4.8 VEGETATION AND WILDLIFE

4.8.1 INTRODUCTION

This chapter describes the effects that the proposed project could have on vegetation, wildlife, and wetland resources in the region. All data used in this section were obtained from field visits to the CSP area. North Fork Associates has been conducting botanical and wetland surveys in the study area since 2005. Field surveys were conducted in 2005, 2006, and 2008. The 2006 and 2008 surveys for special status plants and wildlife were conducted on March 1 and 24, April 28, May 6 and 16, 2006 and May 6, 2008. Additional information for this section is based on aerial photographs and from review of the following documents:

- City of Roseville *General Plan* , as amended 2010
- City of Roseville *Zoning Ordinance* as amended 2010
- *Placer County General Plan*, as amended)
- *Draft Creekview Specific Plan,* 2010
- North Fork Associates, *Biological Resources Assessment for the +/-560- acre Creekview Specific Plan*, November 30, 2010.
- *Comprehensive Clean Water Act Section 404 Application for Creekview,* 2010
- *Recovery Plan for Vernal Pool Ecosystems of California and Southern Oregon,* December 15, 2005
- *California Natural Diversity Database (CNDD)*
- *West Roseville Specific Plan FEIR,* February 2004
- Sierra Nevada Arborists, *Blue Oaks Property Owners Creekview Project Initial Aborist Report and Tree Inventory Summary,* January 19, 2007 and 2008

The documents listed above are available for review during normal business hours at:

City of Roseville Permit Center
311 Vernon Street
Roseville, CA 95678

During the circulation of the Notice of Preparation (NOP), the City received comments from the Department of Fish and Game (CDFG) regarding impacts to Swainson's Hawk and the potential need for a Lake or Streambed Alteration Agreement (LSAA). Refer to Appendix B of this EIR to view the comments received on the project during circulation of the NOP.

4.8.2 ENVIRONMENTAL SETTING

The project area is located in the eastern Central Valley at elevations of approximately 75- to 95-feet above sea level. The project area supports non-native annual grassland, with flat to gently rolling topography. Although most of the project area is currently uncultivated, there is evidence of former wheat cultivation and pastureland. Land north of the creek has been used for cattle grazing and other agricultural uses. Most of the land located south of the Pleasant Grove Creek has been idle since 1989.

At one time several structures or farmsteads were located in the study area. Several have been removed and one cluster of structures was burned in a 2007 fire. The only structures in the project area at this time are a mobile home located in the central portion of the project site and a corn crib on the north side of Pleasant Grove Creek, near the western boundary. A residence and outbuildings exist on the Urban Reserve parcel. No other developed features exist on the landscape except for the transmission line corridor that passes along the creek corridor, dirt ranch roads, and fences and farming and ranching implements.

Wetlands and other waters are embedded within the annual grassland. Pleasant Grove Creek flows from east to west through the southern portion of the project area, and supports scattered riparian and emergent vegetation. Two intermittent tributaries, vernal pools and seasonal wetland swales, and other seasonal wetlands occur throughout the project area. The predominant plant communities are annual grassland and agricultural land.

Hydrology

Hydrology on the site is driven by two forces: precipitation and stream flow. Most of the precipitation falling on the property is captured in upland and wetland swales, which flow into the University Creek drainage to the north (tributary of Pleasant Grove Creek) and to Pleasant Grove Creek.

Pleasant Grove Creek, a regionally substantial stream, flows in a northwesterly direction through the project site. It drains the area between Auburn Ravine to the North and Dry Creek to the south as it flows west through Rocklin, Roseville and unincorporated lands in western Placer County before entering the Pleasant Grove Creek Canal in Sutter County.

Pleasant Grove Creek Canal joins with the Natomas Cross Canal and the Natomas East Canal in the American Basin, both of which discharge into the Sacramento River, a navigable water.

The reach of Pleasant Grove Creek located in the project boundaries appears to flow year round, and contained several feet of flowing water during August and early September.

The project area also supports seasonal wetland swales, vernal pools, and other seasonal wetlands that are saturated and/or inundated during the rainy season.

Biological Communities

The Project area contains non-native annual grassland, stream complex (Pleasant Grove Creek and its associated riparian corridor, and University Creek), rural mix landscape, and agriculture.

Figure 4.8-1 shows the locations the habitat types.

TABLE 4.8-1

BIOLOGICAL COMMUNITIES PRESENT

WITHIN THE CREEKVIEW SPECIFIC PLAN AREA

Biological Community	Estimated Acreage
Annual Grassland	455.50
Valley Oak Riparian Corridor	11.00
Developed/Disturbed	3.41
Cultivated Land	56.26
Waters of the United States	33.83
Total	**560***

*Note: Includes Off-Site Improvement Area (58.6 acres)

Annual Grasslands

Most of the project area supports disturbed, non-native annual grassland that has been managed in different ways. Although most of the project area is currently fallow, there is evidence of former wheat cultivation, regular disking, and pasture land. Most of the project area has been disked over the years. During the April 2007 field surveys, the area was dominated by wheat. Large patches of bare ground and ruderal vegetation such as vetch, turkey mullein, common knotweed, and bindweed occur throughout the project area. The western portions of the project area appear to have been historically heavily grazed; however, during the field surveys no cattle were observed on any portion of the Project area. The areas along the southern Project area boundary appeared to be recently and regularly disked. All of the fallow areas appear to be dominated by non-native grass species such as medusa-head grass, soft chess, ripgut grass, and slender wild oats. Other common non-native herbaceous species include yellow star-thistle, vetch, filaree, Fitch's spikeweed, and virgate tarweed. Native species present include: common fiddleneck, rusty popcornflower, ookow, white brodiaea, and Ithruriel's spear.

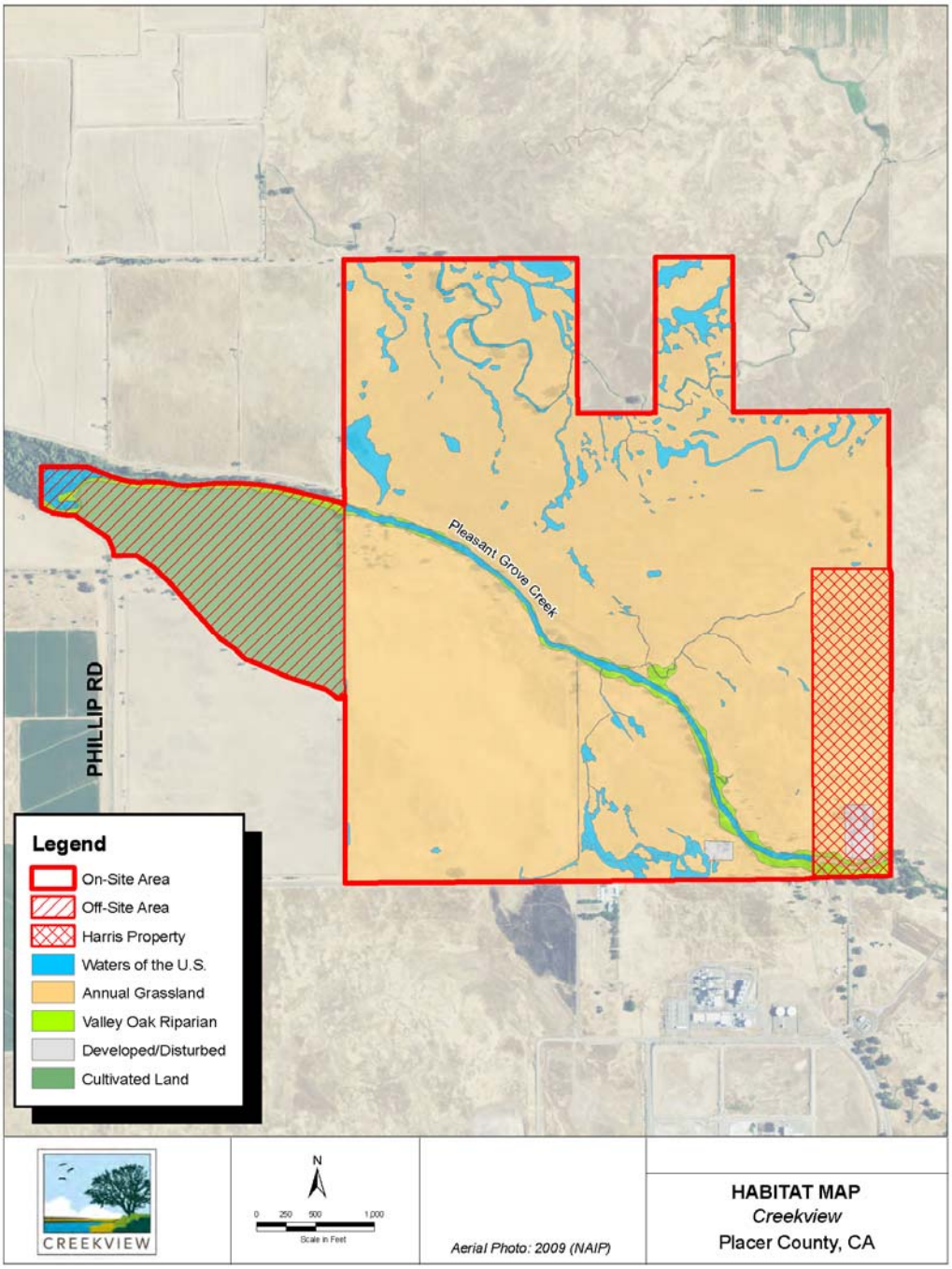
Non-native annual grassland habitats generally occupy what was once native grassland consisting primarily of perennial bunch grasses. Prior to its conversion to agricultural production by settlers, the Great Valley supported a diversity of habitats made up of vast grasslands, valley oak savannahs, riparian woodlands, and marshes.

Stream Complex

Pleasant Grove Creek is a perennial drainage that contained flowing and standing water at the time of the field surveys. Pleasant Grove Creek was historically an intermittent stream that has been converted to more of a perennial condition through the addition of irrigation runoff from upstream development. Certain reaches of Pleasant Grove Creek are associated with riparian habitat and emergent marsh.

FIGURE 4.8-1

HABITAT TYPES



Wetlands

Approximately 37.03 acres of wetlands and other waters are found within the CSP area, consisting of the following: 0.08 acres of ephemeral streams, 5.68 of perennial streams, 1.77 acres of intermittent streams, 2.70 acres of seasonal marshes, 7.43 acres of seasonal wetlands, 1.75 acres of vernal pools, and 14.42 acres of wetland swales. Wetlands are dispersed throughout the Project area, as shown in Figure 4.8-2, with the greatest concentration located on the north side of the project site.

Waters of the United States

The study area has resources within the jurisdiction of the U.S. Army Corps of Engineers pursuant to Section 404 of the federal Clean Water Act.

Pleasant Grove Creek

Anadromous fish species, such as Central Valley spring and winter-run Chinook salmon and steelhead, are not expected to occur within Pleasant Grove Creek.

This section of Pleasant Grove Creek, as well as University Creek, is expected to support only resident cold- and warm-water fish species.

Seasonal Wetland

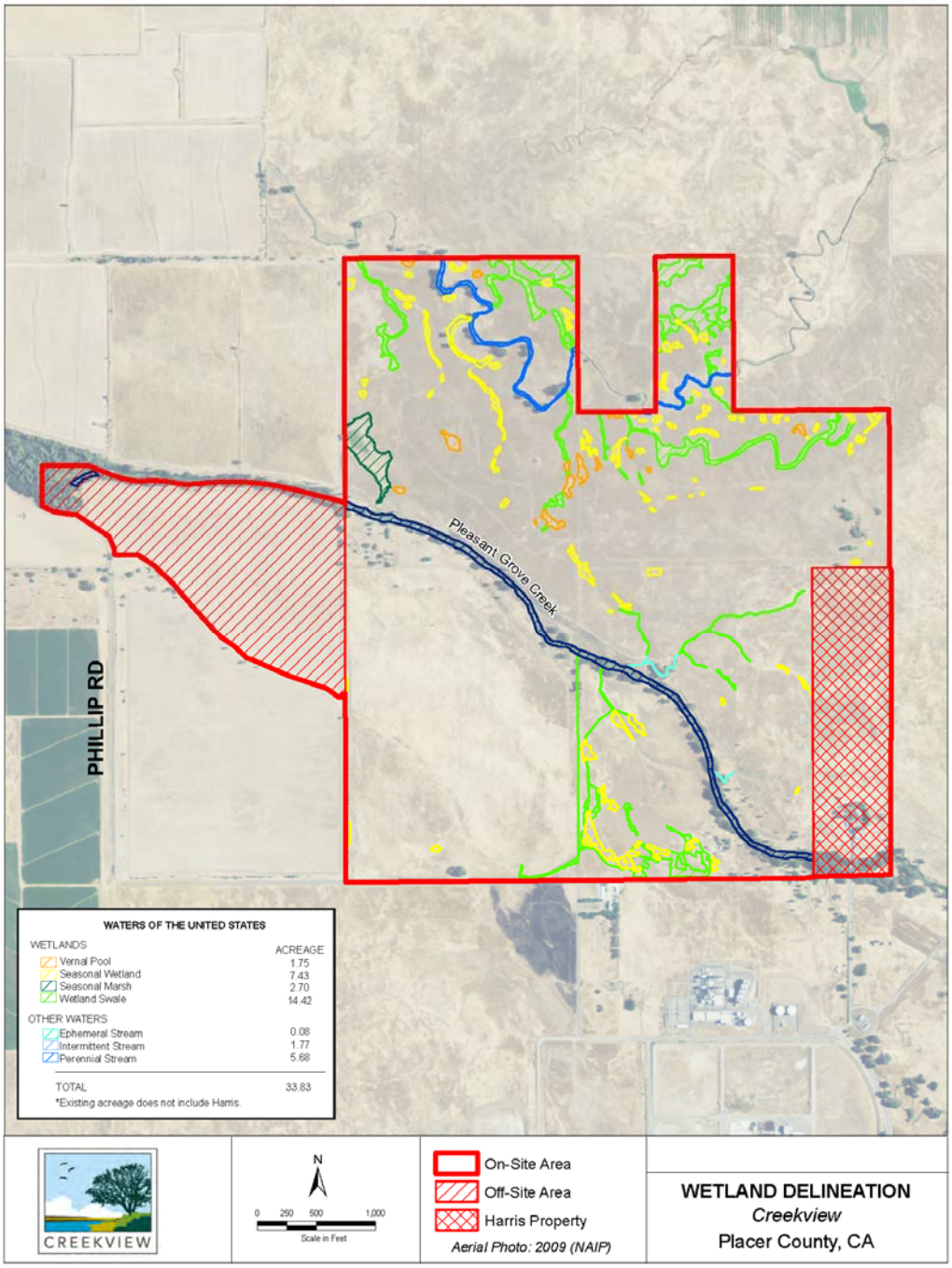
Seasonal wetlands are seasonally inundated and/or saturated depressions. They are similar to vernal pools; however, they support mostly a non-native flora and are not dominated by vernal pool endemics. Within the project area, these depressions collect rain water or receive water from baseflow and/or overbank flooding from adjacent streams during high flows.

Vernal Pools and Swales

Vernal pools are depressional wetlands underlain by hardpans or duripans that pond with winter and spring rainfall but are dry in the summer and fall. They typically support a variety of invertebrate populations including federally listed branchiopods and endemic flora.

FIGURE 4.8-2

WETLAND DELINEATION



Seasonal Marsh

This habitat type occurs in a pond north of Pleasant Grove Creek on the west side of the study area. Marsh vegetation also occurs along the edges of Pleasant Grove Creek and other natural drainages, although most of this is included in creek or swale habitat types. This is a biologically important habitat feature in the study area, supporting a variety of wetland-associated species.

Riparian Woodlands

Riparian habitat supports one of the most diverse areas for wildlife of any habitat type in the state. Riparian woodlands provide essential nesting, roosting, and cover for many species, and enhances the species richness and value of the open grassland habitat. Riparian habitat is found along Pleasant Grove Creek.

Valley Oak Riparian

The majority of the site is treeless and no riparian habitat occurs within the study area except for a band of Valley Oak Riparian habitat associated with Pleasant Grove Creek. The 11-acre riparian corridor located along Pleasant Grove Creek, in both on-site and off-site portions, is dominated by valley oak, but supports cottonwood, blue oak, and black willow. Himalayan blackberry is common and forms a shrubby understory. There are also several isolated valley oak trees, including a tall, mature valley oak along the north side of Phillip Road along the southern edge of the study area.

The portion of University Creek in the northwest corner of the Project area supports 20-30 mature valley oaks along its upper bank. There are no other trees or shrubs or other associated streamside vegetation. Thus, University Creek is not considered a riparian corridor.

West of the Creekview Specific Plan Area (particularly on Reason Farms), the riparian corridor along Pleasant Grove Creek becomes wider and denser. Willows, cottonwoods, and valley oaks are the main species. The understory is Himalayan blackberry, but herbaceous species are common in some places.

The *Initial Arborist Report and Tree Inventory Summary* (Sierra Nevada Arborists 2007) and supplemental reports (Sierra Nevada Arborists 2008) inventoried 528 blue oak, interior live oak, and valley oak trees within the Creekview Specific Plan Area except for the Harris property.

Developed/Disturbed

The developed/disturbed habitat components are associated with buildings and associated structures on the on-site portion of the Project area. These areas have a high level of disturbance and include an occupied ranch residence on the Harris property. The habitat supports sparse and ruderal vegetation.

Cultivated Land

Approximately 56 acres in the offsite proposed bypass channel area, to the west, in the Off-Site Improvement Area (Reason Farms panhandle), support agriculture. This area undergoes rotational agricultural activities every three years and currently supports cattle. Plant species include Italian ryegrass, wheat, oats, and common vetch. Berms and raised pads support primarily ruderal species.

Wildlife Occurrence and Use

The region surrounding the project site is becoming increasingly urbanized with residential development. The project site is in an area adjacent to this urban expansion, with existing development to the east and north and proposed development to the south and west.

The project area and surrounding undeveloped landscapes provide suitable habitat for many wildlife species. During the winter and spring months when vernal pools, swales and other seasonal wetlands are inundated, these habitats support a variety of aquatic invertebrates including several special status species, and are key habitats for wintering waterfowl, wading birds, and several amphibian species such as Pacific chorus frog.

Open grassland provides suitable habitat for several breeding and wintering raptors, particularly for foraging habitat. Several prey species were detected during surveys including pocket gopher, meadow vole, and black-tailed jackrabbit. During the spring and summer seasons, locally breeding raptors such as Swainson's hawk, red-tailed hawk, white-tailed kite, northern harrier, and American kestrel are dependent on grassland and agricultural foraging habitats.

During the nesting raptor surveys in 2007, two active red-tailed hawk nests and one Swainson's hawk nest were observed within the study area (Estep 2008a). Surveys in 2008 observed two

active red-tailed hawk nests, two Swainson's hawk nests, and two white-tailed kite nests onsite (Estep 2008b). In addition, white-tailed kite, great-horned owl, northern harrier, and American kestrel were observed foraging onsite and likely nest on or near the study area. During winter, additional species, such as ferruginous hawk, rough-legged hawk, Cooper's hawk, and sharp-shinned hawk also occupy these landscapes.

The grassland habitats are also important nesting habitat for many ground-nesting birds, such as western meadowlark and horned lark, and are home to several common reptiles such as gopher snake, valley garter snake, and western fence lizard.

Other habitat types such as emergent marsh, perennial and ephemeral streams, riparian woodlands, and isolated trees or groups of trees further enhance the value of this landscape by providing nesting, roosting, and cover habitat for species that also use the open grassland and vernal pool grassland community. The seasonal marsh north of Pleasant Grove Creek provides important nesting opportunities for red-winged blackbirds and other species that also forage in grassland habitats. The stream channels and associated vegetation provide cover for many species and denning opportunities for coyote and other mammals. The flowing and pooled water provide an important source of drinking water for many birds and mammals.

The riparian habitat along Pleasant Grove Creek and the valley oak trees along University Creek, and the few isolated ornamental trees and patches of trees throughout the study area, provide important nesting habitat for breeding raptors and many other birds common to the area, including American crow, western scrub jay, yellow-billed magpie, mourning dove, and songbirds. Trees associated with rural residences provide similar nesting and roosting habitat value.

Pleasant Grove Creek and University Creek are not known to support anadromous salmonids such as Chinook salmon or steelhead (NMFS 2008; DWR 2005). The portion of Pleasant Grove Creek (and other streams, such as University Creek) located within the study area are therefore expected to support only resident warm-water fish species.

