4.7 BIOLOGICAL RESOURCES

4.7.1 INTRODUCTION

This section describes the biological resources on the project site and its vicinity; describes relevant federal, state, and local regulations; and addresses biological resources that could be affected by implementation of the proposed project. Information presented is based on reconnaissance field surveys conducted by EDAW biologists on January 4, June 5, August 29, and September 3, 2008; searches of electronic databases that contain records of sensitive biological resources; and a review of environmental documents that discuss biological resources, including the *San Joaquin County Multi-Species Habitat Conservation and Open Space Plan* (SJMSCP) (San Joaquin County 2000) and the *San Joaquin County General Plan 2010* (San Joaquin County 1992).

4.7.2 ENVIRONMENTAL SETTING

The project site is in the northern San Joaquin Valley in unincorporated central San Joaquin County, approximately one-third mile south of the Stockton city limits. Except in areas of higher density development associated with urban centers, the northern San Joaquin Valley is characterized by relatively flat open farmland interspersed with rivers and other tributaries, combined with industrial/warehouse uses and low-density residential farmsteads.

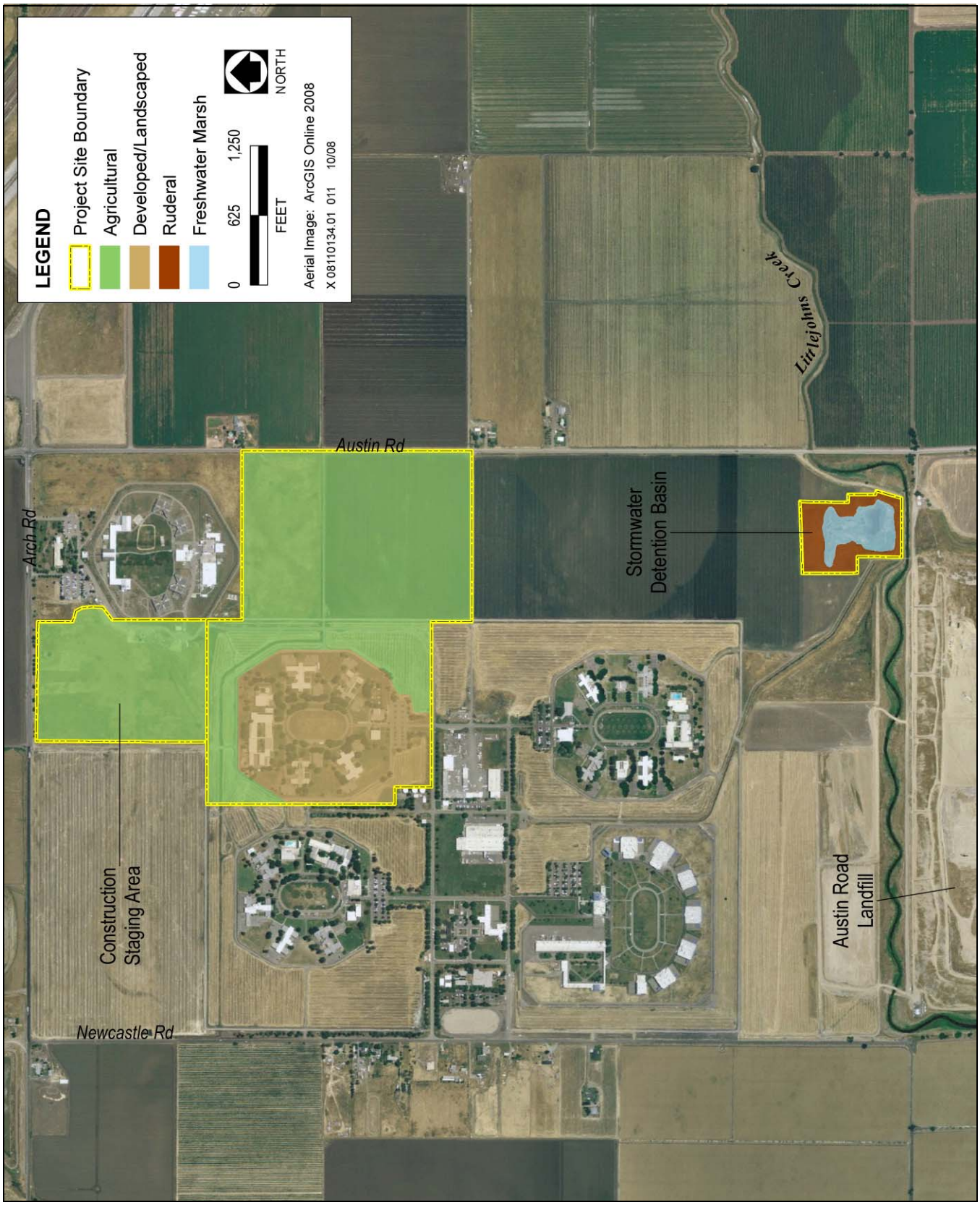
The 144.2-acre project site includes the existing California Department of Corrections and Rehabilitation (CDCR) Karl Holton Youth Correctional Facility and a vacant disked field to the east (Exhibit 4.7-1). The Karl Holton Youth Correctional Facility is part of the 400-acre Northern California Youth Correctional Center (NCYCC). The NCYCC includes three additional youth correctional facilities, one of which lies directly south of the Karl Holton facility. CDCR's Richard A. McGee Training Center Annex (CTCA) lies directly north of the disked field portion of the project site. The Austin Road Landfill, Littlejohns Creek, and a stormwater detention/retention basin are within approximately three-quarters of a mile south of the project site. A drainage channel carries stormwater from the NCYCC facilities to the stormwater detention basin, which is equipped with pumps that can transfer water into North Fork South Littlejohns Creek (Littlejohns Creek). The detention basin supports dense freshwater marsh habitat. The primary land use surrounding the correctional facilities is agriculture.

The reconnaissance survey included the proposed construction staging area north of the project site and abutting CTCA to the west. The construction staging area is an agricultural field similar to the agricultural field on the project site.

VEGETATION AND WILDLIFE

The primary project site does not support any natural habitat. Habitat types on the project site include landscaped and developed areas associated with the Karl Holton Youth Correctional Facility and agricultural fields north of the facilities within the perimeter security fence and adjacent to the Karl Holton facility to the east (Exhibit 4.7-1). The off-site stormwater detention basin south of the project site contains approximately 5 acres of freshwater marsh and seasonal wetland habitat dominated by common cattails (*Typha latifolia*). Along the fringe of the cattail marsh are stands of black willow (*Salix gooddingii*), sandbar willow (*S. exigua*), and cottonwood (*Populus fremontii*). The northern half of the basin is inundated for a much shorter period of the time in the winter and spring months; the vegetation is dominated by seasonal wetland vegetation characterized by species such as tall flatsedge (*Cyperus eragrostis*), curly dock (*Rumex crispus*), and common lippia (*Phyla nodiflora*).

A tree assessment was conducted in 2007 by a certified arborist on the NCYCC site (Jaime, pers. comm., 2008). According to the tree survey, the existing facility contains approximately 90 ornamental trees in various stages of health ranging from very poor to good. None of the trees are native species. The trees are commonly planted species such as Modesto ash (*Fraxinus velutina* "Modesto"), Chinese elm (*Ulmus parviflora*), and Deodar cedar (*Cedrus deodara*). The groundcover is primarily sod grasses and ornamental shrubs.



Source: Adapted by EDAW 2008

Habitat Types on the Project Site **Exhibit 4.7-1**

The agricultural fields in the eastern half of the project site were tilled and bare at the time of the reconnaissance field surveys. Vegetation in the agricultural fields is sparse and limited to ruderal (nonnative, weedy) species along the edges of the fields. Dominant plant species include ripgut brome (*Bromus diandrus*), field mustard (*Brassica niger*), and yellow starthistle (*Centaurea solstitialis*). An agricultural ditch runs through the middle of the field in the eastern half of the project site and along the north edge of the existing Karl Holton Youth Correctional Facility. The ditch drains the surrounding agricultural fields and was dry during the field reconnaissance surveys in January and March. Because the ditch is dug out of uplands and is not hydrologically connected to any other drainages or wetlands, it would not be considered a federally protected wetland.

