

4.4 BIOLOGICAL RESOURCES

INTRODUCTION

This section focuses on various biological characteristics of the proposed impact area of the General Plan Land Use Map for the Wheatland General Plan Update study area. The chapter's discussion will include existing plant communities, wetlands, wildlife habitats, and potential for special-status species and communities within the study area. Information for this analysis was largely drawn from a *Biological Resources Report*¹ provided by Foothill Associates, located in the Technical Appendices, and the *Wheatland General Plan Update Background Report*.²

ENVIRONMENTAL SETTING

The City of Wheatland is located in the Sacramento Valley in the northern portion of California's Central Valley in Southern Yuba County. The City is situated just north of the Bear River and the junction of the boundaries of Sutter, Placer and Yuba counties. This region of California is part of the Great Central Valley geographic subdivision, which typically consists of long, very hot summers and moderately cold winters. More specifically, the City of Wheatland is located in the Sacramento Valley sub-region, the smaller, wetter, northern sub-region of the Great Central Valley, which extends from Red Bluff in Tehama County to the salt marshes of Suisun Slough in southwest Solano County. Plant communities predominant in the region include agriculture, open range (grassland), oak woodland, riparian (associated with creeks and rivers), and wetlands.

The Wheatland General Plan Update study area, which encompasses $\pm 10,420$ acres, consists of the existing City of Wheatland and its Sphere of Influence. Elevations within the General Plan study area range from 65 feet to approximately 140 feet above mean sea level (MSL). Plant communities within the study area include annual grassland, cropland/orchard, valley foothill riparian, riverine, pond, seasonal wetlands, and vernal pool. Land use within the study area varies; the predominant uses include agricultural, commercial, and residential. Natural undisturbed open space is present along creeks, sloughs, and rivers within the study area.

For the purposes of analyzing potential impacts to biological resources occurring in the Wheatland General Plan Update study area that could arise from implementation of the *General Plan Land Use Diagram*, the areas designated "Urban Reserve" were not assessed in this document. Accordingly, all other areas were assessed in terms of potential impacts to existing biological resources and are included in this analysis. This study area comprises $\pm 4,808$ acres (this area does not include the areas within the study area that are designated as "Urban Reserve," totaling $\pm 5,612$ acres), and ranges from 65 feet to approximately 115 feet above MSL, and will be hereafter referred to as the *General Plan Land Use* impact area.

Biological Communities

Discussed below are the biological communities occurring in the *General Plan Land Use* impact area. Common wildlife and plant species observed, or expected to occur, in these areas are addressed in the following discussion. Special-status species and sensitive habitats expected or known to occur in these areas are also addressed below. Figure 4.4-1 illustrates the communities located in the *General Plan Land Use* impact area. Community types include predominantly agricultural/orchard and urban, with lesser amounts of non-native annual grassland, valley oak woodland, valley foothill riparian, riverine, pond habitat, irrigated pasture, and seasonal wetland.

Cropland/Orchard

Agricultural cropland occurs interspersed throughout the *General Plan Land Use* impact area with the majority occurring on the lands surrounding the City limits. Because this habitat is intensively managed, vegetation is limited to cultivated crops, predominately almond orchards, with ruderal (weedy) vegetation along the margins. Plant species observed within this habitat type include Italian ryegrass (*Lolium multiflorum*), johnsongrass (*Sorghum halepense*), ripgut grass, and yellow star-thistle.

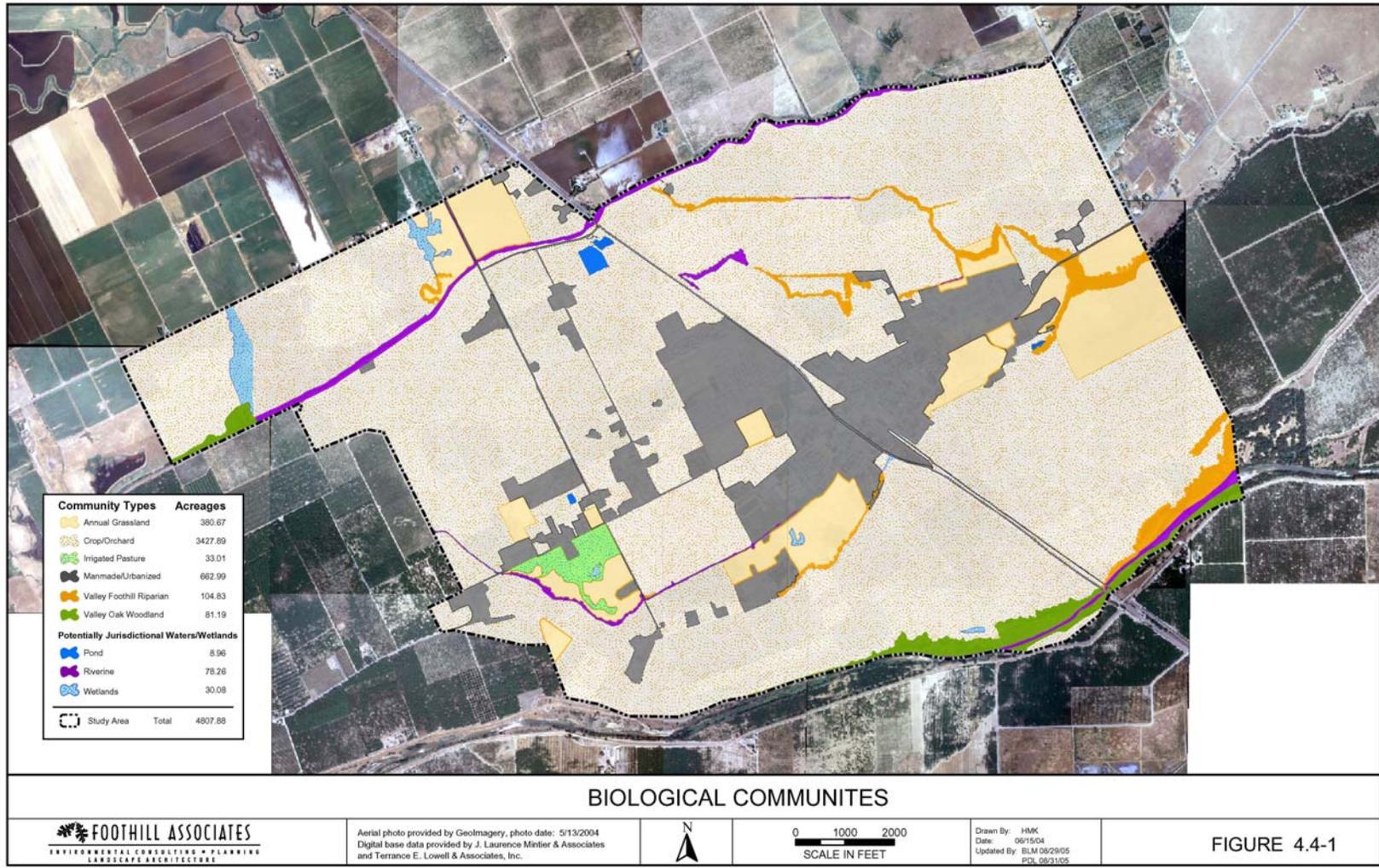
Orchard and row crops generally provide low breeding habitat for wildlife species due to the high level and frequency of disturbance. However, orchard and row crops can provide cover and foraging habitat for many species. While trees in orchards provide cover from predation for small birds and mammals, row crops present a foraging opportunity for birds of prey given that they provide little cover for small birds and mammals. Row crops are particularly important to migratory raptors for foraging. Species expected to occur in these habitats include American crow (*Corvus brachyrhynchos*), American robin (*Turdus migratorius*), western scrub jay (*Aphelocoma californica*), yellow-billed magpie (*Pica nuttalli*), western kingbird (*Tyrannus verticalis*), red-tailed hawk, white-tailed kite, black-tailed jackrabbit, California ground squirrel, and deer mouse (*Peromyscus maniculatus*).

Annual Grassland

Annual grassland is the most widely distributed biological community within the *General Plan Land Use* impact area. For the most part, annual grassland occupies grazing pasture, areas adjacent to the riparian habitat of Dry Creek and Grasshopper Slough, and vacant lots. Annual grasslands of the Central Valley occur mostly on flat plains and gently rolling foothills. Based on the dominant grasses observed within the *General Plan Land Use* impact area, this biological community is best classified as California Annual Grassland Series.

Annual grassland is characterized by annual grasses and forbs. This type of community generally occupies what was once a native grassland dominated by native perennial bunch grasses. However, annual grassland habitats today are composed largely of non-native annuals, which have effectively displaced the native perennial species.

**Figure 4.4-1
 Biological Communities**



WHEATLAND GP

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Dominant species in the *General Plan Land Use* impact area include wild oat (*Avena fatua*), ripgut grass (*Bromus diandrus*), barley (*Hordeum* sp.), medusahead grass (*Taeniatherum caput-medusae*), redstem filaree (*Erodium cicutarium*), lupine (*Lupinus* sp.), true clovers (*Trifolium* spp.), and California burclover (*Medicago polymorpha*). Widespread grassland species within the *General Plan Land Use* impact area are yellow star-thistle (*Centaurea solstitialis*), tarweed (*Holocarpha* sp.), bindweed (*Convolvulus arvensis*), and several species of brodiaea (*Brodiaea* spp.).

Many wildlife species use annual grassland habitat for all or part of their life cycle. Wildlife typically found in annual grassland habitat includes western meadowlark (*Sturnella neglecta*), white-crowned sparrow (*Zonotrichia leucophrys*), California vole (*Microtus californicus*), blacktail jackrabbit (*Lepus californicus*), California ground squirrel (*Spermophilus beecheyi*), and western harvest mouse (*Reithrodontomys megalotis*). Rodent populations provide foraging opportunities for mammalian predators, such as common gray fox (*Urocyon cinereoargenteus*) and coyote (*Canis latrans*), as well as avian predators such as white-tailed kite (*Elanus leucurus*), American kestrel (*Falco sparverius*), red-tailed hawk (*Buteo jamaicensis*), barn owl (*Tyto alba*) and great horned owl (*Bubo virginianus*).

Valley Oak Woodland

Valley oak woodland in the Central Valley usually merges with annual grasslands or borders agricultural land. This habitat varies from savanna-like to forest-like stands with partially closed canopies, comprised mostly of winter deciduous, broad-leaved species. Valley oak (*Quercus lobata*) stands with little or no grazing tend to develop a partial shrub layer with species such as poison-oak (*Toxicodendron diversilobum*), toyon (*Heteromeles arbutifolia*), and coffeeberry (*Rhamnus californica*). Ground cover consists of a well-developed carpet of annual grasses and forbs. Based on the dominant trees observed within the *General Plan Land Use* impact area, this biological community is best classified as Valley Oak Series.

A very small portion of the *General Plan Land Use* impact area supports Valley oak woodland habitat in the northwest section near Grasshopper Slough. Oak woodlands are considered a valuable biological community for several wildlife species. This community provides food, cover, and nesting sites for resident and migratory birds as well as several species of mammals, reptiles, and amphibians. Some common species that may occur in this habitat type include acorn woodpecker (*Melanerpes formicivorus*), California quail (*Callipepla californica*), red-tailed hawk, oak titmouse (*Baeolophus inornatus*), western screech owl (*Otus kennicottii*), and gray squirrel (*Sciurus griseus*).