TABLE 4.8-2
SPECIAL STATUS SPECIES
THAT COULD OCCUR IN PROJECT AREA

Species	Federal	State	CNPS	Habitat	Potential for Occurrence
Plants					
Dwarf downingia *Dowingia pusilla*	-	-	List 2.2	Valley and foothill grassland; vernal pools	Occurs. Observed in a basin vernal pool, wetland swale and a man-made ditch onsite in 2006.
Bogg's Lake hedge-hyssop *Gratiola heterosepala*	-	CE	List 1B.2	Marshes and swamps (lake margins); Vernal pools below 1200 m	Occurs. Observed n one deep basin vernal pool onsite in 2006 and 2008.
Ahart's dwarf rush *Juncus leiospermus* var. *ahartii*	-	-	List 1 B.2	Vernal pools	Possible. Suitable habitat is present in study area. Not observed onsite.
Big-scale balsam-root *Balsamorhiza macrolepis var. macrolepis*	-	-	List 1 B.2	Cismontane woodland; valley and foothill grassland	Possible. Marginal habitat is present in the study area. Not observed onsite.

CSC- California Species of Special Concern

FE- Federally Endangered

FT- Federally Threatened

CT- California Threatened

CF- California Fully Protected

CE- California Endangered

CNPS- California Native Plant Society

List 1B- Rare or Endangered in CA

List 2- Rare and Endangered in CA, more common elsewhere

List .1- Seriously endangered in CA

*- Rookeries are tracked and are of special interest to CDFG

TABLE 4.8-2 (Continued)
SPECIAL STATUS SPECIES
THAT COULD OCCUR IN PROJECT AREA

Species	Federal	State	CNPS	Habitat	Potential for Occurrence
Red Bluff dwarf rush *Juncus leiospermus* var. *leiospermus*	-	-	List 1B.1	Chaparral; cismontane woodland, valley and foothill grassland; vernal poolsVernal pools	Unlikely. Nearest known occurrence is considered to be a misidentification (CDFG 2008). Not observed onsite
Legenere *Legenere limosa*	-	-	List 1B.1	Vernal pools	Possible. Suitable habitat is present. Not observed onsite
Pincushion navarretia *Navarretia myersii* spp. *Myersii*	-	-	List 1 B.1	Vernal pools	Possible. Suitable habitat is present. Not observed onsite
Slender Orcut grass *Orcuttia tenuis*	FT	CE	List 1 B.1	Vernal pools	Unlikely. Marginal habitat occurs in the project area. Not known in Placer County. Not observed onsite.
Sacramento Valley Orcutt grass *Orcuttia viscida*	FE	CE	List 1 B.1	Vernal pools	Unlikely. Marginal habitat occurs in the project area. Prefers larger, deeper pools. Not known in Placer County. Not observed onsite.
Sanford's arrowhead Sagittaria sanfordii	-	--	List 1 B.2	Marshes, swamps, and other wetlands	Possible. Marginal habitat is present. Not observed onsite.
Vernal pool fairy shrimp *Branchinecta lynchi*	FT	-	-	Vernal pools, swales, seasonal wetlands	Occurs. *Branchinecta* spp. Cysts present on site., assumed to be *B. lynchi*. No adult B. lynchi observed onsite (2007 and 2008)
Conservancy fairy shrimp *Branchinecta conservatio*	FE	-	-	Vernal pools, swales, seasonal wetlands	Unlikely. Marginal habitat in study area. Not observed during surveys (2007). Very rare in region.
Vernal pool tadpole shrimp *Lepidurus packardi*	FE	-	-	Vernal pools, swales, seasonal wetlands	Unlikely. Marginal habitat in study area. Not observed during surveys (2007).
Invertebrates					

TABLE 4.8-2 (Continued)
SPECIAL STATUS SPECIES
THAT COULD OCCUR IN PROJECT AREA

Species	Federal	State	CNPS	Habitat	Potential for Occurrence
Valley elderberry longhorn beetle *Desmocerus californicus dimorphus*	FT	-	-	Elderberry shrubs with stems greater than 1 inch diameter are considered potential habitat.	None/Unlikely. No elderberry shrubs are present in study area. Harris property not surveyed. Not observed onsite.
Amphibians					
California tiger salamander *Ambystoma californieinse*	FT	CSC	-	Vernal pools, vernal pool grasslands, ponds	Unlikely. Not detected during surveys and no recent or historical records from western Placer County
California red-legged frog *Rana aurora draytonii*	FT	CSC	-	Deeper pools and streams with emergent or overhanging vegetation	Unlikely in project area. Marginal habitat. No recent records from western Placer County
Western spadefoot *Spea hammondii*	-	CSC	-	Seasonally inundated basins	Possible. Not detected during surveys; however, suitable habitat. Surveys did not include the Harris property.
Reptiles					
Western pond turtle *Clemmys marmorata*	-	CSC	-	Ponds, marshes, river, streams and ditches with basking sites and vegetation	Possible. Suitable habitat occurs in the study area. Not observed onsite.
Giant garter snake *Thamnophis gigas*	FT	CT	-	Streams, irrigation channels, seasonal wetlands	Unlikely. Marginal habitat. Not observed onsite.
Birds					
Tricolored backbird *Agelaius tricolor*	-	CSC	-	Open water areas with tall emergent vegetation or in willow and blackberry thickets	Possible for foraging, unlikely to nest. Colony observed +/- 4,000 feet downstream, but not observed onsite.
Great egret (rookery) *Ardea alba*	-	*	-	Colonial nester in tall trees.	Unlikely. Marginal habitat. Not observed onsite.

TABLE 4.8-2 (Continued)
SPECIAL STATUS SPECIES
THAT COULD OCCUR IN PROJECT AREA

Species	Federal	State	CNPS	Habitat	Potential for Occurrence
Great blue heron (rookery) *Ardea herodias*	-	*	-	Colonial nester in tall trees	Unlikely. Marginal habitat. Not observed onsite.
Snowy egret (rookery) *Egretta thula*	-	*	-	Colonial nester in dense tules.	Unlikely. Marginal rookery habitat occurs onsite. Not observed on site.
Black-crowned nigh heron (rookery) *Nycticorax nycticorax*	-	*	-	Colonial nester in trees and sometimes tule patches.	Unlikely. Marginal rookery habitat occurs in the study area. Not observed onsite.
Grasshopper sparrow *Ammodramus savannarum*	-	CSC	-	Breeds in grasslands and savannahs in rolling hills and lower mountain hillsides up to 5000 feet elevation.	Unlikely. Marginal habitat occurs in the study area. Not observed onsite.
Burrowing owl *Ahtene cunicularia*	-	CSC	-	Grasslands, agricultural lands	Possible. Suitable habitat. Not observed onsite.
Swainson's hawk *Buteo swainsoni*	-	CT	-	Grasslands, agricultural lands	Occurs. Observed nesting in project area (2007 and 2008) and species forages in study area.
Northern harrier *Circus cyaneus*	-	CSC	-	Grasslands, seasonal wetlands, agricultural lands	Occurs. Observed foraging. (2008). No observed nesting on the site.
White-tailed kite *Elanus leucurus*	-	CFP	-	Open grassland, and farmlands. Nests in tall trees near foraging areas.	Occurs. Observed two nests. (2008) and species observed foraging.
Greater sandhill crane *Grus candadensis*	FT	-	-	Seasonal wetlands, irrigated pastures, alfalfa and corn fields.	Unlikely. Marginal habitat. Not observed onsite.

TABLE 4.8-2 (Continued)
SPECIAL STATUS SPECIES
THAT COULD OCCUR IN PROJECT AREA

Species	Federal	State	CNPS	Habitat	Potential for Occurrence
tabida					
Western yellow billed cuckoo *Coccyzus americanus occidentalis*	FC	CE	-	Riparian forests along broad, lower floodplains of larger rivers. Nest in thickets of willows and cottonwoods with an understory of blackberry, nettle, or wild grape.	Unlikely. Marginal habitat in western portion of Pleasant Grove Creek. Generally not considered a nesting bird in Placer County. Not observed onsite.
Loggerhead shrike *Lanius ludovicianus*	-	CSC	-	Grasslands, pastures, agricultural lands	Occurs. Observed foraging in 2008. No nesting observed onsite.
California black rail *Laterallus jamaicesis*	-	T	-	Shallow, perennial freshwater marshes	Unlikely. Habitat along Pleasant Grove Creek, but few regional occurrences.
Long-billed curlew Numensius americanus	-	-	-	Winter foraging and roosting habitat in pastures, seasonal wetlands and some cultivated lands	Likely for wintering.
Purple martin *Progne subis*	-	CSC	-	Breeds in riparian woodland, oak woodland, open coniferous forest. Secondary cavity nester. Requires nest sites close to open foraging areas of water or land.	Unlikely. Marginal habitat Not observed onsite.
Mammals					
Pallid bat *Antrozous pallidus*	-	CSC	-	Shrublands, grasslands, woodlands, forests; rocky areas, caves, hollow trees	Possible for foraging, unlikely for roosting. Not observed onsite.
Townsend's big-eared bat *Corynorhinus twonsendii twonsendii*	-	CSC	-	Most low to mid-elevation habitats; caves, mines, and buildings for roosting.	Possible for foraging, unlikely for roosting. Not observed onsite.

Pleasant Grove Creek drains into the northern part of the Natomas East Main Drainage Canal (NEMDC), which flows into the Sacramento River. Although there is a connection to the Sacramento River, the Natomas East Main Drainage Canal is an "impaired" waterway and has significant water quality issues. The NEMDC, however, provides a migratory route to Dry Creek which supports marginal salmonid habitat (NMFS 2007).

There are 12 plant species and 23 species of animals that either occur or have some potential to occur within the project area because of the presence of suitable habitat. Table 4.8-2 lists these species, their habitat and potential for occurrence within the project area.In general, vernal pool and seasonal wetland habitats that meet the general definition of habitat are considered suitable habitat by these species.

Plants

NFA conducted floristic special-status plant surveys of the CSP area on March 1 and 24, April 28, and May 6 and 16, 2006, with a follow-up survey on May 6, 2008. Figure 4 shows the location of special-status plants in the CSP area (surveys did not include the Harris property or the Reason Farms portion of the study area).

Special Status Wildlife

Aquatic Invertebrates

Several special status invertebrates have the potential to occur in vernal pools and seasonal wetland habitats in the broader project region, including vernal pool tadpole shrimp and conservancy fairy shrimp, both federally listed endangered species, and vernal pool fairy shrimp, a federally listed threatened species. Each of these species occurs in vernal pools and other seasonal wetland habitats throughout the Central Valley, and each is known to occur in western Placer County.

Collectively these species occur within a range of specific environmental conditions that include soil type, vegetation characteristics, water depth, water temperature, inundation duration, and water quality and detection can be difficult. In general, therefore, vernal pool and seasonal wetland habitats that meet the definition of habitat suitability are considered potentially occupied

by these species. To confirm absence of these species requires adherence to standard U. S. Fish and Wildlife Service two-year survey protocol.

Protocol surveys were conducted by Helm Biological Consulting during the 2006-2008 dry and wet seasons within the study area. A total of 202 basins (21 vernal pools, 35 wetland swales, 90 seasonal wetlands and one seasonal marsh was identified by NFA (2007) and 55 additional basins identified by Helm Biological Consulting), were sampled during dry sampling surveys, and 139 of these were sufficiently inundated to conduct wet-season sampling.

Of the 202 basins sampled that were considered to have potential to support special status Branchiopods, only 11 were found to be occupied by Branchincta species during dry season sampling. Species of the cysts that are detected during dry season surveys cannot be confirmed without hatching the cysts and growing them to maturity. Therefore, cysts that were observed during the dry season surveys associated with this study were, therefore, not identified to the species level, but were presumed to most likely be those of vernal pool fairy shrimp.

The conservancy fairy shrimp was determined to have minimal potential for occurrence due to the rarity of the species within the project region and the absence of additional documented occurrences locally since the 2007 observation in western Placer County.

Valley Elderberry Longhorn Beetle is a federally listed threatened species. It is a medium-sized wood-boring beetle, about 0.8 inches long. It is endemic to California's Central Valley and watersheds that drain into the Central Valley. Its presence is entirely dependent on the presence of its host plant, the elderberry shrub. Elderberry grows in upland riparian forests or savannas adjacent to riparian vegetation, but also occurs in oak woodlands and savannas and in disturbed areas. It usually co-occurs with other woody riparian plants, including Fremont cottonwood, California sycamore, various willows, wild grape, blackberry and poison oak. No elderberry shrubs were detected in the project site.

California tiger salamander is a federally threatened species and a state species of special concern. It can be found in vernal pools and seasonal ponds, including stock ponds, in grassland from sea level to about 1,500 feet in central California. No known tiger salamanders occur in the project vicinity. No specific surveys were conducted for the salamander. The species was not

detected during extensive vernal pool and seasonal wetland surveys for listed branchiopods and western spadefoot. Thus, it is unlikely that the species occurs in the project area.

California red-legged frog is a federally listed threatened species and is designated as a state species of special concern. Once common, most of the remaining populations occur in the Coast Ranges. The nearest known occurrence in Placer County is at Michigan Bluff, approximately 50 miles northeast of the project site, a considerable distance away. No red-legged frogs have been found in the project vicinity. Although Pleasant Grove Creek provides marginal potential habitat, for several reasons; historic and current disturbances to the creek from farming and ranching practices and prior to urban development the creek did not contain perennial flows); and the presence of bull frogs that were detected within Pleasant Grove Creek makes it highly unlikely that the CRLF is present within the project area.

Western spadefoot toad is a state species of special concern. It occurs throughout the Central Valley and adjacent foothills up to 4,500 feet. The American spadefoot toads are of typical have the shape typical of most burrowing frogs. They are round, with short legs and protruding eyes. As suggested by their name, this frog has hard, keratinous protrusion present on their feet, which helps them to dig. Like most burrowing frogs, they will dig backwards into the ground.

The species has been reported in the vicinity of the project area in conditions and habitat similar to those on the Project site. Vernal pool and pool habitats in streams are considered high quality habitat for spadefoot. Therefore, the species is considered likely to occur. Surveys of the Project site did not detect evidence of their presence on site.

Giant garter snake is a state and federally listed threatened species. The project area supports marginally suitable habitat for the snake with perennial flow, steep-sided banks, and emergent wetlands. However the potential for occurrence is considered unlikely due to the lack of records of the species east of the Natomas East Main Drainage Canal. Pleasant Grove Creekview from Reason Farms to near Brewer Road supports a dense canopy of riparian cover, reducing the potential as a migration corridor from the Natomas Basin populations to the study area. Consequently, the giant garter snake is presume to be absent from the Creekview study area and highly unlikely to occur. Thus, while occurrence is unlikely, there remains the potential for occurrence within the Project area.

Greater sandhill crane is a state listed threatened species and California fully protected species. The greater sandhill crane is the largest of six recognized subspecies of sandhill crane, standing nearly four feet tall and with a nearly seven-foot wingspan. Portions of the Sacramento-San Joaquin Delta and Cosumnes River basin are principal wintering grounds for the crane. Most traditional foraging areas are near communal roost sites (within 2-3 miles) that are flooded with several inches of standing or slowly moving water. Foraging habitat includes harvested fields, irrigated pastures, alfalfa fields and seasonally flooded habitats. The potential for occurrence in the Project area is considered low. The study area is not within the designated essential winter range of greater sandhill crane. Although it is within an area that may receive incidental use by roosting or migrating cranes, the potential for occurrence is considered low, and the value of the project site to this species in the context of its regional wintering range is considered low.

Western yellow billed cuckoo is a state listed endangered species. This riparian species occurs in association with willow-cottonwood riparian forest. Nests are primarily in willow trees; however, other trees such as alder and box elder are sometimes used. Canopy cover is typically dense (averaging 96.8% at the nest) and large patch sizes (generally greater than 20 hectares) are typically required.

Pleasant Grove Creek extends east-west through the project site along a narrow corridor (less than 100-feet from levee to levee) of sparse to relatively dense oak-dominated riparian forest. However, beginning at the western border of the Reason Farms property, Pleasant Grove Creek basin widens to an average of approximately 300 feet and supports a much more diverse mixed riparian forest for a little over one mile before returning to a narrow, sparse to relatively dense oak-dominated riparian forest. Nonetheless, even on Reason Farms, the habitat is considered quite marginal.

There are no reported occurrences of nesting yellow-bill cuckoos from Pleasant Grove Creek or from western Placer County. Local bird lists generally regard the species as a rare migrant, but not a nesting bird in western Placer County. The nearest confirmed nesting sites are from the Feather River area. Therefore, because habitat conditions are considered marginal, the habitat patch is small (approximately 30 acres), and isolated from other potential habitat, and the species has not been reported in the vicinity, this species is considered highly unlikely to occur along the reach of pleasant Grove Creek west of Reason Farms.

Nesting Raptors

There are several common raptors that are known or have potential to nest in the study area. In 2008, two active red-tailed hawk nests were located during surveys, and great-horned owl and American kestrel were observed during field surveys.

Northern harrier is a state species of special concern. While population declines in California have been noted for many years, the species can be locally abundant. They occur primarily in open wetland, grassland, and agricultural habitats. The northern harrier is a ground-nesting raptor, which nests on the ground in marsh, grassland, and some agricultural habitats, particularly grain fields. They forage in seasonal wetland, grassland, and agricultural habitats. Several adult northern harriers were observed foraging in the project area during the survey. The seasonal marsh and seasonal wetland habitats provide suitable nesting habitat for this species. However, while northern harrier nests are sometimes difficult to detect because they are often concealed in dense vegetation, no defensive or nest-attentiveness behavior was noted that would suggest a possible active breeding site.

White-tailed kite is a state species of special concern and a state fully protected species. The white-tailed kite is a highly specialized and distinctively marked bird of prey; smaller than most hawks with a wingspan of just over three feet. The white-tailed kite nests in riparian forests and woodlands, and occasionally in isolated trees. They forage in grasslands, seasonal wetlands, and agricultural fields.

A white-tailed kite was observed foraging in the grassland habitat in the study area during the July 2007 survey and two white-tailed nests were found in 2008. Virtually the entire study area is considered suitable foraging and nesting habitat for this species.

Swainson's hawk is a state listed threatened species. It is a medium-sized hawk, which forages in open grassland in the Central Valley and Great Basin and nests in riparian forests, remnant oak woodlands, isolated trees, and roadside trees. They forage primarily in agricultural habitats, particularly those that optimize availability of prey, and also use irrigated pastures, and annual grasslands. The study area is near the eastern edge of the Swainson's hawk range in the Central Valley. The open grasslands provide suitable foraging habitat. Potential nesting trees, including valley oak and cottonwood occur along Pleasant Grove Creek, University Creek, and in several

isolated trees in the study area. Nesting raptor surveys were conducted in July 2007 and one nesting hawk was found, located in an isolated mature valley oak tree on the north side of Phillip Road along the southern boundary of the study area. The nest appeared to have failed, but both adults were present at the nest tree during the survey. Adult Swainson's hawks were also observed along Pleasant Grove Creek, just east of the occupied residence near the southeastern portion of the study area. A nest was not confirmed at this location but based on the behavior of the birds and the suitability of nesting habitat, the potential for a nest along this portion of Pleasant Grove Creek is high.

Two active Swainson's hawk nests were observed in a willow tree along Pleasant Grove Creek on the eastern border of Reason Farms, and another was observed in a valley oak tree along the south side of Pleasant Grove Creek in the central portion of the study area during surveys in 2008.

Ferruginous hawk is designated as a state species of special concern. It typically does not nest in California. Individuals migrate into California during the winter where they utilize open grassland and agricultural land for foraging and roosting. The project site provides suitable grassland wintering habitat for this species. While it probably is only an occasional visitor, its potential for occurrence during the winter is high.

California black rail is a state-listed threatened species. Until recently, the current range of this species was thought to be restricted mainly to coastal marshes. In the 1990's, populations were discovered in freshwater marshes in Yuba County. Recently the black rail was detected in the City of Rocklin in Clover Valley and along Yankee Slough southeast of Sheridan. The black rail typically inhabits marshes dominated by bullrushes and cattails. A relatively narrow range of conditions is required for occupancy and successful breeding. Too much water will prevent nesting, and too little water will lead to abandonment of the site. Because of its continuing range expansion, it is possible that it might occupy the emergent marsh of the project site.