The project site provides little natural habitat for wildlife, but landscaping trees, manicured lawns, and weedy fields on the grounds of the Karl Holton facility and the adjacent disked field provide nesting and foraging habitat for common wildlife species. The grounds of Karl Holton provide nesting habitat for several native resident and migratory bird species: red-tailed hawk (*Buteo jamaicensis*), western scrub-jay (*Aphelocoma coerulescens*), yellow-billed magpie (*Pica nuttalli*), barn swallow (*Hirundo rustica*), western bluebird (*Sialia mexicana*), mourning dove (*Zenaida macroura*), and house finch (*Carpodacus mexicanus*). The stormwater detention basin south of the CDCR facilities provides nesting habitat for birds such as red-winged blackbirds (*Agelaius phoeniceus*) that nest in freshwater marsh vegetation. It also provides potential aquatic and upland habitat for wildlife species such as garter snakes, turtles, and frogs. Mammals common to agricultural areas in the San Joaquin Valley—California ground squirrel (*Spermophilus beecheyi*), desert cottontail (*Sylvilagus audubonii*), raccoon (*Procyon lotor*), opossum (*Didelphis virginiana*), and striped skunk (*Mephitis mephitis*)—are also likely to inhabit the project site. In addition, numerous vacant buildings and dead trees on the project site could be used as roosts by bats.

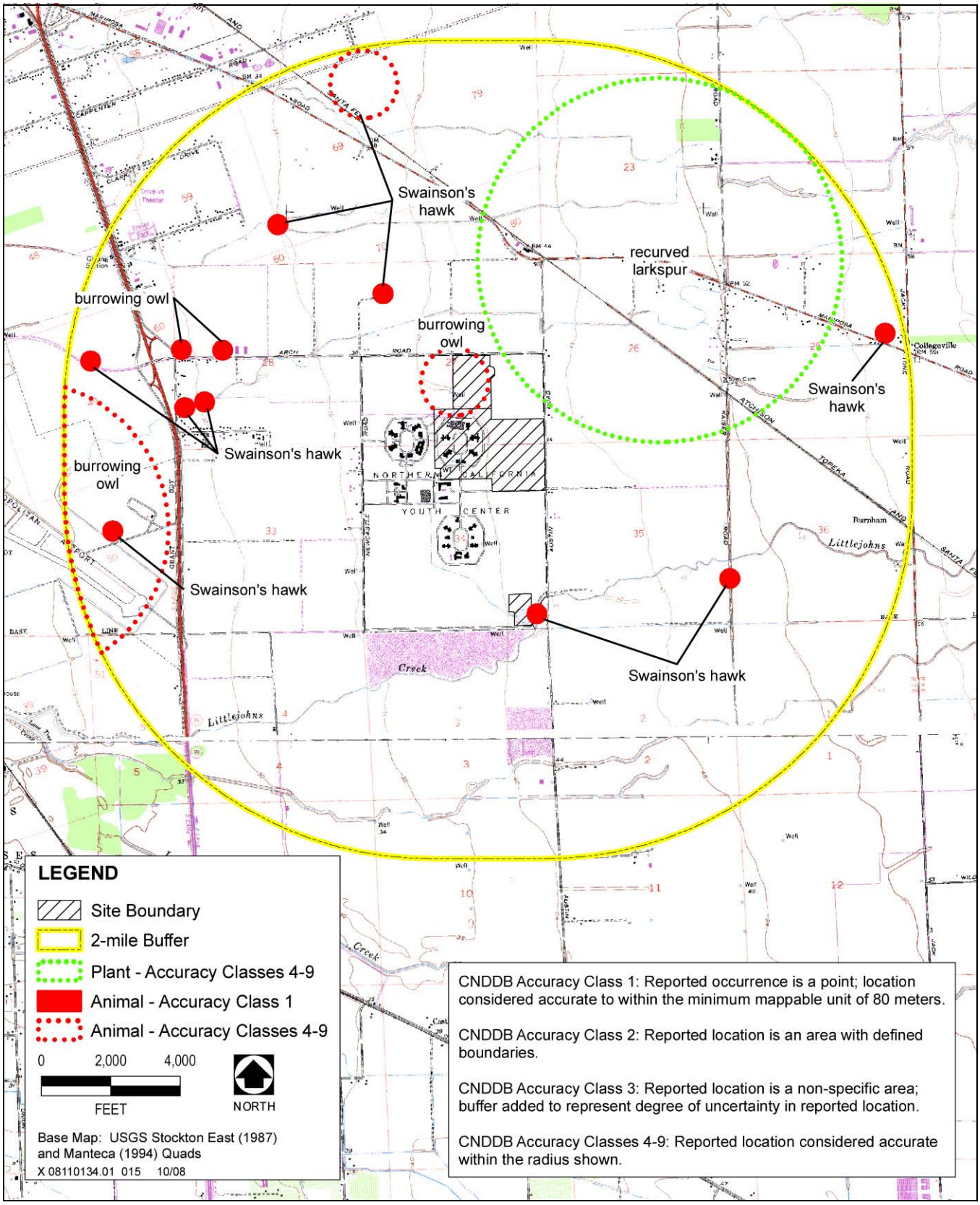
SENSITIVE BIOLOGICAL RESOURCES

Sensitive biological resources evaluated as part of this analysis include special-status species and sensitive habitats. The California Natural Diversity Database (CNDDB) was used as the primary source to identify previously reported occurrences of special-status species and sensitive habitats in the project vicinity. The CNDDB is a statewide inventory, managed by the California Department of Fish and Game (DFG), that is continually updated with the location and condition of the state's rare and declining species and habitats. Although the CNDDB is the most current and reliable tool for tracking occurrences of special-status species, it contains only those records that have been reported to DFG. Occurrences of special-status species documented in the CNDDB within a 2-mile radius of the project site are shown in Exhibit 4.7-2. A search of the California Native Plant Society's (CNPS's) online *Inventory of Rare and Endangered Plants* (CNPS 2008) was conducted as well.

Special-Status Species

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

- plant and wildlife species that are listed under the federal Endangered Species Act (ESA) and/or California Endangered Species Act (CESA) as rare, threatened, or endangered;
- plant and wildlife species considered candidates for listing or proposed for listing;
- wildlife species identified by DFG as fully protected and/or species of special concern;
- plants considered by CNPS to be rare, threatened, or endangered; and
- plants and animals covered by the SJMSCP.



Source: Adapted by EDAW 2008

CNDDB Occurrences within 2 Miles of the Project Site **Exhibit 4.7-2**

Special-Status Plants

Searches of the CNDDB and CNPS online electronic inventory identified 15 special-status plant species that have been documented in the vicinity of the project site. Fourteen of the 15 species have specialized habitat requirements that are not found on the project site. Alkali milk-vetch (*Astragalus tener* var. *tener*), San Joaquin spearscale (*Atriplex joaquiniana*), and palmate-bracted bird's-beak (*Cordylanthus palmatus)* are found in mesic alkaline playas that are not present on the site. Delta button-celery (*Eryngium racemosum*) and Greene's tuctoria (*Tuctoria greenei*) are found in vernally mesic clay flats and vernal pools that are not found on the project site. Round-leaved filaree (*Erodium macrophyllum*) occurs on friable, undisturbed clay soils, which are not present on the site. Slough thistle (*Cirsium crassicaule*), Delta tule pea (*Lathyrus jepsonii* var. *jepsonii*), Mason's lilaeopsis (*Lilaeopsis masonii*), Delta mudwort (*Limosella subulata*), Suisun Marsh aster (*Symphyotrichum lentum*), woolly rose-mallow (*Hibiscus lasiocarpus*), and Wright's trichocoronis (*Trichocoronis wrightii* var. *wrightii)* occur in freshwater and brackish marsh habitats that occur to the west of the project site within the primary zone of the Sacramento–San Joaquin Delta. The CNDDB occurrence for recurved larkspur (*Delphinium recurvatum*) shown in Exhibit 4.7-2 as occurring just northeast of the project site is a historic record that has not been observed since 1937 (CNNDB 2008). This species occurs on alkaline soils in valley saltbush or valley chenopod scrub plant communities, and the habitat where this population once occurred is no longer present.

Sanford's arrowhead (*Sagittaria sanfordii*) is the only special-status plant species for which potentially suitable habitat occurs within the project area. Upon further examination of the habitat present in the stormwater detention basin during the reconnaissance survey on September 2, 2008, by EDAW botanist Mark Bibbo, it was determined that the basin did not provide suitable habitat for Sanford's arrowhead because of the lack of open-water habitat and the overwhelming cover of cattails.

Special-Status Wildlife

Based on review of the results of a search of the CNDDB, documented species ranges, and conditions observed during the reconnaissance-level survey conducted by EDAW, a list of special-status wildlife species with the potential to occur in the project site was compiled, as presented in Table 4.7-1.

