APPENDIX C

BIOLOGICAL RESOURCES ASSESSMENT

MOORE BIOLOGICAL CONSULTANTS

October 4, 2016

Ms. Rebecca Auld
Lamphier-Gregory
1944 Embarcadero
Oakland, CA 94606

Subject: 340+/- ACRE "NORTHWEST NEWMAN MASTER PLAN", STANISLAUS COUNTY, CALIFORNIA: BIOLOGICAL ASSESSMENT

Dear Rebecca:

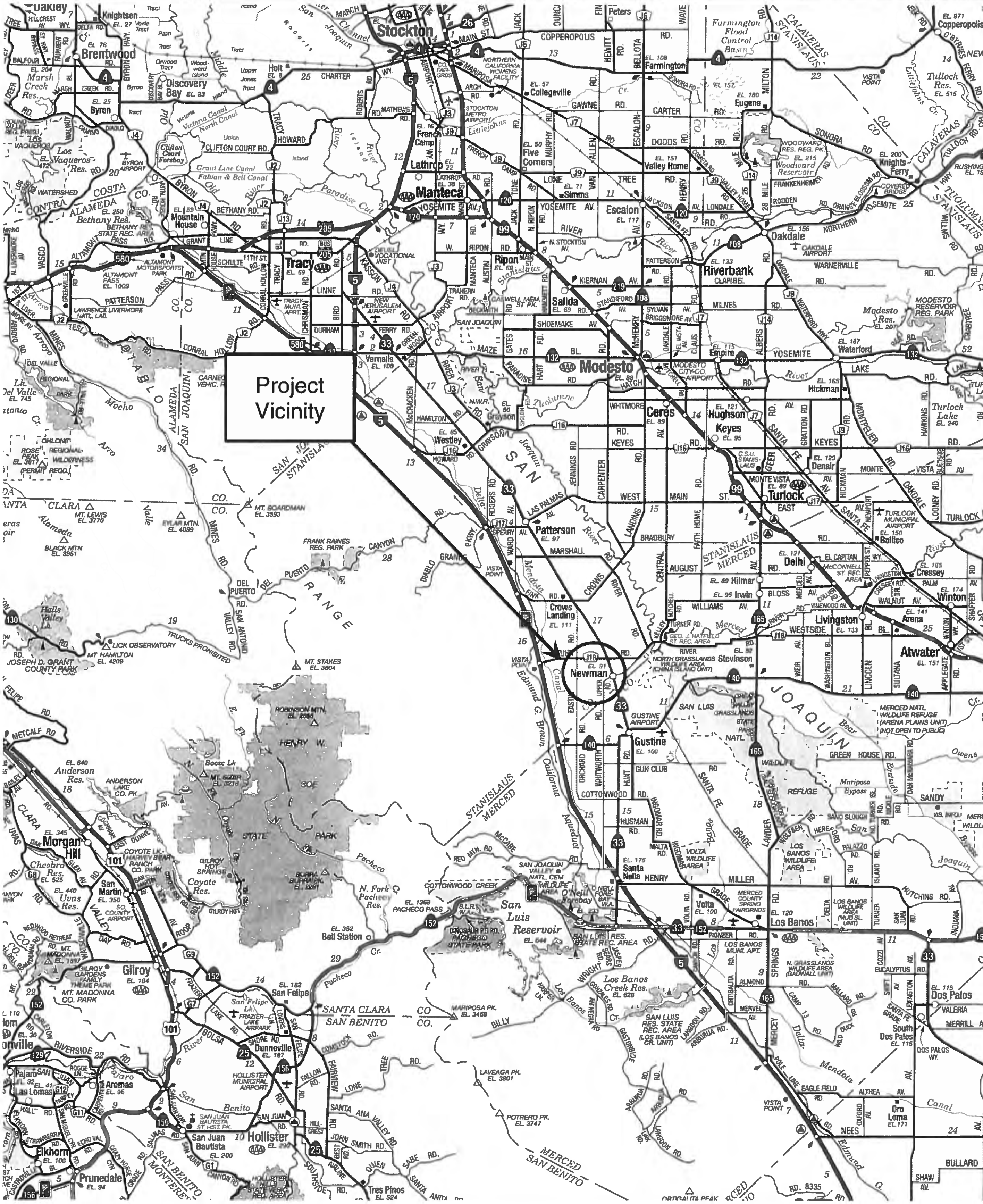
Thank you for asking Moore Biological Consultants to conduct a Biological Assessment of the Northwest Newman Master Plan site (Figures 1 and 2). The focus of our work was to document existing biological resources, identify potentially jurisdictional Waters of the U.S. and/or wetlands, and search for suitable habitat for or presence of special-status species at the site that could be potentially impacted by future development. This report details the methodology and results of our investigation.