Long-billed curlew, until recently, was a state species of special concern. The population was significantly reduced at the end of the 19th century by hunting. Numbers have rebounded sufficiently in more recent times, so that it no longer is a state species of special concern. The species is not included on the recent revision to this list. While none were reported during surveys, the long-billed curlew likely occasionally occurs in the plan area during the winter. The

open grazed grasslands are suitable foraging and roosting habitat for this species, which is fairly wide-ranging during the winter season.

Western burrowing owl is a state species of special concern. It is a small ground-dwelling owl, typically occupying the burrows created by ground squirrels. They also occupy artificial habitats, such as those created by pipes and small culverts. Burrowing owls forage in grassland and agricultural habitats with low vegetative height.

No burrowing owls or active burrows were detected during the most recent field survey. An evaluation of burrowing owl habitat in the study area during the field survey indicated that there is relatively little ground squirrel activity onsite; thus few potential nesting opportunities for burrowing owl. This may be due to past and/or ongoing ground squirrel control measures, common in cattle grazing areas or to hardpan soil conditions that are less conducive to ground squirrel activity. However, it remains possible that breeding or wintering owls could occupy the study area prior to development. The nearest recorded burrowing owl site is approximately one mile south of the project area, and has presumably been displaced as a result of the development of the West Roseville Specific Plan.

Tri-colored blackbird is a state species of special concern and more than 99% of the global population occurs in the state. In any given year, more than 75% of the breeding population can be found in the Central Valley. They breed in colonies that require the following: open accessible water; a protected nesting area including either flooded or thorny or spiny vegetation; and a suitable foraging space providing adequate insect prey within a few miles of the nesting colony.

The tri-colored blackbird was not observed during the field survey. The nearest known occurrence is a June 3, 2008 undocumented observance of a colony approximately 4,000 feet west of the study area. The colony was located in a large, open cattail and tule marsh within Pleasant Grove Creek. The nearest known active tricolored colony is on the BKS preserve, a property owned and managed by the Natomas Basin Conservancy approximately 6-7 miles west of the Project site. The project site does not support similar large, open marshes where the colony was found downstream. However, the project site probably provides some foraging use.

Loggerhead shrike is a species of special concern. It is a permanent resident and winter visitor throughout California. They prefer open habitats with scattered trees, shrubs, posts, fences, utility

lines or other perches. It nests in small trees and shrubs, and forages in pastures and agricultural lands. Two loggerhead shrikes were observed during the field survey. No nests were located. Potential nesting habitat exists along Pleasant Grove Creek, ornamental trees and shrubs around rural residences, and in the small trees along Phillip Road. The entire Project area is suitable foraging habitat.

Purple martin is a species of special concern with a range California largely restricted to the Modoc Plateau, northern Sierra Nevada, the mountains of southern California, and some urban areas in the Sacramento area.

Purple martins develop colonial nests in cavities of large trees in oak or riparian woodlands and low-elevation coniferous forests. They have begun to use man-made structures such as buildings, bridges, and highway overpasses for nesting. CNDDB reports a recent nest site in a Highway 65 freeway overpass in the City of Rocklin.

This species was not observed during surveys nor has it been reported from the study area. Portions of the riparian habitat along Pleasant Grove Creek and the small oak grove along University Creek support marginal, but potential habitat for this species. The general lack of snags, hollow trees, or other essential habitat elements in the study area make the potential for occurrence of this species unlikely.

Heron/Egret Rookeries

Rookeries are colonial nesting sites for heron and egret species. While these species are not considered special status species, rookeries are included on the CDFG's special animals list because these breeding colonies can support a large segment of local populations. There are currently no rookeries in the project area. Portions of the riparian habitat along Pleasant Grove Creek and the small oak grove along University Creek are considered marginally suitable and could support a small rookery.

Grasshopper Sparrow

There are no breeding records of grasshopper sparrow from the study area and few recent occurrences from western Placer County. It is likely that the conversion of nonnative grasslands, human encroachment and incompatible land use have reduced populations of this species.

Although this species is considered unlikely to occur in the study area, the open grassland habitat provides at least marginal habitat.

Special-status Bats

Two special status bats potentially occur in the study area, the pallid bat and Townsend's big-eared bat, both state species of special concern. Pallid bat occurs primarily in shrub-lands, woodlands, and forested habitats, but also can occur in grasslands. Townsend's bat occurs in a variety of woodland and open habitats. Both species roost in mines, caves, rocky crevices, large hollow trees, and occasionally in large open buildings that are infrequently inhabited.

Although the Project site may support suitable foraging habitat for these and other common bat species, there is little habitat onsite to support roosting or maternity sites. There are no structures in the study area suitable for roosts. There are no rocky areas, mines or caves. Several of the larger trees along Pleasant Grove Creek and University Creek, and the few large isolated trees could support roosting bats, but most do not have opportunities to create large hollow spaces that would support significant roost sites.

4.8.3 REGULATORY SETTING

Federal

The U.S. Fish and Wildlife Service (USFWS) administers the Federal Endangered Species Act (FESA) except as applied to anadromous fish species and other salt water species. Projects that would result in "take" of any federally listed threatened or endangered species are required to obtain authorization from the USFWS through either Section 7 (Interagency Consultation) or Section 10 (a) (incidental take permit) of FESA, depending on whether the federal government is involved in permitting or funding the project. The authorization process, be it through Section 10 or Section 7, is used to determine whether a project would jeopardize the continued existence of a listed species or cause the destruction or adverse modification of designated critical habitat for the species, and what mitigation measures would be required to avoid jeopardizing the listed species and/or minimize incidental take of the listed species.

"Take" under the federal definition means to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct. Incidental take is defined as a

take of listed fish or wildlife that results from, but is not the purpose of, carrying out an otherwise lawful activity conducted by a federal agency or private party. Section 10 (a) (1) (B) requires an applicant for an incidental take permit to submit a "conservation plan that specifies, among other things, the impacts that are likely to result from the taking and the measures the permit applicant will undertake to minimize and mitigate such impacts." Where Section 7 is involved, incidental take authorization is provided by the incidental take statement included in the Biological Opinion.

City/U.S. Fish and Wildlife Service MOU

In August 2000, the City and the USFWS entered into a memorandum of understanding (MOU) to prepare a Habitat Conservation Plan (HCP) or equivalent permit process to minimize the indirect impact and incidental take of vernal pool species from future City growth. Consistent with this agreement, the City of Roseville, the CSP Landowners, and the USFWS, the USACE, and the U.S. Environmental Protection Agency (EPA) conducted an extensive early consultation process. The group met on 14 different occasions between March 2007 and August 2008 with the following objective: to reach basic agreement on a land use plan and mitigation strategy that could be permitted under Section 404 of the Clean Water Act utilizing a Section 7 Consultation process for ESA compliance. Modifications to the proposed land use plan were made based on feedback received, which resulted in additional avoidance areas.

Vernal Pool Recovery Plan

The CSP is located within the area covered by the "Recovery Plan for Vernal Pool Ecosystems of California and Southern Oregon" (December 15, 2005), also referred to as the Vernal Pool Recovery Plan. According to the preface, such plans are voluntary guidance documents, not regulatory documents, which broadly address conservation needs of the species. Recovery plans are necessarily expansive, identifying many options and strategies that may contribute to recovery.

According to the Vernal Pool Recovery Plan, "no agency or other entity is required by the Endangered Species Act to implement the recovery strategy or specific recommended action in a recovery plan" (page J-2), and recovery plans also are "not land use plans and cannot restrict activities proposed by other agencies or the public." (Page J-4).

A recovery plan neither expands nor diminishes any obligations under the ESA. Whether or not the USFWS has adopted a recovery plan, all persons are subject to the prohibitions against take of

a listed species in Section 9 of the ESA, and all federal agencies must comply with the requirement under Section 7 of the ESA to ensure that its actions do not jeopardize the continued existence of a listed species or adversely modify designated critical habitat

Migratory Bird Treaty Act of 1918 (MBTA)

The MBTA makes it "unlawful to take any migratory bird listed in 50 CFR Part 10, including nests, eggs, or products". This regulation is pertinent to any shrub or tree removal required for a proposed project, or project-related disturbance that could affect nesting migratory birds. The MBTA could require that elements of the proposed project (particularly vegetation removal) to be reduced or eliminated during critical phases of the nesting cycle unless surveys by a qualified biologist demonstrate that nests, eggs, or nesting birds will not be disturbed. Disturbance that causes nest abandonment and/or loss of reproductive effort (killing or abandonment of eggs or young) is considered "taking".

Clean Water Act

The objective of the Clean Water Act (CWA) is to restore and maintain the chemical, physical, and biological integrity of the Waters of the United States. Section 401 prohibits the discharge of any pollutant into the Waters of the United States without certification that the discharge would not violate applicable water quality standards, and Section 402 establishes the National Pollutant Discharge Elimination System (NPDES) permit program, which regulates "point sources" of water pollution. Section 404 of the Act requires a USACE permit for discharges of dredged or fill materials into waters of the United States (as defined in the Code of Federal Regulations (33 CFR Section 328.3 [a]; 40 CFR Section 230.3 [s]). Section 404 of the CWA is administered by the USACE.

State

The California Department of Fish and Game (CDFG) administers a number of laws and programs designed to protect biological resources.

Sections 2081.1 et seq., 3503, and 3511 of the Fish and Game Code

The CDFG derives its authority from the Fish and Game Code of California. Species listed under CESA cannot be "taken" without authorization by the CDFG.

California Endangered Species Act (CESA)and Species of Special Concern

CESA regulates the listing and take of state-endangered (SE) and state-threatened (ST) species. CESA establishes that it is the policy of the State of California to conserve, protect, restore, and enhance endangered species and their habitats.

Species listed under CESA cannot be taken without adequate mitigation and compensation. The definition of take under CESA is narrower than that described under FESA, because the state definition does not include "harm" or "harass." Rather, Fish and Game Code Section 86 defines "take" to mean "hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill." Typically, the CDFG implements endangered species protection and take determinations through the issuance of incidental take permits pursuant to Fish and Game Code Section 2081. Species listed under CESA cannot be "taken" without mitigation and compensation.

California candidate species are given protection that is equal to that provided to listed species. In addition, separate and apart from CESA, CDFG also identifies what it calls Species of Special Concern (SSC) based on limited distribution, declining populations, diminishing habitat, and/or unusual scientific, recreational, or educational value. These species are not afforded the same legal protection as listed species, but may be added to official lists in the future. The designation of SSC is intended by the CDFG as a management tool for consideration in future land use decisions. As a consequence, the CDFG typically requests that CEQA lead agencies give consideration to minimization of impacts to SSC species when approving projects.

Natural Communities Conservation Planning Act

Sections 2800–2835 of the California Fish and Game Code detail the State's policies on the conservation, protection, restoration, and enhancement of the State's natural resources and ecosystems. The intent of the legislation is to provide for conservation planning as an officially recognized policy that can be used as a tool to eliminate conflicts between the protection of the State's natural resources and the need for growth and development. In addition, the legislation promotes conservation planning as a means of coordination and cooperation among private interests, agencies, and landowners, and as a mechanism for multi-species and multi-habitat management and conservation. A Natural Communities Conservation Plan (NCCP) can be an

alternative to an incidental take permit issued under CESA as a source of take authorization for state-listed species.

Fully Protected Species Four sections of the California Fish and Game Code (Sections 3511 [birds], 4700 [mammals], 5050 [reptiles and amphibians], and 5515 [fish]) list 37 fully protected species. CESA prohibits take or possession at any time of fully protected species. CDFG is unable to authorize incidental take of fully protected species when activities are proposed in areas inhabited by those species. CDFG has informed nonfederal agencies and private parties that they must avoid take of any fully protected species in carrying out projects.

Protection of 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 (i.e. hawks, owls, eagles, and falcons), including their nests or eggs. Typical violations involve removal of vegetation in which nests are located resulting in destruction of active nests. Violation of Section 3503.5 could also involve failure of active raptor nests resulting from disturbance of nesting pairs by nearby project construction.

Sections 1600-1607 of the Fish and Game Code

Under Section 1600-1607 of the California Fish and Game Code, CDFG regulates activities that would substantially alter the flow, bed, channel, or bank of streams and lakes. The lateral limits of CDFG's jurisdiction are defined in the statute as the bed, channel, or bank of any river, stream, or lake designated by CDFG in which there is at any time an existing fish or wildlife resource or from which these resources derive benefit…" In practice, CDFG usually determines its lateral limit of jurisdiction to be the top of bank or the outer edge of the riparian vegetation, whichever is farther from the middle of the water body in question.

State Water Resources Control Board

The State Water Resources Control Board administers Section 401 of the Clean Water Act. Section 401 of the CWA requires that an applicant for a Section 404 permit must first obtain a certification, or a waiver thereof, that the project will not violate applicable state water quality standards. In California, the authority to either grant certification or waive the requirement for certification has

been delegated by the State Water Resources Control Board to the nine regional boards, including, in the Roseville area, the Central Valley Regional Water Quality Control Board. A request for certification or waiver is typically, but is not required to be submitted to the regional board at the same time that the Section 404 application is filed with the USACE. The regional board has 60 days from receipt of a complete application to review and take action on the application. Because no USACE permit is valid under the CWA unless "certified" by the state, the regional boards may effectively veto or add conditions to any USACE permit.

Additionally, implementation of the State Water Resources Control Board NPDES General Permit for Storm Water Discharges Associated With Construction and Land Disturbance Activities ("General Permit") would reduce impacts associated with erosion and runoff from construction sites. As described in more detail in Section 4.13, Hydrology and Water Quality (see subsection 4.13.3 and Impact 4.13-4), for any construction that would disturb one or more acres of land, the "discharger" must obtain coverage under the General Permit. In order to obtain coverage under the General Permit, the discharger must undertake a risk assessment, develop a Storm Water Pollution Prevention Plan (SWPPP), implement Best Management Practices (BMPs) in accordance with the SWPPP, and comply with monitoring and reporting requirements and other management practices to prevent or reduce pollution.

Local

Placer County Conservation Plan (PCCP)

For the past several years, Placer County has been working with regulatory agencies and stakeholders to prepare a Natural Community Conservation Plan and Habitat Conservation Plan (NCCP/HCP) to address the conservation of natural communities, endangered species and other less sensitive species of native wildlife that could be affected by actions in the County and other participating agencies such as the Placer County Water Agency (PCWA) and the City of Lincoln. As part of the process, the County intends to apply for a Clean Water Act Section 404 Programmatic General Permit (PGP), CDFG Master Streambed Alteration Agreement (MSAA) and Clean Water Act Section 401 Water Quality Certification. Collectively, the NCCP, HCP, PGP, MSAA, and Water Quality Certification application have been termed the Placer County Conservation Plan (PCCP). At this time the County is focusing on Phase 1, which addresses lands within western Placer County (lands west of Auburn to the western county line). Listed species that are presumed to be

covered by such a plan include but are not limited to: Swainson's hawk, vernal pool fairy shrimp, vernal pool tadpole shrimp, and several listed fish species. The City of Roseville is currently not participating in the PCCP because of the City's existing MOU with the USFWS. Uses and mitigation proposed as part of the CSP are designed to be compatible with the PCCP.

Placer Legacy Open Space and Agricultural Conservation Program

The Placer Legacy program, in conjunction with resource agencies and local stakeholders, is intended to protect and conserve open space and agricultural lands in Placer County. A key element of the program is to enable the County to make itself a willing buyer to persons wishing to sell interest in lands having value for conservation purposes.

City of Roseville

City of Roseville Design and Construction Standards

Implementation of Section 111 of the City's Construction Standards would reduce impacts associated with erosion and runoff from construction sites containing soil or other materials that could degrade water quality if discharged to local streams and changes in surface water or groundwater quality from storm water runoff by requiring the development of an Erosion Control Plan. The erosion control plan would include a description of the site, time restrictions, erosion and sediment controls to be used, means of waste disposal, control of post-construction sediment, erosion control measures, maintenance responsibilities, landscaping during and after grading, and non-storm water management controls.

Section 111.6 of the Construction Standards contains the following specifications for grading adjacent to wetlands:

Grading activities adjacent to sensitive wetland or creek areas shall be conducted under the conditions set forth under the Grading Permit. These conditions shall also include:

1. Prior to construction within any phase of the project, high visibility temporary construction fencing shall be installed along the parcel adjacent to the preserve or creek. Fencing shall be maintained daily until permanent fencing is installed, at which time the temporary fencing shall be removed from the project site.

2. With the exception of access required for maintenance and/or emergency vehicles, the project shall be designed to prevent vehicle access into the Open Space Preserve. Post and cable fencing or other improvements shall be utilized to meet this requirement.

3. Landscaping adjacent to the Open Space Preserve shall be California native, drought-tolerant groundcover, shrubs, plants and trees.

4. The Pre-Construction meeting shall address the presence of the Open Space Preserve, the sensitive habitats present and minimization of disturbance to the Open Space Preserve. During grading and construction the preserve area shall be avoided and shall not be used for parking, storage, or project staging. The contractor shall remove all trash blown into the preserve from adjacent construction on a daily basis. After construction is complete, the temporary fencing shall be removed from the preserve, along with all temporary erosion control measures.

City of Roseville Zoning Ordinance-Tree Preservation (Chapter 19.66)

The City of Roseville Tree Preservation Ordinance protects native oak trees 6-inches or more in diameter at breast height (dbh) and specific landmark trees. As specified below, the ordinance requires a permit for any activity that would harm, destroy, kill or remove any protected tree. In addition to removal, grading (cut or fill) and trenching within the dripline are subject to permit approval.

As stated in Section 19.66.030 Tree Permits: Permit required. No person shall conduct any regulated activities within the protected zone of any protected tree; or harm, destroy, kill or remove any protected tree unless authorized by a tree permit.

B. Type of Permit.

1. Administrative Tree Permit. An administrative tree permit is required for any regulated activity affecting one or more protected trees, when the regulated activity is not associated with a discretionary project, does not include the removal of a protected tree, and the requested encroachment does not exceed 20 percent of the projected zone of any individual protected tree.

2. Tree Permit. A tree permit is required for any regulated activity within the protected zone of a protected tree where the encroachment exceeds 20 percent of the protected zone, or where the regulated activity is related to a discretionary project. In addition, a tree permit is required for the removal of any protected tree, unless otherwise exempted by this chapter.

Tree permits may be conditioned to include replacement of trees in kind. The replacement requirement shall be calculated based upon an inch for an inch replacement of the removed trees (an inch being equivalent to a 15-gallon tree). The total of replacement trees shall equal the combined diameter of the trees removed. A minimum of 50 percent of replacement trees shall be native. The preferred replacement alternative is onsite.

The tree ordinance specifies requirements for Arborist's Reports as specified in 19.66.050:

A. Minimum Information: The arborists report shall include the following information:

1. Identification of each protected tree by number;
2. Botanical name of tree(s) by tree number;
3. Common name of tree(s) by tree number;
4. Location by tree(s) number;
5. Diameter at breast height (DBH) by tree number;
6. Height by tree number (optional);
7. Dripline radius by tree number;
8. Condition by tree number; and
9. Recommendations for each protected tree by number.

City/U.S. Fish and Wildlife Service MOU

As an outgrowth of the August 2000 City of Roseville/USFWS MOU, the City in coordination with the USFWS and USACE is preparing a Preserve Area Overarching Management Plan (Overarching Plan). The Overarching Plan will replace various existing operation and management plans for open space preserves established by 404 Permit that are located within the City limits. The Overarching Plan will consolidate preserve management under a single plan allowing for more consistent management across preserves. The Overarching Plan adapts and reallocates monitoring resources to collect more comprehensive and meaningful monitoring data, and combines reporting requirements under a single cover increasing report preparation and review

efficiencies for both the City and the federal reviewing agencies. It is anticipated that following dedication to the City, CSP Open Space Preserve areas will be managed by the City in accordance with the City's Overarching Plan.

City of Roseville Floodplain Development Regulations

Implementation of Chapter 9.80 of the Municipal Code (Flood Damage Prevention) would control the alteration of natural flood plains, stream channels, and natural protective barriers which help accommodate or channel flood waters. In addition, regulations would control fill, grading, dredging and other development which may increase flood damage. Specifically 9.80.30 includes:

A. Restricting or prohibiting uses which are dangerous to health, safety, and property due to water or erosion hazards, or which result in damaging increases in erosion or flood heights or velocities;

B. Requiring that uses vulnerable to floods, including facilities which serve such uses, be protected against flood damage at the time of initial construction;

C. Controlling the alteration of natural floodplains, stream channels, and natural protective barriers, which help accommodate or channel flood waters;

D. Controlling fill, grading dredging and other development which may increase flood damage and

E. Preventing or regulating the construction of flood barriers which will unnaturally divert flood waters or which may increase flood hazards in other areas.