Table 4.7-1
Special-Status Wildlife Species with Documented Occurrences on the Project Site

Common Name	Scientific Name	Status	Habitat	Potential for Occurrence
Reptiles				
Giant garter snake	*Thamnophis gigas*	Fed: Threatened CA: Threatened	Freshwater marsh, sloughs, and slow-moving rivers	Could occur; potential upland and aquatic habitat (Littlejohns Creek and stormwater detention basin) present on project site
Northwestern pond turtle	*Emys marmorata marmorata*	CA: Species of Special Concern	Freshwater marsh, ponds, lakes, and rivers	Could occur; potential upland and aquatic habitat (Littlejohns Creek and stormwater detention basin) present on project site
Birds				
Burrowing owl	*Athene cunicularia*	CA: Species of Special Concern *(breeding)*	Grasslands and agricultural fields	Likely to occur; suitable nesting and foraging habitat present on project site and occupied burrows nearby
Loggerhead shrike	*Lanius ludovidianus*	CA: Species of Special Concern *(breeding)*	Forage in grasslands and agricultural fields; nest in scattered shrubs and trees	Could forage in agricultural fields on project site; unlikely to nest on project site

Table 4.7-1
Special-Status Wildlife Species with Documented Occurrences on the Project Site

Common Name	Scientific Name	Status	Habitat	Potential for Occurrence
Northern harrier	*Circus cyaneus*	CA: Species of Special Concern *(breeding)*	Forage and nest in grassland, agricultural fields, and marshes	Could forage in agricultural fields on project site. No suitable nesting habitat on project site
Swainson's hawk	*Buteo swainsoni*	CA: Threatened	Forage in grasslands and agricultural fields; nest in open woodland or scattered trees	Could occur; suitable nesting and foraging habitat present on project site
Tricolored blackbird	*Agelaius tricolor*	CA: Species of Special Concern *(breeding)*	Forage in grasslands and agricultural fields; nest in freshwater marsh, riparian scrub, and other dense shrubs and herbs	Could occur; potential nesting habitat in stormwater detention basin and foraging habitat in agricultural fields on project site.
White-tailed kite	*Elanus leucurus*	CA: Fully Protected	Forage in grasslands and agricultural fields; nest in isolated trees or small woodland patches	Could occur; suitable nesting and foraging habitat present on project site
Mammals				
Pallid bat	*Antrozous pallidus*	CA: Species of Special Concern	Reside in deserts, grasslands, shrublands; most common in open, dry habitats with rock areas	Could use vacant buildings on project site for day roosts, nursery roosts, and/or hibernation roosts

Sources: CNDDB 2008, Shuford and Gradali 2008

Giant Garter Snake

Giant garter snake is federally listed and state listed as threatened. Giant garter snakes use a variety of aquatic habitats for foraging, such as agricultural canals, marshes, sloughs, and ponds. Giant garter snakes also require adjacent upland habitat for basking; for overwintering they require burrows that provide sufficient cover and are at high enough elevations to function as refuges from floodwaters during the snakes' inactive season. The giant garter snake typically emerges from overwintering hibernacula in spring. The active period for giant garter snake is defined as May 1–October 1.

Littlejohns Creek, a portion of which runs just south and east of the stormwater detention basin, is considered potential giant garter snake habitat in the SJMSCP. The stretch of Littlejohns Creek near the detention basin contains emergent vegetation and held slow-running water during all field visits to the site. The detention basin (which is less than 200 feet from Littlejohns Creek in some places) appears to contain water year round, supports dense emergent vegetation, and also appears to be suitable habitat for giant garter snake. The area surrounding the detention basin and Littlejohns Creek provides suitable upland habitat for giant garter snake. Two CNDDB records for giant garter snake are reported within 10 miles of the project site.

Northwestern Pond Turtle

The northwestern pond turtle is a California species of special concern. Northwestern pond turtles are generally associated with permanent or near-permanent aquatic habitats, such as lakes, ponds, streams, freshwater marshes, and agricultural ditches. They require still or slow-moving water with instream emergent woody debris, rocks, or similar features for basking sites. Pond turtles are highly aquatic but can venture far from water to lay eggs. Nests are typically located on unshaded upland slopes in dry substrates with clay or silt soils. Pond turtles can overwinter in upland sites. Both Littlejohns Creek and the open water associated with the stormwater detention

basin could provide suitable habitat for northwestern pond turtles, and the surrounding area could support nesting sites if soil conditions are appropriate.

Burrowing Owl

Burrowing owl is a DFG species of special concern. Burrowing owls can be found in the Central Valley year round, typically inhabiting grasslands and other open habitats with low-lying vegetation (Shuford and Gradali 2008:221). They are also known to nest and forage in idle agricultural fields, ruderal fields, and the edges of cultivated fields. Burrow availability is an essential component of suitable habitat. Burrowing owls can dig their own burrows in areas with soft soil, but they generally prefer to adopt those excavated by other animals, typically ground squirrels. In areas where burrows are scarce, they can use pipes, culverts, debris piles, and other artificial features.

Burrowing owls have been found in highly disturbed areas where appropriate burrows exist, and they have the potential to occur on the project site. At least two active burrows were observed on state property southwest of the project site (just to the west of the N. A. Chaderjian Youth Correctional Facility) during the reconnaissance field survey on August 29, 2008. The CNDDB reports four burrowing owl occurrences within 2 miles of the project site; one of these is a 1987 observation of four burrowing owls along the banks of a drainage ditch at the north end of the NCYCC (CNDDB 2008). Ground squirrel burrows that appeared suitable for burrowing owls were observed on the grounds of the Karl Holton Youth Correctional Facility, in the berm surrounding the stormwater detention basin, and likely also occur on agricultural fields on the project site. Burrowing owls have high potential to occupy the project site based on the presence of suitable habitat and their known occurrence in the project vicinity.

Swainson's Hawk

Swainson's hawk is state listed as threatened. Swainson's hawks typically are found in California only during the breeding season (March–September) and generally begin to arrive in the Central Valley in March. Nesting territories are usually established by April, with incubation and rearing of young occurring through June (Estep 2003:8). Nesting pairs frequently return to the same nest site for multiple years and decades.

Swainson's hawks most commonly occur in grasslands, low shrublands, and agricultural habitats that include large trees for nesting. Nests are found in riparian woodlands, roadside trees, trees along field borders, and isolated trees. Prey abundance and accessibility are the most important features determining the suitability of Swainson's hawk foraging habitat. Agricultural operations (e.g., mowing, flood irrigation) have a substantial influence on the accessibility of prey and thus create important foraging opportunities. Swainson's hawks feed primarily on small rodents but also consume insects and birds.

Numerous trees on the grounds of the Karl Holton Youth Correctional Facility could provide Swainson's hawk nesting sites, and disked fields on the project site could provide foraging habitat. Although no active Swainson's hawk nests were confirmed during the June 2008 reconnaissance field survey, several stick nests that could potentially be active or historical Swainson's hawk nest sites (or nests for other species) were observed, and Swainson's hawks were seen foraging nearby. The CNDDB reports 10 Swainson's hawk occurrences within 2 miles of the project site.

Other Special-Status Raptors

White-tailed kite (*Elanus leucurus*) is fully protected under the California Fish and Game Code and northern harrier (*Circus cyaneus*) is a DFG species of special concern. White-tailed kites forage in grasslands and agricultural fields and nest in isolated trees or small woodland patches. Trees on the grounds of the Karl Holton Youth Correctional Facility could provide nesting sites and disked fields on the project site could provide foraging habitat. A white-tailed kite was observed perching in a tree on the grounds of the Karl Holton facility

during the June 2008 reconnaissance field survey. Northern harriers typically nest in tall grass or marsh habitat and would not likely nest on the project site, but could use it for foraging.

Loggerhead Shrike

The loggerhead shrike is a California species of special concern that is present in California year round. Loggerhead shrikes nest in shrubs and small trees in shrublands and open woodlands and typically forage in grasslands and agricultural fields (Shuford and Gradali 2008:274). Loggerhead shrikes could use agricultural fields on the project site to forage, but are unlikely to nest on the project site because nesting habitat is not present.

Tricolored Blackbird

Tricolored blackbird is a DFG species of special concern. Tricolored blackbirds are permanent residents of California, but make extensive migrations within the state both during the breeding season and in the winter. Tricolored blackbirds breed in dense colonies and historically nested primarily in freshwater marshes dominated by cattails or tules; more recently, however, the trend has been for more colonies to nest in Himalayan blackberries. Wintering birds forage in grasslands and agricultural fields with low-growing vegetation and at dairies with feedlots, often forming large mixed flocks (Shuford and Gradali 2008:437–443). San Joaquin County may provide important wintering habitat for tricolored blackbirds (San Joaquin County 2000:2.2-52). The stormwater detention basin approximately 3,000 feet south of the project site, which may require expansion to increase capacity, supports dense cattail and tule habitat that could provide breeding habitat for tricolored blackbirds. Agricultural fields on the project site could provide foraging habitat.