Valley Foothill Riparian

Valley foothill riparian occurs along portions of Bear River, Dry Creek, Grasshopper Slough, and various irrigation canal systems throughout the *General Plan Land Use* impact area. Typically, valley foothill riparian habitat is found in valleys bordered by sloping alluvial fans, terraces, and lower foothills. Valley foothill riparian vegetation

varies from a two-layered canopy of trees and herbs (riparian woodland) to a multi-layered canopy of canopy trees, subcanopy trees, shrubs, and herbs (riparian forest). Based on the dominant trees observed within the *General Plan Land Use* impact area, this biological community is best classified as Fremont Cottonwood Series.

Within the *General Plan Land Use* impact area the valley foothill riparian community is made up of Fremont cottonwood (*Populus fremontii*), Valley oak, box elder (*Acer negundo*), and Oregon ash (*Fraxinus latifolia*). Understory shrub layer plants include wild grape (*Vitis californica*), California rose (*Rosa californica*), blue elderberry (*Sambucus mexicana*), poison-oak, and willows (*Salix* spp.). The herbaceous layer consists of sedges, rushes, and grasses. Riparian habitats are unique and ecologically important habitats that support an exceptionally high diversity of plants and wildlife. This community provides an important source of food, water, and protection for wildlife, as well as breeding and nesting habitat for both resident and migratory bird species. Species that may occur within this habitat type include red-shouldered hawk, great horned owl, northern flicker (*Colaptes auratus*), black phoebe (*Sayornis nigricans*), marsh wren (*Cistothorus palustris*) and common gray fox. Amphibian and reptile species such as western toad (*Bufo boreas*) and common garter snake (*Thamnophis sirtalis*) may occur in areas directly adjacent to standing water within the valley foothill riparian community.

Riverine

Riverine habitats can occur in association with many terrestrial habitats and are often contiguous to larger open water areas. The riverine habitat for this analysis includes the aquatic habitat of Dry Creek, Grasshopper Slough, and the Bear River. These natural water courses have well-defined beds and banks and in some areas adjacent wetlands occur. The aforementioned valley foothill riparian habitat is used to describe the adjacent terrestrial habitat that is interdependent with the riverine systems within the *General Plan Land Use* impact area.

The open water zones of rivers provide resting and escape cover for many species of waterfowl. Gulls, terns, osprey (*Pandion haliaetus*), and bald eagle (*Haliaeetus leucocephalus*) forage in open water. Near shore waters provide food for waterfowl, herons, and shorebirds. Many species of insectivorous birds (swifts, flycatchers, swallows) forage for their prey over water. Some of the more common mammals that may occur in riverine habitat include river otter (*Lutra canadensis*), muskrat (*Ondatra zibethica*), and beaver (*Castor canadensis*).

Pond

Pond habitat is generally constructed for agricultural purposes (stock ponds for livestock) throughout the *General Plan Land Use* impact area. Pond habitats are inland depressions or dammed riverine channels containing standing water. They may vary from small ponds to very large bodies of water. Typical pond habitats can be divided into two types, permanent and intermittent. Permanent pond habitats include perennial flooded lakes and

reservoirs, while intermittent pond habitats include lakes, and ponds (including vernal pools) that are periodically flooded.

The plants and animals found in pond habitat can vary with water depth and vegetation composition. A blanket of vegetation on the surface of water provides suitable habitat for microorganisms, minute crustaceans, and snails and mosquitoes. Submerged plants such as algae and pondweeds serve as supports for smaller algae and as cover for swarms of minute aquatic animals. As sedimentation and accumulation of organic matter increases toward the shore, floating rooted aquatics such as water lilies and smartweeds often appear. Floating plants offer food and support for numerous herbivorous animals that feed both on phytoplankton and the floating plants.

Perennial pond habitats are used by water birds, such as mallards (*Anas platyrhynchos*), cinnamon teal (*Anas cyanoptera*), killdeer (*Charadrius vociferus*), and herons and egrets for resting and foraging grounds. Additionally, lakes and ponds that support fish provide optimal foraging habitat for osprey and bald eagle as mentioned in the riverine discussion above. Intermittent pond habitat, such as vernal pools, is further discussed below.

Irrigated Pasture

Irrigated pasture is typically associated with livestock grazing. The vegetation within pastures would include a mix of perennial grasses and legumes. The height of the vegetation can vary, according to season and livestock stocking levels, from a few inches to two or more feet. Common grassland and forbs species observed in this habitat include perennial ryegrass (*Lolium perenne*), Mediterranean barley (*Hordeum marinum*), narrowleaf plantain (*Plantago lanceolata*), soft brome (*Bromus hordeaceus*), butterweed (*Senecio* sp.), filaree (*Erodium cicutarium* and *E. botrys*), vetch (*Vicia* sp.), California poppy (*Eschscholzia californica*), common owl's-clover (*Triphysaria eriantha*), and rose clover (*Trifolium hirtum*). Although several areas within the *General Plan Land Use* impact area might be active irrigated pasture, one area was identified through field investigation.

Irrigated pastures support foraging habitat for a variety of avian and small mammal species and the wetland areas interspersed throughout this habitat likely support a variety of wildlife species. Species expected to occur within this habitat include great egret (*Ardea albus*), great blue heron (*Ardea herodias*), red-winged blackbird (*Agelaius phoeniceus*), bullfrog (*Rana catesbeiana*), and Pacific chorus frog (*Pseudacris regilla*).

Seasonal Wetland

Seasonal wetland habitat is typically associated with shallow drainages and swales (riverine features) or depressions, which inundate long enough to support hydric soils and hydrophytic vegetation such as vernal pools. Riverine seasonal wetlands are characterized by the seasonal flow of water induced by the onset of the rainy season and are typically vegetated with hydrophytic species. These features can be supported by ground water and surface water sources, and therefore are typically more expansive than

other seasonal wetlands, often flowing linearly across the landscape. A depressional seasonal wetland is characterized by shallow land depressions that are inundated or saturated by water often enough to support hydrophytic plant species.

Vernal pools are a unique type of seasonal wetland located within annual grassland habitats. Vernal pools are shallow depressions underlain by an impermeable layer, such as clay hardpan or bedrock, that fills with water seasonally, providing habitat for various plant and animal species. Vernal pools occur within the *General Plan Land Use* impact area where the topography of the landscape is gently sloping to nearly level. Annual herbs and grasses adapted to the unique seasonal conditions dominate vernal pool communities. Dominant plant species typically found within the vernal pools include coyote-thistle (*Eryngium vaseyi*), annual hairgrass (*Deschampsia danthonioides*), popcorn-flower (*Plagiobothrys* sp.), spikerush (*Eleocharis macrostachya*), and western mannagrass (*Glyceria occidentalis*).

Seasonal wetlands including vernal pools are used by resident and migratory animal species. The Central Valley is part of the Pacific flyway, a migratory route for waterfowl species extending from Alaska to South America. In the spring, migrating waterfowl are often observed foraging and resting in Central Valley seasonal wetlands. Resident invertebrates and crustaceans, as well as the roots and leaves of vernal pool plants, provide an important seasonal food source for waterfowl and other non-migratory bird species. In addition, vernal pool habitat is vital to the life cycle of special-status crustaceans such as vernal pool fairy shrimp (*Branchinecta lynchi*).

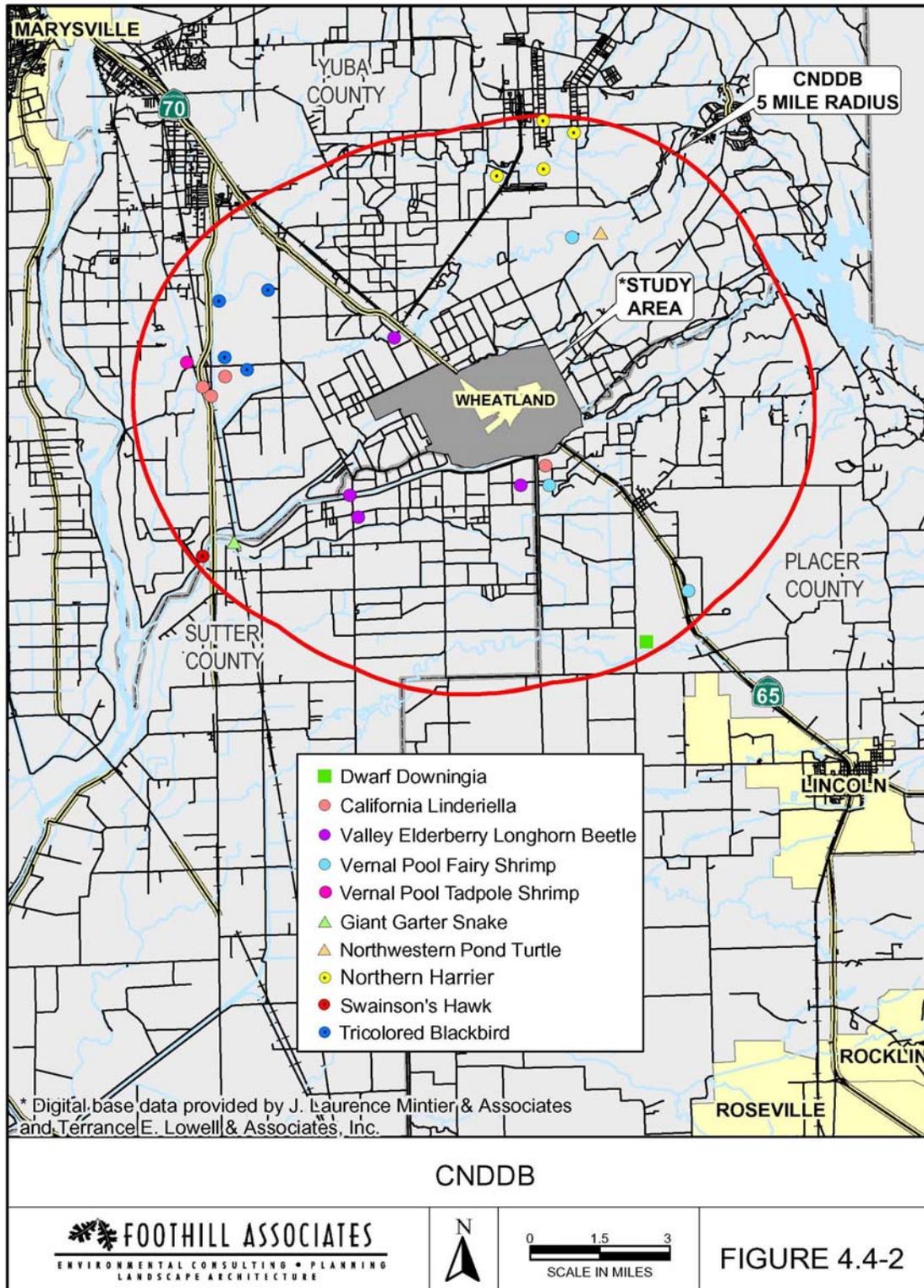
Special-Status Species

Special-status species are plant and animal species that have been afforded special recognition by federal, State, or local resource agencies or organizations. Listed and special-status species are of relatively limited distribution and may require specialized habitat conditions. Listed and special-status species are defined as:

- Listed or proposed for listing under the Federal Endangered Species Acts;
- Listed or proposed for listing under the State Endangered Species Acts;
- Protected under other regulations (e.g. Migratory Bird Treaty Act);
- California Department of Fish and Game (CDFG) Species of Special Concern;
- Listed as species of concern by California Native Plant Society (CNPS) or United States Fish and Wildlife Services (USFWS); or
- Receive consideration during environmental review under California Environmental Quality Act (CEQA).