City of Roseville General Plan

The City of Roseville General Plan establishes goals and policies for the preservation of the value of biological resources in the community. These policies are specific to vegetation and wildlife. However, other policies intended to preserve water quality, air quality, and other features also benefit and protect biological resources.

Goal 1: Preserve, protect and enhance a significant system of interconnected natural habitat areas, including creek and riparian corridors, oak woodlands, wetlands, and adjacent grassland areas.

Goal 2: Maintain healthy and well-managed habitat areas in conjunction with one another, maximizing the potential for compatible open space, recreation, and visual experiences.

Goal 3: Protect special status species and other species that are sensitive to human activities.

Policy 1: Incorporate existing trees into development projects, and where preservation is not feasible, continue to require mitigation for the loss of removed trees. Particular emphasis shall be placed on avoiding the removal of groupings or groves of trees.

Policy 2: Preserve and rehabilitate continuous riparian corridors and adjacent habitat along the city's creeks and waterways.

Policy 3: Require dedication of the 100-year flood plain or comparable mechanism to protect habitat and wildlife values in perpetuity.

Policy 4: Require preservation of contiguous areas in excess of the 100-year flood plain as merited by special resources or circumstances. Special circumstances may include but are not limited to, sensitive wildlife or vegetation, wetland habitat, oak woodland areas, grassland connections in association with other habitat areas, slope or topographical considerations, recreation opportunities, and maintenance access requirements.

Policy 5: Limit recreation activities within the 100-year flood plain and require additional setback areas for trails and other public recreation uses so that natural resource areas are not adversely impacted.

Policy 6: Provide for the protection and enhancement of native fishery resources, including continued coordination with the California Department of Fish and Game to release water into Linda Creek.

Policy 7: Require cumulative mitigation plans for wetlands, where feasible, in association with specific plans.

Policy 8: Consider substitute site mitigation for federally non-regulated wetlands, provided that such mitigation will provide comparable habitat values.

Policy 9: Limit the access of pedestrians and cyclists to vernal pool and wetland areas so that access is compatible with long-term protection of these natural resource areas.

Policy 10: Manage public lands with special status species to encourage propagation of the species and discourage non-indigenous, invasive species.

Policy 11: Habitat preservation and mitigation for woodlands, creeks, riparian and seasonal wetland areas should occur within the defined boundaries of the impacting projects where long-term resource viability is feasible and desirable.

Policy 13: Work with adjacent jurisdictions, regulatory agencies, and community organizations to explore opportunities for regional mitigation banking.

The *Wetland Mitigation Guidelines* in the General Plan provide that "[i]n conjunction with required environmental review per CEQA," the City shall "regulate the preservation, mitigation, monitoring and maintenance of wetland areas in coordination with the California Department of Fish and Game, U.S. Army Corps of Engineers, U.S. Fish and Wildlife Service, and U.S. Environmental Protection Agency. For federally non-regulated wetlands, the City may require compensation or mitigation based on the value of the resource and reserves the right to consider not-in-kind compensation".

Wetland preservation, mitigation, monitoring and maintenance efforts in Roseville shall, where feasible, comply with the following principles:

- Avoidance of resources as a first priority, with compensation or mitigation implemented when avoidance is determined not to be feasible or desirable;
- No net loss of wetland acreage, values or function, or habitat of comparable value is provided;
- Comprehensive rather than incremental preservation, compensation or mitigation programs;

- Preservation, compensation or mitigation efforts focused on enhancing and expanding existing resource areas rather than creating isolated resource pockets;
- Preserves, compensation or mitigation areas created that are large enough to be self-sustaining and ensure the long-term preservation of wetland resources and required watersheds, provide an adequate buffer, and have a sufficient number of wetlands to support adequate species populations and range;
- Preserves and compensation or mitigation areas selected on their representative habitat quality, watershed integrity, defensibility, buffer, size, plant species, variety, and presence of special status species.

When avoidance is determined not to be feasible or desirable, compensation or mitigation shall occur based on the following priorities:

1. On-site within the identified project or specific plan area when long-term resource viability is feasible.
2. Off-site, but within the City of Roseville, when on-site compensation or mitigation is determined not to be feasible or desirable.
3. Off-site outside the City, only when the above two options are determined not to be feasible or desirable. Compensation or mitigation efforts outside the City should be in proximity and accessible to Roseville residents and should be coordinated with regional preservation and banking efforts. Proposals to provide wetland compensation or mitigation outside the City shall be accompanied by documentation indicating how the compensation or mitigation proposal benefits the resource and the City and how the loss of open space resources in the City will be mitigated.

All wetland preserve, compensation or mitigation areas shall be designated as permanent open space and maintained as specified in implementation measures Open Space and Conservation Element 8 and 10 of the General Plan[1]. City property may be used for preservation or mitigation if

[1] **Implementation Measure 8 Land Use Designation**- Designate all areas identified for open space use and/or preservation with the appropriate open space land use designation as defined in the Land use Element. Open Space land use shall be applied to primary water courses and may be considered for significant recharge areas.

Implementation Measure 10 Preservation Mechanisms- Explore and utilize a variety of mechanisms to promote and ensure the preservation of designated open space resources. Such mechanisms may include,

such efforts do not conflict with existing resources, recreational opportunities or other City goals, policies and programs. Pedestrian and cyclist access to preservation and compensation or mitigation areas shall be well-defined and limited to minimize impacts upon the resources. Areas identified as having special status species shall be monitored and managed to encourage the continued viability of the species and discourage non-indigenous invasive species.

City of Roseville Beaver Management Policy

The Beaver Management Policy was created as a General Plan implementation measure. The policy provides the criteria and process for beaver management actions. This includes identifying the circumstances or criteria that would trigger a management response. Issues that could trigger a management response include public health and safety, potential impacts to public utilities or public improvements, and potential impacts to preserves, resource mitigation areas and/or other significant natural resources. In general the policy is built on a progressive management strategy that initially calls for the least invasive techniques to discourage problem beaver dams. This may involve partially breaching the dam or installing devices to prevent excessive ponding behind the dam if site conditions allow and the action would alleviate the initial concern. Depending on site conditions, tree wraps and scent deterrents could also be used in an attempt to discourage tree and vegetation removal and therefore limit available resources that can be used by beaver for dam reconstruction. It should be noted that the policy allows for the sequence of progressive management actions leading to dam removal to be bypassed, and the beaver dam removed, if circumstances warrant as determined by the Public Works or Environmental Utilities Director.

Applicable CSP Measures

The specific plan includes several polices designed to protect existing resources listed below:

- No net loss of wetland functions, habitat and values

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but are not limited to, dedication, fee-title purchase, donations, transfer or purchase of development rights, and credits against park dedication requirements. If it is determined by the City that an open space resources is not desired for public ownership, the City may designate the preservations of such resource in private ownership. A decision not to seek public ownership may occur when the resource is not desired for public access and where public management and maintenance could not be efficiently accommodated. In such cases, the permanent preservation of the resources shall be ensured through land use and zoning, recorded map, deed restriction, conservation easement, or other City-approved mechanism. Where feasible, and desirable, the acquisition and preservation of open space resources may be facilitated by working with non-profit land trusts and conservation organizations.

- Development of a "vernal pool strategy" consistent with the City/USFWS MOU
- Designation of creek corridors/floodplains as open space

4.8.4 IMPACTS

Methods of Analysis

This analysis of potential project impacts to biological resources (wildlife and vegetation) is based on background and historic record searches, review of previous field investigations and reconnaissance level visits to the site, and the Biological Resources Assessment (North Fork Associates 2010) prepared for the project. Background research included reviewing the CDFG Natural Diversity Database (CNDDB) and the California Native Plant Society's Electronic Inventory to determine the potential for occurrence of special status plant or wildlife species in the project vicinity.

A series of natural resource investigations were conducted for the Project area. Reports detailing the results were reviewed for this EIR to determine which species have been observed in the Project area (refer to Table 4.8-1). Wildlife surveys of the site occurred in November and December 2007, July 2007 and May 2008.

Thresholds of Significance

For purposes of this EIR, a significant impact is assumed to occur if development proposed in the CSP would do any of the following:

- *Have a substantial adverse effect, either directly through habitat modifications or indirectly, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies or regulations, or by CDFG 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 CDFG or USFWS.*
- *Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act through direct removal, filling, hydrological modification, or other means*
- *Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites*

- *Conflict with any local polices or ordinance protecting biological resources such as a tree preservation ordinance*
- *Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Conservation Community Plan, or other approved local, regional, or state habitat conservation plan*

Notably, the significance thresholds quoted above addressing impacts to "wetlands" apply only to "federally protected wetlands as defined by Section 404 of the Clean Water Act." These criteria are based on 1998 amendments to Appendix G of the CEQA Guidelines, which focused on federally regulated wetlands. Since 1998, the extent of federal jurisdiction over wetlands has been the subject of two decisions of the United States Supreme Court, which, in effect, have narrowed the jurisdiction of the Corps of Engineers compared with what the Corps assumed previously. In *Solid Waste Agency of Northern Cook County v. U.S. Army Corps of Engineers*, (2001) 531 U.S. 159, the United States Supreme Court held that the "migratory bird rule" was not an adequate basis to regulate isolated waters under Section 404 of the CWA. In 2006, in *Rapanos v. United States* (2006) 126 S. Ct. 2208, the Supreme Court further attempted to clarify the Corps' jurisdiction. The test established in *Rapanos* is that, only waters that possess a "significant nexus to waters that are navigable-in-fact" are subject to regulation under the Clean Water Act.

In contrast, the Roseville General Plan does not limit its protection of "wetlands" to those recognized as "waters of the United States." Indeed, the General Plan provides that "[f]or federally non-regulated wetlands, the City may require compensation or mitigation based on the value of the resource and reserves the right to consider not-in-kind compensation." To the extent feasible, mitigation under the General Plan shall seek to achieve "no net loss of wetland acreage, values or function, or habitat of comparable value is provided".

In light of these General Plan policies, the City has determined that an additional significance threshold dealing with "non-federal" wetlands is appropriate. Under this additional threshold of significance, impacts to biological resources could be considered significant if the project would:

- *Have a substantial adverse effect on non-federal wetlands through direct removal, filling, hydrological modification, or other means*.

Table 4.8-3 provides a summary of potential habitat impacts in acres from both the CSP development area and the offsite improvement area.

TABLE 4.8-3

POTENTIAL HABITAT IMPACTS

Habitat	Existing Acres*	On-Site Impacts	Off-Site Impacts	Total Impacts
Upland Habitat				
Annual Grassland	455.50	313.26	0	313.26
Valley Oak Riparian	11.00	0.37	0.13	0.50
Cultivated	56.26	0	54.70	54.70
Developed/ Disturbed	3.41	0.82	0	0.82
Subtotal	526.17	314.45	54.83	329.28

TABLE 4.8-3

POTENTIAL HABITAT IMPACTS

(CONTINUED)

Habitat	Existing Acres*	On-Site Impacts	Off-Site Impacts	Total Impacts
Wetland Habitats				
Vernal Pools	1.75	1.28	0	1.28
Seasonal Wetlands	7.43	4.68	0	4.68
Seasonal Marsh	2.70	2.70	0	2.70
Swales	14.42	5.15	0	5.15
Streams	7.53	0.14	0.22	0.36
Subtotal	33.83	13.84	0.22	14.17
Total	**560.00**	**328.29**	**55.05**	**383.45**

*Acreage does not include Urban Reserve parcel.

IMPACT 4.8-1	LOSS OF FEDERALLY PROTECTED WETLANDS AND "OTHER WATERS" OF THE UNITED STATES	
Applicable Policies and Regulations	Section 404 and 401 of the Clean Water Act City/USFWS MOU City of Roseville General Plan Open Space and Conservation Element	
	CSP	**Urban Reserve**
Significance with Policies and Regulations	Significant	Significant
Mitigation Measures	MM 4.8-1 (a) Ensure No Net Loss of Wetlands; MM 4.8-1 (b) Wetland Avoidance/Mitigation Plan	WMM 4.7-2 Wetland Protection Policies
Significance after Mitigation:	Less Than Significant	Less Than Significant

CREEKVIEW SPECIFIC PLAN

Hydrology on the site is driven by two forces: precipitation and stream flow. Most of the precipitation onto the property is captured in upland and wetland swales and in ephemeral streams. These eventually flow into an intermittent stream (known as University Creek) or the perennial stream Pleasant Grove Creek.

Jurisdictional wetland delineations have been completed for all of the parcels in the CSP area and the USACE verified the delineations. A total of 33.83 acres of wetlands or "other waters" of the U.S. have been identified in the Project area. These wetlands consist of several types of wetlands as shown described earlier. All wetlands identified in the CSP area were determined to be jurisdictional. No non-jurisdictional wetlands are present.

TABLE 4.8-4
TOTAL DIRECT IMPACTS TO WATERS OF THE UNITED STATES
IN THE CSP PROJECT AREA

Wetland Type	Total Impacts[2]	Total Preserved[3]	Project Area Total
Total all wetlands	**14.17**	**19.66**	**33.82**

Includes both on and off-site improvement areas.

Source: North Fork Associates, 2010.

The open space preservation areas proposed in the CSP area are aligned along drainage courses and include moderate concentrations of both vernal pools and seasonal wetlands located in proximity to these drainage courses. Implementation of the CSP is anticipated to result in the total loss of approximately 14.17 acres of wetlands and "other waters" of the U.S. Approximately 19.66 acres would be preserved as part of the CSP. The majority of impacts from the proposed project will be to wetland swales, seasonal wetlands and seasonal marshes. The largest single impact will occur to the seasonal wetland south of Pleasant Grove Creek. This wetland has been substantially altered by long-term agricultural activities. Other seasonal wetlands, especially those north of Pleasant Grove Creek, are shallow depressions usually associated with wetland swales. Although these are similar to vernal pools, they are shallower and inundated for less time than vernal pools. They also tend to support more non-native species that also grow in moist uplands.

The applicants have indicated that offsite mitigation areas could be secured such as acquiring offsite property, providing conservation easements, and/or participating in approved mitigation/conservation banks, to satisfy the off-site mitigation. While mitigation banks have not been identified, the potential location of offsite mitigation is shown in Figure 4.8-3 Potential Offsite Mitigation Areas. The mitigation banks would be approved by the Corps and USFWS, and the project would have to be within the banks' approved service area.

Approximately 19.66 acres would be preserved as part of the Project, within areas designated as open space, while wetlands in other areas are assumed to be filled by development of the project.

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[2] The total impacts include both on- and off-site impacts.

[3] The total preserved and total existing are Onsite and Off-Site.

Loss of wetlands would occur as a result of grading in preparation for development, construction of roads and utility corridors, creation of storm water detention basins along stream corridors, and other ground-disturbing activities related to construction. This impact would be considered **significant**.

Mitigation is proposed to reduce the impacts to vernal pool habitat. The mitigation proposed is typical of minimum requirements of the USACE and USFWS. MM 4.8-1 discussed in more detail below, requires vernal pool restoration to be completed in accordance with the "no net loss" performance standard required by MM 4.8-1 (a), current USACE and USFWS guidelines and City General Plan policy as set forth in the Wetlands Mitigation Guidelines. MM 4.8-1 (b) requires the developer to prepare and submit a Wetland Avoidance/Mitigation Plan for any wetlands to be restored or created outside of an approved mitigation bank.

The overall proposed restoration/creation mitigation would be at a minimum ratio of 1:1 which meets or exceeds the City of Roseville standards for no net loss. The goal of the CSP conservation strategy is to achieve no net loss of wetlands through a combination of onsite avoidance and preservation, onsite enhancement and creation of wetlands, offsite acquisition and preservation of existing vernal pool complexes, and purchase of vernal pool credits at an agency-approved mitigation bank. These wetlands, both onsite and offsite, would be preserved and managed in perpetuity to provide for the long-term viability of the protected wetlands.

The components that make up the wetland mitigation include:

> **Onsite Avoidance and Preservation**: The 19.66 acres of on-site preservation includes all preserved vernal pools and depressional seasonal wetlands within occupied vernal pool shrimp watersheds that will be located more than 250 feet from the edge of development. Based on extensive consultation with the Corps, U.S. EPA, USFWS and CDFG, the CSP land plan is designed to avoid and preserve the highest quality wetland resources present on the project site. A minimum of 19.66 acres of in-kind wetland habitat will be preserved resulting in a ratio of approximately 1.2 acres of wetlands preserved for each acre of wetlands impacted. The avoided areas will be preserved with a Conservation Easement and a Long-term Operations and Management (O&M) Plan. Management activities will be assigned to a third-party eligible to hold conservation easements and approved by federal

and state resource agencies. A Property Assessment Report will be used to determine the amount of funds needed for annual monitoring and management.

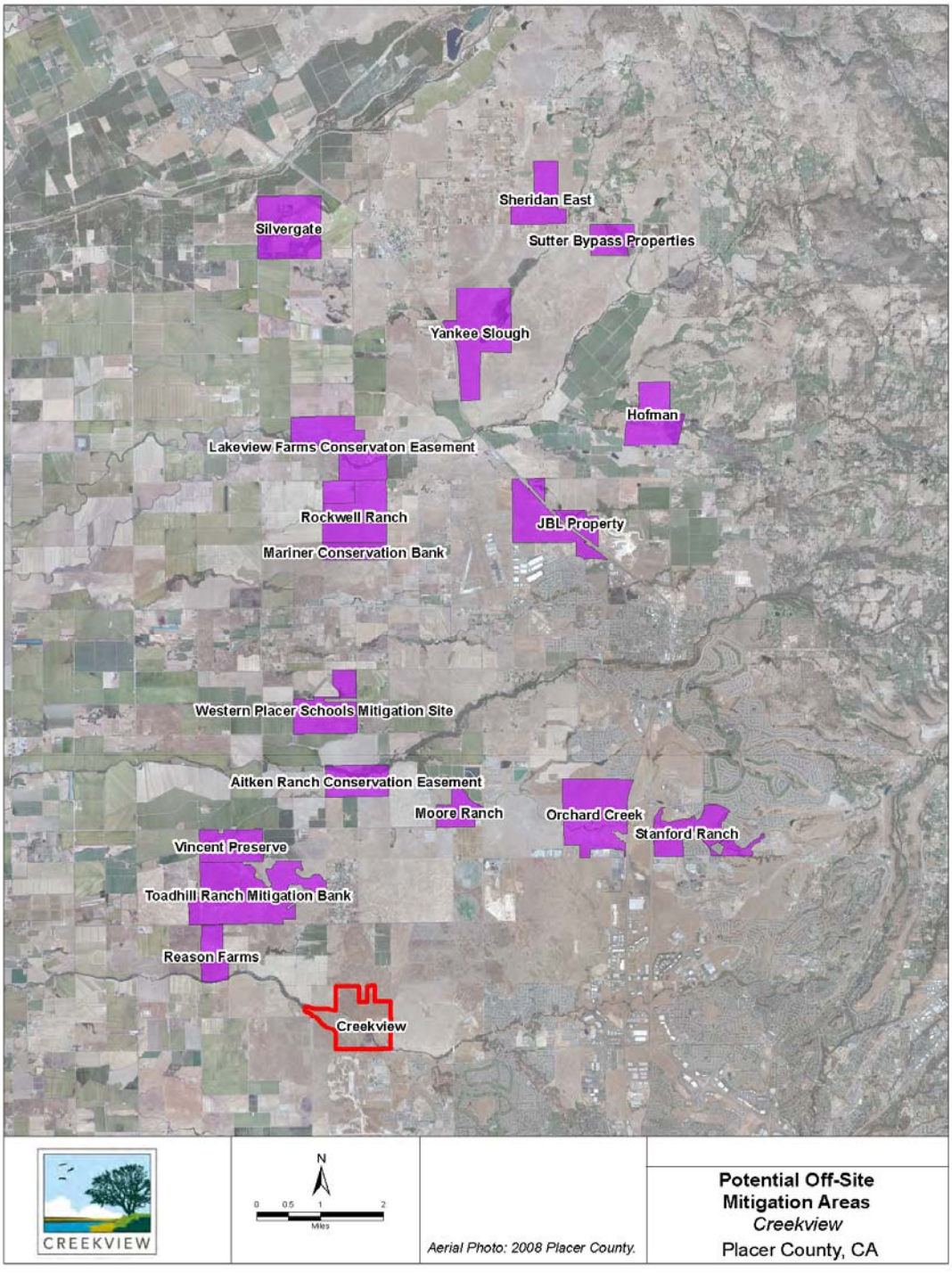
Off-site Preservation: The 14.17 acres of off-site preservation will consist of vernal pools and depressional seasonal wetlands preservation credits purchased from approved mitigation banks and/or preserved vernal pools and depressional seasonal wetlands.