Methods

Prior to the field survey, we conducted a search of California Department of Fish and Wildlife's (CDFW) California Natural Diversity Database (CNDDB, 2013); an updated search was conducted in 2016. The CNDDB search was conducted on the USGS 7.5-minute Newman, Crows Landing, Hatch, and Gustine topographic quadrangles, encompassing approximately 240+/- square miles surrounding the site that are at similar elevations and habitat types as those in the site.

The United States Fish and Wildlife Service (USFWS) IPaC Trust Resource Report of Federally Threatened and Endangered species that may occur in or be

10330 Twin Cities Rd., Ste. 30 • Galt, CA 95632
(209) 745-1159 • Fax (209) 745-7513
e-mail: moorebio@softcom.net



Source: Calif. State Automobile Association

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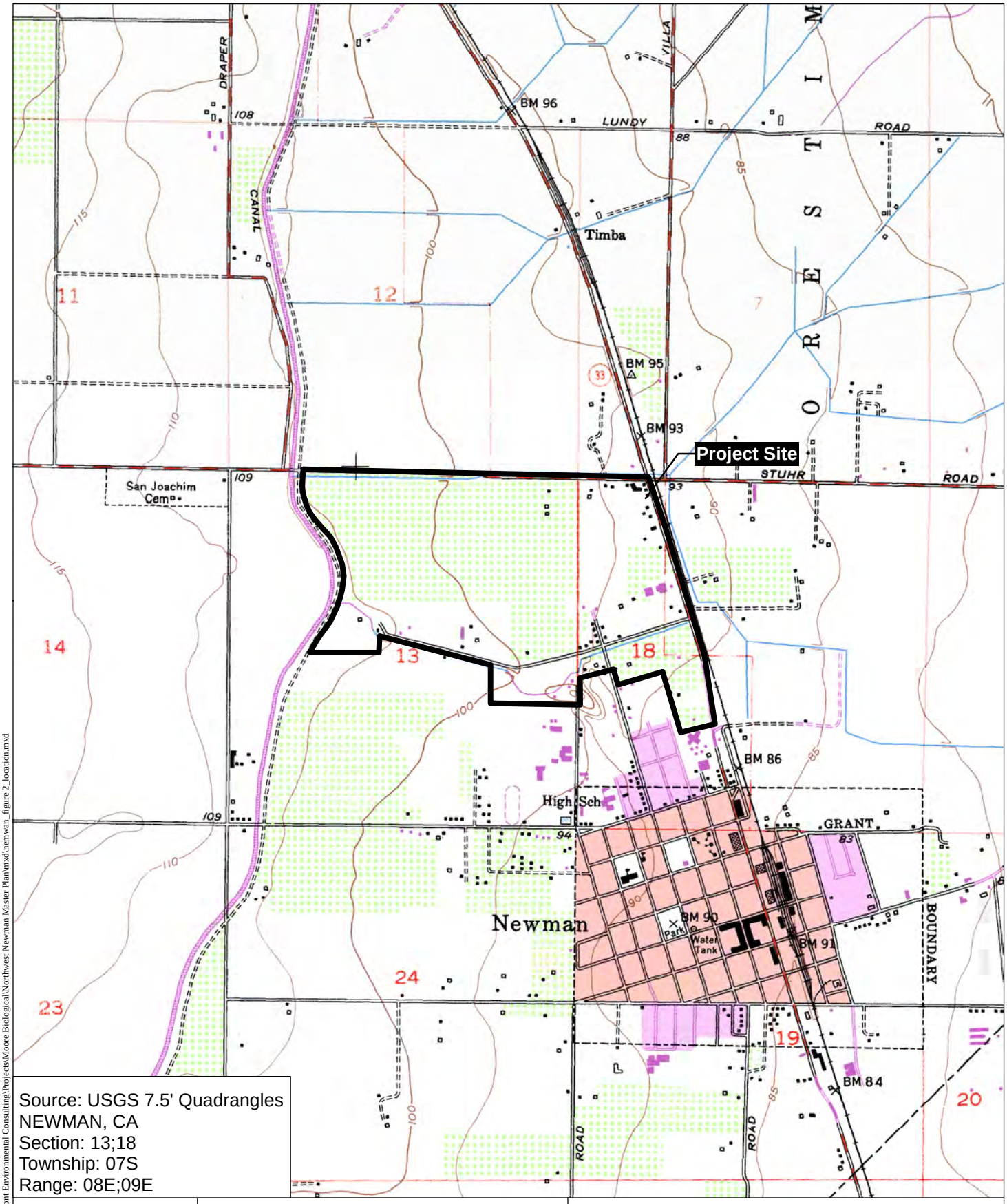
0 18 Miles