Special-status species considered for this analysis are based on field survey results, review of the California Natural Diversity Data Base (CNDDDB) occurrence records of species, review of the USFWS lists for special-status species occurring in the region, and CNPS literature (Table 4.4-1). The locations of special-status species occurrences in the project vicinity are shown in Figure 4.4-2, which is from a search of the CNDDDB.

**Figure 4.4-2
 CNDDDB**



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SOURCE: CNDDDB, 8/5/05
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Table 4.4-1 includes the common name and scientific name for each species, regulatory status (Federal, State, local, CNPS), habitat descriptions, and potential for occurrence within the *General Plan Land Use* impact area.

The following set of criteria has been used to determine each species potential for occurrence within the *General Plan Land Use* impact area:

- **Present:** Species is known to occur on the site, based on CNDDDB records, and/or was observed onsite during the field survey(s);
- **Likely to Occur:** Species is known to occur on or near the site (based on CNDDDB records within 5 miles, and/or based on professional expertise specific to the site or species) and there is suitable habitat onsite;
- **Low:** Species is known to occur in the vicinity of the site, and there is marginal habitat onsite; **or**, species is not known to occur in the vicinity of the site, however there is suitable habitat onsite;
- **No:** Species is not known to occur on or in the vicinity of the site and there is no suitable habitat for the species onsite; **or**, species was surveyed for during the appropriate season with negative results.

Only those species that are known to be present, are likely to occur, or have a low potential for occurrence will be discussed further following Table 4.4-1.

Table 4.4-1 Listed and Special-Status Species Potentially Occurring on the General Plan Land Use Impact Area			
Common Name	Regulatory Status (Federal; State; Local; CNPS)	Habitat Requirements	Potential for Occurrence
Plants			
AHART'S DRAWF RUSH <i>Juncus leiospermus</i> var. <i>ahartii</i>	FSC; --; --; 1B	Vernal pools and swales in agricultural lands and valley grasslands, usually in sparsely vegetated microhabitats such as gopher mounds. Elevations range from 100 to 300 feet.	Low
BRANDEGEE'S CLARKIA <i>Clarkia biloba</i> ssp. <i>brandegeae</i>	--; --; SLC; 1B	Chaparral, cismontane woodland, often in roadcuts. Elevations range from 900 to 3,000 feet.	No; General Plan Land Use impact area is located outside of the known range of this species, and no suitable habitat is present.

<p>BUTTE FRITILLARY <i>Fritillaria eastwoodiae</i></p>	<p>FSC; --; --; 3</p>	<p>Openings in lower mixed-conifer forest, especially forest-shrub ecotones, and semishade in chaparral and foothill woodland, including serpentine-related soils. Elevations range from 1,000 to 4,000 feet.</p>	<p>No; General Plan Land Use impact area is located outside of the known range of this species, and no suitable habitat is present.</p>
<p>CALIFORNIA PITCHERPLANT <i>Darlingtonia californica</i></p>	<p>--; --; --; 4</p>	<p>Endemic to the northern Sierra Nevada and Coast Ranges of southwestern Oregon and northern California, including the Klamath, Siskiyou, Salmon, and Trinity Mountains. In the Sierra Nevada, it occurs as far south as Nevada County. Elevations range from 4,500 to 5,500 feet.</p>	<p>No; General Plan Land Use impact area is located outside of the known range of this species, and no suitable habitat is present.</p>
<p>CLUSTERED LADY'S-SLIPPER <i>Cypripedium fasciculatum</i></p>	<p>FSC; --; --; 4</p>	<p>Populations are found in areas with 60 to 100 percent shade provided by plant communities, including mixed evergreen, mixed conifer, Douglas-fir, pine, and black oak forest. Elevations range from 1,000 to 5,300 feet.</p>	<p>No; General Plan Land Use impact area is located outside of the known range of this species, and no suitable habitat is present.</p>
<p>DWARF DOWNINGIA <i>Downingia pusilla</i></p>	<p>--; --; --; 2</p>	<p>Northern claypan vernal pools in the central Sacramento Valley, northern hardpan vernal pools in the Sierra Nevada foothills, and vernal pools of the interior Coast Range valleys in Napa and Sonoma Counties. Elevations range from sea level to 1,500 feet.</p>	<p>Low</p>
<p>HARTWEG'S GOLDEN SUNBURST <i>Pseudobahia bahiifolia</i></p>	<p>FE; CE; --; 1B</p>	<p>Cismontane woodland, valley and foothill grassland with clay soils. Elevations range from 50 to 500 feet.</p>	<p>Low</p>
<p>LAYNE'S BUTTERWEED <i>Senecio layneae</i></p>	<p>FT; CR; --; 1B</p>	<p>Chaparral, cismontane woodland on serpentine or gabbroic soils in rocky areas. Elevations range from 650 to 3,300 feet.</p>	<p>No; General Plan Land Use impact area is located outside of the known range of this species, and no suitable habitat is present.</p>

LEGENERE <i>Legenere limosa</i>	FSC; --; --; 1B	Found in vernal pool habitats.	Low
TEHAMA NAVARRETIA <i>Navarretia heterandra</i>	--; --; --; 4	Valley and foothill grassland (mesic), vernal pools; elevations range from 100 to 300 feet.	Low
QUINCY LUPINE <i>Lupinus dalesiae</i>	FSC; --; --; 1B	Open, dry, mixed-conifer forests, often on light-colored fractured shale soils and disturbed areas. Elevations range from 2,900 to 6,300 feet.	No ; General Plan Land Use impact area is located outside of the known range of this species, and no suitable habitat is present.
Wildlife			
Invertebrates			
CALIFORNIA LINDERIELLA FAIRY SHRIMP <i>Linderiella occidentalis</i>	FSC; --; --; --	Vernal pools, swales, and ephemeral freshwater habitat.	Low
CONSERVANCY FAIRY SHRIMP <i>Branchinecta conservatio</i>	FE; --; --; --	Vernal pools, swales, and ephemeral freshwater habitat.	Low
VALLEY ELDERBERRY LONGHORN BEETLE <i>Desmocerus californicus dimorphus</i>	FT; --; --; --	Associated with host plant, elderberry trees (<i>Sambucus</i> spp.) in California's Central Valley during its entire life cycle.	Likely to occur
VERNAL POOL FAIRY SHRIMP <i>Branchinecta lynchi</i>	FT; --; --; --	Vernal pools, swales, and ephemeral freshwater habitat.	Low
VERNAL POOL TADPOLE SHRIMP <i>Lepidurus packardi</i>	FE; --; --; --	Vernal pools, swales, and ephemeral freshwater habitat.	Low
Amphibians/Reptiles			
CALIFORNIA RED-LEGGED FROG <i>Rana aurora draytonii</i>	FT; CSC; --; --	Requires a permanent water source and is typically found along quiet slow moving streams, ponds, or marsh communities with emergent vegetation.	Low
GIANT GARTER SNAKE <i>Thamnophis gigas</i>	FT; CT; --; --	Agricultural wetlands and other wetlands such as irrigation and drainage canals, low gradient streams, marshes, ponds, sloughs, small lakes, and their associated uplands.	Low

NORTHWESTERN POND TURTLE <i>Clemmys marmorata marmorata</i>	FSC; CSC; --; --	Occurs from the vicinity of the American River northward in permanent or nearly permanent ponds and streams, in a wide variety of habitats including valley, foothill, and montane regions.	Likely to occur
WESTERN SPADEFOOT TOAD <i>Spea hammondi</i>	FSC; CSC; --; --	Grassland habitats associated with long-lasting rain pools including, large vernal pools, or other seasonal wetlands. These habitats are essential for breeding and laying eggs.	Low
Fish			
CENTRAL VALLEY FALL/LATE FALL-RUN CHINOOK SALMON <i>Oncorhynchus tshawytscha</i>	FC; CSC; --; --	Sacramento and San Joaquin Rivers and their tributaries.	Low ; possibly on the Bear River only
DELTA SMELT <i>Hypomesus transpacificus</i>	FT; CT; --; --	Middle and lower delta region.	No
GREEN STURGEON <i>Acipenser medirostris</i>	PT; CSC; --; --	Found in large rivers from San Francisco Bay northward.	Low ; possibly on the Bear River only
LONGFIN SMELT <i>Spirinchus thaleichthys</i>	FSC; CSC; --; --	Found in major bays and estuaries from San Francisco Bay northward.	No ; there is no suitable habitat within the General Plan Land Use impact area for longfin smelt.
PACIFIC LAMPREY <i>Lampetra tridentata</i>	FSC; --; --; --	Spawning adults are found in gravel riffles and runs of clear coastal streams; feeding adults usually in the ocean.	No ; there is no suitable habitat within the General Plan Land Use impact area for pacific lamprey.
SACRAMENTO SPLITTAIL <i>Pogonichthys macrolepidotus</i>	FSC; CSC; --; --	Delta region and lower Sacramento and San Joaquin Rivers.	No
Birds			
AMERICAN BITTERN <i>Botaurus lentiginosus</i>	FSC; --; --; --	Marshes and reedy lakes. Seldom seen in trees.	Low
ALEUTIAN CANADA GOOSE <i>Branta canadensis leucopareia</i>	FD (FSC); --; --; -- (Wintering)	Winter resident of agricultural lands.	Low

BALD EAGLE <i>Haliaeetus leucocephalus</i>	FPD (FT); CE (fully protected); --; -- (Nesting and Wintering)	Nesting restricted to the mountainous communities near permanent water sources. Winters throughout most of California at lakes, reservoirs, river systems, and coastal wetlands.	Low
BANK SWALLOW <i>Riparia riparia</i>	--; CT; --; -- (Nesting)	Restricted to riparian areas with vertical cliffs and banks with fine or sandy soils.	Low
BLACK SWIFT <i>Cypseloides niger</i>	FSC; CSC; --; -- (Nesting)	Areas with rocky cliffs available for nesting, varying from ocean cliffs to mountain ledges, at elevations from sea level to 11,000 feet.	Low
CALIFORNIA THRASHER <i>Toxostoma redivivum</i>	FSC; --; --; --	Endemic to coastal and foothill areas of California, in dense chaparral and conifer forests.	No ; although this species may occur along the foothills, it is unlikely that California thrasher would occur within the General Plan Land Use impact area.
FERRUGINOUS HAWK <i>Buteo regalis</i>	FSC; CSC; --; -- (Wintering)	A winter resident of open habitats in California including grasslands, and brushy forests.	Likely to occur
GREATER SANDHILL CRANE <i>Grus canadensis tabida</i>	--; CT & Fully protected; --; -- (Nesting & Wintering)	Nests in wet meadows interspersed with emergent marsh habitat. Winters in agricultural croplands and irrigated pastures.	Low
LAWRENCE'S GOLDFINCH <i>Carduelis lawrencei</i>	FSC; --; --; -- (Nesting)	Nests in open oak or other arid woodland and chaparral habitats near water. Nest built in a tightly woven cup, in a low tree or bush.	Low
LEWIS' WOODPECKER <i>Melanerpes lewis</i>	FSC; --; --; -- (Nesting)	Nests in cavities in dead or live snags of trees. Breeds along eastern slopes of the Coast Ranges, and in the Sierra Nevada.	No ; wintering habitat occurs within the General Plan Land Use impact area, this species known nesting range is in the Coast Range and Sierra Nevada mountain ranges.