On-site Enhancement, Restoration and Creation: The onsite preserve areas provide some opportunity for enhancement, restoration and/or creation. The northern preserve area would accommodate creation of approximately one acre of vernal pool wetlands. University Creek, Pleasant Grove Creek, and the bypass channel provide opportunities for riparian enhancement and creation. These activities generally will occur within preserve areas and will be governed by the long-term management goals of the preserve. Areas within the bypass channel may provide opportunities for restoration outside of the designated preserve areas.

On-site Minimization. Minimization methods include Low Impact Development (LID) features that will further reduce long-term adverse impacts to waters of the United States and will maintain water quality in Pleasant Grove Creek and University Creek. The CSP proposes strategies to collect storm flows and manage quantity and quality of stormwater runoff. This approach will mimic the natural hydrologic function of the site. Stormwater quality will be managed through source, runoff and treatment controls applied to land used.

FIGURE 4.8-3

POTENTIAL OFFSITE WETLAND MITIGATION AREAS



Off-site Compensatory Mitigation: The offsite mitigation land will provide both wetlands habitat and land to offset the loss of property designated within and/or proximate to the Recovery Plan designated Core Area in Western Placer County. The applicant has proposed to acquire offsite mitigation properties, which would meet primary constituent elements (PCEs), or purchase credits in an approved mitigation bank if the appropriate credits are available.

Because the USACE has a no-net loss policy for wetlands subject to its jurisdiction, satisfaction of the "no net loss" performance standard in MM 4.8-1 (a) can be achieved through the 404 permit process. The Section 404 Individual Permit Application has been submitted by the CSP applicants to the USACE for review. The basic premise of the 404 permit program is that no discharge of material can be permitted into the waters of the U.S. if a practicable alternative exists that is less damaging to the aquatic environment, or if the nation's waters would be significantly degraded. Therefore, applicants for Section 404 permits must show that they have:

- Taken steps to avoid wetland impacts where practicable
- Minimize potential impacts to wetlands
- Provide compensation for any remaining unavoidable impacts through activities to restore or create wetlands.

Regulated activities discharges are controlled by a 404 permit review process, which includes a period designated for public and agency comments. An individual permit is required for those projects that would not meet the terms and conditions of nationwide or other general permits and/or would have more than minimal impacts on the environment. This application includes an analysis of impacts on wetlands and provides a detailed mitigation and monitoring plan for the CSP. As described in the application, the CSP has been designed to incorporate habitat preservation.

Under the USACE mitigation policy, restoration of wetland habitats is normally preferred over wetland creation. This approach is consistent with the City/USFWS MOU. The USACE will determine whether the adequacy of the proposed wetland mitigation, and require modification of the mitigation plan if it is deemed inadequate. The applicants must obtain a 404 permit prior to discharging any dredged or fill material into any waters of the U.S. Because the 404 permit would ensure no net loss of wetlands, impacts would be reduced to a **less than significant** level.

URBAN RESERVE

It is likely that wetlands are present within Urban Reserve. Development of the Urban Reserve would likely impact wetlands at levels similar to the CSP. Future development in this area would cause further losses to wetland resources as a result of grading and other ground disturbance related to development of the property. This impact is considered **significant**.

Previously adopted WMM 4.7-2, identified in the WRSP EIR, would continue to apply to the Urban Reserve area and requires that specific plans or development plans in the Urban Reserve be delineated through a jurisdictional delineation of wetlands and "other waters" of the U.S. submitted for USACE review, and that mitigation plans provide for no net loss of wetlands. Avoidance could be accomplished through onsite avoidance, onsite wetland construction, offsite wetland construction, offsite wetland restoration or offsite acquisition where approved by the permitting agencies. This would reduce the impact to a **less than significant** level.

IMPACT 4.8-2	**LOSS OF FEDERALLY LISTED VERNAL POOL CRUSTACEANS AND THEIR HABITAT**	
Applicable Policies and Regulations	Federal Endangered Species Act City/USFWS MOU General Plan Open Space and Conservation Element	
	CSP	**Urban Reserve**
Significance with Policies and Regulations	Significant	Significant
Mitigation Measures:	MM 4.8-1 (a) No Net Loss of Wetlands; MM 4.8-1 (b) Wetland Avoidance/Mitigation Plan; MM 4.8-4 Onsite and Offsite Preservation of Grassland Habitat	WMM 4.7-2 Wetland Protection Policies, and WMM 4.7-3 Vernal Pool Crustacean Policies
Significance after Mitigation:	Less Than Significant	Less Than Significant

CREEKVIEW SPECIFIC PLAN

Suitable habitat for vernal pool crustaceans such as vernal pool fairy shrimp, and vernal pool tadpole shrimp, is present in the CSP area as shown in Figure 4.8-5, Special Status Species. Vernal pool fairy shrimp have been observed within the project area. Loss of wetland habitat would occur as a result of grading and other ground disturbing activities related to the development of the project area. As shown in Table 4.8-3, 1.28 acres of vernal pool crustacean habitat would be impacted by the project. Potential impacts to avoided vernal pool habitat include possible disturbance resulting from passive recreation, changes to hydrological conditions or erosion of adjacent uplands that could result in the deposition of sediment within the wetlands. Additionally, after project construction, vernal pool habitat that avoided could be subject to further indirect impacts resulting from urban runoff, increased human access (i.e., proximity to development, trails, etc.), vandalism or other human disturbances, and an increase in exotic weed species. Maintenance activities such as fire break maintenance, weed abatement, and construction and maintenance of trails and utilities, could also degrade habitat.

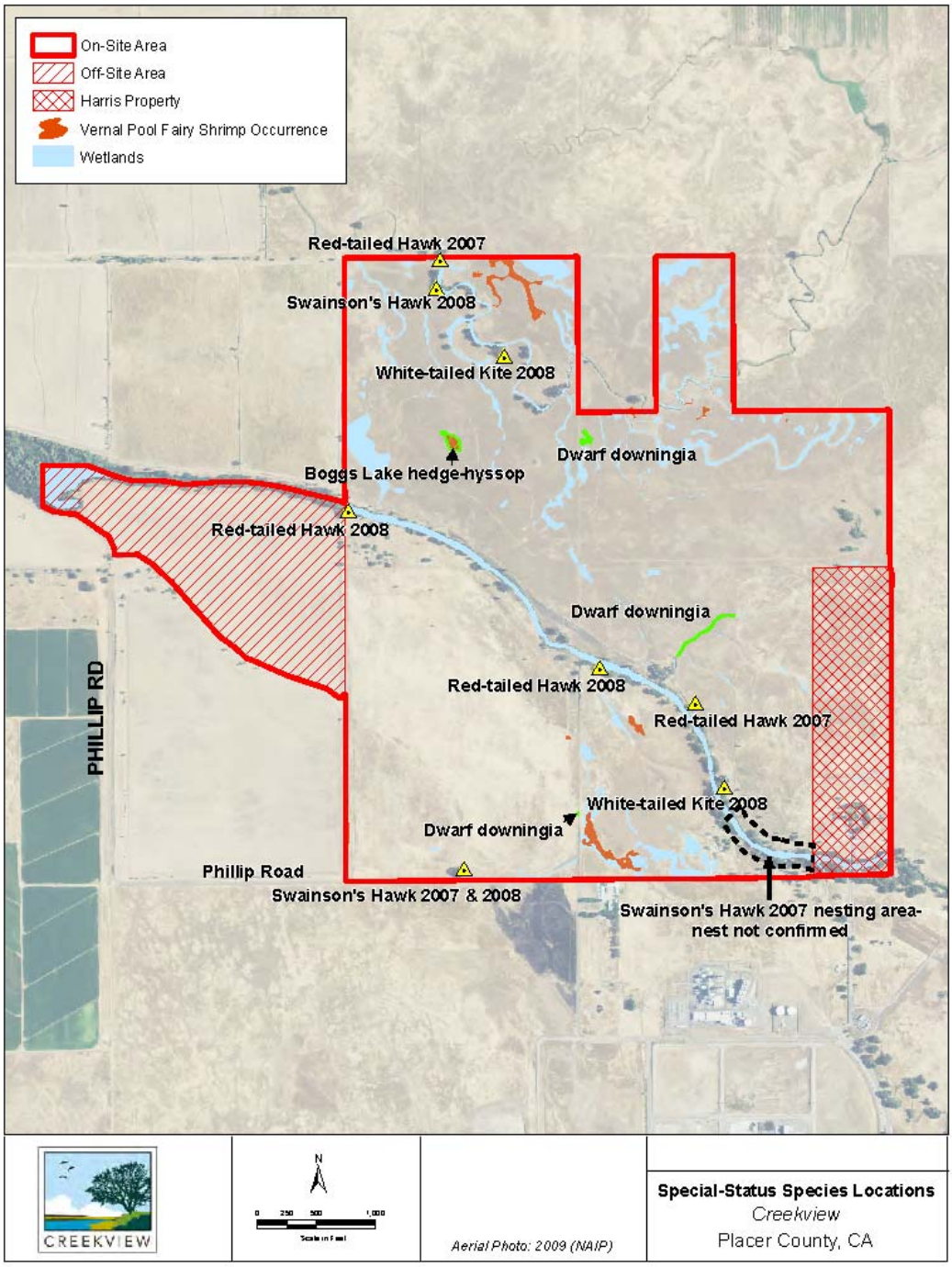
For purposes of this analysis, it was assumed that vernal pools and depressional seasonal wetlands that are within occupied watersheds and located within 250 feet of development and/or construction activities could be indirectly impacted.

Direct loss of habitat for vernal pool crustaceans federally listed as threatened or endangered and indirect degradation of this habitat is considered to be a **significant impact**.

Mitigation is proposed to reduce the impacts to vernal pool habitat. As discussed above, MM 4.8-1 requires vernal pool restoration to be completed in accordance with the "no net loss" performance standard required by MM 4.8-1 (a), current USACE and USFWS guidelines, and City General Plan Policy as set forth in the Wetland Mitigation Guidelines. MM 4.8-1 (b) requires a Wetland Avoidance/Mitigation Plan. MM 4.8-4 O*ffsite and On-site Preservation of Grassland Habitat* will ensure 368 acres of grassland is preserved which would provide wetland protection. The proposed mitigation would reduce these impacts to a **less than significant** level.

FIGURE 4.8-4

SPECIAL STATUS SPECIES



URBAN RESERVE

Vernal pool habitat and vernal pool fairy shrimp are likely to occur within the Urban Reserve area. Development of the Urban Reserve could potentially result in take of potential vernal pool crustacean habitat, as well as degradation of habitat due to ongoing maintenance activities, urban runoff, erosion, human and domestic animal access, and introduction of nonnative invasive plants. This would be a **significant** impact.

Previously adopted WMM 4.7-3, identified in the WRSP EIR, would continue to apply to the Urban Reserve area and requires wetland delineations. Previously adopted WMM 4.7-2 also would continue to apply, and would ensure no net loss of habitat by using generally acceptable mitigation ratios and practices for loss of vernal pool crustacean habitat. These mitigation measures would reduce impacts on vernal pool crustacean species to a **less than significant** level.

IMPACT 4.8-3	**LOSS OF RARE PLANT POPULATIONS**	
Applicable Policies and Regulations	Federal Endangered Species Act California Endangered Species Act Native Plant Protection Act General Plan Open Space and Conservation Element	
	CSP	**Urban Reserve**
Significance with Policies and Regulations	Significant	Significant
Mitigation Measures:	MM 4.8-1 (a) Ensure No Net Loss of Wetlands; MM 4.8-1 (b) Wetland Avoidance/Mitigation Plan	WMM 4.7-2 Wetland Protection Policies
Significance after Mitigation:	Less Than Significant	Less Than Significant

CREEKVIEW SPECIFIC PLAN

The Project area contains 1.75 acres of vernal pool habitat. Vernal pools represent potential habitat for dwarf dowingia, legenere, and other special status plants (see Tables 4.8-2 and 4.8-3). Surveys for special status plants were conducted by North Fork Associates in 2006 and 2008. The floristic surveys were done at the appropriate time of the year, according to the guidelines issued by CDFG and USFWS. At present, dwarf dowingia is the only special status plant species known to occur within the project area. It is not state or federally listed, but is on the CNPS List 2.2.

Potential habitat for other special status species, including Bogg's Lake hedge hyssop, slender orcutt grass, Sacramento orcutt grass, and Sanford's arrowhead, and upland species such as big-scale balsamroot is present within the project area. Although focused special status plant surveys were conducted during the bloom period for these species, none of these species were observed in the CSP area.

Impacts to special status plant species could result from grading and other ground disturbing activities related to development of the CSP. Implementation of the CSP is anticipated to result in the direct of vernal pool wetlands. Additionally, indirect impacts could occur to vernal pools that would remain as part of the project by changes to hydrological conditions that result from grading or other topographic changes such that precipitation runoff supplies are interrupted and prevent the pools from filling properly, or erosion of adjacent uplands causes siltation of the pools. Loss of special status plants would be considered a **significant** impact.

Compliance with the federal ESA would reduce impacts associated with the loss of federally listed vernal pool crustaceans and their habitat, and the loss and degradation of rare plant populations, by requiring any project that would result in the take of any federally listed threatened or endangered species to obtain authorization from the USFWS. Protection, preservation, and replacement of special status plants can be achieved through implementation of MM 4.8-1 (a) Ensure No Net Loss of Wetlands, (consistent with both federal law and City General Plan policies) and MM 4.8-1 (b) Wetland Avoidance/Mitigation Plan. Special status plants would receive protection through the preservation, enhancement, or restoration and protection of potential habitat for these species. Additionally, this type of restoration effort is required to contain success criteria acceptable to and monitored by the USFWS, as well as the drafting of and compliance with

a formal restoration plan. Implementation of MM 4.8-1 would reduce this impact to a **less than significant** level.

URBAN RESERVE

The Urban Reserve is likely to contain vernal pools, therefore there is a potential that rare plants are present within the area, similar to the CSP. Loss of special status plant species due to grading or other ground disturbing activities would be considered a **significant** impact. WMM 4.7-2 requires that surveys for special status plants be conducted prior to development in the Urban Reserve. If no special status plants are determined to be present, then no further mitigation would be required. However, if special status plants are determined to be present in the area, then the project applicant shall ensure that no net loss of special status plant species will occur. This measure, in addition to compliance with the federal ESA would reduce the impact to special status plants to a **less than significant** level.

IMPACT 4.8-4	**LOSS OR DEGRADATION OF HABITAT FOR WESTERN SPADEFOOT**	
Applicable Policies and Regulations	Federal Endangered Species Act State Endangered Species Act California Fish and Game Code	
	CSP	**Urban Reserve**
Significance with Policies and Regulations	Significant	Significant
Mitigation Measures:	MM 4.8-1 (a) No Net Loss of Wetlands; MM 4.8-2 Relocate Western Spadefoots; MM 4.8-4 Off-site and On-site Preservation of Grassland Habitat	WMM 4.7-5 Spadefoot Protection Policies and WMM 4.7-2 Relocate Western Spadefoots
Significance after Mitigation:	Less Than Significant	Less Than Significant

CREEKVIEW SPECIFIC PLAN

Western Spadefoot

Within the CSP area, potential habitat for the western spadefoot includes vernal pools, seasonal wetlands, and adjacent grassland habitat. Impacts on this species would occur as a result of the loss of vernal pools, seasonal wetlands and grassland habitat due to grading or other ground disturbance related to development of the CSP. This species is a state and federal species of concern, and is fully protected pursuant to the California Fish and Game Code.

Surveys for spadefoot were conducted in the Project development area, and no evidence of the western spadefoot was detected. Additionally, no adult vocalization calls were heard during the surveys (Helm Biological Consulting 2008). Although the species was not observed on site during surveys, there is a potential that it is present on site. Spadefoots have been detected in the past in the vicinity of the project area.[4] The CSP supports suitable habitat for this species. Development on vernal pools, seasonal wetlands, and the adjacent habitat could result in the destruction of individual western spadefoot and/or its habitat. This would be considered a **significant** impact.

Compliance with FESA would reduce impacts associated with the loss or degradation of habitat for western spadefoot by requiring any project that would result in the take of any federally listed species to obtain authorization from the USFWS. Mitigation for vernal pools and mitigation for grassland which provide upland habitat would also provide mitigation for spadefoots.

Prior to earth moving, measures would be implemented to capture any adult or larval western spadefoots, or western spadefoot egg masses, and relocate them to suitable habitat. MM 4.8-2 would greatly enhance the survival rates of western spadefoots that are displaced during construction by relocating them to protected areas of suitable habitat.

Additionally, implementation of MM 4.8-1 (a), which requires preservation and protection of existing vernal pools, would protect individual western spadefoots by avoiding impacts on areas that are designated open space. Construction of wetlands on-site within the open space corridors

[4] West Roseville Specific Plan FEIR, 2004.

will result in the creation of suitable habitat for spadefoot. Ensuring no net loss of wetlands would provide protection of potential habitat for western spadefoot by preserving or enhancing and protecting habitat that is capable of supporting this species. Further, implementation of MM 4.8-4, preservation of grassland habitat, described below, would ensure that over 368 acres of grassland habitat are preserved as part of the project, which would mitigate potential impacts to this species. Implementation of mitigation reduces this impact to **less than significant**.

URBAN RESERVE

Potential habitat for western spadefoot also occurs in the Urban Reserve area. Future development would likely result in further impacts on this species, including the loss of vernal pools, seasonal wetlands and the adjacent grassland habitat due to grading or other ground disturbance, which would be a **significant** impact.

Previously adopted WMM 4.7-5, identified in the WRSP EIR, would continue to apply to the Urban Reserve area and requires that the location of pools which are occupied by western spadefoot be identified by a qualified biologist through surveys conducted during the appropriate season, and the subsequent formulation of a CDFG approved relocation plan if avoidance of occupied habitat is not possible.

In addition, preservation and protection of existing vernal pools, as required by previously adopted WMM 4.7-2, would protect individual western spadefoots by avoiding impacts on existing populations in areas that are designated as open space. Additionally, ensuring no net loss of wetlands would provide protection for potential habitat for western spadefoot by preserving or enhancing and protecting potential habitat that is capable of supporting this species. Implementation of the above mitigation measures, as well as compliance with FESA and CESA, would reduce this impact to level that is **less than significant**.

IMPACT 4.8-5	LOSS OR DEGRADATION OF HABITAT FOR RED-LEGGED FROG, CALIFORNIA TIGER SALAMANDER, AND WESTERN POND TURTLE	
Applicable Policies and Regulations	Federal Endangered Species Act State Endangered Species Act California Endangered Species Act	
	CSP	**Urban Reserve**
Significance with Policies and Regulations	Less Than Significant	Less Than Significant
Mitigation Measures:	None Required	None Required
Significance after Mitigation:	Less Than Significant	Less Than Significant

CREEKVIEW SPECIFIC PLAN

California Tiger Salamander

The vernal pool/grassland habitat within the Project area is considered suitable habitat for California tiger salamander. However, there are no known tiger salamanders in Placer County. Surveys for vernal pool crustaceans in 2007 did not detect the presence of salamanders within the Project area. Therefore, impacts to tiger salamanders are considered **less than significant**.

Red-Legged Frog

There are no recent records of red-legged frogs in Placer County, and the nearest known record is approximately 50-miles from the project area (Michigan Bluff). While Pleasant Grove Creek contains the basic habitat elements for red-legged frogs, it is considered only marginally suitable habitat due to variable water flows, the extent of urbanization in the vicinity of the project site, historic and current disturbances to the creek from farming and ranching practices, and the presence of large populations of bullfrogs. Pleasant Grove Creek also has no connectivity with other drainages that are known or have potential to support California red-legged frog. Therefore, impacts to red-legged frogs are considered **less than significant**.

Western Pond Turtle

No pond turtles were found during surveys, and Pleasant Grove Creek and the stock ponds are considered marginal habitat. The project will not have a substantial adverse effect through habitat modification because Pleasant Grove Creek will remain as open space as part of the project. Further, land immediately adjacent to Pleasant Grove Creek will be modified to increase in-stream wetlands for stormwater detention and habitat enhancement. At the completion of the project, the CSP will provide additional habitat for the turtle, should they occur in the area. Therefore, impacts from the project are considered **less than significant.**

URBAN RESERVE

Potentially suitable habitat for the salamander exists within the Urban Reserve Area. However, no western pond turtle habitat or red-legged frog habitat is found in the Urban Reserve. The vernal pool/grassland habitat within the project area is considered suitable habitat for California tiger salamander. However, there are no known tiger salamanders in Placer County. Therefore, impacts to tiger salamanders are considered **less than significant**.