N S E W

FIGURE 1
PROJECT VICINITY



Source: USGS 7.5' Quadrangles
NEWMAN, CA
Section: 13;18
Township: 07S
Range: 08E;09E

Figure 2

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1 inch = 2,000 feet

N
W E
S

Map Date: 10/03/2016

PROJECT LOCATION

Northwest Newman Master Plan

Stanislaus County, CA

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affected by projects in the project vicinity was also reviewed. This information was used to identify special-status wildlife and plant species that have been previously documented in the vicinity or have the potential to occur based on suitable habitat and geographical distribution. Additionally, the CNDDB depicts the locations of sensitive habitats. The USFWS on-line-maps of designated critical habitat in the area were also downloaded.

A field survey was conducted on May 17, 2013. The survey consisted of driving and walking throughout the site making observations of habitat conditions and noting surrounding land uses, habitat types, and plant and wildlife species. The fieldwork included an assessment of potentially jurisdictional Waters of the U.S. and wetlands as defined by the U.S. Army Corps of Engineers (ACOE, 1987; 2008) and a search for special-status species and suitable habitat for special-status species (e.g., blue elderberry shrubs, vernal pools). Trees in and near the site were assessed for the potential use by nesting raptors, especially Swainson's hawk (*Buteo swainsoni*). The cropland and grasslands in the site and adjacent areas visible from the site were also searched for burrowing owls (*Athene cunicularia*) or ground squirrel burrows with evidence of past occupancy.

Results

GENERAL SETTING: The 361+/- acre project site is located in Newman, Stanislaus County California (Figure 1). The site is within Section 13, Township 7 South, Range 8 East and Section 18, Township 7 South, Range 9 East of the USGS 7.5-minute Newman topographic quadrangle (Figure 2). The site is essentially level and is at an elevation of approximately 100 feet above mean sea level. The site encompasses several parcels of various sizes proposed for a variety of land uses including residential and commercial development, a business park, and a variety of public uses (see Master Plan concept map in Attachment A). The project site is primarily cropland with scattered residences; there are also a few businesses along State Route 33 (Figure 3)

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Figure 3

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0 500 1,000

1 inch = 1,000 feet

N W E S

AERIAL

Northwest Newman Master Plan

Stanislaus County, CA

Map Date: 10/03/2016; Aerial Photo: Google Earth (03/2016)

Surrounding land uses in this part of Stanislaus County are primarily agricultural, with residential development encroaching from the southeast. West Stuhr Road runs along the north edge of the site and Highway 33 bounds the site on the east (Figure 3). A large irrigation canal (Main Canal) bounds the site on the west. There are agricultural fields to the north, west, northeast, and southwest of the site. There is a school to the south of the site and urban, commercial, and industrial development the southeast of the site.