Pallid Bat

Pallid bat is a California species of special concern that can be locally common in low elevations throughout California. Pallid bats occupy a wide variety of habitats: grasslands, shrublands, woodlands, and forests from sea level up through mixed conifer forests. The species is most common in open, dry habitats with rocky areas for roosting. A period of peak activity occurs for approximately 7–8 months in spring and summer when insects are most available and reproduction occurs. Day roosts for pallid bats are found in natural features such as trees, cliffs, caves, and rocky outcrops, and in human-made features such as barns, bridges, and attics (Sacramento County 2007:Appendix A). Pregnant females gather in maternity colonies starting in early April, and may form colonies of anywhere from a dozen to hundreds of individuals. Maternity colonies disperse into smaller groups by mid-October. Little is known about suitable winter hibernation roosts. The CNDDB reports three occurrences of pallid bats within San Joaquin County, and vacant buildings on the project site could potentially be used for day and maternity roosts by pallid bats.

Sensitive Habitats

Sensitive habitats are those identified as sensitive natural communities "rare and worthy of consideration" in the *List of California Terrestrial Natural Communities Recognized by the CNDDB*, as well as those subject to U.S. Army Corps of Engineers (USACE) jurisdiction under Section 404 of the Clean Water Act (CWA), Section 1602 of the California Fish and Game Code, and the state's Porter-Cologne Water Quality Control Act, which protects waters of the state. Sensitive habitats are of special concern because they have high potential to support special-status plant and animal species. Sensitive habitats can also provide other important ecological functions, such as enhancing flood and erosion control and maintaining water quality.

The majority of the project site consists of existing correctional facilities and agricultural fields and does not support any sensitive habitat. The stormwater detention basin contains wetland habitat that would likely be considered a jurisdictional waters of the United States under Section 404 of the CWA and a sensitive habitat by DFG. A formal delineation of waters of the United States, including wetlands, has not been prepared for the stormwater detention basin; however, an EDAW biologist surveyed the basin on September 2, 2008, and marked

the likely jurisdictional limit of the wetland with a Trimble Global Positioning System (GPS) unit. The location of this boundary was based on the dominance of vegetation that is considered hydrophytic (i.e., consisting of plant species that are typically adapted to saturated soils resulting from periodic inundation or saturation by surface water or groundwater).

4.7.3 REGULATORY CONSIDERATIONS

FEDERAL PLANS, POLICIES, REGULATIONS, AND LAWS

Federal Endangered Species Act

Under the federal ESA, the U.S. Fish and Wildlife Service (USFWS) has regulatory authority over federally listed species. Under the ESA, a permit to "take" a listed species is required for any federal action that may harm an individual of that species. Take is defined under ESA Section 9 as "to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct." Under federal regulation, take is further defined to include habitat modification or degradation where it would be expected to result in death or injury to listed wildlife by significantly impairing essential behavioral patterns, including breeding, feeding, or sheltering. ESA Section 7 outlines procedures for cooperation between federal agencies to conserve federally listed species and designated critical habitat. Section 7(a)(2) requires federal agencies to consult with USFWS to ensure that they are not undertaking, funding, permitting, or authorizing actions likely to jeopardize the continued existence of listed species. For projects where federal action is not involved and take of a listed species may occur, the project proponent may seek to obtain an incidental take permit under ESA Section 10(a). Section 10(a) allows USFWS to permit the incidental take of listed species if such take is accompanied by a habitat conservation plan (HCP) that includes components to minimize and mitigate impacts associated with the take.

Section 404 of the Clean Water Act

Section 404 of the CWA requires a project applicant to obtain a permit from USACE before engaging in any activity that involves any discharge of dredged or fill material into waters of the United States, including wetlands. Waters of the United States include navigable waters of the United States; interstate waters; all other waters where the use, degradation, or destruction of the waters could affect interstate or foreign commerce; and relatively permanent tributaries to any of these waters. Wetlands are defined as those areas that are inundated or saturated by surface water or groundwater at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Potentially jurisdictional wetlands must meet three wetland delineation criteria: hydrophytic vegetation, hydric soil types, and wetland hydrology. Wetlands that meet the delineation criteria may be jurisdictional under Section 404 of the CWA pending review by USACE and the U.S. Environmental Protection Agency (EPA).

Section 401 of the Clean Water Act

CWA Section 401(a)(1) requires an applicant for a federal license or permit to conduct an activity that may result in a discharge into navigable waters to provide the federal licensing or permitting agency with a certification that the discharge will not violate state water quality standards. California's regional water quality control boards (RWQCBs) administer the Section 401 program and prescribe measures for projects as necessary to avoid, minimize, and mitigate adverse impacts on water quality and ecosystems.

Migratory Bird Treaty Act

The Migratory Bird Treaty Act (MBTA) (Title 16, Sections 703–712 of the U.S. Code [16 USC 703–712], first enacted in 1918, implements domestically a series of treaties between the United States and Great Britain (on behalf of Canada), Mexico, Japan, and the former Soviet Union that provide for international protection of migratory birds. The MBTA authorizes the U.S. Secretary of the Interior to regulate the taking of migratory birds;

the act provides that it shall be unlawful, except as permitted by regulations, "to pursue, take, or kill any migratory bird, or any part, nest or egg of any such bird…" (16 USC 703). This prohibition includes both direct and indirect acts, although harassment and habitat modification are not included unless they result in direct loss of birds, nests, or eggs. The current list of species protected by the MBTA includes several hundred species and essentially includes all native birds. Species whose occurrences in the United States are strictly the result of intentional human introduction (i.e., nonnative species) are not protected by the MBTA. Among the nonnative species that are not protected by the MBTA are European starling (*Sturnus vulgaris*) and house sparrow (*Passer domesticus*).

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. Under the CESA, the definition of "take" is understood to apply to an activity that would directly kill or indirectly result in the death of an individual of a species, but the definition under the CESA does not include "harm" or "harass," as the definition under the federal ESA does. As a result, the CESA threshold for a take is typically higher than the ESA threshold. Project proponents can obtain authorization for take of state-listed species through a consistency determination under Section 2080.1 of the California Fish and Game Code or a Section 2081 incidental-take permit.

California Fish and Game Code

Fully Protected Species

Protection of fully protected species is described in Sections 3511, 4700, 5050, and 5515 of the California Fish and Game Code. These statutes prohibit take or possession of fully protected species and do not provide for authorization of incidental take. DFG has informed nonfederal agencies and private parties that their actions must avoid take of any fully protected species.

Protection for Bird Nests and Raptors

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 (e.g., hawks, owls, eagles, and falcons), including their nests or eggs.

Porter-Cologne Water Quality Control Act

Under Section 401 of the CWA, an applicant for a Section 404 permit must obtain a certificate from the appropriate state agency stating that the intended dredging or filling activity is consistent with the state's water quality standards and criteria. In California, the authority to grant water quality certification is delegated by the State Water Resources Control Board to the nine RWQCBs. Each of the nine RWQCBs must prepare and periodically update a basin plan for water quality control in accordance with the Porter-Cologne Water Quality Control Act. Each basin plan establishes water quality standards for surface water and groundwater and specifies actions to control nonpoint and point sources of pollution. These actions are intended to achieve and maintain the basin plan's water quality standards.

Basin plans represent an opportunity to protect wetlands by establishing water quality objectives. Under the Porter-Cologne Water Quality Control Act, wetlands and drainages that are considered waters of the United States by USACE are also often classified as waters of the state. More recently, the appropriate RWQCB has also generally taken jurisdiction over "waters of the state" that are not subject to USACE jurisdiction under the federal CWA, in cases where USACE has determined that certain features do not fall under its jurisdiction. Mitigation

typically must require no net loss of wetlands functions and values of waters of the state pursuant to Executive Order W-59-93, "State Wetland Conservation Policy."

California Environmental Quality Act Guidelines

Section 15380 of the State *CEQA Guidelines* provides that a species not listed under the ESA or CESA may be considered rare or endangered under specific criteria. These criteria have been modeled after the definitions in the ESA and CESA. Section 15380 allows public agencies to consider their own criteria when they determine whether effects on candidate species that have not yet been listed by either USFWS or DFG (or other species, as determined by the lead agency) would be significant.

An example would be the vascular plants that have been listed as rare or endangered by CNPS, but that may have no designated status or protection under the federal ESA or CESA. The CNPS created five lists:

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

In general, plants appearing on CNPS List 1A, 1B, or 2 are considered to meet the criteria of CEQA Section 15380.

Statewide Electrified Fence Project Habitat Conservation Plan

The proposed project includes a lethal electrified fence similar to those found at state prisons throughout California. After a prototype fence at Calipatria State Prison in Imperial County became operational in 1993, CDCR personnel found that unanticipated accidental wildlife electrocutions had occurred. To address this unexpected effect, CDCR consulted with DFG and USFWS. Based on this consultation, CDCR determined that a statewide EIR was needed to assess impacts on wildlife resulting from operation of the electrified fences at 25 existing state prisons and four planned facilities and to identify feasible mitigation measures. CEQA documents prepared for the Statewide Electrified Fence Project include *Draft Environmental Impact Report (DEIR), Statewide Electrified Fence Project* (CDC 1996); *Final Environmental Impact Report (FEIR), Statewide Electrified Fence Project* (CDC 1997); and *FEIR Addendum, Statewide Electrified Fence Project* (CDC 1999). The latter document changed the project to only include 27 facilities because CDCR decided not to proceed with construction of two of the facilities.