IMPACT 4.8-6	**DISRUPTION OF SWAINSON'S HAWK, BURROWING OWL, AND OTHER LEGALLY PROTECTED RAPTORS NESTING AND FORAGING HABITAT**	
Applicable Policies and Regulations	Federal Endangered Species Act California Fish and Game Code Migratory Bird Treaty Act	
	CSP	**Urban Reserve**
Significance with Policies and Regulations	Significant	Significant
Mitigation Measures:	MM 4.8-3 Avoid Nesting Sites and MM 4.8-4 Preservation of Offsite Grasslands	WMM 4.7-7 Nest Protection Policies
Significance after Mitigation:	Less Than Significant	Less Than Significant

CREEKVIEW SPECIFIC PLAN

Grassland and trees within the project area provide suitable foraging habitat and nesting sites for legally protected raptor species including; Swainson's hawk, burrowing owl, Cooper's hawk,

white- tailed kite, northern harrier, and ferruginous hawk, among others. Disturbance resulting in active nest abandonment or removal of an active nest or otherwise injuring, pursuing, or killing a protected raptor is prohibited under the Federal Migratory Bird Treaty Act, the California Endangered Species Act, and/or the California Fish and Game Code. Special status species surveys in the CSP area (2006-2009) documented the presence of several legally protected raptor species, including: Swainson's hawk, burrowing owl, white-tailed kite, and northern harrier.

Swainson's hawk nests have been observed in several areas of the Project area as shown in Figure 4.8-5, Swainson's Hawk Nest Radius. Development of the project would eliminate approximately 368 acres of grassland foraging habitat and cultivated habitat suitable for foraging. CDFG recommends that projects that result in the loss of potential habitat for Swainson's hawk (which includes grasslands) within 10- miles of an active nest site provide mitigation for that loss. Mitigation for Swainson's Hawk would be provided by implementation of MM 4.8-4, which requires mitigation for loss of grassland habitat.

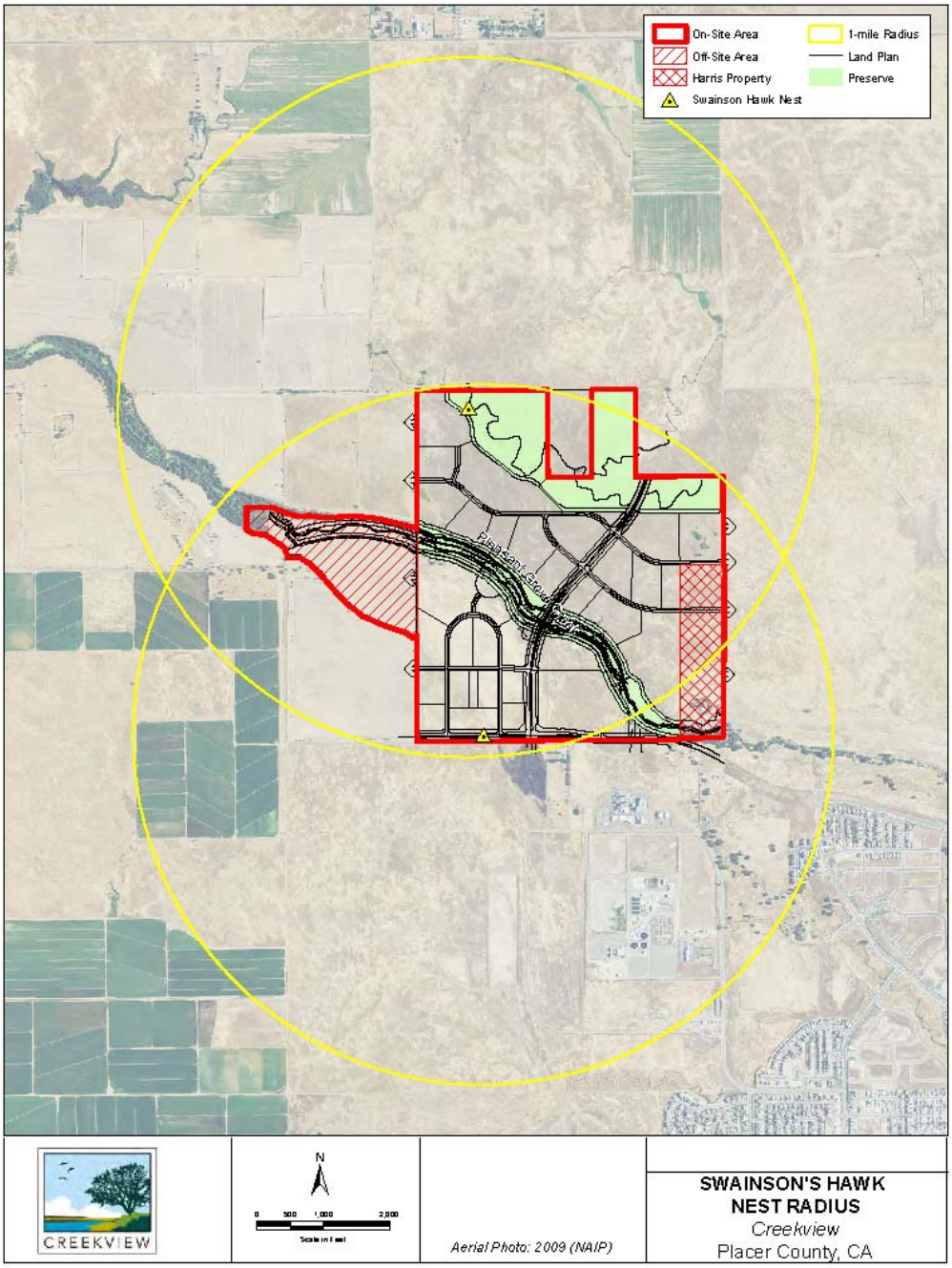
A white-tailed kite nest was observed foraging in the grassland habitat in July 2007, and two white-tailed kite nests were found in 2008. Virtually the entire Project area is considered suitable foraging and nesting habitat for white-tailed kite.

Several adult northern harriers were observed foraging in the Project area during the survey. The seasonal marsh and seasonal wetland habitat provide suitable nesting habitat for this species.

Four red-tailed hawk nests were observed within the Project area and nearby. While this species is relatively common throughout its range, disturbances and habitat loss could cause permanent nest abandonment that could affect a portion of the local population.

FIGURE 4.8-5

SWAINSON'S HAWK NEST RADIUS



While few ground squirrel burrows are present, the entire Project area is otherwise considered suitable for burrowing owls, and may be occasionally used for foraging. No heron rookeries are present within the plan area. Prior to earthmoving that would disturb marsh habitat or tree removal of the eucalyptus grove, pre-construction surveys would be conducted to verify that no rookeries have been established.

Construction disturbance as part of the CSP, resulting in active nest abandonment, removal of an active nest, or otherwise injuring a raptor would be a **significant impact**.

Compliance with the Migratory Bird Treaty Act and CESA would reduce impacts by prohibiting the take of any migratory bird listed, including nests, eggs or products, or the removal of any pertinent shrub or tree that could affect nesting.

To ensure that legally protected birds-of-prey are not taken during project construction, MM 4.8-3 requires that, when feasible, tree removals or excavation near potential burrowing owl burrows occur during the period when these species are not nesting (September through February). If removal of trees or excavation near potential burrowing owl burrows during the nesting season is unavoidable, pre-construction raptor surveys shall be conducted to determine whether or not legally protected raptor nests are present. In the event that nests are present, construction will cease within the vicinity of the nest and appropriate protocols shall be followed in consultation with CDFG during the removal and relocations of those nests.

Compliance with the MBTA and CESA (for Swainson's Hawks), as well as implementation of MM 4.8-3, would reduce impacts on the nesting by preventing disturbance that would cause nest abandonment and subsequent loss of their young. MM 4.8-4, requires onsite and offsite grassland preservation that also would reduce impacts to foraging habitat. Implementation of these mitigation measures would reduce this impact to a **less than significant** level.

URBAN RESERVE

Suitable habitat for legally protected raptor species exists within the Urban Reserve area. Development of the Urban Reserve could eliminate 32 acres of grassland habitat. Disturbance resulting in active nest abandonment, removal of an active nest, or otherwise injuring pursuing or harming raptors would be a **significant** impact. Compliance with the State Endangered Species Act, CDFG Code, and the Migratory Bird Treaty Act would be required. Previously adopted WMM

4.7-7, identified in the WRSP EIR, would continue to apply to the Urban Reserve area and requires that surveys for special status and other legally protected raptors be conducted, and if special status or other legally protected raptors are determined to have active nests in the area, then a mitigation program that incorporates the protective measures set forth in previously adopted WMM 4.7-7 must be developed in consultation with CDFG. Implementation of WMM 4.7-7 would reduce impacts on nesting raptors to a **less than significant** level.

IMPACT 4.8-7	**LOSS OF GRASSLAND HABITAT**	
Applicable Policies and Regulations	None Identified	
	CSP	**Urban Reserve**
Significance with Policies and Regulations	Significant	Significant
Mitigation Measures:	MM 4.8-4 On-site and Off-site Preservation of Grassland Habitat	WMM 4.7-9 Swainson's Hawk Habitat Policies
Significance after Mitigation:	Less Than Significant	Less Than Significant

CREEKVIEW SPECIFIC PLAN

Annual grassland exists throughout the Project area. Grassland is important for foraging for special status and other legal protected raptors, including Swainson's hawk and a wider variety of other wildlife species such as burrowing owls and long-billed curlew. CDFG considers the loss of foraging habitat for Swainson's hawk within 10 miles of an active Swainson's hawk nest site to be detrimental to the breeding success of this species. This habitat is also used by a number of other bird species such as red-tailed hawk, white-tailed kite, loggerhead shrike, and a wide variety of other wildlife species.

Implementation of the CSP would result in the loss of an estimated 313.26 acres of grassland foraging habitat through grading and conversion to various urban uses. This represents approximately 56 percent of the grasslands in the 560 acre on and off-site study area. Due to the

potential negative effects that loss of foraging habitat could have on wildlife species, this impact would be considered **significant**.

Implementation of MM 4.8-4 would reduce the impacts from loss of grassland to a **less than significant** level by protecting a quantity of similar habitat in southwestern Placer County in perpetuity, according to a CDFG-established mitigation formula for loss of Swainson's hawk foraging habitat, and by ensuring that on-site preserved grasslands are managed as raptor and migratory bird foraging habitat.

URBAN RESERVE

Approximately 32 acres of grassland habitat are present in the Urban Reserve area. Loss of this habitat would be a s**ignificant** impact. However, similar to the CSP, compliance with CESA would be required, which would reduce impacts to grasslands. In addition, previously adopted WMM 4.7-9, identified in the WRSP EIR, would continue to apply to the Urban Reserve area and would reduce the severity of this impact to a level that is **less than significant** by providing protection for similar habitat in perpetuity.

IMPACT 4.8-8	**SUBSTANTIAL INTERFERENCE WITH THE MOVEMENT OF RESIDENT AND MIGRATORY WILDLIFE SPECIES**	
Applicable Policies and Regulations	Section 1600 of the California Fish and Game Code City Floodplain Development Regulations City Improvement Standards NPDES Requirements	
	CSP	**Urban Reserve**
Significance with Policies and Regulations	Significant	Significant
Mitigation Measures:	MM 4.8-5 Wildlife Movement Protection Policies; MM 4.14-3 Avoid Light-Spillover	WMM 4.7-11 Stream Protection Policies; MM 4.14-3 Avoid Light Spill Over; WMM 4.7-13 (d) Riparian Habitat Policies
Significance after Mitigation:	Less Than Significant	Less Than Significant

CREEKVIEW SPECIFIC PLAN

Wildlife corridors link areas of suitable wildlife habitat that are otherwise separated by changes in vegetation or human disturbance. The fragmentation of open space areas by urbanization creates isolated islands of wildlife habitat. In the absence of habitat linkages that allow movement to adjoining open space areas, various studies have concluded that some wildlife species, especially the larger and more mobile mammals, would not likely persist over time because fragmentation prohibits the infusion of new individuals and genetic information. Corridors mitigate the effects of this fragmentation by (1) allowing animals to move between remaining habitats, thereby permitting depleted populations to be replenished and promoting genetic exchange; (2) providing escape routes from fire, predators, and human disturbances, thus reducing the risk of catastrophic events, and (3) serving as travel routes for individual animals as they move within their home ranges in search of food, water, and other needs.

Wildlife movement activities generally fall into one of three movement categories: (1) dispersal (e.g., of juvenile animals from natal areas or individuals extending range distributions), (2) seasonal migration, and (3) movement related to home range activities (foraging for food or water, defending territories, or searching for mates, breeding areas, or cover).

Development of the CSP area could impede the movement of wildlife by disturbing and/or blocking local movement corridors. Additionally, many of those species that would normally use the grasslands as a foraging area would not as easily move across the future urbanized landscapes proposed for the sites. With development of the CSP, wildlife would be naturally restricted to the remaining areas of designated open space such as the Pleasant Grove and University Creek open space areas. Thus, both corridors could become wildlife corridors through the urbanized landscape. Construction of stream crossings and other activities, as well as the introduction of artificial light would alter the corridors and disturb the wildlife using them. The potential loss of local travel routes and the potential future restriction of movement through the site due to obstructions to the stream/riparian open space corridor are discussed below.

Wildlife species that are adapted to live in grasslands or that move between isolated pockets of water would not easily move across the future urbanized landscapes and would be displaced, and/or concentrate their movements within the remaining open space. The CSP provides for an open space corridor along Pleasant Grove Creek and the University Creek corridor which would

allow relatively free access through the site. However, the construction of culverts and bridges and road crossings could create barriers that could prevent wildlife passage along these corridors.

Erosion and runoff during construction of these facilities would be controlled by best management practices as required by the City's Improvement Standards and NPDES General Permit. Nonetheless, alterations to the flow, bed, channel, or bank of any streams in the project area as a result of project improvements would affect the ability of the corridors to provide habitat for the wildlife species that depend upon them for feeding, cover, and nesting, and thus could result in a loss of that habitat.

Outdoor lighting can also have a negative effect on wildlife by interfering with nocturnal movement and causing disorientation, making individuals more vulnerable to predation or making it more difficult for them to capture prey. Passive recreational use along nature or bicycle trails may also have indirect impacts such as interfering with foraging, breeding, or movement. These impacts would be considered **significant**.

The City's Floodplain Development Regulations, Improvement Standards and NPDES permit requirements would aid in reducing impacts associated with floodplains, stream channels, and natural protective barriers. Floodplain and the Pleasant Grove Creek stream channel would remain as open space which would allow movement corridors to remain. Implementation of MM 4.8-5 requires the use of either bridges or culverts that are large enough that wildlife has enough space to pass through these road crossings without having to travel over the road surface. MM. 4.8-5 also requires that the project applicant obtain a Section 1600 Streambed Alteration Agreement from CDFG prior to any construction activities that could affect stream corridors. Specific measures would be developed during discussions with CDFG, but may include using bridges instead of culverts, use of erosion control and bank stabilization measures, and restoration of stream corridor habitat that has been damaged due to the project's construction. In addition, MM 4.14-3 requires that outdoor lighting be placed, designed, and directed to avoid spillover light into the Pleasant Grove Creek and open space preserve areas (refer to Section 4.14 *Aesthetics and Visual Resources* of this EIR for a detailed discussion). These measures would reduce this impact to a level that is **less than significant.**

URBAN RESERVE

Pleasant Grove Creek is on the southern boundary of the Urban Reserve parcel. Pleasant Grove Creek provides a wildlife corridor. Night lighting and additional urban development would affect wildlife movement through the CSP area, including the Urban Reserve parcel. This impact would be considered **significant**.

Previously adopted WMM 4.7-11, identified in the WRSP EIR, would continue to apply to the Urban Reserve area and provides for the development of stream protection policies, primarily through the Section 1600 Streambed Alteration agreement process. In addition, previously adopted WMM 4.7-13 (d) would ensure that outdoor lighting does not spill over into creeks or open space preserves. These mitigation measures would reduce impacts to stream corridors and protect against stream corridor alterations that affect their ability to provide habitat for migration, feeding, cover, and nesting. Therefore, with mitigation this impact would be **less than significant**.

IMPACT 4.8-9	**LOSS OF OAK TREES OF GREATER THAN 6 INCHES IN DIAMETER**	
Applicable Policies and Regulations	Tree Preservation chapter of the Roseville Zoning Ordinance	
	CSP	**Urban Reserve**
Significance with Policies and Regulations	Less Than Significant	Less Than Significant
Mitigation Measures:	None Required	None Required
Significance after Mitigation:	Less Than Significant	Less Than Significant Impact

CREEKVIEW SPECIFIC PLAN

Oak trees can be found along Pleasant Grove Creek and the University Creek drainage area. Trees will need to be removed as part of the extension of Blue Oaks Boulevard and Westbrook Boulevard. In addition, the construction of bridges across Pleasant Grove Creek, may also necessitate the removal of oak trees and riparian habitat. Sierra Nevada Arborists analyzed the

potential impacts to oaks trees from the construction of Blue Oaks Boulevard in a supplemental report dated June 12, 2007. The arborist report prepared for the Project area states that five native oaks totaling 67 aggregate diameter inches were documented. Compliance with the City's Tree Preservation Chapter of the Zoning Ordinance will ensure that removal of the oaks would be adequately replaced. This impact is considered **less than significant**.

URBAN RESERVE

At the time development is proposed within the Urban Reserve area, oak trees may need to be removed. Compliance with the City's Tree Preservation Chapter of the Zoning Ordinance will ensure that if any oak trees are removed, they would be adequately replaced. This impact is considered **less than significant**.

IMPACT 4.8-10	LOSS OF RIPARIAN HABITAT	
Applicable Policies and Regulations	Section 1600 of the California Fish and Game Code City Floodplain Development Regulations City Improvement Standards NPDES Requirements General Plan Open Space and Conservation Element	
	CSP	**Urban Reserve**
Significance with Policies and Regulations	Significant	Significant
Mitigation Measures:	MM 4.8-5 Wildlife Movement Protection Policies; MM 4.14-3 Avoid Light Spillover	MM 4.8-5 Wildlife Movement Protection Policies; MM 4.14-3 Avoid Light Spillover
Significance after Mitigation:	Less Than Significant	Less Than Significant

CREEKVIEW SPECIFIC PLAN

Implementation of the proposed project would result in development that would occur within the riparian habitat and stream corridors along Pleasant Grove Creek and University Creek drainages. Some portions of the project are entirely within or adjacent to the stream corridor. This proximity presents the possibility of direct and secondary effects to the habitat due to removal of riparian habitat and/or spillover of human intrusion. Proposed CSP improvements include extending Blue

Oaks Boulevard and extension of Westbrook Boulevard, both of which will include a bridges and/or culverts over the Pleasant Grove Creek crossings; internal bridges for pedestrian crossing over the drainages; and channel improvements as part of the drainage strategy and in-stream mitigation.

Deterioration of the creek channel could result from construction activities, intrusion of artificial lighting, non-native invasive plant species, domestic animals, or human activity (i.e., jogging, walking, and biking) in or along the creek channel. Trampling of stream banks could occur when people descend or climb the banks, which would remove vegetation directly or indirectly by causing soil compaction or erosion. Increased human recreational and residential uses could result in an increase in domestic animals, which could impact native wildlife by reducing habitat and by increasing wildlife mortality. These impacts could also occur during construction of the proposed project. This impact would be **significant**.

Implementation of Sections 1600-1607 of the Fish and Game Code would reduce impacts associated with the blocking or degradation of stream corridors by regulating activities that would alter the flow, bed, channel, or bank of streams. Implementation of Chapter 9.80 of the Municipal Code (Flood Damage Protection) would control the alteration of natural floodplains stream channels, and natural protective barriers, which help accommodate or channel flood waters. In addition, the City of Roseville's Improvement Standards and Floodplain Development Regulations would control fill, grading, dredging, and other development, which may increase flood damage.