VEGETATION: The body of the site is intensively farmed in vegetable and grain crops (Figure 3 and photographs in Attachment B). At the time of the survey, most of the fields were being farmed in tomatoes, corn, and alfalfa; there is also an almond orchard and a walnut orchard in the site. Beyond the planted crops, there is little or no vegetation in these agricultural fields. There are residential ranchettes and commercial and/or industrial parcels in the south and west parts of the site that contain areas of disturbed ruderal grassland vegetation.

There are a few small open fields and numerous narrow strips of disturbed ruderal grassland vegetation along the edges of the agricultural fields, dirt roads, irrigation ditches, and drainage ditches that are vegetated with annual grass and weed species. Grasses including oats (*Avena* sp.), soft chess brome (*Bromus hordeaceus*), ripgut brome (*Bromus diandrus*), red brome (*Bromus madritensis*), foxtail barley (*Hordeum murinum*), and perennial ryegrass (*Lolium perenne*) are dominant grass species in the upland grassland habitats in the site. Other grassland species such as black mustard (*Brassica nigra*), bull thistle (*Cirsium vulgare*), prickly lettuce (*Lactuca serriola*), curlycup gumweed *(Grindelia squarrosa),* narrow-leaf milkweed (*Asclepias fascicularis*), hairy fleabane (*Conyza bonariensis*), shepherd's purse (*Capsella bursa var. pastoris*), red-stem filaree (*Erodium circutarium*), and common mallow (*Malva neglecta*) are intermixed with the grasses. Table 1 is a list of plant species observed in the site.

The Main Canal, small on-site agricultural ditches, and a small agricultural return pond in the south-central part of the site are routinely maintained and support

TABLE 1

PLANT SPECIES OBSERVED IN THE SITE

Amaranthus blittoides	prostrate pigweed
Anagallis arvensis	scarlet pimpernel
Asclepias fascicularis	narrow-leaf milkweed
Avena fatua	wild oat
Brassica nigra	black mustard
Bromus diandrus	ripgut brome
Bromus hordeaceus	soft chess brome
Bromus madritensis	red brome
Capsella bursa var. pastoris	shepherd's purse
Centaurea solstitialis	yellow star-thistle
Convolvulus arvenis	morning glory
Conyza bonariensis	hairy fleabane
Conyza canadensis	horseweed
Cirsium vulgare	bull thistle
Cucurbita foetidissima	melon gourd
Cynodon dactylon	Bermuda grass
Cyperus eragrostis	umbrella sedge
Erodium circutarium	red-stem filaree
Eucalyptus sp.	blue gum
Ficus carica	edible fig
Grindelia squarrosa	curlycup gumweed
Helianthus annuus	common sunflower
Hordeum marinum	Mediterranean barley
Hordeum murinum	foxtail barley
Juglans californicus	black walnut
Juglans regia	English walnut
Juncus balticus	Baltic rush
Lactuca serriola	prickly lettuce
Lolium perenne	perennial ryegrass
Malva neglecta	common mallow

TABLE 1 (continued)
PLANT SPECIES OBSERVED IN THE SITE

Mentha pulegium	pennyroyal
Morus alba	mulberry
Pinus sp.	ornamental pine
Plantago lanceolata	plantain
Polygonum persicaria	lady's thumb
Polygonum sp.	water smart weed
Polypogon monspeliensis	rabbit's foot grass
Portulaca oleracea	common purslane
Quercus lobata	valley oak
Rumex crispus	curly dock
Salix sp.	willow
Salsola iberica	Russian thistle
Senecio vulgaris	common groundsel
Sequoia sempervirens	coastal redwood
Silybum marianum	milk thistle
Sonchus asper	prickly sow thistle
Sorghum halepense	Johnsongrass
Sisymbrium irio	London rocket
Tribulus terrestris	puncture vine
Typha sp.	cattail
Washingtonia filifera	California fan palm

essentially no vegetation (see photographs in Attachment B). An irrigation lateral along the north edge of the site is less well maintained and supports a discontinuous fringe of hydrophytic vegetation near the water line. Hydrophytic species such as water smartweed (*Polygonum* sp.), rabbit's foot grass (*Polypogon monspeliensis*), Bermuda grass (*Cynodon dactylon*), Johnsongras (*Sorghum halepense*), cattail (*Typha* sp.), and umbrella sedge (*Cyperus eragrostis*) grow along the edges of this lateral. There is also a single small willow (*Salix* sp.) shrub along this lateral.