LITTLE WILLOW FLYCATCHER <i>Empidonax traillii brewsteri</i>	--; CE; --; -- (Nesting)	Nests in shrubby riparian vegetation with saturated soil conditions or near a water source, from Tulare County north, along the western side Sierra Nevada and Cascades, extending to northern California coast.	No; the known nesting range of this species occurs at higher elevation than the Plan Area.
LOGGERHEAD SHRIKE <i>Lanius ludovicianus</i>	FSC; CSC; --; -- (Nesting)	Nests on stable branches in densely foliated shrubs or trees. Typically found in open habitats with scattered shrubs, trees, posts, utility lines or other perching sites.	Likely to occur
LONG-BILLED CURLEW <i>Numenius americanus</i>	FSC; CSC; --; -- (Nesting)	Frequent wet meadow habitats, large coastal estuaries, and upland herbaceous areas including croplands. Nest built in grass-lined depressions on open ground.	Low
MOUNTAIN PLOVER <i>Charadrius montanus</i>	PT (FC); CSC; -- ; -- (Wintering)	Open and flat valley grasslands and short-grass prairies.	Low
NUTTALL'S WOODPECKER <i>Picoides nuttallii</i>	--; --; SLC; --	Permanent resident of low elevation riparian deciduous and oak woodland habitats.	Likely to occur
OAK TITMOUSE <i>Baeolophus inornatus</i>	--; --; SLC; --	Oak and pine-oak woodland, chaparral, and oak-riparian communities.	Likely to occur
RUFIOUS HUMMINGBIRD <i>Selasphorus rufus</i>	FSC; --; --; --; -- (Nesting)	Nests in berry brambles, shrubs and conifers, within wooded habitats. Known to breed in Oregon and Washington and the Trinity Mts., of Trinity and Humboldt counties.	Low
SWAINSON'S HAWK <i>Buteo swainsoni</i>	--; CT; -- (Nesting)	Nests in isolated trees or riparian woodlands adjacent to suitable foraging habitat (agricultural fields, grasslands, etc.).	Likely to occur

TRI-COLORED BLACKBIRD <i>Agelaius tricolor</i>	FSC; CSC; --; -- (Nesting colony)	Nests in dense blackberry, cattails, tules, willows, or wild rose within emergent wetlands throughout the Central Valley and the foothills surrounding the valley.	Low
VAUX'S SWIFT <i>Chaetura vauxi</i>	FSC; CSC; --; -- (Nesting)	Nests within large hollow trees and snags in coniferous forest habitats.	No ; General Plan Land Use impact area is located outside of the known range of this species.
WESTERN BURROWING OWL <i>Athene cunicularia hypugaea</i>	FSC; --; --; -- (Burrow Sites)	Nests in burrows in the ground, often in old ground squirrel burrows or badger, within open valley and foothill grassland and desert habitat.	Low
WESTERN YELLOW-BILLED CUCKOO <i>Coccyzus americanus occidentalis</i>	FC; CE; --; -- (Nesting)	Nests in valley, foothill, and desert, riparian communities within dense understory foliage. Also known to nests in walnut and almond orchards (CDFG 2002).	No ; no suitable habitat is present onsite.
WHITE-FACED IBIS <i>Plegadis chihi</i>	FSC; CSC; --; -- (Rookery)	Inhabits large freshwater emergent wetlands. Nesting colonies typically occur hidden within dense stands of vegetation such as reeds or willows.	Low ; although this species could occur during migration, the General Plan Land Use impact area is outside of the known range.
WHITE-TAILED KITE <i>Elanus leucurus</i>	FSC; Fully protected; --; -- (Nesting)	Inhabits herbaceous lowlands with variable tree growth. Nests in substantial groves of dense trees, typically adjacent to agricultural land or grassland habitats.	Present
OTHER RAPTORS (HAWKS, OWLS AND VULTURES)	MBTA and §3503.5 Department of Fish and Game Code	Nests in a variety of communities including cismontane woodland, mixed coniferous forest, chaparral, montane meadow, riparian, and urban communities.	Present
Mammals			
FRINGED MYOTIS BAT <i>Myotis thysanodes</i>	FSC; --; --; --	Chiefly inhabits coastal and montane forests and mountain meadows. Forms nursery colonies in caves, mines or buildings.	Low

GREATER WESTERN MASTIFF-BAT <i>Eumops perotis californicus</i>	FSC; CSC; --; --	Inhabits open areas in annual and perennial grasslands, coniferous and deciduous woodlands, with potential roost locations having vertical faces to drop off from and take flight, such as crevices in rock outcrops and cliff faces, tunnels and tall buildings.	Low
LONG-EARED MYOTIS <i>Myotis evotis</i>	FSC; --; --; --	Roosts in buildings, crevices, spaces under bark and snags. Uses caves for night roosts and forages among trees, over water and shrubs in forests between 7,000-8,500 feet above MSL.	Low
LONG-LEGGED MYOTIS BAT <i>Myotis volans</i>	FSC; --; --; --	Woodland and forest communities above approximately 4,000 feet above MSL. Roosts in rock crevices, buildings, under tree bark, in snags, mines, and caves.	Low
PACIFIC WESTERN BIG-EARED BAT <i>Corynorhinus townsendii townsendii</i>	FSC; --; --; --	Typically occurs in mesic habitats, and requires caves, crevices, mines, tunnels, buildings or structures for roosting.	Low
SAN JOAQUIN POCKET MOUSE <i>Perognathus inornatus</i>	FSC; --; --; --	Flat ground and low hills in Central Valley north to Marysville Buttes and south to Carrizo Plain.	Low
SMALL-FOOTED MYOTIS <i>Myotis ciliolabrum</i>	FSC; --; --; --	Occurs in open stands of trees in forests and woodland, as well as scrubland. Often seen flying above water. Roosts in buildings and caves.	Low
YUMA MYOTIS BAT <i>Myotis yumanensis</i>	FSC; CSC; --; --	Reside in open forests and woodland habitats with sources of water over which to feed. Roost in buildings, mines, caves, and crevices.	No ; there is no potential habitat for this species within the General Plan Land Use impact area.
Federally Listed Species:		California State Listed Species:	CNPS* List Categories:
FE = federal endangered	FC = candidate	CE = California state endangered	1A = plants presumed extinct in California

FT = federal threatened	PT = proposed threatened	CT = California state threatened	1B = plants rare, threatened, or endangered in California and elsewhere
FSC = federal species of concern	PD = proposed for delisting	CR = California state rare	2 = plants rare, threatened, or endangered in California, but common elsewhere
	FD = delisted	CSC = California Species of Special Concern	3 = plants about which more information is needed
			4 = plants of limited distribution
			Other Special-status Listing:
			SLC = species of local or regional concern or conservation significance

Source: Foothill Associates

Special-Status Wildlife

Invertebrates

California linderiella, Conservancy fairy shrimp, vernal pool fairy shrimp, and vernal pool tadpole shrimp. Typical habitat for special-status vernal pool crustaceans in California include vernal pools, seasonally ponded areas within vernal swales, rock outcrop ephemeral pools, playas and alkali flats. Fairy shrimp are small, delicate animals that grow 10 to 20 mm in a period as short as two to three weeks and about 40 mm in some of the species that may live several months. They filter bacteria, algae, and protozoa from their aquatic habitat. These short-lived animals hatch and reproduce during a short interval in the winter when the vernal pools are filled with water. Fairy shrimp cysts fall to the bottom of the pool where they withstand the hot, dry summers of California's grasslands. After one or more dry seasons, the cysts will hatch when the pools are once again full of water, and the cycle of life begins again. The CNDDDB lists several records of California linderiella and vernal pool fairy shrimp within the five miles of the *General Plan Land Use* impact area. Approximately 1,324 acres is designated critical habitat for vernal pool species within Yuba County. Seasonal wetlands such as vernal pools are considered suitable habitats for these species. Consequently, these special-status invertebrates could occur within vernal pools and seasonal wetlands throughout the *General Plan Land Use* impact area.

Valley Elderberry Longhorn Beetle. The federally listed valley elderberry longhorn beetle (VELB) is known to occur in association with its host plant, the elderberry (*Sambucus* sp.), that is critical for the larval stages. Because of the beetle's dependence on its host plant, the USFWS considers the elderberry, which is a common species of riparian and upland habitats in the Central Valley, habitat for VELB. This species is recorded in the CNDDDB within five miles of the *General Plan Land Use* impact area. Additionally, elderberry shrubs were observed along roadways and within the riparian areas during field reconnaissance. Consequently, VELB has a high potential to occur on elderberry shrubs within the *General Plan Land Use* impact area.

Fish

Anadromous Fishes and Other Aquatic Species. Two special-status anadromous fish species are known to or could occur in the *General Plan Land Use* impact area (Bear River): Central Valley fall/late fall-run Chinook salmon and green sturgeon. The Bear River is a tributary to the Feather River that eventually drains into the Sacramento River. These fish species are known to occur within the San Joaquin and Sacramento Rivers and their tributaries. Consequently, these species have the potential to occur within the open water habitat of the Bear River.

Amphibians

California Red-Legged Frog. California red-legged frog is listed as federally threatened and a California species of special concern. The California red-legged frog is the largest native frog in the western United States. This species requires dense, shrubby or emergent riparian vegetation closely associated with deep, still, or slow-moving water. The largest densities of California red-legged frogs are associated with deep-water pools with dense stands of overhanging willow trees and an intermixed fringe of cattails (*Typha latifolia*). Well-vegetated terrestrial areas within the riparian corridor may provide important sheltering habitat during winter. California red-legged frogs estivate in small mammal burrows and moist leaf litter. The California red-legged frog is not recorded to occur within five miles of the *General Plan Land Use* impact area. However, the riparian, riverine, and pond habitat within the *General Plan Land Use* impact area are considered suitable habitat for this species. Consequently, California red-legged frog could occur within the riparian corridors and slow-moving waterways throughout the *General Plan Land Use* impact area.

Western Spadefoot Toad. The western spadefoot toad is a federal species of concern and a California species of special concern. This species occurs in shallow temporary pools adjacent to annual grassland habitat. The western spadefoot toad is not listed in the CNDDDB to have occurred within five miles of the *General Plan Land Use* impact area. However, seasonally inundated wetland habitat within annual grassland communities are considered suitable habitat for this species. Therefore, this species has a low potential to occur within the *General Plan Land Use* impact area.

Reptiles

Giant Garter Snake. The giant garter snake is federally listed as threatened and is listed in California as threatened. This species occurs in vegetated canals, streams, and rivers throughout the Central Valley. Grassy banks and emergent vegetation are used for basking and high ground with burrows or crevices, which are protected from winter flooding, is used for hibernacula (winter retreats). An occurrence record of giant garter snake is listed in the CNDDDB within five miles of the *General Plan Land Use* impact area. The riverine and adjacent riparian habitats in the area support suitable habitat for this species. Consequently, giant garter snake could occur in the Bear River and any perennial irrigation canals within the *General Plan Land Use* impact area.

Northwestern Pond Turtle. Northwestern pond turtle is a federal species of concern and is a California species of special concern. This species requires permanent, still to slow-moving water with basking sites such as submerged logs, rocks, mats of floating vegetation or mud banks. One occurrence of this species is listed in the CNDDDB within five miles of the *General Plan Land Use* impact area. The pond habitats in the *General Plan Land Use* impact area support suitable habitat for this species and, consequently, this species could very likely occur in ponds within the *General Plan Land Use* impact area.

Birds

American Bittern. The American bittern is a federal species of concern. This species occurs in fresh or saline emergent wetlands throughout the Central Valley. American bitterns nest on a platform of matted emergent vegetation, usually in shallow water. Although records of this species are not listed in the CNDDDB, suitable habitat occurs adjacent to several of the open water features in the *General Plan Land Use* impact area. Therefore, American bittern has a low potential to occur in stock ponds, flooded agricultural fields, and Grasshopper Slough within the *General Plan Land Use* impact area.

