife nursery site. Therefore, implementation of the project would not substantially interfere with wildlife movement or established migratory corridors, or impede the use of important nursery sites. This would be a **less-than-significant** impact.

**IMPACT 4.5-5 Biological Resources — Consistency with Local Plans, Policies, and Ordinances.** *Implementation of the project might conflict or be inconsistent with local policies and ordinances including the City of Manteca general plan. This would be a **potentially significant** impact.*

Policies contained in the City of Manteca general plan protect sensitive biological resources in the vicinity of the project site. Specifically, policy RC-P-34 states that the plan should protect special-status species and other species that are sensitive to human activities. Implementation of the project has the potential to adversely affect special-status species by reducing potential foraging habitat for special-status birds. Project implementation could also lead to disturbance of nesting habitat in trees adjacent to the site, potentially resulting in the loss of active nests. This would be a **potentially significant** impact.

**IMPACT 4.5-6 Biological Resources — Consistency with Adopted Habitat Conservation Plan, Natural Community Conservation Plan, or Other Approved Conservation Plan.** *Implementation of the project would not conflict with or be inconsistent with the above plans because the project applicant intends to participate in the San Joaquin Multi-Species Conservation Plan (SJMSCP). This is a **less-than-significant** impact.*

The project site is located within the SJMSCP area. The special-status bird species that could be affected by the proposed project (Swainson's hawk, white-tailed kite, northern harrier, burrowing owl, and loggerhead shrike) are covered by the SJMSCP. The City adopted the SJMSCP on February 5, 2001. The project applicant intends to participate in the SJMSCP and would work with the City to ensure that the project is consistent with the provisions outlined in the SJMSCP. This would be a **less-than-significant** impact.

#### **4.5.4 MITIGATION MEASURES**

No mitigation measures are required for the following less-than-significant impacts:

Impact 4.5-1 Impacts to Special-Status Plants and Sensitive Habitats.

Impact 4.5-4 Impacts to Wildlife Movement.

Impact 4.5-6 Consistency with Adopted Habitat Conservation Plan, Natural Community Conservation Plan, or Other Approved Conservation Plan.

The following mitigation measures are provided for potentially significant and significant impacts:

**Mitigation Measure 4.5-2: Impacts to Special-Status Wildlife.** The project applicant is committed to obtaining coverage under the SJMSCP to mitigate for project impacts and obtain incidental take authorization for SJMSCP-covered species under the City of Manteca's Section 10(a) and Section 2081 permits. Compensation for significant impacts on all SJMSCP-covered species would be accomplished through payment of development fees for conversion of open space lands that may provide habitat for these species. Development fees would be paid to the San Joaquin Council of Governments (SJCOG) in the amount specified by SJCOG, which administers the SJMSCP.

In addition, incidental take avoidance and minimization measures for species that could be significantly affected as a result of the project would be implemented, as determined by the SJCOG, and in accordance with requirements of the SJMSCP. Potentially suitable nesting habitat for Swainson's hawk, white-tailed kite, northern harrier, burrowing owl, and loggerhead shrike is currently present in the project area and could be affected by project implementation. During the SJMSCP application process, SJCOG will determine whether the project site supports suitable nesting habitat for these species. If SJCOG determines suitable habitat is present on or adjacent to the project site, the following SJMSCP incidental take avoidance and minimization measures for applicable special status birds shall be implemented:

- ▶ Swainson's Hawk: Project-related construction activities (such as equipment movement, truck movement, and equipment or materials deliveries to the project site) could require the trimming or removal of nearby trees. If any trees adjacent to the site with potential to support Swainson's hawk nests must be removed, the tree shall be removed only during the nonbreeding season between September 16 and February 28. If a nest tree adjacent to the site becomes occupied during construction activities, then a qualified biologist shall conduct a survey to determine if Swainson's hawks are nesting immediately adjacent to the site. The survey shall be conducted within one week prior to beginning of construction. If construction would occur during the nesting season (March 1 – September 15), then all construction activities shall remain a distance of two times the dripline of the tree, measured from the nest. A setback of this distance shall be established and maintained during the nesting season for the period encompassing nest building and continuing until fledglings leave the nest.
- ▶ Burrowing Owl: The presence of ground squirrels and squirrel burrows are attractive to burrowing owls. Burrowing owls may therefore be discouraged from entering or occupying construction areas by discouraging the presence of ground squirrels. To accomplish this, the project applicant should prevent ground squirrels from occupying the project site early in the planning process by employing one of the following practices:
  - The project applicant may plant new vegetation or retain existing vegetation entirely covering the site at a height of approximately 36" above the ground. Vegetation should be retained until construction begins. Vegetation will discourage both ground squirrel and owl use of the site.
  - Alternatively, because burrowing owls are not known or suspected on the project site and the project area is an unlikely occupation site for red-legged frogs, San Joaquin kit fox, or tiger salamanders:
    - The project applicant may disc or plow the entire project site to destroy any ground squirrel burrows. At the same time burrows are destroyed, ground squirrels should be removed through one of the approved methods described in Appendix A of the SJMSCP to prevent reoccupation of the project site. If these measures are not attempted or are attempted but fail, and burrowing owls are known to occupy the project site, then the following measures shall be implemented:
      - During the non-breeding season (September 1 through January 31) burrowing owls occupying the project site should be evicted from the project site by passive relocation as described in DFG's Staff Report on Burrowing Owls (1995)
      - During the breeding season (February 1 through August 31) occupied burrows shall not be disturbed and shall be provided with a 75 meter protective buffer until and unless the Technical Advisory Committee (TAC), with the concurrence of the Permitting Agencies' representatives on the TAC; or unless a qualified biologist approved by the Permitting Agencies verifies through non-invasive means that either: 1) the birds have not begun egg laying, or 2) juveniles from the occupied burrows are foraging independently and are capable of independent survival. Once the fledglings are capable of independent survival, the burrow can be destroyed.
- ▶ White-tailed Kite: Preconstruction surveys shall investigate all potential nesting trees within 150 feet of the project site (e.g., especially tree tops 15-59 feet above the ground in oak, willow, eucalyptus, cottonwood, or other deciduous trees), during the nesting season (February 15 to September 15) whenever white-tailed kites are noted on-site or within the vicinity of the project site during the nesting season. A setback of 100 feet from nesting areas shall be established and maintained during the nesting season for the period encompassing nest building and continuing until fledglings leave nests. This setback applies whenever construction or other ground-disturbing activities must begin during the nesting season in the presence of nests which are known to be occupied. Setbacks shall be marked by brightly colored temporary fencing.
- ▶ Northern harrier: A setback of 500 feet from nesting areas shall be established and maintained during the nesting season for the period encompassing nest building and continuing until fledglings leave nests. This

setback applies whenever construction or other ground-disturbing activities must begin during the nesting season in the presence of nests which are known to be occupied. Setbacks shall be marked by brightly colored temporary fencing.

- ▶ **Loggerhead Shrike:** A setback of 100 feet from nesting areas shall be established and maintained during the nesting season for the period encompassing nest building and continuing until fledglings leave nests. This setback applies whenever construction or other ground-disturbing activities must begin during the nesting season in the presence of nests which are known to be occupied. Setbacks shall be marked by brightly colored temporary fencing.

**Mitigation Measure 4.5-3: Impacts to Common Raptors.** To avoid and minimize potential project effects on common raptors, the project applicant shall do the following:

If project activity would commence during the raptor nesting season (February 15 to September 15), preconstruction surveys shall be conducted by a qualified biologist during the nesting season. The surveys shall cover all areas of suitable nesting habitat within 500 feet of project activity and shall be conducted within 14 days prior to commencement of project activity. If no active nests are found, no further mitigation shall be required.

If active nests are found, impacts shall be avoided by establishment of appropriate buffers. No project activity shall commence within the buffer area until a qualified biologist confirms that the nest is no longer active. DFG guidelines recommend implementation of 500-foot buffers, but the size of the buffer may be adjusted if a qualified biologist determines adverse effects to the nest are not likely. Monitoring of the nest by a qualified biologist may be required if the activity has potential to adversely affect the nest.

**Mitigation Measure 4.5-5: Consistency with Federal, State, and Local Plans, Policies, and Ordinances.** Implementation of Mitigation Measures 4.5-2 and 4.5-3 would sufficiently address measures necessary to mitigate for Impact 4.5-5.

#### **4.5.5 LEVEL OF SIGNIFICANCE AFTER MITIGATION**

Incorporation and implementation of the mitigation measures specified in the SJMSCP (and summarized in this Draft EIR) for Impact 4.5-2, and incorporation and implementation of the mitigation measures outlined for Impacts 4.5-3 and 4.5-5 would avoid and/or minimize adverse effects to special-status wildlife and common raptors, and the significance of these impacts would be reduced to a less-than-significant level. With implementation of the above mitigation, all of the project's biological impacts would be less-than-significant.