MM 4.8-5 and MM 4.14-3 would reduce this impact to a **less than significant** along Pleasant Grove Creek and University Creek by installing fences and signage to keep trail users within designated trail corridors. Pleasant Grove Creek and University Creek will remain in open space, and the riparian habitat would be protected and enhanced with the proposed in-stream improvements included as part of the project (see section 2, Project Description and section 4.13 Hydrology. Further, the CSP would be required to implement the recommendations of the hydrology technical report (Appendix O).

URBAN RESERVE

Similar to the CSP, MM 4.8-5 and MM 4.14-3 would reduce this impact to a **less than significant** level on the Urban Reserve parcel by requiring a minimum setback to be maintained in buffer

zones along Pleasant Grove Creek and University Creek, and installing fences and signage to keep trail users within designated trail corridors. Pleasant Grove Creek is anticipated to remain in open space, and the riparian habitat would be protected and enhanced with the proposed in-stream improvements included as part of the project (see section 2, Project Description and section 4.13 Hydrology. Further, the CSP would be required to implement the recommendations of the hydrology technical report (Appendix O).

IMPACT 4.8-11	LOSS OF BIOLOGICAL RESOURCES DUE TO CONSTRUCTION OF OFF-SITE INFRASTRUCTURE	
Applicable Policies and Regulations	Federal and California Endangered Species Act Section 404 and 401 of the Clean Water Act General Plan Open Space and Conservation Element	
	CSP	**Urban Reserve**
Significance with Policies and Regulations	Significant	Significant
Mitigation Measures:	MM 4.8-7 Off-site Surveys; MM 4.8-1 (a) Ensure No Net Loss of Wetlands; MM 4.8-1 (b) Wetland Avoidance/Mitigation Plan; MM 4.8-2 Relocate Western Spadefoots; MM 4.8-3 Avoid Nesting Sites; MM 4.8-4 Off-site and On-site Preservation of Grassland Habitat; MM 4.8-5 Wildlife Movement Protection Policies; MM 4.8-6 Habitat Restoration/Onsite Preservation	WMM 4.7-2 Wetland Protection Policies; WMM 4.7-3 Vernal Pool Crustacean Policies; WMM 4.7-5 Spadefoot Protection Policies; WMM 4.7-9 Swainson's Hawk Habitat Policies; WMM 4.7-11 Stream Protection Policies; WMM 4.7-15 Conduct appropriate Surveys
Significance after Mitigation:	Less Than Significant	Less Than Significant

CREEKVIEW SPECIFIC PLAN

Development of the CSP would require infrastructure improvements outside of the CSP area, such as extension of roadways; extension of water, wastewater, and recycled water infrastructure from the West Roseville Specific Plan area; water tank construction within the WRSP area; and the

extension of electric and natural gas lines. Potential impacts from these activities include both direct and indirect impacts to:

- Special status species, including state and federally threatened endangered species
- Wetland and vernal pool habitat
- Oak trees
- Stream and Riparian Habitat

No formal focused surveys or wetland delineation have been performed within the offsite infrastructure areas (with the exception of the Off-site Improvement Area on Reason Farms), as part of the Biological Resources Assessment. Most offsite improvements would be constructed within street right-of-ways. Nonetheless offsite improvements would result in potentially **significant** biological impacts.

MM 4.6-6 requires that wetlands be preserved within and along the preserved open space corridors.

MM 4.8-7 requires that surveys be conducted by qualified biologists prior to the construction of the offsite infrastructure facilities. The purpose of these surveys will be to determine the presence or absence of sensitive biological resources in the areas that would be disturbed. If such resources are discovered, then appropriate mitigation measures, as described in this EIR shall be implemented in the offsite infrastructure areas as explained in MM 4.8-8 (MM 4.8-1(a-b) through 4.8-5). These measures will ensure that impacts on special status species or their habitat that occur within the offsite infrastructure areas would be reduced to a **less than significant** level.

URBAN RESERVE

Similar to the CSP, development of the Urban Reserve area would require infrastructure improvements outside of the area, such as extension of roadways; water, wastewater, and recycled water infrastructure; and electric and natural gas lines.

These off-site activities could have impacts to:

- Special status species
- Wetland and vernal pool habitat

- Oak trees
- Stream and riparian habitat

Construction and installation of infrastructure could destroy special status species and/or degrade or destroy their habitat. This would be a **significant** impact.

Previously adopted WMM 4.7-15, identified in the WRSP EIR, requires that formal surveys be conducted by a qualified biologist prior to the construction of offsite infrastructure facilities. The purpose of these surveys would be to determine the presences or absence of sensitive biological resources in areas that will be disturbed. If such resources are discovered, then appropriate mitigation measures described throughout this section shall be implemented in the offsite infrastructure areas (WMM 4.7-2, WM 4.7-3, WM 4.7-5, WMM 4.7-9, and WMM 4.7-11). These measures would ensure that impacts to special-status species or their habitat that occur within the offsite infrastructure areas would be reduced to a **less than significant** level, by requiring appropriate surveys and measures, including appropriate permits for and protection of such resources, and no net loss of habitat.

IMPACT 4.8-12	**POTENTIAL IMPACTS TO THE CALIFORNIA BLACK RAIL**	
Applicable Policies and Regulations	California Fish and Game Code City/USFWS MOU	
	CSP	**Urban Reserve**
Significance with Policies and Regulations	Less Than Significant	Less Than Significant
Mitigation Measures:	None Required	None Required
Significance after Mitigation:	Less Than Significant	Less Than Significant

CREEKVIEW SPECIFIC PLAN

There are no known occurrences of California black rail in the Project area or vicinity. The nearest reported occurrence is in Clover Valley in Rocklin, approximately nine miles east of the project site. Given the restricted range of the Rail and the limited amount of marsh habitat on the site, it is unlikely that this species occurs in the Project area. Limited areas of freshwater marsh habitat occur within the Project area along Pleasant Grove Creek. The amount of vegetative cover present within and around wetland areas onsite is not expected to be suitable for this secretive bird, which requires dense areas of emergent vegetation. Based on the rare occurrence of this species within the region and the limited amount of suitable habitat available, the potential for occurrence of this species is considered to be unlikely. This is considered a **less than significant** impact.

URBAN RESERVE

There is limited habitat is present in the Urban Reserve area along Pleasant Grove Creek that would be expected to support black rails. Therefore, there would be **less than significant** impact from future development of the Urban Reserve parcel.

IMPACT 4.8-13	POTENTIAL IMPACTS TO BATS	
Applicable Policies and Regulations	California Fish and Game Code City/USFWS MOU	
	CSP	**Urban Reserve**
Significance with Policies and Regulations	Less Than Significant	Less Than Significant
Mitigation Measures:	None Required	None Required
Significance after Mitigation:	Less Than Significant	Less Than Significant

CREEKVIEW SPECIFIC PLAN

Three special status bats potentially occur in the project area: pallid bat, Townsend's big-eared bat, and Yuma myotis, which are all state species of special concern. Pallid bat occurs primarily in shrubland, woodlands and forested habitats, but can also occur in grasslands. Townsend's bat occurs in a variety of woodland and open habitats, and the Yuma bat occurs primarily in forests

and woodlands. All three species roost in mines, caves, large hollow trees, and occasionally in large open buildings that are usually abandoned or infrequently inhabited. While the project area may support suitable foraging habitat, there is very little habitat that would support roosting or maternity sites. The existing residences are unlikely to support roosting habitat for special status bats. There are no rocky areas, mines, caves, or other features that support roosts. Therefore, impacts to bats are considered **less than significant.**

URBAN RESERVE

Similar to the CSP, the Urban Reserve parcel may support suitable foraging habitat, although there is very little habitat that would support bat roosting or maternity sites. Further, there are no rocky areas, mines, caves, or other features that support roosts. This impact is considered **less than significant**.

IMPACT 4.8-14	POTENTIAL IMPACTS TO GIANT GARTER SNAKE	
	California Endangered Species Act California Fish and Game Code	
	CSP	**Urban Reserve**
Significance with Policies and Regulations	Less Than Significant	No Impact
Mitigation Measures:	None Required	None Required
Significance after Mitigation:	Less Than Significant	No Impact

CREEKVIEW SPECIFIC PLAN

Giant garter snakes are not known to occur in the project vicinity. However, portions of Pleasant Grove Creek support at least marginally suitable habitat for giant garter snake, a state and federally listed species. With the exception of road crossings, (which would be subject to state and federal permit requirements, including federal ESA consultations to address potential impacts to giant garter snake), Pleasant Grove Creek will be set aside as permanent open space as part of the project: and therefore, impacts to the giant garter snake are considered **less than significant**.

It is expected that the Pleasant Grove Creek corridor which will be over 400 feet in width, would provide sufficient habitat to support the giant garter snake, should it be present within the project area.

URBAN RESERVE

The Urban Reserve area contains a portion of Pleasant Grove Creek. Giant garter snakes are not known to occur in the project vicinity. However, portions of Pleasant Grove Creek support at least marginally suitable habitat for giant garter snake, a state and federally listed species. With the exception of road crossings, (which would be subject to state and federal permit requirements, including federal ESA consultations to address potential impacts to giant garter snake), Pleasant Grove Creek will be set aside as permanent open space as part of the project: therefore, impacts to the giant garter snake are considered **less than significant**. Similar to the CSP, it is expected that the Pleasant Grove Creek corridor would remain in open space and would provide sufficient habitat to support the giant garter snake, should it be present within the project area.

IMPACT 4.8-15	IMPACTS TO FISH HABITAT	
Applicable Policies and Regulations	Federal and California Endangered Species Act General Plan Open Space and Conservation Element	
	CSP	**Urban Reserve**
Significance with Policies and Regulations	Less Than Significant	No Impact
Mitigation Measures:	None Required	None Required
Significance after Mitigation:	Less Than Significant	No Impact

CREEKVIEW SPECIFIC PLAN

Anadromous fish species, such as Central Valley spring and winter-run Chinook salmon and steelhead, do not occur within Pleasant Grove Creek. Pleasant Grove Creek within the CSP area does not contain sufficient depths of water to support fish for most of the year. It historically has

been dry during the summer months. Therefore, direct and indirect impacts on fish species are considered **less than significant**. The portion of Pleasant Grove Creek located within the project area is expected to support only resident warm water fish species.

URBAN RESERVE

Pleasant Grove Creek within the Urban Reserve area does not contain sufficient depths of water to support fish for most of the year. It historically has been dry during the summer months. Therefore, direct and indirect impacts on fish species due to future development of the Urban reserve parcel are considered **less than significant**. The portion of Pleasant Grove Creek located within the project area is expected to support only resident warm water fish species.

IMPACT 4.8-16	IMPACTS TO BEAVERS	
Applicable Policies and Regulations	City of Roseville Beaver Policy	
	CSP	**Urban Reserve**
Significance with Policies and Regulations	No Impact	No Impact
Mitigation Measures:	None Required	None Required
Significance after Mitigation:	No Impact	No Impact

CREEKVIEW SPECIFIC PLAN

The beaver is a widely distributed animal, which inhabits most of the U. S. They are found just about everywhere in the U.S. except southern California, most of Florida and Nevada, and parts of Alaska. While their numbers diminished in the late 1800's and early 1900's due to trapping, they have made a comeback over the years. Populations of beavers are known to occur throughout the Roseville area. They are not federally or state protected.

While beavers may be present in Pleasant Grove Creek, the project would not substantially reduce the habitat of the Beaver. Pleasant Grove Creek will remain as open space as part of the project. Beavers are not a protected species, and the project would therefore, not significantly reduce a

protected or threatened species as outlined in the significance thresholds above. Therefore, there would be **no impact** to the beaver as a result of the project.

URBAN RESERVE

While beavers may be present in Pleasant Grove Creek, future development of the Urban Reserve parcel would not substantially reduce the habitat of the Beaver. Pleasant Grove Creek will remain as open space as part of the Urban Reserve parcel. Beavers are not a protected species, and the project would therefore, not significantly reduce a protected or threatened species as outlined in the significance thresholds above. There would be **no impact** to the beaver as a result of development of the Urban Reserve parcel.

IMPACT 4.8-17	**CONFLICT WITH THE PROVISION OF AN ADOPTED HABITAT CONSERVATION PLAN, NATURAL CONSERVATION COMMUNITY PLAN OR OTHER APPROVED CONSERVATION PLAN**	
Applicable Policies and Regulations	Federal and California Endangered Species Act California Fish and Game Code City/USFWS MOU	
	CSP	**Urban Reserve**
Significance with Policies and Regulations	Less Than Significant	Less Than Significant
Mitigation Measures:	None Required	None Required
Significance after Mitigation:	Less Than Significant	Less Than Significant

CREEKVIEW SPECIFIC PLAN

Conservation plans allow a cooperative effort between regulatory agencies, local agencies and private and public partners. The goal is to apply a broad-based ecosystem approach to planning for the protection of biological diversity in an effort to protect habitat and species. In California the Natural Community Conservation Planning Act (NCCP) was enacted in 1991 to protect individual species that have declined significantly. The primary objective of the NCCP program is

to preserve natural communities while accommodating compatible land use. The federal equivalent to this program is the Habitat Conservation Plan or HCP. The HCP requirement resulted from 1982 amendments to FESA which provide that, as a condition to obtaining an "incidental take" permit (which allows the "take" of endangered species), the applicant must prepare a HCP that specifies, among other things, the actions the applicant will take to minimize and mitigate any adverse impacts to the species and available funding to implement these measures. The permit will be issued if the Secretary of Commerce or the Interior finds that the impacts to the species have been minimized and mitigated to the "maximum extent practicable", that the anticipated take will not jeopardize the species' continued existence, and that funding will be sufficient to implement the HCP.

In May 2000, the City of Roseville and US Fish and Wildlife Service entered into an MOU to prepare a Habitat Conservation Plan (HCP) or equivalent. The purpose of the MOU is to minimize the indirect impact of incidental take of vernal pool species resulting from future City growth served by the Pleasant Grove Wastewater Treatment Plant (PGWWTP), which was then under construction. To accomplish this purpose, the MOU commits the City to development of an "interim conservation strategy" to address City development that would be served by Phase I of the treatment plant operation (12 million gallons per day) and an HCP or equivalent for future City development served by Phase II operations (expansion beyond the initial 12 million gallons per day). At the time the MOU was signed, the planning area was restricted to existing City boundaries. However, section 2.1 of the MOU recognizes that the City boundaries may change in the foreseeable future to include lands annexed through an agreement with Placer County, in which case those annexed areas are intend to be incorporated into the "planning area" covered by the City/County MOU.

As part of advancing the development of an interim strategy, consistent with the MOU, the City worked with USFWS to assess the status of remaining vernal pool resources within the City. This included several mapping efforts to identify current development trends and remaining vernal pool resources. The USFWS concurred that nearly all remaining undeveloped land containing vernal pools within the city limits had received federal permits for development through the Clean Water Act 404 process, therefore, preparation of an HCP or equivalent to address remaining development would not be necessary. The USFWS further determined that the conservation

strategy could be developed and approved through the Section 7 consultation process in the context of permitting, pursuant to Section 404 of the Clean Water Act.

The City of Roseville is committed to developing a vernal pool conservation strategy that is consistent with the direction provided by the USFWS. This includes development of an Open Space Preserve Area and Overarching Management Plan that ties the existing City preserve system together under a broader more unified framework. It also includes a commitment to coordinate on-site avoidance and off-site mitigation strategies in a manner that would not prejudice or conflict with the County's proposed larger scale conservation effort. The City of Roseville recently drafted a Preserve Area Overarching Management Plan that pulls all of the city's existing preserve areas under one umbrella program. Management, monitoring and reporting for on-site open space Preserve areas established as part of the CSP would be conducted consistent with the City's new Preserve Area Overarching Management Plan.

Through the 404-permit process, the landowners and City have completed an early consultation process on the project with the USFWS, USACE and EPA. Over the course of two years, the City and the applicants met with the USACE, EPA, and USFWS over 14 times to discuss the project. A goal of USFWS was to ensure that the project did not preclude options for establishing a viable long-term preserve system.

Therefore, the City has complied with the spirit of the City/USFWS MOU and determined that the CSP would have a **less than significant** impact regarding conflicts with a conservation plan.

URBAN RESERVE

Development of the Urban Reserve area would be required to comply with the City/USFWS MOU. Through the 404-permit process, future applications would go through the Section 7 consultation process between USACE and USFWS. Any development would be required to prepare an O&M plan that would be folded into the City's Preserve Area Overarching Management Plan. Future development would be designed to complement the region's habitat conservation plan and, therefore, would have a **less than significant** impact with regard to potential conflicts with a conservation plan.

4.8.5 MITIGATION MEASURES

The Project area was included in the program-level analysis of the West Roseville Specific Plan Final EIR. Mitigation adopted by the City Council at time of approval in 2004 is still applicable in the CSP area unless superseded by CSP project-specific mitigation, and will continue to apply to the Urban Reserve area unless noted. This following refers to the previously adopted WRSP mitigation measures as "WMM", and will show either ~~strikeout~~ for language that is being eliminated from the previously adopted WMMs or underline for language that is proposed to be added to the previously adopted WMMs.

WMM 4.7-2 ***Wetland Protection Policies (Impacts 4.8-1, 4.8-2, 4.8-3, 4.8-4 and 4.8-11- Urban Reserve)***

Prior to the adoption of any Specific Plans and/or other development proposal for the ~~Remainder Area~~ Urban Reserve Area, wetland delineations shall be conducted, and, if wetlands are present, the project achieves no net loss of wetlands. As used here, "no net loss of wetlands" shall account for all wetlands impacted by the project, both directly (e.g., filled or drained) and indirectly (e.g., subjected to polluted and accelerated runoff, or damage caused by human or domestic animal access). No net loss could be achieved through on-site avoidance where practicable and desirable, on-site wetland construction where practicable and desirable, and/or off-site wetland construction, or off-site wetland restoration, and off-site acquisition where approved by the permitting agencies.

Where appropriate, the plans shall specify that special-status plant surveys be conducted for species that have a high probability to occur within areas of potential impacts (e.g., big-scale balsamroot and Hispid bird's beak), such that if found, no net loss of special-status plants occur, and that landowners use harvested inoculum (i.e., the top few inches of soil containing the seed bank and vernal pool crustacean cysts) from on-site vernal pools in constructed wetlands. Additionally, if wetland habitat would be impacted methods listed to ensure no net loss of wetlands, as detailed in W~~MM 4.7-1~~ MM 4.8-1 would be applicable and required.

WMM 4.7-3 ***Vernal Pool Crustacean Policies (Impact 4.8-2 and 4.8-11- Urban Reserve)***

Prior to the adoption of any Specific Plans and/or other development proposal for the ~~Remainder Area~~ Urban Reserve, a delineation of all potential vernal pool crustacean habitat and appropriate surveys shall be performed. Surveys shall follow the January 19, 1995 (or more recent version, if available) USFWS *Guidelines for Surveys of the Endangered Conservancy Fairy shrimp, Longhorn Fairy Shrimp, Riverside Fairy Shrimp, Vernal Pool Tadpole Shrimp, and the Threatened Vernal Pool Fairy Shrimp* to determine the extent of the potential habitat that is present in the proposed development area. For those areas of potential habitat that are determined not to be occupied by federally listed vernal pool crustaceans, no further mitigation would be required. If federally listed vernal pool crustaceans MM 4.8-1 shall be implemented. Alternatively, the project applicant may assume that all potential vernal pool crustacean habitat is occupied and implement MM 4.8-1. In implementing MM 4.8-1, it shall be demonstrated in the project-level environmental document that the mitigation strategy would ensure no net loss of vernal pool crustacean habitat.

WMM 4.7-5 ***Spadefoot Protection Policies (Impact 4.8-4 Urban Reserve)***

Prior to adoption of any specific plans and/or other development proposals for the ~~Remainder Area~~ Urban Reserve, CDFG approved protocol surveys shall be conducted, if necessary, to determine the presence or absence of pools occupied by western spadefoot. These surveys shall be conducted during the appropriate season (generally February), by a qualified biologist. If western spadefoot is found during the surveys, the Specific Plan and/or development plan shall provide a plan and/or policies to protect this species. The plan and/or policies shall provide for avoidance of those pools that are found to support western spadefoot wherever feasible. If avoidance is not feasible, then the CDFG shall be

consulted to approve an adult or larval western spadefoot, or western spadefoot egg masses capture and relocation plan. In addition, ~~WMM 4.7-2~~,MM 4.8-1, which would result in no net loss of wetlands, would assist in the preservation of vernal pool and seasonal wetland habitat that this species requires for breeding. This measure would ensure the survival of western spadefoots that are displaced from pools that are destroyed during construction by relocating them to suitable habitat.