Trees in the project site include blue gum (*Eucalyptus* sp.), California fan palm (*Washingtonia filifera*), ornamental pine (*Pinus* sp.), mulberry (*Morus alba*), coastal redwood (*Sequoia sempervirens*), black walnut (*Juglans californicus*), edible fig (*Ficus carica*), and at least one valley oak (*Quercus lobata*) (see photographs in Attachment B). No blue elderberry (*Sambucus mexicana*) shrubs were observed within or adjacent to the project site.

WILDLIFE: A limited variety of wildlife species were observed in the site. Turkey vulture (*Cathartes aura*), Swainson's hawk, red-tailed hawk (*Buteo jamaicensis*), American kestrel (*Falco sparverius*), American crow (*Corvus brachyrhynchos*), mourning dove (*Zenaida macroura*), northern mockingbird (*Mimus polyglottos*), red-winged blackbird (*Agelaius phoeniceus*), Brewer's blackbird (*Euphagus cyanocephalus*), and house finch (*Carpodacus mexicanus*) are representative bird species observed in and near the site (Table 2). All of these are species commonly found in agricultural areas in the greater project vicinity.

There are only a few potential nest trees within the project site that are suitable for nesting raptors and other protected migratory birds, including Swainson's hawks, which were observed foraging just west of the site. Given the presence of trees and shrubs in and near the site, it is likely one or more pairs of raptors and a variety of songbirds nest on-site during most years. It is possible a few songbirds nest within ruderal grassland habitats in the site during some years.

A variety of mammals are likely to occur in the project site. California ground squirrel (*Spermophilus beecheyi*) was the only mammal observed in the site. However, sign of raccoon (*Procyon lotor*) was also observed at the site. Coyote (*Canis latrans*), black-tailed hare (*Lepus californicus*), striped skunk (*Mephitis mephitis*), and Virginia opossum (*Didelphis virginiana*) are expected to occur at the project site. A number of species of small rodents including mice (*Mus musculus, Reithrodontomys megalotis,* and *Peromyscus maniculatus*) and voles (*Microtus californicus*) also likely occur.

TABLE 2

WILDLIFE SPECIES OBSERVED IN THE SITE

Birds	
Turkey vulture	*Cathartes aura*
Swainson's hawk	*Buteo swainsoni*
Red-tailed hawk	*Buteo jamaicensis*
American kestrel	*Falco sparverius*
Mourning dove	*Zenaida macroura*
Northern flicker	*Colaptes auratus*
Barn swallow	*Hirundo rustica*
Western kingbird	*Tyrannus verticalis*
Western scrub jay	*Aphelocoma coerulescens*
American crow	*Corvus brachyrhynchos*
Northern mockingbird	*Mimus polyglottos*
Song sparrow	*Melospiza melodia*
White-crowned sparrow	*Zonotrichia leucophrys*
Red-winged blackbird	*Agelaius phoeniceus*
Brewer's blackbird	*Euphagus cyanocephalus*
House finch	*Carpodacus mexicanus*
Mammals	
California ground squirrel	*Spermophilus beecheyi*
Raccoon	*Procyon lotor*
Amphibians	
Western fence lizard	*Sceloporus occidentalis*
Pacific chorus frog	*Pseudacris regilla*

Based on habitat types present, only a few amphibian and reptile species are expected to use habitats in the site. Western fence lizard (*Sceloporus occidentalis*) was the only reptile observed in the site and Pacific chorus frog

(*Pseudacris regilla*) was the only amphibian observed. Although none were observed, common species such as gopher snake (*Pituophis melanoleucus*), common king snake (*Lampropeltis getulus*), and common garter snake (*Thamnophis sirtalis*) are expected to occur at the site.

WATERS OF THE U.S. AND WETLANDS: Waters of the U.S., including wetlands, are broadly defined under 33 Code of Federal Regulations (CFR) 328 to include navigable waterways, their tributaries, and adjacent wetlands. State and federal agencies regulate these habitats and Section 404 of the Clean Water Act requires that a permit be secured prior to the discharge of dredged or fill materials into any waters of the U.S., including wetlands. ACOE, CDFW, and the California Regional Water Quality Control Board (RWQCB) have jurisdiction over modifications to riverbanks, lakes, stream channels and other wetland features.