Aleutian Canada Goose. The Aleutian Canada goose was recently removed from the federal endangered species list. Currently, the U.S. Fish and Wildlife Service is monitoring the species. In autumn, Aleutian Canada geese migrate from their breeding grounds in the Aleutian Islands to their wintering grounds in Oregon and California. Suitable wintering habitat for this species in California occurs in the Central Valley, which includes agricultural croplands, marshes, and pastures. Records of the Aleutian Canada goose are not listed with the CNDDDB within five miles of the *General Plan Land Use* impact area. However, suitable wintering habitat for this species occurs within the agricultural cropland, annual grassland, riverine and pond habitats within the *General Plan Land Use* impact area. Therefore, this species has a low potential to use agricultural fields, stock ponds, irrigation canals, Dry Creek, and Grasshopper Slough for foraging within the *General Plan Land Use* impact area.

Bald Eagle. Bald eagles live near large bodies of open water such as lakes, marshes, seacoasts and rivers, where plenty of fish to eat and tall trees for nesting and roosting occur. Bald eagles use a specific territory for nesting, winter feeding, or a year-round residence. Bald eagle is a year-round resident in mountain ranges of northern California. Some bald eagles that reside in the southern U.S. migrate slightly north during the hot summer months. Bald eagles feed primarily on fish, but also eat small animals (ducks, coots, muskrats, turtles, rabbits, snakes, etc.) and occasional carrion (dead animals). Although wintering habitat occurs, the *General Plan Land Use* impact area is outside of the known nesting range for bald eagle. Therefore, this species has a low potential to nest within the *General Plan Land Use* impact area.

Bank Swallow. The bank swallow is listed in California as threatened. The majority of this species breeding population occurs along banks of lakes, ponds, rivers, and streams in the Central Valley. This species is restricted to riparian habitats with vertical cliffs and banks with fine-textured or sandy soils, into which it digs nesting holes. The species is not recorded to occur within five mile of the *General Plan Land Use* impact area. However, suitable habitat for this species occurs adjacent to the riverine habitat. Therefore, this species has a low potential to occur along the banks of the Bear River within the *General Plan Land Use* impact area.

Ferruginous Hawk. The ferruginous hawk is a federal and state species of concern. This hawk is a winter resident and migrant at lower elevation and open grassland in the Modoc Plateau, Central Valley, and Coast Ranges. Ferruginous hawks are known to frequent open grasslands in search for prey and roosts in open areas, usually in a lone tree or on a utility pole. This species can tolerate heat, and nests are often found out in the open with no shade. Ferruginous hawks tend to displace red-tailed and Swainson's hawks, and compete with numerous avian and mammal species that prey upon small mammals. Occurrence records for this species do not exist within five miles of the *General Plan Land Use* impact area. However, the annual grassland is considered suitable foraging habitat for ferruginous hawk. Consequently, this species has a high potential to occur during wintering months foraging in agricultural fields and vacant lands within the *General Plan Land Use* impact area.

Greater Sandhill Crane. The greater sandhill crane is listed in California as threatened. This species is a winter migrant to the Central Valley where it occurs in wet meadows that are often interspersed with emergent marsh, agricultural croplands with cereal grain crops, and irrigated pastures. The species is not listed in the CNDDDB within five miles of the *General Plan Land Use* impact area. The cropland, annual grassland, and ponds in the *General Plan Land Use* impact area provide suitable wintering habitat for this species, allowing the species to regularly forage within these habitats. Consequently, greater sandhill crane could occur during wintering months foraging in agricultural fields, open grasslands, and along edges of Dry Creek and Grasshopper Slough, as well as stock ponds. Therefore, greater sandhill crane has a low potential to occur within the *General Plan Land Use* impact area.

Lawrence's Goldfinch. Lawrence's goldfinch is a federal species of concern. The breeding range of the species is confined to the Central Valley and coastal foothills of California. Lawrence's goldfinches typically nest in arid, open woodlands near chaparral, ruderal fields, and small bodies of water. Breeding generally occurs between mid-April and late July. The species feeds mostly on seeds of annual plants, with a strong preference for fiddlenecks (*Amsinckia* spp.). The species is not recorded to occur within five miles of the *General Plan Land Use* impact area. However, the oak woodland and annual grassland habitats within the *General Plan Land Use* impact area would provide suitable nesting and foraging habitat for Lawrence's goldfinch. Therefore, this species has a low potential to occur within the oak woodland and annual grassland communities within the *General Plan Land Use* impact area.

Loggerhead Shrike. Loggerhead shrike is a federal and California species of concern. This species prefers open habitats with scattered shrubs, trees, posts, fences, or other perches. Loggerhead shrikes nest in desert, savanna, open-canopied hardwood, hardwood-conifer, and riparian communities. Although no records of this species are listed in the CNDDDB within five miles of the *General Plan Land Use* impact area, suitable foraging and nesting habitat for this species occurs adjacent to open water habitat and within the riparian habitat in the *General Plan Land Use* impact area. Consequently, this species has a high potential to occur within the riparian corridors along Dry Creek and Grasshopper Slough within the *General Plan Land Use* impact area.

Long-billed Curlew. Long-billed curlew is a federal and state species of concern. The long-billed curlew breeds on plains, grasslands and prairies. The long-billed curlew spends the winter on lake and river shores, marshes, mudflats, and sandy beaches. When they are in the grasslands, the long-billed curlew eats grasshoppers, beetles and crickets. When they are in their winter habitats, they eat small crustaceans, mollusks, berries, and seeds. Occurrence records do not exist for long-billed curlew within five miles of the *General Plan Land Use* impact area. However, the *General Plan Land Use* impact area is within the known range of this species and the annual grassland and wetland communities would be considered suitable nesting and foraging habitat for this species. Therefore, this species has a low potential to occur within annual grassland and seasonal wetland communities within the *General Plan Land Use* impact area.

Mountain Plover. The mountain plover is a federally proposed threatened species and a California species of concern. This species is a Great Plains native that breeds on the arid short-grass prairie from northern Montana to southern New Mexico and winters in California with small numbers in Arizona and Texas. Wintering habitat for this species includes short grasslands and plowed fields. The species is not recorded in the CNDDDB to occur within five miles of the *General Plan Land Use* impact area. Although suitable wintering habitats for this species occurs within annual grassland, fallow agricultural land, and irrigated pasture habitats in the *General Plan Land Use* impact area, it is unlikely that this species regularly forages there. As such, this species has a low potential to occur within these habitats throughout the *General Plan Land Use* impact area.

Nuttall's Woodpecker. Nuttall's woodpecker is a species of local concern. This species is a common resident of low elevation riparian deciduous and oak habitats. Nest holes are excavated in willow, alder, cottonwood, sycamore, or oak trees, and these are found anywhere from 2.5 feet to 60 feet above the ground. Nuttall's woodpeckers forage preferentially in oaks, but acorns make up only a small part of their diet. Insects such as beetles, caterpillars, ants, and bugs are sought among the dense foliage of trees. Records of this species are not listed in the CNDDDB within five miles of the *General Plan Land Use* impact area. However, suitable habitat for Nuttall's woodpecker occurs within the oak woodland habitat within the *General Plan Land Use* impact area. Consequently, this species has a high potential to occur within woodland communities throughout the *General Plan Land Use* impact area.

Oak Titmouse. Oak titmouse is a species of local concern. Suitable nesting habitat includes oak woodland, pine-oak woodland, chaparral, and oak-riparian habitats. Nests are typically constructed in natural tree cavities, but this species will also use old woodpecker holes or bird boxes. Records of this species are not listed in the CNDDDB within five miles of the *General Plan Land Use* impact area. However, suitable nesting habitat for oak titmouse occurs within the valley oak woodland habitat onsite, and this species is very common in oak woodlands. Therefore, this species has a high potential to occur within woodland communities throughout the *General Plan Land Use* impact area.

Swainson's Hawk. Swainson's hawk is a migratory species that is typically found in California during its breeding season, from early March through early September. This species migrates from their wintering grounds in the La Pampas region in Argentina to their breeding ground in east-central Alaska, southwest Canada, eastern Washington and Oregon, and the Central Valley of California. For breeding grounds, Swainson's hawks prefer open habitats including mixed and short grasslands, with scattered trees or shrubs for perching, dry grasslands, irrigated meadows, and edges between two habitat types. Breeding occurs from late March to late August, peaking in late May through July. In the Central Valley of California, Swainson's hawk nest in stands of few trees in juniper-sage flats, riparian woodlands and oak woodlands, usually in close proximity to suitable foraging habitat. Swainson's hawk is recorded in the CNDDDB within ten miles of the *General Plan Land Use* impact area. Suitable foraging and nesting habitat occurs within the *General Plan Land Use* impact area and, consequently, this species has a high potential to occur.

Tricolored Blackbird. Tricolored blackbird is a federal and California species of concern. This species is a common resident throughout the Central Valley and coastal areas south of Sonoma County. Tricolored blackbirds nest in emergent wetlands with dense cattails or tules, and also in thickets of blackberry and willow. Records of this species are not listed in the CNDDDB within the *General Plan Land Use* impact area; however, potential nesting habitat occurs in the valley foothill riparian habitat and adjacent to the irrigation ditches and open water habitats in the *General Plan Land Use* impact area. Therefore, this species has a low potential to occur within wetland communities that support thickets of blackberry and stands of cattail within the *General Plan Land Use* impact area.

Western Burrowing Owl. The western burrowing owl is a federal and California species of concern. Burrowing owls inhabit open grasslands of the Central Valley. Typically, they nest in small colonies in abandoned ground squirrel burrows. This species may also occur along canal banks. Occurrence records do not exist for the western burrowing owl within five miles of the *General Plan Land Use* impact area. However, suitable habitat occurs within the annual grassland and cropland habitat in the *General Plan Land Use* impact area. Consequently, this species has a low potential to use this habitat in the *General Plan Land Use* impact area.

White-faced ibis. The white-faced ibis is found in salt and freshwater marsh habitat throughout the western United States east to approximately Louisiana. The white-faced ibis is a federal and state species of special concern. The species does not nest widely in

California and breeding in the Central Valley is known from only a few locations such as the Kern National Wildlife Refuge in the San Joaquin Valley. The species nests on the ground in dense, emergent marsh vegetation. This species is rarely known to nest in trees.

White-tailed kite. White-tailed kite is a federal species of concern and is fully protected by the California Department of Fish and Game. White-tailed kite is a medium sized raptor that is a yearlong resident in coastal and valley lowlands in California. This species occurs in agricultural, grassland, wetland, and oak woodland habitats. White-tailed kite prey mostly on voles and other small mammals; however, this species will occasionally prey on insects, birds, reptiles, and amphibians. White-tailed kite are monogamous and breed from February to October, peaking from May to August (Zeiner *et al.*, 1990). This species nests near the top of dense oak, willow, or other large trees. This species was observed onsite during the field survey, and there is suitable nesting and foraging habitat for this species present. Therefore, white-tailed kite is considered likely to occur within the study area.

Raptors and Other Migratory Birds. Raptor nests including Cooper's hawk (*Accipiter cooperii*), short-eared owl (*Asio flammeus*), and white-tailed kite (*Elanus leucurus*) are protected under the MBTA and Section 3503.5 of the California Fish and Game Code. Suitable raptor nesting and foraging habitat occurs in the *General Plan Land Use* impact area. American kestrel, red-tailed hawk, and white-tailed kite were observed during the field reconnaissance. Consequently, raptor species likely forage and nest in the *General Plan Land Use* impact area.