Impacts of the electrified fence on species covered by the ESA and CESA and on migratory birds were evaluated further in 1999 when CDCR prepared an HCP for the Statewide Electrified Fence Program. USFWS issued a threatened and endangered species take permit covering 62 wildlife species to CDCR for the 27 prisons in the project on June 12, 2002. The permit expires in 2052. The Statewide Electrified Fence Program's HCP covers, among other things, mortality of ESA-, CESA-, and MBTA-protected species caused by electrocution on the electrified fence.

The former Northern California Women's Facility (NCWF) is one of the 27 facilities covered by the Statewide Electrified Fence Program's HCP. NCWF is now CTCA and CDCR has approved the conversion of CTCA to a reentry facility. The electrified fence was never constructed at the former NCWF site and CDCR does not plan to construct an electrified fence for the reentry facility. The project site is adjacent to CTCA, on the same state-owned parcel, and has the same habitat characteristics as the area of the site that would have been surrounded by an electrified fence. The same species that could have been affected by an electrified fence at the adjacent facility would be potentially exposed to hazards from an electrified fence at the project site. Because these sites are adjacent to each other, have similar habitat characteristics, and could affect the same species, the project may qualify for coverage under the Statewide Electrified Fence Program's HCP.

The approved HCP for the Statewide Electrified Fence Program includes numerous mitigation measures designed to minimize use by wildlife of the areas nearest the electrified fences and to deter wildlife from making contact with the electrified fences. An extensive feasibility evaluation was conducted over several years by CDCR to determine which mitigation measures were biologically effective, cost effective, and viable based on weather, security, maintenance, and operational issues. Mitigation in the HCP was organized and implemented in three tiers. Tier 1 includes operational measures designed to modify or remove habitat or other attractants to wildlife from the secured perimeter area of each prison. Tier 2 involves installing exclusion and deterrent devices on the electrified fences and in the perimeters. Tier 3 includes a compensation package designed to offset the residual loss of wildlife resources at each prison as a result of electrocution risks that remain even after Tiers 1 and 2 have been implemented. The plan also includes a wildlife mortality monitoring program. In this program a qualified biologist visits each institution that has an operational electrified fence three times per year and identifies carcasses of animals collected from the perimeter of the electrified fence by CDCR staff, then prepares summary reports for the resource agencies.

Operations of the electrified fences have been monitored intensively and regularly, in coordination with USFWS and DFG, since 1993. No endangered species have been electrocuted by any of CDCR's fences in the state. Because of this record, and supported by biological analyses in the locations of these facilities, CDCR constructed electrified fences around four additional facilities not covered by the HCP. CDCR has implemented the same three-tier mitigation approach and the same intensive monitoring at these additional prisons as was implemented with the 27 facilities covered by the HCP. No take of endangered species has occurred at the facilities not covered by the HCP.

LOCAL PLANS, POLICIES, REGULATIONS, AND ORDINANCES

San Joaquin County Multi-Species Habitat Conservation and Open Space Plan

As stated in the SJMSCP (San Joaquin County 2000:1), the key purpose of the plan is to provide a strategy for balancing the need to develop and conserve open space:

> …while protecting the region's agricultural economy; preserving landowner property rights; providing for the long-term management of [special-status] plant, fish, and wildlife species; providing and maintaining multiple-use Open Spaces which contribute to the quality of life of the residents of San Joaquin County; and accommodating a growing population while minimizing costs to Project Proponents and society at large.

The SJMSCP covers 97 special-status plant, fish, and wildlife species in 52 vegetative communities scattered throughout San Joaquin County. The plan provides comprehensive mitigation, in compliance with federal, state, and local regulations, for impacts of SJMSCP-permitted activities on these species. USFWS and DFG participated in development of the SJMSCP, approved the mitigation, and agreed to issue incidental-take permits for species and activities covered by the SJMSCP. Therefore, participation in the SJMSCP permits activities that result in or may result in incidental take of covered federally listed or state-listed species, as well as other covered nonlisted sensitive species, that may otherwise require a federal or state incidental-take authorization. The SJMSCP aims to minimize potential take by requiring that project proponents implement take avoidance and minimization measures and compensate for incidental take and loss of habitat by paying fees (or making in-lieu land dedications) for conversion of open space. These fees are to be 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 proponents, but participation provides a potential option for streamlining mitigation.

San Joaquin County General Plan 2010

The following policies in the Resources section of the *San Joaquin County General Plan 2010* are applicable to the proposed project.

- **Policy 1.** Resources of significant biological and ecological importance in San Joaquin County shall be protected. These include wetlands; riparian areas; rare, threatened and endangered species and their habitats as well as potentially rare or commercially important species; vernal pools; significant oak groves and heritage trees.

- **Policy 2**. No public action shall significantly diminish the wildlife and vegetative resources of the County; cumulatively significant impacts shall be avoided.

4.7.4 IMPACTS AND MITIGATION MEASURES

SIGNIFICANCE CRITERIA

In accordance with Appendix G and Section 15065 (Mandatory Findings of Significance) of the State *CEQA Guidelines*, an impact of the proposed project on biological resources would be considered significant if project implementation would:

- have a substantial adverse effect, either directly or through habitat modification, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by DFG 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 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 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 HCP, natural community conservation plan, or other approved state, regional, or local HCP; or

- substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, or substantially reduce the number or restrict the range of an endangered, rare, or threatened species.

ISSUES NOT DISCUSSED FURTHER

The project site does not provide habitat for special-status plant species. Because project implementation would not result in significant impacts on special-status plants, they are not discussed further. The ornamental trees present on the project site within the existing Karl Holton Youth Correctional Facility are nonnative trees and do not meet the criteria of heritage trees as defined by the Resources section of the *San Joaquin County General Plan 2010*. Removing trees for project implementation would not conflict with any local tree preservation policies or ordinances.

Project implementation is not expected to interfere substantially with the movement of any native resident or migratory wildlife species because the project site does not contain any wildlife movement corridors and the surrounding land use is primarily agricultural fields. Conflicts with regional and local plans and policies are not discussed further because implementation of the mitigation measures described below is intended to comply with regional HCPs and local policies. The SJMSCP is an adopted HCP that covers the project site and provides comprehensive mitigation, in compliance with federal, state, and local regulations, for impacts on species covered by the plan.

PROJECT IMPACTS AND MITIGATION MEASURES

IMPACT BIO-1 Loss of Raptor Nesting and Foraging Habitats. *Implementation of the proposed project would result in the permanent loss of potential raptor nesting and foraging habitat and could disturb nesting raptors in the project vicinity. Disturbance of active nests could result in abandonment of nests and loss of eggs or young. (Significant, less than significant with mitigation)*

Implementation of the proposed project would result in the removal of approximately 90 trees that could provide nesting sites for Swainson's hawk, white-tailed kite, and common raptors such as red-shouldered hawk, red-tailed hawk, great horned owl, and America kestrel that are protected under Section 3503.5 of the California Fish and Game Code. Project implementation could result in the loss of habitat for burrowing owls along with active and/or nesting burrows, because suitable habitat for burrowing owl occurs along the edges of agricultural fields, lawns, and weedy fields on the project site and occupied burrows are known to occur nearby. Numerous potentially active raptor stick nests were observed in trees during reconnaissance field surveys. In addition, stick nests were observed on the platforms of floodlights mounted on tall poles surrounding the site's running track. At the time of the June 5, 2008, reconnaissance field survey, one of these nests was occupied by red-tailed hawks with multiple nestlings. No active Swainson's hawk or white-tailed kite nests were observed on the project site, but a white-tailed kite was observed perching in trees on the facility grounds and Swainson's hawks were observed foraging nearby. Should trees be removed during the raptor breeding season (February–August), mortality of eggs and chicks could result if an active nest were present. In addition, project construction could disturb active nests near the project site or in trees not yet removed from the project site, potentially resulting in nest abandonment by the adults and mortality of chicks and eggs. The portion of the project site that is currently vacant disked field could provide approximately 70 acres of foraging habitat for Swainson's hawks. This habitat would be permanently lost following construction. This impact would be significant.