"Waters of the U.S.", as defined in 33 CFR 328.4, encompasses Territorial Seas, Tidal Waters, and Non-Tidal Waters; Non-Tidal Waters includes interstate and intrastate rivers and streams, as well as their tributaries. The limit of federal jurisdiction of Non-Tidal Waters of the U.S. extends to the "ordinary high water mark". The ordinary high water mark is established by physical characteristics such as a natural water line impressed on the bank, presence of shelves, destruction of terrestrial vegetation, or the presence of litter and debris.

Jurisdictional wetlands are vegetated areas that meet specific vegetation, soil, and hydrologic criteria defined by the ACOE *Wetlands Delineation Manual* and Regional Supplement (ACOE, 1987; 2008). Jurisdictional wetlands are usually adjacent to or hydrologically associated with Waters of the U.S. Isolated wetlands are outside federal jurisdiction, but may still be regulated by state agencies including CDFW and RWQCB.

Jurisdictional wetlands and Waters of the U.S. include, but are not limited to, perennial and intermittent creeks and drainages, lakes, seeps, and springs; emergent marshes; riparian wetlands; and seasonal wetlands. Wetlands and

Waters of the U.S. provide critical habitat components, such as nest sites and a reliable source of water, for a wide variety of wildlife species.

The body of the site consists of leveled upland fields farmed in annual crops. The only potential jurisdictional Waters of the U.S. in and or adjacent to the site are the Main Canal and the irrigation lateral along the north edge of the site (Figure 3 and photographs in Attachment B).

Main Canal, a large irrigation canal that flows along the west edge of the site has potential to fall under ACOE jurisdiction due to hydrologic connectivity with Waters of the U.S. Water in this lateral is derived via gravity from the San Joaquin River at Mendota Pool, many miles southeast of the site. The water flows via gravity generally northwest from Mendota, providing irrigation water to farmland along the west edge of the valley. After leaving the site under West Stuhr Road, the canal continues north several miles and terminates.

Along its length, water is released from the Main Canal to laterals such as the one along the south side of West Stuhr Road. This lateral conveys water east, serving the on-site fields, as well as fields further east. Through the irrigation network northeast of the site, water derived from the Main Canal eventually has an opportunity to spill back into the San Joaquin River, many miles northeast of the site. This hydrological connectivity of Main Canal and the irrigation lateral with jurisdictional Waters of the U.S. forms the basis for these irrigation features also falling under ACOE jurisdiction.

There are several much smaller annually installed irrigation ditches in the site (see photographs in Attachment B). These minor irrigation ditches are non-jurisdictional because they were excavated in uplands, hydrologically manipulated for crop irrigation, do not support hydrophytic vegetation, and terminate on site. There is also a small created and maintained irrigation recirculation pond in the central part of the site that was dry during the survey (Figure 3 and photographs in Attachment B). Because this pond was excavated

in uplands, is hydrologically manipulated, and is hydrologically isolated from nearby creeks and rivers, it also does not meet the technical and/or regulatory criteria of jurisdictional Waters of the U.S.

Beyond Main Canal and the irrigation lateral, we observed no potential jurisdictional wetlands or Waters of the U.S. in the site. No other areas appear to have any potential to fall under ACOE jurisdiction. Specifically, we observed no rivers, streams, ponds, lakes, marshes, vernal pools, or seasonal wetlands of any type within the site.

SPECIAL-STATUS SPECIES: Special-status species are plants and animals that are legally protected under the state and/or federal Endangered Species Act or other regulations. The Federal Endangered Species Act (FESA) of 1973 declares that all federal departments and agencies shall utilize their authority to conserve endangered and threatened plant and animal species. The California Endangered Species Act (CESA) of 1984 parallels the policies of FESA and pertains to native California species. Both FESA and CESA prohibit unauthorized "take" (i.e., killing) of listed species, with take broadly defined in both acts to include activities such as harassment, pursuit and possession.