Migratory birds forage and nest in multiple habitats such as annual grasslands and riparian oak woodlands. The nests of all migratory birds are protected under the MBTA, which makes it illegal to destroy any active migratory bird nest. Numerous migratory bird species have the potential to nest in the *General Plan Land Use* impact area.

Mammals

San Joaquin Pocket Mouse. San Joaquin pocket mouse is a federal species of concern. Seeds of grasses, forbs, and shrubs such as *Atriplex* are the main food source and soft-bodied insects such as cutworms and even grasshoppers are also eaten. The pocket mouse lives in arid habitats, therefore all water needs are metabolized through seed digestion. The foraging habits of the pocket mouse tend to occur under the cover of shrubs. They generally do not travel far to forage and stay out of relatively open areas. The occurrence of the San Joaquin pocket mouse is unknown within five miles of the *General Plan Land Use* impact area. However, the annual grassland and oak woodland habitats would be considered suitable foraging and nesting habitat. Consequently, this species could occur within the *General Plan Land Use* impact area.

Bats. Pacific western big-eared bat, fringed myotis, long-eared myotis, long-legged myotis, and small-footed myotis bats are all federal species of concern. The greater western mastiff bat is also a state species of concern, as well as a federal species of

concern. Habitat for bat species consists of foraging habitat, maternity roost sites, night roosting cover, and winter hibernacula. In general, the CDFG is most concerned about the loss of maternity roosting sites. These species forage over open water or land and could use open water and riparian habitats in the *General Plan Land Use* impact area to forage. Potential maternity and night roosting sites could occur in abandoned outbuildings and within the riparian habitats in the *General Plan Land Use* impact area. Therefore, these bat species could occur in the *General Plan Land Use* impact area.

Special-Status Plants

Based on records search of the CNDDDB, CNPS Inventory of Rare and Endangered Plants, and the USFWS species list for Yuba County, suitable habitat for the following plant species occurs in the *General Plan Land Use* impact area: Ahart's dwarf rush (*Juncus leiospermus* var. *ahartii*), dwarf downingia (*Downingia pusilla*), Hartweg's golden sunburst (*Pseudobahia bahiifolia*), legenere (*Legenere limosa*), and Tehama navarretia (*Naverretia heterandra*). These species are further discussed below.

Ahart's Dwarf Rush. Ahart's dwarf rush is known from fewer than six occurrences in Butte, Calaveras, Placer, Sacramento, and Yuba counties. This small, reddish, grass-like annual is in the rush family (Juncaceae). Typically the height of this plant ranges from less than an inch to 2.5 inches and each plant produces as many as 100 slender stems from its base. The grass-like leaves arise from the base and are approximately half as long as the stems. The flowering period for Ahart's dwarf rush is April–May with each stem producing a single flower at its tip. This species will occur in vernal pool margins within moderately moist valley and foothill grasslands. More specifically, Ahart's dwarf rush is more commonly found in vernal pools with short inundation durations and/or the upper margins of deeper vernal pools. Currently, the Ahart's dwarf rush is not known to occur within five miles of the *General Plan Land Use* impact area. However, vernal pools and seasonal ponded areas could support this species. Therefore, Ahart's dwarf rush has a low potential to occur within the *General Plan Land Use* impact area.

Dwarf Downingia. Dwarf downingia is an annual herb that occurs in vernal pools within moderately moist valley and foothill grasslands. This species is a small (0.8– 5.9 inches) plant with flowers that vary from white to blue which can be seen from March through May. Typically, dwarf downingia occurs in vernal pools and artificial features within the annual grassland, such as stock ponds, roadside ditches, gravel pits, tire ruts, and scraped depressions. This species can occur in areas that hold water for short periods of time as well as on along the margins of areas that hold water for longer durations such as marshes and sloughs. While a known CNDDDB occurrence of dwarf downingia exists within five miles and suitable habitat such as vernal pool is present (though of marginal quality), this species nevertheless has a low potential to occur within the *General Plan Land Use* impact area.

Hartweg's Golden Sunburst. Hartweg's golden sunburst is a member of the sunflower or aster family (Asteraceae) and is known to occur in valley and foothill grasslands. This species can be 2 to 6 inches tall and is covered throughout with white, woolly hairs. This

species, which is in bloom during March or April, shows a solitary bright yellow flower. Only known from fewer than twenty occurrences, Hartweg's golden sunburst is very rare and seriously threatened by development and agricultural uses. Because CNDDDB records for this species do not exist within five miles of the *General Plan Land Use* impact area, and the widespread agricultural practices that occur throughout the area, Hartweg's golden sunburst has a low potential to occur.

Legenere. Legenere is in the bellflower family and is known to occur within vernal pools in valley grasslands. The flowering period for legenere is generally from April through June, depending on the depth of the vernal pool or the duration of ponding. Legenere can occur within matted vegetation at the bottom of drying vernal pools and grows to approximately 4–6 inches tall. Many historical occurrences of legenere have been extirpated through California due grazing and development. Because CNDDDB records for this species do not exist within five miles and cattle grazing activity occurs within annual grassland communities, legenere has a low potential to occur.

Tehama Navarretia. Tehama navarretia is an annual herb that occurs in vernal pools of the valley and foothill grasslands. This species generally blooms from April through June. Because CNDDDB records for this species do not exist within five miles and cattle grazing activity occurs within annual grassland communities, Tehama navarretia has a low potential to occur.

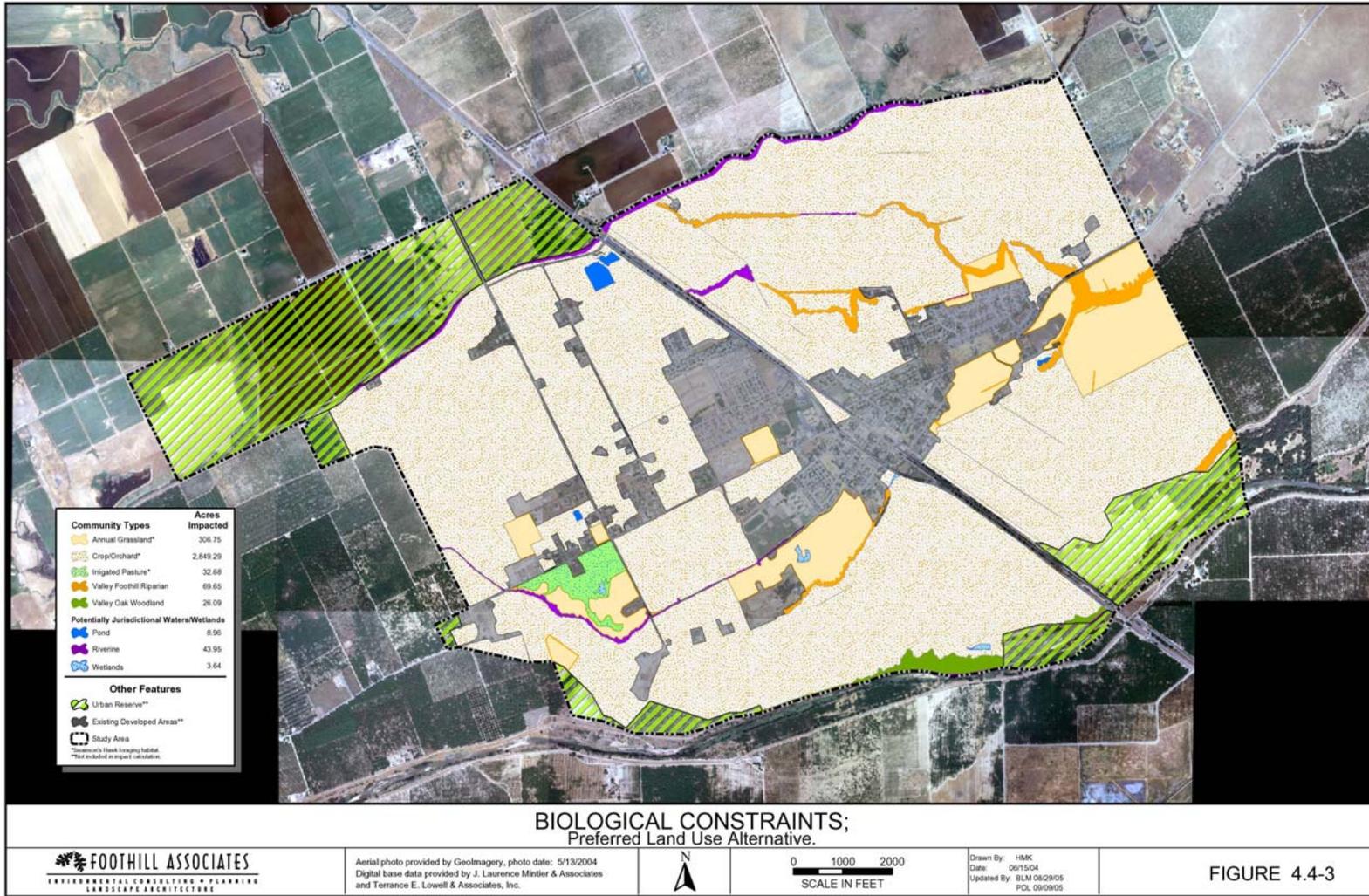
Sensitive Habitats

Sensitive habitats include those that are of special concern to resource agencies or those that are protected under CEQA, Section 1600 of the California Fish and Game Code, or Section 404 of the Clean Water Act. Sensitive habitats within the *General Plan Land Use* impact area include: potential waters of the U.S., which could include lakes, rivers, streams (including intermittent and ephemeral streams), sloughs, and seasonal wetlands; woodland habitats; riparian habitats; and any community types that could serve as potential Swainson's hawk foraging habitat. Impacts to these sensitive habitat types that could potentially occur from buildout of the Land Use Diagram are shown in Figure 4.4-3.

Jurisdictional Waters of the U.S. (Riverine, Pond, and Seasonal Wetland)

Jurisdictional waters of the U.S. include jurisdictional wetlands as well as other waters of the U.S. such as creeks, ponds, and intermittent drainages. Wetlands are defined as "those areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions." The majority of jurisdictional wetlands in the United States meet three wetland criteria: hydrophytic vegetation, wetland hydrology, and hydric soils.

**Figure 4.4-3
 Biological Constraints**



WHEATLAND GP

Impacts_to_Biological_communities_Pref_Alt.mxd
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Jurisdictional waters of the U.S. can also be defined by exhibiting a clearly defined bed and bank and ordinary high water mark (OHWM). Jurisdictional waters of the U.S. are subject to Section 404 of the CWA and are regulated by the U.S. Army Corps of Engineers.

Potential jurisdictional waters of the U.S. in the *General Plan Land Use* impact area include ponds, intermittent and perennial creek, slough, irrigation ditch, river, seasonal wetland, and vernal pool.

Oak Woodland

Although native trees such as oaks (*Quercus* sp.), are not afforded special protection under federal law, the California Oak Woodlands Law (Pub. Res. Code 21083.4) establishes conservation standards for oak trees of 5 inches diameter-at-breast-height (dbh) on project sites subject to CEQA processes under county jurisdictions. Loss of these species is also a concern of the CDFG and CNPS because of their continued depletion throughout California. Additionally, oaks are considered important to birds and mammals as a food resource and are typically protected under an oak woodland management plan in most cities or counties throughout California. Although the City of Wheatland does not have tree policies in place as of September 2005, the *Yuba County General Plan EIR* (1994) discusses the conservation of oak woodlands under Goal 7-OSCG.