Mitigation Measure(s) for Impact BIO-1:

Prior to the site preparation activities, CPR will, as encouraged in the letter dated August 15, 2008 from San Joaquin Council of Governments (SJCOG), request from the SJMSCP Joint Powers Authority (under SJCOG) concurrence that the proposed project qualifies for third-party participation in the SJMSCP because the project is consistent with permitted activities as defined in SJMSCP Section 8.2.2.c, "Major Impact Projects." Upon receipt of the concurrence letter, CPR will pay the Natural Lands and Agricultural Habitat Lands Fee (adjusted for inflation annually by the Joint Powers Authority) as defined in SJMSCP Section 7.4.1.2, "Agricultural Habitat Lands, Non-Vernal Pool Natural Lands, and Multipurpose Open Space Lands." Site preparation activities may commence upon payment of the fees. The SJMSCP Joint Powers Authority will determine the fee amount to be paid based on the acreage of disturbance. The total amount could be up to 153.2 acres (up to: 70 acres of farmland raptor foraging habitat; 74.2 acres of raptor nesting habitat at the existing Karl Holton Youth Correctional Facility; and 9 acres of raptor foraging habitat at the existing detention basin).

In addition, the following avoidance and minimization measures for Swainson's hawk and other tree-nesting raptors and burrowing owl will be implemented.

Swainson's Hawk and Other Tree-Nesting Raptors. Consistent with the avoidance and minimization measures in the SJMSCP, CPR will implement the following measures to reduce impacts on Swainson's hawk and other tree-nesting raptors:

- If trees and floodlights are removed between September 1 and February 15, then no further mitigation will be required.

- If trees and floodlights are removed between February 16 and August 31, then a qualified biologist will be retained to conduct preconstruction surveys for active raptor nests on and within 0.5 mile of the project site no more than 14 days and no less than 7 days before tree and floodlight removal. Surveys for Swainson's hawks will follow the guidelines provided in the *Recommended Timing and Methodology for Swainson's Hawk Nesting Surveys in the Central Valley* (DFG 2000). If no active nests are found, then no further mitigation will be required.

- If active nests are found, the qualified biologist will establish a buffer around the tree or floodlight where the active nest is located. No project activity will commence within the buffer area until the qualified biologist confirms that the nest is no longer active or that the young have fully fledged. For Swainson's hawk nests, DFG guidelines recommend implementation of 0.25- or 0.5-mile buffers, but the size of the buffer may be adjusted if a qualified biologist and DFG determine that it would not be likely to adversely affect the nest. Monitoring of the nest by a qualified biologist may be required if the activity has potential to adversely affect the nest.

Burrowing Owl. Consistent with the avoidance and minimization measures in the SJMSCP, CPR will implement the following measures to reduce impacts on burrowing owl:

- Retain a qualified biologist to conduct focused surveys for burrowing owls in areas of suitable habitat on and within 250 feet of the project site. Surveys will be conducted before project activity and in accordance with DFG protocol (DFG 1995).

- If no occupied burrows are found in the survey area, a letter report documenting survey methods and findings will be submitted to DFG, and no further mitigation is necessary. If occupied burrows are found, to the extent feasible, establish a buffer of 165 feet around the occupied burrow during the nonbreeding season (September 1–January 31) or 250 feet during the breeding season (February 1–August 31). The size of the buffer area may be adjusted if a qualified biologist and DFG determine that adjusting the buffer size would not be likely to have adverse effects. No project activity will commence within the buffer area until a qualified biologist confirms that the burrow is no longer occupied. If the burrow is occupied by a nesting pair, a minimum of 6.5 acres of foraging habitat contiguous to the burrow will be preserved until the breeding season is over.

- If occupied burrows cannot be avoided, during the nonbreeding season conduct on-site passive relocation techniques, approved by DFG, to encourage owls to move to alternative burrows outside of the impact area. No burrows found by the survey to be occupied will be disturbed during the breeding season.

- After burrowing owls have been confirmed absent or removed from the site, the burrows may be destroyed.

Significance after Mitigation

With the implementation of avoidance measures, nest surveys, and the payment of fees to the SJMSCP Joint Powers Authority for disturbance of up to 153.2 acres (up to: 70 acres of farmland raptor foraging habitat; 74.2 acres of raptor nesting habitat at the existing Karl Holton Youth Correctional Facility; and 9 acres of raptor foraging habitat at the existing detention basin) described in the mitigation measures for Impact BIO-1, direct effects on nesting raptors would be minimized and loss of foraging habitat would be compensated. Thus, direct and indirect impacts on raptor species would be reduced to a less-than-significant level.

IMPACT BIO-2 **Injury or Mortality of Special-Status Bat Species.** *Implementation of the proposed project could result in injury and mortality of pallid bats should vacant buildings on the project site be used as day roosts, hibernation roosts, or maternity colony roosts. (Significant, less than significant with mitigation)*

Numerous vacant buildings on the project site could provide day roosts, maternity colony roosts, and/or hibernation roosts for pallid bat, a California species of special concern that is not a species covered by the SJMSCP. Pallid bats have been documented in the project vicinity (CNDDB 2008) and pallid bats are known to roost in abandoned or little-used structures in wall sections, behind fascia, in spaces between vaulted interior ceiling and roofing materials, and in similar enclosed spaces (Sacramento County 2007:Appendix A). Day roosts are used throughout the spring and summer and maternity colony roosts can be active from early April until mid-October. All buildings on the existing site would be demolished. Should any of these buildings support an active roost of pallid bats, building demolition could result in injury or mortality of a potentially large number of bats. This impact would be significant.

Mitigation Measure(s) for Impact BIO-2:

Surveys for roosting bats on the project site will be conducted by a qualified biologist. Surveys will consist of a daytime pedestrian survey looking for evidence of bat use (e.g., guano) and/or an evening emergence survey to note the presence or absence of bats. The type of survey will depend on the condition of the buildings. If no bat roosts are found, then no further study is required. If evidence of bat use is observed, the number and species of bats using the roost will be determined. Bat detectors may be used to supplement survey efforts, but are not required.

If roosts of pallid bats are determined to be present and must be removed, the bats will be excluded from the roosting site before the facility is removed. A mitigation program addressing compensation, exclusion methods, and roost removal procedures will be developed in consultation with DFG before implementation. Exclusion methods may include use of one-way doors at roost entrances (bats may leave but not reenter), or sealing roost entrances when the site can be confirmed to contain no bats. Exclusion efforts may be restricted during periods of sensitive activity (e.g., during hibernation or while females in maternity colonies are nursing young). The loss of each roost (if any) will be replaced in consultation with DFG and may include construction and installation of bat boxes suitable to the bat species and colony size excluded from the original roosting site. Roost replacement will be implemented before bats are excluded from the original roost sites. Once the replacement roosts are constructed and it is confirmed that bats are not present in the original roost site, the building may be removed.

Significance after Mitigation

By ensuring absence of pallid bats from potential roosts before demolition and replacing lost roost sites, the mitigation measure for Impact Bio-2 would minimize impacts on pallid bats. As a result, the project's impacts on pallid bats would be reduced to a less-than-significant level.

IMPACT BIO-3 **Injury or Mortality of Special-Status Reptile Species.** *Implementation of the proposed project could result in injury and mortality of giant garter snakes and northwestern pond turtles in upland areas around Littlejohns Creek and the stormwater detention basin. (Significant, less than significant with mitigation)*

Should expansion of the detention basin receiving stormwater from the NCYCC facilities be required, the area would be recontoured to increase the capacity of the existing basin, which includes an area of permanent standing water toward the south of the basin that consists of aquatic habitat. Although no construction would take place within existing aquatic habitat, earthmoving activities would take place within 200 feet of Littlejohns Creek and the areas of permanent standing water within the detention basin, both of which provide potential aquatic habitat for giant garter snake and northwestern pond turtle. Giant garter snake and northwestern pond turtle both use upland habitat adjacent to aquatic habitat. Giant garter snakes use areas adjacent to their aquatic habitat for basking and for cover, and they overwinter in upland burrows. Nothwestern pond turtles nest in upland areas. No

temporary or permanent loss of aquatic habitat is expected as a result of earthmoving activities in the area adjacent to Littlejohns Creek and the stormwater detention basin because no construction would occur within existing aquatic habitat, and because expansion of the detention basin would likely result in an overall increase in the amount of aquatic habitat. Earthmoving activities in this area could result in injury or mortality of giant garter snakes and northwestern pond turtles. This impact would be significant.

Mitigation Measure(s) for Impact BIO-3:

As stated above in Mitigation Measure(s) for Impact BIO-1, prior to the ground disturbing activities third-party participation in the SJMSCP will be requested and the fees paid. The SJMSCP Joint Powers Authority will determine the total amount of the fees to be paid. The acreage of disturbance could amount up to 9 acres. The following avoidance and minimization measures for giant garter snake and northwestern pond turtles will be implemented.

Giant Garter Snake. Consistent with the avoidance and minimization measures in the SJMSCP, CPR will implement the following measures to reduce impacts on giant garter snake. All mitigation listed below will be limited to construction within 200 feet of potential aquatic habitat.