Special-status wildlife species also includes species that are considered rare enough by the scientific community and trustee agencies to warrant special consideration, particularly with regard to protection of isolated populations, nesting or denning locations, communal roosts, and other essential habitat. The federal Migratory Bird Treaty Act and Fish and Game Code of California protect special-status bird species year-round, as well as their eggs and nests during the nesting season. Fish and Game Code of California also provides protection for mammals and fish.

Special-status plants are those which are designated rare, threatened, or endangered and candidate species for listing by the USFWS. Special-status plants also include species considered rare or endangered under the conditions

of Section 15380 of the California Environmental Quality Act Guidelines, such as those plant species identified on Lists 1A, 1B and 2 in the Inventory of Rare and Endangered Vascular Plants of California (CNPS, 2016). Finally, special-status plants may include other species that are considered sensitive or of special concern due to limited distribution or lack of adequate information to permit listing or rejection for state or federal status, such as those included on CNPS List 3.

Table 3 provides a summary of the listing status and habitat requirements of special-status plant and wildlife species that have been documented in the greater project vicinity or for which there is potentially suitable habitat in the project area. This table also includes an assessment of the likelihood of occurrence of each of these species in the site. The evaluation of the potential for occurrence of each species is based on the distribution of regional occurrences (if any), habitat suitability, and field observations.

The likelihood of occurrence of listed, candidate, and other special-status species in the site is generally low. Table 3 provides a summary of the listing status and habitat requirements of special-status species that have been documented in the greater project vicinity or for which there is potentially suitable habitat in the greater project vicinity. This table also includes an assessment of the likelihood of occurrence of each of these species in the site. The evaluation of the potential for occurrence of each species is based on the distribution of regional occurrences (if any), habitat suitability, and field observations.

SPECIAL-STATUS PLANTS: Special-status plants identified in the CNDDB (2016) search include alkali milk-vetch (*Astragalus tener var. tener*), heartscale (*Atriplex cordulata*), lesser saltscale (*Atriplex minuscula*), vernal pool smallscale (*Atriplex persistens*), hispid bird's-beak (*Chloropyron molle spp. hispidum*), delta button celery (*Eryngium racemosum*), spiny-sepaled button celery (*Eryngium spinosepalum*), San Joaquin spearscale (*Extriplex joaquiniana*), prostrate navarretia (*Navarretia prostrata*), California alkali grass (*Puccinellia simplex*), and

TABLE 3

SPECIAL-STATUS PLANT AND WILDLIFE SPECIES DOCUMENTED IN THE GREATER PROJECT VICINITY

Common Name	Scientific Name	Federal Status[1]	State Status[1]	CNPS List[2]	Habitat	Likeliness of Occurrence in the Project Site
PLANTS						
Alkali milk-vetch	*Astragalus tener var. tener*	None	None	1B	Alkali playas and vernal pools.	Unlikely: there is no suitable habitat in the site for this species. The nearest occurrence of alkali milk vetch in the CNDDB (2016) search area is approximately 4 miles southeast of the site.
Heartscale	*Atriplex cordulata*	None	None	1B	Valley and foothill grassland, chenopod scrub	Unlikely: the leveled cropland and ruderal grassland in the site does not provide suitable habitat for heartscale. The nearest occurrence of this species in the CNDDB (2016) search area is approximately 5 miles northeast of the site.
Lesser saltscale	*Atriplex minuscula*	None	None	1B	Chenopod scrub, playas, valley and foothill grassland.	Unlikely: the leveled cropland and ruderal grassland in the site does not provide suitable habitat for lesser saltscale. The nearest occurrence of this species in the CNDDB (2016) search area is approximately 7.5 miles northeast of the site.
Vernal pool smallscale	*Atriplex persistens*	None	None	1B	Alkaline vernal pools.	Unlikely: no suitable habitat exists in the site for vernal pool smallscale. The nearest occurrence of this species in the CNDDB (2016) search area is approximately 5 miles southeast of the site.
Hispid bird's-beak	*Chloropyron molle spp. hispidum*	None	None	1B	Meadows, playas, valley and foothill grassland.	Unlikely: the ruderal grassland and cropland in the site do not provide suitable habitat for this species. The nearest occurrence of hispid bird's-beak in the CNDDB (2016) search area is approximately 7.5 miles southeast of the site.
Delta button celery	*Eryngium racemosum*	None	E	1B	Riparian scrub in seasonally inundated floodplain with clay substrate	Unlikely: there is no suitable habitat in the site for this species. The nearest occurrence of Delta button celery in the CNDDB (2016) search area is approximately 3 miles northeast of the site.