Riparian

Valley foothill riparian habitat is found in valleys bordered by sloping alluvial fans, terraces, and lower foothills. The habitat occurs on floodplains or on flat to gently sloping areas adjacent to low-velocity streams. Valley foothill riparian habitat vegetation varies from a two-layered canopy of trees and herbs (riparian woodland) to a four-layered canopy of canopy trees, subcanopy trees, shrubs, and herbs (riparian forest). Valley foothill riparian occurs along portions of Bear River, Dry Creek and Grasshopper Slough (see Figure 4.4-3).

Typical trees in valley foothill riparian include willows (*Salix* spp.), western sycamore (*Plantanus racemosa*), Fremont cottonwood (*Populus fremontii*), valley oak (*Quercus lobata*), box elder (*Acer negundo*), and Oregon ash (*Fraxinus latifolia*). Valley foothill riparian habitats provide food, water, migration and dispersal corridors, and escape, nesting, and thermal cover for an abundance of wildlife. Common shrubs normally associated with riparian habitat are minimal in the *General Plan Land Use* impact area, due primarily to extensive livestock grazing and agricultural practices over the last one hundred years.

REGULATORY CONTEXT

The following describes federal, state, and local environmental laws and policies that are relevant to the CEQA review process. The CEQA significance criteria are also included in this section.

Federal

Federal Endangered Species Act

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

The FESA prohibits the “take” of endangered or threatened wildlife species. “Take” is defined to include harassing, harming (including significantly modifying or degrading habitat), pursuing, hunting, shooting, wounding, killing, trapping, capturing, or collecting wildlife species or any attempt to engage in such conduct (16 USC 1532, 50 CFR 17.3). Actions that result in take can result in civil or criminal penalties.

The FESA and EPA Section 404 guidelines prohibit the issuance of wetland permits for projects that would jeopardize the existence of threatened or endangered wildlife or plant species. The U.S. Army Corps of Engineers must consult with the U.S. Fish and Wildlife Service (USFWS) and NOAA Fisheries Service when threatened or endangered species may be affected by a proposed project to determine whether issuance of a Section 404 permit would jeopardize the species. In the context of the study site, the FESA would be triggered if development resulted in take of a threatened or endangered species (e.g., California red-legged frog, Coho salmon) or if issuance of a Section 404 permit or other federal agency action could adversely affect or jeopardize a threatened or endangered species.

Migratory Bird Treaty Act

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

U.S. Army Corps of Engineers

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

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

Furthermore, jurisdictional waters of the U.S. can be defined by exhibiting a defined bed and bank and ordinary high water mark (OHWM). The OHWM is defined by the Corps as “that line on shore established by the fluctuations of water and indicated by physical character of the soil, destruction of terrestrial vegetation, the presence of litter and debris, or other appropriate means that consider the characteristics of the surrounding areas” [33 C.F.R. §328.3(e)].

State

California Endangered Species Act

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

requirements. CDFG may authorize taking if an approved habitat management plan or management agreement that avoids or compensates for possible jeopardy is implemented. CDFG requires preparation of mitigation plans in accordance with published guidelines.

CDFG Species of Special Concern

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

California Native Plant Society

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

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

City of Wheatland General Plan Update

The project involves establishment of goals and policies aimed at reducing biological resource impacts within the City of Wheatland. These applicable goals and policies have been included in the following impact discussions, where appropriate, in order to mitigate potential impacts.

IMPACTS AND MITIGATION MEASURES

Standards of Significance

A biological resource impact is normally considered significant if implementation of the project would:

- Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service;

- Have a substantial adverse effect on riparian habitat or other sensitive natural communities in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service;
- Conflict with existing local, state, or federal natural resource protection laws, policies, or guidelines; or
- Have a substantial adverse effect on significant ecological resources including:
 - a) Wetland areas including vernal pools;
 - b) Stream environment zones;
 - c) Large areas of non-fragmented natural habitat, including but not limited to Blue Oak Woodlands, Valley Foothill Riparian, vernal pool habitat;
 - d) Identifiable wildlife movement zones, including but not limited to, non-fragmented stream environment zones, avian and mammalian routes, and known concentration areas of waterfowl within the Pacific Flyway;
 - e) Important spawning areas for anadromous fish.

Method of Analysis

Available information pertaining to the natural resources of the region was reviewed, including biological resource documentation from other projects east and southwest of the General Plan study area. Literature reviewed included:

- Jones Ranch Subdivision Project Draft EIR, Foothill Associates (January 2002);
- Yuba Highlands Specific Plan EIR, Foothill Associates (November 2004);
- California Department of Fish and Game (CDFG) California Natural Diversity Data Base, 2005;
- California Native Plant Society (CNPS) Inventory of Rare and Endangered Vascular Plants of California, 1994;
- The River Highlands Community Plan, Yuba County, California (December 1993).

The General Plan study area was surveyed by Foothill Associates biologists on May 7, 2004. Field investigations involved conducting general plant and wildlife surveys focusing on portions of the *General Plan Land Use* impact area with the potential to support special-status species and sensitive habitats. Color aerial photography of the *General Plan Land Use* impact area was used to identify and map vegetation types and sensitive habitats. Potential biological resource constraints within the General Plan study area were evaluated primarily in-office using interpretation of aerial photography along with a literature review.

Project-Specific Impacts and Mitigation Measures

4.4-1 Development associated with the proposed General Plan Update would result in the removal of substantial flora and fauna habitat.

A total of $\pm 4,808$ acres of land is present in the General Plan study area, most of which is orchard or cropland, though, some areas are considered sensitive habitats (Figure 4.4-3). Assuming full buildout of the study area, the majority of the total acreages for some of these habitat types would be removed. The grasslands and scattered wetland habitats provide breeding and foraging habitat and shelter for numerous species of resident and migratory wildlife. Orchard and row crops can provide cover and foraging habitat for many species, while irrigated pasture supports foraging habitat for a variety of avian and small mammal species. The riparian habitat community provides an important source of food, water, and protection for wildlife, as well as breeding and nesting habitat for both resident and migratory bird species. In addition, buildout of the *General Plan Land Use* impact area could result in the removal of seasonal wetlands that could potentially support dwarf downingia, which, according to the California Native Plant Society (CNPS), is considered a rare, threatened, or endangered plant in California, but common elsewhere.

Oak Woodland

Several native oak trees and stands of oak woodlands composed largely of blue oaks are present in the General Plan study area, primarily in the extreme western and southern portions of the study area. Assuming full build-out, of the ± 81 acres of the Valley oak woodland community present in the study area, approximately ± 26 acres would be removed (Figure 4.4-3). Oak woodlands provide cover, foraging, and breeding habitat for numerous species of common resident and migratory wildlife and the loss of these habitats is of concern to CNPS and CDFG.

Jurisdictional Waters of U.S.

Buildout of the *General Plan Land Use* impact area may result in several acres of potential jurisdictional waters of the U.S. being filled. A Clean Water Act Section 404 permit and 401 Water Quality Certification from the RWQCB is required for work that affects jurisdictional waters of the Army Corps of Engineers. The possibility also exists for some of these waters to be under the jurisdiction of the California Department of Fish and Game, which would require a Streambed Alteration Agreement.

Assuming full build-out, of the ± 117 acres of potentially jurisdictional waters present in the General Plan study area, the study area proposes to remove ± 57 acres (Figure 4.4-3).

The General Plan Update includes the following goals and policies regarding loss-of-habitat issues:

- Goal 8.B To protect, restore, and enhance habitats that support fish and wildlife species so as to maintain populations at viable levels.
- Policy 8.B.1. The City shall support preservation of the habitats of federally or state-listed rare, threatened, endangered, and/or other special status species. Federal and state agencies, as well as other resource conservation organizations, shall be encouraged to acquire and manage endangered species' habitats.
- Policy 8.B.2. The City shall support and cooperate with efforts of other local, state, and federal agencies and private entities engaged in the preservation and protection of significant biological resources from incompatible land uses and development. Significant biological resources include endangered, threatened, or rare species and their habitats, wetland habitats, wildlife migration corridors, and locally-important species/communities.
- Policy 8.B.3. The City shall support preservation, restoration, and enhancement of the designated habitats of State or Federally listed rare, threatened, endangered and/or other sensitive and special status species.
- Policy 8.B.4. The City shall support the management of wetland and riparian plant communities for passive recreation, groundwater recharge, and wildlife habitats. Where possible and appropriate, such communities shall be restored or expanded.
- Policy 8.B.5. The City shall require careful planning of new development in areas that are known to have particular value for biological resources to maintain sensitive vegetation and wildlife habitat.
- Policy 8.B.6. The City shall review development proposals in accordance with applicable Federal, State, and local statutes protecting special-status species and jurisdictional wetlands.
- Policy 8.B.7. The City shall impose appropriate mitigation measures using protocols defined by the applicable statute (e.g., USFWS, CDFG, etc.).
- Policy 8.B.8. On sites that have the potential to contain critical or sensitive habitats or special-species or are within 100 feet of such areas, the City shall require the project applicant to have the site surveyed by

a qualified biologist. A report on the findings of this survey shall be submitted to the City as part of the application process.

Goal 8.C To preserve and protect the valuable vegetation resources of the Wheatland area.

Policy 8.C.1. The City shall require developers to use native and compatible non-native species, especially drought-resistant species, to the extent possible in fulfilling landscaping requirements imposed as conditions of permits or for project mitigation.

Policy 8.C.2. The City shall support the preservation of outstanding areas of natural vegetation, including, but not limited to, oak woodlands and riparian areas.

Policy 8.C.3. The City shall require that new development preserve natural woodlands to the maximum extent possible.

Policy 8.C.4. The City shall encourage the planting of native trees, shrubs, and grasslands in order to preserve the visual integrity of the landscape, provide habitat conditions suitable for native wildlife, and ensure that a maximum number and variety of well-adapted plants are maintained.

Goal 8.D To preserve and enhance open space lands to maintain the natural resources of the Wheatland area.

Policy 8.D.1. The City shall support the preservation and enhancement of natural land forms, natural vegetation, and natural resources as open space to the maximum extent feasible.

Policy 8.D.2. The City shall, where appropriate, permanently protect as open space areas of natural resource value, including wetlands preserves, riparian corridors, woodlands, and floodplains.

Policy 8.D.3. The City shall require that new development be designed and constructed to preserve significant stands of vegetation and any areas of special ecological significance as open space to the maximum extent feasible.

Implementation of the goals and policies above would minimize impacts to habitat loss; however not to a *less-than-significant* level. The resultant impact would therefore remain *significant*.

Mitigation Measure(s)

Feasible mitigation measures do not exist. Therefore, impacts related to wildlife habitat would remain *significant and unavoidable*.

4.4-2 Development associated with the proposed General Plan Update may result in impacts to special-status vernal pool invertebrates in the General Plan study area.

The seasonal wetland biological communities in the General Plan study area located in the western, northwestern and eastern portions of the project site (see Figure 4.4-1) are considered potential habitat for vernal pool fairy shrimp, Conservancy fairy shrimp, vernal pool tadpole shrimp, and California linderiella. Of the ±30 acres of suitable seasonal wetlands present onsite, the *General Plan Land Use* would remove ±4 acres (Figure 4.4-3). As these wetland features could potentially support these species, their disturbance is likely regulated under the Endangered Species Act. In general, the USFWS requires a 250-foot setback from the edge of each avoided vernal pool. However, based on site-specific conditions (e.g. topographic position, hydrological effects, etc.) this setback may be reduced.