- All ground-disturbing activity will be limited to May 1–October 1, the active period for giant garter snake. Consult with USFWS and DFG if work cannot be completed by October 1. If work occurs continuously before that date, work may continue contingent upon written approval from USFWS and DFG.

- Retain a qualified biologist to conduct a worker-awareness training program for all construction personnel before construction activities begin. The program will inform all construction personnel about the life history and status of the snake, the need to avoid causing snake mortality and damaging suitable habitat, and the possible penalties for not complying with these requirements. Submit written documentation of the training to USFWS and DFG within 30 days of completion.

- Before construction activities begin, erect high-visibility fencing in locations identified by a qualified biologist to protect areas of aquatic habitat outside of the construction area from encroachment. All construction personnel will avoid these areas. The primary construction contractor will inspect the fencing before the start of each work day and will maintain the fencing in place until all construction activities are completed.

- No plastic, monofilament, jute, or similar erosion control matting that could entangle snakes will be used.

- Within 24 hours before ground-disturbing activities, a qualified USFWS-approved biologist will inspect the basin area for giant garter snakes. The biologist will provide USFWS written documentation of the monitoring efforts within 24 hours of the start of construction. The monitoring biologist will reinspect the project site whenever a lapse in construction activity of 2 weeks or greater has occurred.

- A monitoring biologist will be available throughout the construction period for the detention basin and will conduct a monitoring visit at least once per week to ensure that avoidance and minimization measures are being properly implemented. If a snake is encountered during construction activities, the biologist will have the authority to stop work until appropriate corrective measures have been completed or until it has been determined that the snake will not be harmed. USFWS will be contacted immediately.

- Snakes encountered during construction will be allowed to move away from the activities on their own. Capture or relocation of snakes will be attempted only by individuals who hold a valid Section 10(a)(1)(A) permit from USFWS.

- The number of access routes, number and size of staging areas, and total area of the proposed project activity will be limited to the minimum necessary. Movement of heavy equipment to and from the project site will be

restricted to established roadways and designated staging areas to minimize habitat disturbance. Project-related vehicles will observe a 20-mile-per-hour speed limit within the detention basin construction areas.

- During construction operations, temporary stockpiling of construction materials, portable equipment, vehicles, supplies, and soil will be restricted to designated construction staging areas. To avoid attracting predators of the snake, all food-related trash items, such as wrappers, cans, bottles, and food scraps, will be disposed of in closed containers.

- The biologist will report any incidental take to USFWS by telephone and written letter addressed to the chief of USFWS's Endangered Species Division within 1 working day.

Northwestern Pond Turtle. Consistent with the avoidance and minimization measures in the SJMSCP, CPR will implement the following measures to reduce impacts on northwestern pond turtle. All mitigation listed below will be limited to construction within 200 feet of potential aquatic habitat.

- A qualified biologist will conduct a preconstruction survey for western pond turtle. If pond turtles are found within the detention basin expansion area during the survey, or are observed within the construction area at any other time, they will be relocated by the biologist to upstream or adjacent aquatic habitat that would not be disturbed by construction activity.

- If nesting areas for pond turtles are identified on the project site, then a buffer area of 300 feet will be established between the nesting site and aquatic habitat during the nesting period (April–November). These buffers will be indicated by temporary fencing if construction has begun or will begin before nesting periods are ended (the period from egg laying to emergence of hatchlings is normally April–November).

Significance after Mitigation

By restricting timing of ground disturbance within 200 feet of aquatic habitat to the giant garter snake's active season, surveying areas to be disturbed for garter snakes and pond turtles before earthmoving begins, and payment of mitigation fees to the SJMSCP Joint Powers Authority for up to 9 acres of disturbance to reptile habitat, the mitigation measures for Impact BIO-3 would minimize the potential for injury and mortality to these species. As a result, the project's impacts on giant garter snake and northwestern pond turtle would be reduced to a less-than-significant level.

IMPACT BIO-4 **Injury or Mortality of Tricolored Blackbirds.** *Expansion of the stormwater detention basin could result in injury and mortality of tricolored blackbirds should a breeding colony occur in the basin. (Significant, less than significant with mitigation)*

Marsh habitat in the stormwater detention basin is suitable breeding habitat for tricolored blackbirds, which form large breeding colonies. No loss of habitat for tricolored blackbirds would result from construction activities associated with expanding the basin because expansion of the basin is likely to result in an overall increase in the amount of marsh habitat. However, should a breeding colony of tricolored blackbirds become established in the basin, construction activities to expand the basin could result in injury or mortality of tricolored blackbirds, could disturb nesting, and could result in nest failure. This impact would be significant.

Mitigation Measure(s) for Impact BIO-4:

As stated above in mitigation measures for Impact BIO-1 and BIO-3, prior to the ground disturbing activities third-party participation in the SJMSCP will be requested and the fees paid. The SJMSCP Joint Powers Authority would determine the fee amount, which could amount to up to 9 acres of disturbance. Consistent with the avoidance and minimization measures in the SJMSCP, CPR will implement the following measures to reduce impacts on tricolored blackbird:

- If project activity would occur during the tricolored blackbird's nesting season (March 1–August 31), a qualified biologist will conduct preconstruction surveys before activity occurring within 500 feet of suitable nesting habitat, including freshwater marsh and areas of low shrubby riparian vegetation. The survey will be conducted within 14 days before project activity begins.

- If no colony is present, no further mitigation is required. If a colony is found, the qualified biologist will establish a buffer around the nesting colony. No project activity will commence within the buffer area until a qualified biologist confirms that the colony is no longer active. The size of the buffer may be determined in consultation with DFG. Buffer size is anticipated to range from 100 to 500 feet, depending on the nature of the project activity, the extent of existing disturbance in the area, and other relevant circumstances.

Significance after Mitigation

By ensuring that no tricolored blackbirds are using the stormwater detention basin for breeding during project construction and payment of mitigation fees to the SJMSCP Joint Powers Authority for up to 9 acres of disturbance to tricolored blackbird habitat, the mitigation measures for Impact BIO-4 would prevent injury and mortality of tricolored blackbirds. As a result, the project's impacts on tricolored blackbirds would be reduced to a less-than-significant level.

IMPACT BIO-5 **Mortality of Special-Status Wildlife Species from the Lethal Electrified Fence.** *Operation of an electrified fence at the project site would likely result in the electrocution of wildlife, especially birds, many of which are protected under the MBTA and the California Fish and Game Code. It is unlikely that these mortalities would result in the local extirpation of any resident or migratory bird species or would reduce species diversity in the project vicinity. However, although not expected, it is possible that the local population of one or more native bird species could be substantially reduced. (Significant, less than significant with mitigation)*

The proposed project includes installation and operation of an electrified fence within the prison's security perimeter, which would likely result in the death of an undetermined number of animals. Lethal electrocution would result when an animal touches two wires simultaneously or touches one wire and an electrical ground. Based on monitoring data collected at other existing electrified fences at other CDCR facilities throughout the state, a number of native birds and mammals are likely to be killed on the electrified fence. Birds are by far the most common wildlife group electrocuted, with mammals making up a relatively small percentage.

No CDCR facilities with an electrified fence are located near the project site, but Valley State Prison for Women (VSPW) in Chowchilla (88 miles south of Stockton on State Route 99) has an electrified fence and may provide a useful comparison of potential wildlife impacts resulting from installation of an electrified fence at the project site. Agriculture is the primary land use around both VSPW and the project site. Based on 8 years of mortality monitoring data collected at VSPW, native bird species were the main group of wildlife killed, with an average of approximately 16 individuals killed per year. Most of these are species protected under the MBTA and California Fish and Game Code. Approximately 20% of the birds killed at VSPW are considered "sensitive" species; however, none of the species killed are protected by the ESA or CESA. Sensitive species include those that meet the definition of special-status described above (i.e., wildlife species identified by DFG as species of special concern), as well as common raptor species, and are covered by CDCR's Statewide Electrified Fence HCP. Mortality of sensitive species at VSPW between 2000 and 2007 included one red-shouldered hawk, two barn owls, one California gull, seven great-horned owls, 12 loggerhead shrikes, and two red-tailed hawks.

Additional special-status species that could occur near the project site and that could enter the fence perimeter are burrowing owl and tricolored blackbird. No species listed as threatened or endangered or candidates for listing under the ESA or CESA were killed at VSPW (note that loggerhead shrike is a species of special concern but is not protected under the ESA or CESA). Although it is not expected that any such species would be killed by the electrified fence at this project site, the presence of Swainson's hawk nesting and foraging habitat precludes ruling out mortality of this species. Some common bird species likely to killed by the electrified fence for the proposed

project include house finch, northern mockingbird, mourning dove, yellow-rumped wabler, Brewer's blackbird, and red-winged blackbird. In addition, the Austin Road Landfill is located less than a mile away and is likely to attract various gull species to the project area during the winter months. This impact would be significant.