WMM 4.7-7 ***Nest Protection Policies (Impact 4.8-6 Urban Reserve)***

Prior to adoption of any Specific Plans and/or other development proposals for the ~~Remainder Area~~ Urban Reserve Area, a plan and/or policies shall be developed and enacted to ensure that fully protected and raptor species are not injured or disturbed by construction in the vicinity of nesting habitat. The plan and or policies shall include the measures set forth above in MM 4.8-3.

WMM 4.7-9 ***Swainson's Hawk Habitat Policies (Impact 4.8-7 and 4.8-11- Urban Reserve)***

Prior to the adoption of any Specific Plans and/or other development proposals for the ~~Remainder Area~~ Urban Reserve, the applicant shall conduct additional environment review and implement measures to protect Swainson's hawk habitat at a ratio commensurate with the habitat area to be lost due to proposed development.

WMM 4.7-11 ***Stream Protection Policies (Impact 4.8-8 and 4.8-11 - Urban Reserve)***

To protect the sensitive habitat within the stream/drainage corridors, and its potential use by wildlife as movement corridors, activities would be prohibited within a buffer zone adjoining the stream area, a minimum of 50-feet from the active channel. Buffers are established and managed to reduce the impact of adjacent land use. The design of a buffer serves several important functions: it preserves the stream's natural characteristics, protects water quality, and improves habitat for plans and

animals on land and in the water. Any Specific Plans and/or other development proposals for the Remainder Area Urban Reserve that involve the alteration or development of areas within the 50 foot riparian buffer areas shall demonstrate how the stream corridors, and the wildlife that use them, will be protected from disturbance due to construction or obstruction (e.g., fill, culverts), passive recreation, or other activities that would otherwise restrict or prevent the unobstructed movement of wildlife through them. This shall be demonstrated to the satisfaction of the CDFG or other jurisdictional bodies. Those plans or proposals shall require use of either bridges or culverts that are large enough that wildlife has enough space to pass through these road crossings without having to travel over the road surface. Additionally, future development within the ~~Remainder Area~~ Urban Reserve would be required to maintain stream corridors in perpetuity via a conservation easement or other deed restriction. The conservation easement shall stipulate permitted uses within this area, as well as provide a maintenance and enhancement plan that would list, the details, responsible parties, funding mechanisms, and schedule. Alternately, this measure may be implemented by obtaining a Section 1600 Streambed Alteration Agreement from CDFG prior to any construction activities within stream corridors. Specific measures would be developed during discussions with CDFG, but may include using bridges instead of culverts, erosion control and bank stabilization measures, and/or restoration of stream corridor habitat that has been damaged due to the project construction.

WMM 4.7-13 ***Riparian Habitat Policies (Impact 4.8-8 Urban Reserve)***

To protect riparian vegetation within the ~~SOI Amendment Area~~ CSP area, the following policies shall be implemented:

(a) The project applicant shall provide for temporary fencing along the top of the bank during construction of those areas of the proposed

project adjacent to riparian habitat to discourage access to the riparian habitat by humans and pets.

(b) The project applicant shall provide for permanent fencing and/or a landscape barrier to discourage access to the riparian habitat by humans and pets. The fencing and/or landscape barrier shall be placed at the top of the bank of the creeks along those portions of the site adjacent to riparian habitat. The proposed recreation trail shall be on the project site side of the fence/landscape barrier. The fencing and/or landscape barrier shall be constructed of wood or other natural materials and shall allow for the viewing of the riparian habitat while discouraging access.

(c) Interpretive signs and displays shall be posted along the border of the riparian area to educate the public and route access away from sensitive areas. These informative signs will be posted at intervals ~~of not less than 500 feet~~ determined appropriate by the City of Roseville Parks and Recreation Director along the border with information regarding the objectives of creek and riparian habitat protection. Signs should also include information regarding the importance of restricting access to the riparian area by household pets. Such signs will be made of wood or similar natural material, and be maintained by the Applicant.

(d) Lighting adjacent to riparian buffers should be shielded away from the riparian areas.

WMM 4.7-15 ***Conduct Appropriate Surveys (Impact 4.8-11 Urban Reserve)***

Prior to construction of any off-site infrastructure for Specific Plans and/or other development proposals for the ~~Remainder Area~~ CSP Offsite Infrastructure (except Off-Site Improvement Area, [Reason Farms Panhandle]) improvements and Urban Reserve Area, the City shall require that appropriate biological surveys have been conducted

and mitigation implemented. The surveys shall be performed, as needed, within any undisturbed areas that would be affected by infrastructure development. Therefore, if such resources are found, WMM 4.7-2, WMM 4.7-3, WMM 4.7-5 and WMM 4.7-11 shall be implemented as appropriate to the resource.

MM 4.8-1 (a): ***Ensure No Net Loss of Wetlands (Impacts 4.8-1, 4.8-2, 4.8-3, 4.8-4 and 4.8-11-CSP)***

The City shall not issue a grading permit for the CSP project unless a Clean Water Action Section 404 permit is first obtained from the USACE [or an equivalent approval for waters of the state is obtained from the RWQCB]The Clean Water Act Section 404 permit process (including Section 7 Consultation under FESA) is the standard method for developing mitigation for projects that affect wetlands and vernal pool species such as special-status plants, vernal pool crustaceans, and western spadefoots. Through this process, project applicants will be required to obtain the necessary permits and approvals to implement their proposed project while remaining in compliance with the Clean Water Act and FESA. If a 404 permit is not obtained, the City shall not issue a grading permit for the CSP project. The obligation to obtain the 404 permit will ensure no net loss to federally protected wetlands. Even after obtaining such a permit, however, the applicants must demonstrate to the City's Planning Director that they have also achieved no net loss of wetlands. Mitigation shall consist of a combination of the preservation of on-site vernal pool habitat and the acquisition of off-site property with existing vernal pool habitat for preservation.

Mitigation shall include off-site creation and/or restoration of vernal pool habitat, and/or participation in a mitigation credit program from a wetlands mitigation bank approved by the USACE and USFWS. These banks charge fees in exchange for credits that are based upon the

mitigation obligation of the applicant. If the applicant chooses to buy mitigation credits, the applicant shall pay fees that shall be used to restore, create, enhance, and/or preserve wetlands at an established mitigation bank. The credits shall be in direct proportion to the wetland impacts resulting from the project. The project applicants have identified appropriate off-site mitigation in the form of preservation and restoration, as shown in Figure 4.8-3. This restoration mitigation, coupled with on-site creation, will be a component of the required compensation for the project.

All wetland restoration and creation shall be conducted in a manner consistent with applicable USACE and USFWS mitigation guidelines and policies.

Additionally, mitigation shall include off-site creation and/or restoration of vernal pool habitat, and/or participation in a mitigation credit program from a wetlands mitigation bank approved by the Corps and USFWS. These banks charge fees in exchange for credits that are based upon the mitigation obligation of the applicant. The fee is used for wetlands that have been restored, created, enhanced, and/or preserved at an established mitigation bank. The credits shall be in direct proportion to the wetland impacts resulting from the project. The project applicants have identified appropriate off-site mitigation as shown in Figure 4.8-3. This restoration coupled with on-site creation will be a component of the required compensation for the project.

All wetland restoration and creation shall be conducted in a manner consistent with applicable Corps of Engineers and USFWS mitigation guidelines and policies.

MM 4.8-1 (b) ***Wetland Avoidance/Mitigation Plan (Impact 4.8-1, 4.8-2, 4.8-3 and 4.8-11- CSP)***

For any wetlands to be restored or created outside of an approved mitigation bank, Applicant shall submit a Wetland Mitigation Plan to mitigate for impacts to wetlands that describes the specific method(s) to be implemented to mitigate any on- or off-site project related impacts. This detailed Wetland Mitigation Plan shall be prepared in accordance with applicable USACE and USFWS policies and regulations, and the City of Roseville Grading and Erosion Control Ordinance. A copy of the 404 permit, the biological opinion, and the Wetland Mitigation Plan shall be provided to the City at the time of specific entitlements (grading permit, tentative map, etc), and the Wetland Mitigation Plan shall ensure the following to the satisfaction of the City:

- Describe the location of the proposed wetland mitigation site(s), including a detailed map showing the acreage, distribution, and type of wetlands to be restored/created to ensure no net loss in wetland habitat acreage, values and functions. The compensation wetlands shall be designed, at a minimum, to meet or exceed the functions of the existing wetlands to be impacted.

- Include a monitoring plan to assess whether the compensation wetlands are functioning as intended. Specific performance standards for hydrologic, floral, and faunal parameters shall be proposed to determine success of the created wetlands. The monitoring plan shall specify the corrective measures/ modifications to be implemented in the event that monitoring indicates that the performance standards are not being met.

- Include a long-term maintenance plan for the wetland preservation/mitigation areas describing the measures to be

implemented to assure that they are maintained as wetland habitat in perpetuity.

- Require that fencing be installed around all existing wetlands that are within fifty feet of any haul route, spoil zone, stockpile zone, creation zone, or other construction area. The fencing shall be of high visibility material. Fencing shall be placed no closer than 10-feet to the delineated, verified perimeter of wetlands. This fencing shall be maintained until all adjacent construction activities are completed.

- A qualified biological resources monitor, approved by the City, shall be on the site(s) at all times when working in the open space corridor or other sensitive areas to ensure compliance with identified mitigation for the duration of all the proposed activities. The biological resources monitor shall submit bi-annual compliance reports to City monitor for review for a period of five years after completion of construction or until all performance standards have been satisfied.

- The wetland mitigation site(s) shall be surveyed by a qualified biologist, no more than 30 days prior to the start of construction, for the presence of raptor and federal and state listed bird nesting sites, unless it is determined that construction will occur outside of the breeding season for all species likely to occur on site or observed present. If active nesting sites are observed, all state and federal guidelines pertaining to active nesting sites shall be strictly adhered to in consultation with a qualified biologist.

- Applicant shall grant full access to the wetland mitigation site(s) to the City for the monitoring of construction activities and mitigation compliance. Access shall be granted during all construction activities and the City monitor may issue stop work orders if mitigation non-compliance is identified.

- Applicant shall specify measures for reuse or disposal of excavated material that is suitable for use in the project area. The plan should minimize the elapsed time between excavation and reuse and provide adequate stockpile coverage and protection from wind and water erosion during the entire storage period. If excavated material is unsuitable for reuse at the project area, the plan shall include specific information regarding the eventual reuse or disposal site, transportation method(s), disposal reuse management, and schedule.

- The Wetland Avoidance Mitigation Plan shall include a spill prevention and response plan to the satisfaction of the City.

- All disturbed areas shall be re-vegetated by the following methods: hydro seeding, drill seeding, or spreading of upland seed bearing soil. The method of re-vegetation shall be approved by a qualified wetland specialist and the City.

- The applicant shall apply non-toxic soil stabilizers according to manufacture's specifications to all inactive construction areas. Non-toxic binders shall be applied to exposed areas after cut and fill operations and hydro seeded areas. The wetland mitigation site shall be watered as directed by the City of Roseville Public Works Department. The frequency shall be based on the type of operation, and soil and wind exposure.

- To reduce air emissions, idling time for all construction vehicles shall be limited to a maximum of 10 minutes. Additionally, the City may curtail construction during high ambient pollutant concentrations, including but not limited to, ceasing construction during peak-hour vehicular traffic on adjacent or nearby roadways. Additionally, all land clearing, grading, earth moving or excavation activities shall be suspended when winds exceed 15 mph.

- The applicants shall ensure that all inactive storage/stock piles are adequately covered, and that all trucks hauling dirt, sand, soil, or other loose materials also are adequately covered or maintain at least two feet of freeboard (i.e., minimum vertical distance between the top of the load and top of the trailer) in accordance with the requirements of the California Vehicle Code (CVC) section 23114.

MM 4.8-2: ***Relocate Western Spadefoots (Impact 4.8-4 and 4.8-11- CSP)***

The location of pools that are occupied by western spadefoot shall be determined through surveys conducted during the appropriate season (generally February), by a qualified biologist. Those pools that are found to support western spadefoot shall be avoided if feasible. If avoidance is not feasible, then the CDFG shall be consulted for its recommendation with respect to an adult or larval or egg masses capture and relocation plan. Although there is no set protocol for this type of activity, the capture and relocation of reptile and amphibian species from areas that will be destroyed to areas of unoccupied suitable habitat is a fairly standard part of both USFWS and CDFG procedures and recommendations for mitigating impacts. When done in combination with habitat restoration and preservation, the procedure is known to be successful in preserving displaced populations. These measures would mandate that, where habitat avoidance is infeasible, western spadefoots displaced from pools that are destroyed during construction shall be relocated to protected areas of suitable habitat.

MM 4.8-3 ***Avoid Nesting Sites (Impact 4.8-6 and 4.8-11 CSP)***

To ensure that fully protected bird and raptor species are not injured or disturbed by construction in the vicinity of nesting habitat, the project applicant shall implement the following measures:

Raptors

a) When feasible, all tree removal shall occur between August 30th and February 15th to avoid the breeding season of any raptor species that could be using the area, and to discourage hawks from nesting in the vicinity of an upcoming construction area.

b) For Swainson's hawk, if avoidance of tree removal outside the breeding season is not feasible, and a nest is present, the applicants would be required to obtain a 2081 permit from CDFG to mitigate for potential "take" under CESA. If no nesting is occurring, a take permit would not be required.

c) Prior to the beginning of mass grading, including grading for major infrastructure improvements, during the period between February 15th and August 30th, all trees and potential burrowing owl habitat within 350 feet of any grading or earthmoving activity shall be surveyed for active raptor nests or burrows by a qualified biologist no more than 30-days prior to disturbance. If active raptor nests or burrows are found, and the site is within 350-feet of potential construction activity, a highly visible temporary fence shall be erected around the tree or burrow(s) at a distance of up to 350-feet, depending on the species, from the edge of the canopy to prevent construction disturbance and intrusions on the nest area.

d) Preconstruction and non-breeding season exclusion measures shall be developed in consultation with CDFG, and shall preclude burrowing owl occupation of the portions of the project site subject to disturbance such as grading. Burrowing owls may be passively excluded from burrows in construction areas by placing one-way doors in the burrows according to CDFG protocol. The one-way doors must be in place for a minimum of three days. All burrows that may be occupied by burrowing owls regardless of whether they exhibit signs of occupation must be cleared with the one way doors. Burrows that have been cleared through the use

of the one-way doors shall then be closed or backfilled to prevent owls from entering the burrow.

e) No construction vehicles shall be permitted within restricted areas (i.e., raptor protection zones) unless directly related to the management or protection of the legally protected species.

f) If a legally protected species nest is located in a tree designated for removal, the removal shall be deferred until after August 30th or until the adults and young of the year are no longer dependent on the nest site as determined by a qualified biologist.

Black Rails and Tri-colored Blackbirds

Prior to earth moving that would disturb marsh habitat, a qualified biologist shall conduct surveys to determine whether the California black rail or Tri-colored blackbird is present. If either of these species is found, all earth moving within 250 feet shall stop and measures, including establishing nest protection buffers along both sides of Pleasant Grove Creek during the nesting season (generally February 1 through August 31st) shall be implemented.

Rookeries

No heron rookeries are present within the plan area. Prior to earthmoving that would disturb marsh habitat or tree removal of the eucalyptus grove, pre-construction surveys should be conducted to verify that no rookeries have been established. If rookeries are present all earth moving within 250-feet shall stop, during the breeding season.

MM 4.8-4 ***Off-site and On-site Preservation of Grassland Habitat (Impact 4.8-2, 4.8-4, 4.8-6, 4.8-7 and 4.8-11-CSP)***

Swainson's Hawk

a) CDFG recommends that projects that result in the loss of potential foraging habitat for Swainson's hawk (which includes grasslands) within 10-miles of an active nest site provide mitigation for that loss. To the extent feasible, strategies for preserving on-site grasslands as raptor and migratory bird foraging habitat will be addressed in the Operations and Maintenance Plan prepared pursuant to the Section 404 Permit. Some of these strategies could include; but are not necessarily limited to, grazing for grassland management, monitoring for biological values, and adaptive management. Mitigation for Swainson's hawk foraging habitat would concurrently mitigate for loss of habitat for a number of other wildlife species in the region such as burrowing owl, red-tailed hawk, white-tailed kite, northern harrier, Ferruginous hawk, and logger-head shrike among others.

Based on information obtained through consultation with CDFG and otherwise, a Swainson's Hawk Grassland Habitat Mitigation Plan shall be developed to mitigate for the loss of grassland foraging habitat, consistent with the ratios set forth in Table 4.8-5. Areas within Placer County including the This would reduce the impacts to Swainson's Hawk to a **less than significant** level.

TABLE 4.8-5
SWAINSON'S HAWK MITIGATION RATIOS
(IN ACRES)

Distance from Nest (miles)	Potential On-site Foraging Habitat Impacted	Mitigation Ratio	Mitigation Acres	Total Net Foraging Habitat Required	On-site Open Space Preservation
0-1	368	1:1	368	368	136

Long-billed Curlew, Burrowing Owls

Mitigation for the Swainson's hawk would ensure that adequate grassland is preserved at ratios identified in Table 4.8-5. For foraging within one mile of an active nest, mitigation would be 1:1. Greater than a mile would be at an amount of .75:1. This would set aside adequate grassland that would reduce impacts from loss of grasslands to these species to a **less than significant** level.

MM 4.8-5 ***Wildlife Movement Protection Policies (Impact 4.8-8, 4.8-10 and 4.8-11-CSP and 4.8-10 Urban Reserve)***

To protect the long term habitat of the stream channels and the WAPA corridor and their potential use by wildlife as movement corridors, the project applicants shall ensure that movement corridors are not obstructed. Through compliance with Section 1600 of the CDFG Code, the applicant(s) will enter into a Streambed Alteration Agreement prior to conducting any construction activities within a stream corridor, which sets forth mitigation measures that the applicant must implement. These measures shall include, but not be limited to; the use of either bridges or culverts that are large enough that wildlife have enough space to pass through road crossings without having to travel over the road surface, the implementation of bank stabilization measures, and/or restoration and re-vegetation of stream corridor habitat that has been damaged due to the

project's construction. Furthermore, the recreational trails shall be lined by post and rail fence and signage would be used to direct trail users to stay within the designated trail corridor. The trails would be closed after dark and no exterior lighting would be used.

MM 4.8-6 ***Habitat Restoration/Onsite Preservation (Impact 4.8-11-CSP)***

Wetlands will be preserved within and along the preserved open space corridors (as shown in Figure 2-7, Project Description). As indicated there are opportunities to create an additional acre of wetlands onsite. The wetlands shall be constructed during the dry season when surface water generally is not present. Design features shall be implemented in order to avoid ponding conditions during the late spring and summer to minimize mosquito breeding. Other design features specified in the hydrology report (Appendix O) shall be implemented to ensure channel stability and reduce potential for siltation and intensive maintenance obligations.

To protect the long term viability of the channel improvements, the following policies shall be implemented:

a) The project applicants shall provide permanent post and cable fencing and/or a landscape barrier to discourage access to the riparian habitat by humans or pets. The fencing and/or landscape barrier shall be placed at the boundary of the open space and developed area. The proposed recreation trails shall be on the project side of the fence/landscape barrier. The posts shall be constructed of wood or other natural materials and shall allow for the viewing of habitat while discouraging access.

b) Interpretive signs shall be posted along the border of the area to educate the public and route access away from sensitive areas. These information signs will be posted at intervals of not less than ¼ mile or as deemed appropriate by the City of Roseville Parks and Recreation Director. The signs shall provide information on the objectives of the

creek and habitat protection and benefits of the project for storm detention and water quality. Signs should also include information regarding the importance of restricting access by household pets.

MM 4.8-7 ***Off-site Surveys (Impact 4.8-11- CSP)***

Prior to construction of any off-site infrastructure, a qualified biologist shall perform detailed, and if necessary, focused biological surveys of any undisturbed areas that would be affected by infrastructure development. Because infrastructure for the proposed project would be located in road right-of-way, or undeveloped land similar to the project site, the biological resources that would be expected to occur would not differ substantially from those identified in this EIR. If it is determined that wetland resources or sensitive species would be impacted MM 4.8-1 (a) and (b) and MM 4.8-2 shall be implemented, as appropriate to the resource. If it is determined that active nests exist within the off-site improvement location, MM 4.8-3 shall be implemented as appropriate to the species. MM 4.8-4 shall be implemented to address grassland impacts. If it is determined the off-site improvement is located within or adjacent to a wildlife movement corridor, MM 4.8-5 shall be implemented.