The General Plan Update includes the following goals and policies regarding impacts to special-status species issues:

Goal 8.B To protect, restore, and enhance habitats that support fish and wildlife species so as to maintain populations at viable levels.

Policy 8.B.3. The City shall support preservation, restoration, and enhancement of the designated habitats of State or Federally listed rare, threatened, endangered and/or other sensitive and special status species.

Policy 8.B.5. The City shall require careful planning of new development in areas that are known to have particular value for biological resources to maintain sensitive vegetation and wildlife habitat.

Policy 8.B.6. The City shall review development proposals in accordance with applicable Federal, State, and local statutes protecting special-status species and jurisdictional wetlands.

Policy 8.B.7. The City shall impose appropriate mitigation measures using protocols defined by the applicable statute (e.g., USFWS, CDFG, etc.).

Policy 8.B.8. On sites that have the potential to contain critical or sensitive habitats or special-species or are within 100 feet of such areas, the City shall require the project applicant to have the site surveyed by

a qualified biologist. A report on the findings of this survey shall be submitted to the City as part of the application process.

Goal 8.D To preserve and enhance open space lands to maintain the natural resources of the Wheatland area.

Policy 8.D.3. The City shall require that new development be designed and constructed to preserve significant stands of vegetation and any areas of special ecological significance as open space to the maximum extent feasible.

Implementation of the goals and policies above would minimize impacts to vernal pool invertebrates to a *less-than-significant* level.

Mitigation Measure(s)

None required.

4.4-3 Development associated with the proposed General Plan Update may result in impacts to valley elderberry longhorn beetle (VELB) in the General Plan study area.

Valley elderberry longhorn beetle (VELB) is recorded in the CNDDDB within five miles of the *General Plan Land Use* impact area. Additionally, elderberry shrubs were observed along roadways and within the riparian areas during field reconnaissance. Elderberry shrubs are considered potential habitat for VELB. Although evidence (i.e. exit holes) or adults were not observed in association with the elderberry shrubs within the study area, focused surveys were not conducted. Consequently, the potential for VELB to occur on the project site cannot be ruled out. Because VELB is protected under the FESA and regulated by the USFWS, removal of any elderberry shrub could result in impacts to VELB.

The General Plan Update includes the following goals and policies regarding impacts to special-status species issues:

Goal 8.B To protect, restore, and enhance habitats that support fish and wildlife species so as to maintain populations at viable levels.

Policy 8.B.3. The City shall support preservation, restoration, and enhancement of the designated habitats of State or Federally listed rare, threatened, endangered and/or other sensitive and special status species.

Policy 8.B.5. The City shall require careful planning of new development in areas that are known to have particular value for biological resources to maintain sensitive vegetation and wildlife habitat.

- Policy 8.B.6. The City shall review development proposals in accordance with applicable Federal, State, and local statutes protecting special-status species and jurisdictional wetlands.
- Policy 8.B.7. The City shall impose appropriate mitigation measures using protocols defined by the applicable statute (e.g., USFWS, CDFG, etc.).
- Policy 8.B.8. On sites that have the potential to contain critical or sensitive habitats or special-species or are within 100 feet of such areas, the City shall require the project applicant to have the site surveyed by a qualified biologist. A report on the findings of this survey shall be submitted to the City as part of the application process.
- Goal 8.D To preserve and enhance open space lands to maintain the natural resources of the Wheatland area.
- Policy 8.D.3. The City shall require that new development be designed and constructed to preserve significant stands of vegetation and any areas of special ecological significance as open space to the maximum extent feasible.

Implementation of the goals and policies above would minimize impacts to VELB to a *less-than-significant* level.

Mitigation Measure(s)

None required.

4.4-4 Development associated with the proposed General Plan Update may result in impacts to special-status reptiles in the General Plan study area.

One occurrence record of giant garter snake (GGS) and one occurrence of northwestern pond turtle are listed in the CNDDDB within five miles of the *General Plan Land Use* impact area. The riverine and adjacent riparian habitats in the area support suitable habitat for GGS, and the pond habitats in the *General Plan Land Use* impact area support suitable habitat for northwestern pond turtle. Consequently, GGS could occur in irrigation canals, Grasshopper Slough, and Dry Creek within the *General Plan Land Use* impact area, and northwestern pond turtle could occur in ponds within the *General Plan Land Use* impact area. As a result, development of the General Plan Land Use Diagram could result in impacts to GGS and northwestern pond turtle.

The General Plan Update includes the following goals and policies regarding impacts to special-status species issues:

Goal 8.B To protect, restore, and enhance habitats that support fish and wildlife species so as to maintain populations at viable levels.

Policy 8.B.3. The City shall support preservation, restoration, and enhancement of the designated habitats of State or Federally listed rare, threatened, endangered and/or other sensitive and special status species.

Policy 8.B.5. The City shall require careful planning of new development in areas that are known to have particular value for biological resources to maintain sensitive vegetation and wildlife habitat.

Policy 8.B.6. The City shall review development proposals in accordance with applicable Federal, State, and local statutes protecting special-status species and jurisdictional wetlands.

Policy 8.B.7. The City shall impose appropriate mitigation measures using protocols defined by the applicable statute (e.g., USFWS, CDFG, etc.).

Policy 8.B.8. On sites that have the potential to contain critical or sensitive habitats or special-species or are within 100 feet of such areas, the City shall require the project applicant to have the site surveyed by a qualified biologist. A report on the findings of this survey shall be submitted to the City as part of the application process.

Goal 8.D To preserve and enhance open space lands to maintain the natural resources of the Wheatland area.

Policy 8.D.3. The City shall require that new development be designed and constructed to preserve significant stands of vegetation and any areas of special ecological significance as open space to the maximum extent feasible.

Implementation of the goals and policies above would minimize impacts to GGS and northwestern pond turtle to a *less-than-significant* level.

Mitigation Measure(s)

None required.

4.4-5 Development associated with the proposed General Plan Update may result in impacts to nesting special-status and common raptor species within the General Plan study area.

American kestrel, red-tailed hawk, and white-tailed kite were observed during the field reconnaissance. As discussed above, other raptor species are also likely to

nest in the *General Plan Land Use* impact area, including but not limited to burrowing owl and Swainson's hawk. Swainson's hawk is recorded in the CNDDDB within ten miles of the *General Plan Land Use* impact area. Suitable foraging and nesting habitat occurs within the *General Plan Land Use* impact area and, consequently, this species has a high potential to occur. For burrowing owl, occurrence records do not exist within five miles of the *General Plan Land Use* impact area. However, suitable habitat occurs within the annual grassland and cropland habitat in the *General Plan Land Use* impact area.

Implementation of the proposed project may remove suitable burrows and/or stick nests utilized by these species. In addition, raptors are protected under the MBTA and Section 3503.5 of the California Fish and Game Code, and destruction of active raptor nests is considered a violation of this code and the MBTA.

The General Plan Update includes the following goals and policies regarding impacts to special-status species issues:

- Goal 8.B To protect, restore, and enhance habitats that support fish and wildlife species so as to maintain populations at viable levels.
- Policy 8.B.3. The City shall support preservation, restoration, and enhancement of the designated habitats of State or Federally listed rare, threatened, endangered and/or other sensitive and special status species.
- Policy 8.B.5. The City shall require careful planning of new development in areas that are known to have particular value for biological resources to maintain sensitive vegetation and wildlife habitat.
- Policy 8.B.6. The City shall review development proposals in accordance with applicable Federal, State, and local statutes protecting special-status species and jurisdictional wetlands.
- Policy 8.B.7. The City shall impose appropriate mitigation measures using protocols defined by the applicable statute (e.g., USFWS, CDFG, etc.).
- Policy 8.B.8. On sites that have the potential to contain critical or sensitive habitats or special-species or are within 100 feet of such areas, the City shall require the project applicant to have the site surveyed by a qualified biologist. A report on the findings of this survey shall be submitted to the City as part of the application process.
- Goal 8.D To preserve and enhance open space lands to maintain the natural resources of the Wheatland area.

Policy 8.D.3. The City shall require that new development be designed and constructed to preserve significant stands of vegetation and any areas of special ecological significance as open space to the maximum extent feasible.

Implementation of the goals and policies above would minimize impacts to GGS and northwestern pond turtle to a *less-than-significant* level.

Mitigation Measure(s)

None required.

4.4-6 Development associated with the proposed General Plan Update would result in impacts to Swainson's hawk foraging habitat within the General Plan study area.

Swainson's hawk is recorded in the CNDDDB within ten miles of the *General Plan Land Use* impact area. Suitable foraging habitat occurs within the *General Plan Land Use* impact area; consequently, this species has a high potential to occur within the study area. Suitable foraging areas include native grasslands or lightly grazed pastures, alfalfa and other hay crops, and certain grain and row croplands. In 2001 the Counties of Yuba and Sutter committed to becoming joint applicants on a Habitat Conservation Plan / Natural Communities Conservation Plan (HCP/NCCP) that would address the impacts of proposed transportation projects and any resulting development in the area. According to the HCP/NCCP project website (www.dfg.ca.gov/nccp/status.htm, December 2005), a baseline GIS data inventory of physical and biological resources is being conducted. Because an HCP/NCCP has not yet been finalized, a mitigation program currently does not exist for Swainson's hawk foraging habitat. In the event that the HCP/NCCP is finalized, the City will participate in the HCP/NCCP and require new development to mitigate impacts to Swainson's hawk foraging habitat through participation in the HCP/NCCP. The City will also coordinate with the appropriate agencies (e.g., California Department of Fish and Game) during the processing of development projects proposed in agricultural areas.

The General Plan Update includes the following goals and policies regarding impacts to special-status species issues:

Goal 8.B To protect, restore, and enhance habitats that support fish and wildlife species so as to maintain populations at viable levels.

Policy 8.B.3. The City shall support preservation, restoration, and enhancement of the designated habitats of State or Federally listed rare, threatened, endangered and/or other sensitive and special status species.

- Policy 8.B.5. The City shall require careful planning of new development in areas that are known to have particular value for biological resources to maintain sensitive vegetation and wildlife habitat.
- Policy 8.B.6. The City shall review development proposals in accordance with applicable Federal, State, and local statutes protecting special-status species and jurisdictional wetlands.
- Policy 8.B.7. The City shall impose appropriate mitigation measures using protocols defined by the applicable statute (e.g., USFWS, CDFG, etc.).
- Policy 8.B.8. On sites that have the potential to contain critical or sensitive habitats or special-species or are within 100 feet of such areas, the City shall require the project applicant to have the site surveyed by a qualified biologist. A report on the findings of this survey shall be submitted to the City as part of the application process.
- Goal 8.D To preserve and enhance open space lands to maintain the natural resources of the Wheatland area.
- Policy 8.D.3. The City shall require that new development be designed and constructed to preserve significant stands of vegetation and any areas of special ecological significance as open space to the maximum extent feasible.

Implementation of the goals and policies above would reduce impacts to Swainson's hawk foraging habitat, but the impact would remain *significant*.

Mitigation Measure(s)

Feasible mitigation measures do not exist to reduce the above impact to a less-than-significant level. Therefore, buildout of the General Plan Update study area would have *significant and unavoidable* impacts to Swainson's hawk foraging habitat.

Endnotes

¹ Biological Resources Report, Foothill Associates, October 2005.

² City of Wheatland, Wheatland General Plan Update Background Report, July 2004.