Mitigation Measure(s) for Impact BIO-5:

CPR will consult with USFWS and DFG regarding the proposed project and anticipated wildlife mortality and will take appropriate actions to minimize wildlife electrocutions to the extent feasible and compensate for impacts on native wildlife species. It is anticipated that this will be accomplished by seeking coverage under the Statewide Electrified Fence HCP in agreement with USFWS and DFG, with concurrence from CDCR. The proposed project will replace the NCWF site in the HCP. The tiered mitigation approach used by the HCP to offset potential adverse effects on birds protected under MBTA and the California Fish and Game Code is outlined below. If coverage under the Statewide Electrified Fence HCP is not authorized, then avoidance and minimization measures in Tier 1 and Tier 2 will be implemented as described below and habitat compensation commensurate with Tier 3 mitigation will be developed in consultation with USFWS and DFG.

- *Tier 1:* These mitigation measures are designed to eliminate or reduce wildlife attractants near the prison perimeter by implementing specific maintenance and operation procedures. By making the perimeter less hospitable, wildlife will frequent this area less often, thus reducing their exposure to accidental electrocution. Tier 1 maintenance and operation procedures will include:

    - *Minimization of vegetation in the vicinity of the electrified fence perimeter.* This will include removal of vegetation growing between and adjacent to chain link fences that surround electrified fences and keeping the first 100 feet of vacant land outside the perimeter and patrol road free of vegetation. Landscaping vegetation near the electrified fence will be minimized and will be trimmed or mowed to reduce its attractiveness to wildlife. Facility landscaping will be designed to provide as little cover and as few foraging and nesting opportunities as possible. Detailed information, including recommended landscape plantings that are less attractive to wildlife, can be found in the *Handbook to Reduce Wildlife Use* (MBA 1996).

    - *Minimization of standing water near the fence perimeter.* Rainwater will not be allowed to stand in or near the perimeter for more than 24 hours after a storm. Localized recontouring, excavation of ditches, and placement of gravel will occur to prevent ponding. Weeds, grasses, or emergent vegetation will be removed from ditches regularly.

    - *Timely correction of erosion gaps and spaces under fencing.* Inner and outer chain link fences will be inspected weekly to ensure that no gaps or spaces have formed. All eroded areas will be filled with soil or gravel as soon as feasible to prevent animals from entering electrified-fence areas.

    - *Proper storage of materials and waste.* To the extent feasible, equipment, supplies, rubble, or pallets will not be stored (temporarily or permanently) within 200 feet of either side of the fence perimeter. Garbage cans and dumpsters will be covered at all times and emptied as often as required to prevent overflow. The area within 200 feet of the fence perimeter will be kept free of all trash, litter, and loose food waste.

- *Tier 2:* These mitigation measures consist of both exclusion and deterrent devices. Tier 2 measures to be installed on the proposed electrified fence are listed below.

    - *Vertical netting.* Past analysis of the locations of carcasses has shown that wildlife kills were typically the result of animals contacting the lowest nine wires, because wires are vertically closer together, resulting in more opportunities for birds to contact two lethal wires or a wire and a ground. Install three-quarter-inch mesh vertical netting enveloping both sides of the lower section of the electrified fence, which will prevent most birds from contacting the fence.

- *Anti-perching wire.* Several birds have been electrocuted as a result of contacting electrified wires while perching, or attempting to perch, on the grounding brackets and fence posts of the electrified fence. Anti-perching wires, which consist of 2- to 4- inch pieces of stiff wire connected to an aluminum base, will be strategically attached to the tops of perching sites in and near the perimeter. Once installed, this wire will reduce the ability of birds to perch near the electrified fence, thus reducing exposure to accidental electrocutions.

► *Tier 3:* These mitigation measures compensate for residual wildlife mortality impacts. Habitat compensation for residual wildlife impacts associated with operation of the electrified fence at this site was provided in the HCP for the Statewide Electrified Fence Project. Collectively, the HCP is providing 2,565 acres of mitigation at 10 sites to offset the loss of individuals from electrified-fence mortality by improving reproductive success elsewhere in the state. The compensatory mitigation for the Statewide Electrified Fence Project's HCP includes habitat acquisition, restoration, management, and creation of 71 acres of riparian woodland, 1,162 acres of scrub/savanna, 700 acres of grassland/agriculture, 250 acres of mixed oak/pine woodland, 202 acres of emergent wetland/open water, and 180 acres of montane/coastal forest. Therefore, if USFWS and DFG agree to use the Statewide Electrified Fence Project's HCP for this project, no additional compensatory mitigation is required.

  Alternatively, if the project does not receive coverage under the HCP, CPR will contribute funds to an existing non-profit organization that creates and manages habitat enhancement areas that would improve opportunities for reproductive success of birds likely to be adversely affected by the project. Birds likely to be adversely affected will be predicted based on the results of mortality monitoring at comparable CDCR facilities and based on birds expected to occur in the project vicinity based on surrounding habitat. Mechanisms for implementing the mitigation will be similar to those previously utilized by CDCR for the Statewide and Six Prison Electrified Fence Projects and may include additional funding for a project to which CDCR has already contributed as part of these existing projects. The San Joaquin Valley will be targeted, but mitigation could be implemented at federal, state, or private lands located anywhere in California if the lands support a large percentage of the species at risk of electrocution at the project site. The amount of funding contributed would depend on the acreage of habitat that would benefit from the mitigation. The mitigation acreage required would be determined based on the anticipated annual mortality of native birds and the area required to support an equivalent number of individuals of the species at greatest risk of electrocution.

Significance after Mitigation

With the implementation of tiered mitigation measures as described in the mitigation for Impact BIO-5, impacts on wildlife would be reduced by minimizing the number of animals killed by the electrified fence and compensating for unavoidable mortalities by preserving breeding habitat that will increase the reproductive success of affected species. As a result, this impact would be reduced to a less-than-significant level.

IMPACT BIO-6 **Short-Term Disturbance of Jurisdictional Waters.** *Expansion of the capacity of the stormwater detention basin would result in the short-term disturbance of jurisdictional waters of the United States, which is considered a sensitive habitat by USACE. This short-term, temporary impact would be significant. (Significant, less than significant with mitigation)*

Expanding the capacity of the stormwater detention basin south of the project site could result in the disturbance of 0–1.5 acres of jurisdictional waters of the United States. The exact extent of grading that would be required to expand the capacity of the detention basin has not yet been determined. A formal wetland delineation has not been conducted and verified by USACE to determine the exact limit of the USACE jurisdiction in the northern half of the basin. It is anticipated that most of the area identified as jurisdictional wetlands in the preliminary mapping can be avoided. It is likely that over time the cattails, willows, and other wetland associated species would spread around the fringe of the newly expanded depression, resulting in a replacement of and increase in wetland habitat in the basin. The short-term removal of the wetland vegetation in the basin can be permitted under Nationwide

Permit 43 for stormwater management facilities. None of the freshwater marsh in southern end of the basin that is dominated by cattails and willows would be removed by expanding the capacity of the detention. The impact of short-term disturbance of jurisdictional waters of the United States would be significant.

Mitigation Measure(s) for Impact BIO-6:

To minimize, avoid, and mitigate potential short-term impacts on waters of the United States, CPR will implement the following measures:

- Minimize fill of waters of the United States and loss of freshwater marsh habitat to the greatest extent feasible. It is anticipated that most of the jurisdictional waters of the United States and all of the cattail- and willow-dominated freshwater marsh in the detention basin can be avoided. Install protective fencing along the northern edge of the wetland as far back from the area of expansion as possible to keep construction equipment out of wetlands.

- For those waters of the United States that cannot be avoided during construction, obtain authorization for fill of jurisdictional waters of the United States from USACE via the Section 404 permitting process before working in the detention basin. Implement any mitigation measures determined necessary during the Section 404 permitting process including construction best management practices during excavation to minimize the release of sediment into the adjacent waterway (Littlejohns Creek).

- As outlined in the mitigation measure for Impact HYDRO-1 in Section 4.6, "Hydrology and Water Quality," a National Pollution Discharge Elimination System permit will be obtained from the Central Valley RWQCB before project implementation. The stormwater pollution prevention plan developed and implemented as a condition of this permit will define the best management practices to minimize indirect effects on the avoided wetlands in the detention basin, as well as in Littlejohns Creek.

Significance after Mitigation

With the implementation of the mitigation measures for Impact BIO-6, impacts on waters of the United States would be avoided and reduced. Further, as described in Impact BIO-6, it is likely that over time the cattails, willows, and other wetland associated species would spread around the fringe of the newly expanded depression, resulting in a replacement of and increase in wetland habitat in the basin. As a result, this impact would be reduced to a less-than-significant level.