TABLE 3

SPECIAL-STATUS PLANT AND WILDLIFE SPECIES DOCUMENTED IN THE GREATER PROJECT VICINITY

Common Name	Scientific Name	Federal Status[1]	State Status[1]	CNPS List[2]	Habitat	Likeliness of Occurrence in the Project Site
Spiny-sepaled button-celery	*Eryngium spinosepalum*	None	None	1B	Vernal pools or valley and foothill grassland.	Unlikely: there is no suitable habitat in the site for spiny-sepaled button-celery. The nearest occurrence of this species in the CNDDB (2016) search area is approximately 2.5 miles west of the site.
San Joaquin spearscale	*Extriplex joaquiniana*	None	None	1B	Chenopod scrub, alkali meadow, valley and foothill grassland.	Unlikely: the leveled cropland and ruderal grassland in the site does not provide suitable habitat for this species. The nearest occurrence of San Joaquin spearscale in the CNDDB (2016) search area is approximately 8 miles southeast of the site.
Prostrate navarretia	*Navarretia prostrata*	None	None	1B	Alkali meadows, playas, and vernal pools.	Unlikely: there is no suitable habitat in the site for prostrate navarretia. The nearest occurrence of this species in the CNDDB (2016) search area is approximately 8 miles southeast of the site.
California alkali grass	*Puccinellia simplex*	None	None	1B	Chenopod scrub, meadows and seeps, valley and foothill grassland, vernal pool habitats; in alkaline, vernally mesic sinks, flats, and lake margins.	Unlikely: there is no suitable habitat in the site for California alkali grass. The nearest occurrence of this species in the CNDDB (2016) search area is approximately 10 miles northeast of the site.
Sanford's arrowhead	*Sagittaria sanfordii*	None	None	1B	Standing or slow moving freshwater ponds, marshes and ditches.	Unlikely: the maintained irrigation lateral, ditches, and pond in the site do not provide suitable habitat for Sanford's arrowhead. The nearest occurrence of this species in the CNDDB (2016) search area is approximately 6 miles southeast of the site.
WILDLIFE						
BIRDS						
Burrowing owl	*Athene cunicularia*	None	None	N/A	Open, dry annual or perennial grasslands, deserts and scrublands characterized by low-growing vegetation.	Unlikely: while the cropland and ruderal grassland provides suitable foraging habitat for burrowing owls, ground squirrel burrows in the site are limited. There are no occurrences of burrowing owl in the CNDDB (2016) search area.

TABLE 3

SPECIAL-STATUS PLANT AND WILDLIFE SPECIES DOCUMENTED IN THE GREATER PROJECT VICINITY

Common Name	Scientific Name	Federal Status[1]	State Status[1]	CNPS List[2]	Habitat	Likeliness of Occurrence in the Project Site
Swainson's hawk	*Buteo swainsoni*	None	T	N/A	Nesting: large trees, usually within riparian corridors. Foraging: agricultural fields and annual grasslands.	Moderate: cropland and grassland in the site is suitable for foraging and large trees in and near the site are suitable for nesting. However, the site is outside or along the very west edge of the nesting range of this species. A Swainson's hawk was observed foraging in fields to the west of the site. The nearest occurrence of nesting Swainson's hawks in the CNDDB (2016) search area is approximately 2 miles southeast of the site.
Tricolored blackbird	*Agelaius tricolor*	None	SC	N/A	Nests in dense brambles and emergent wetland vegetation associated with open water habitat.	Low: no patches of willows, blackberries, or other vegetation suitable for nesting were observed in the site. This species may occasionally fly over or forage in the area. The nearest occurrence of tricolored blackbird in the CNDDB (2016) search area is approximately 2 miles northeast of the site.
Loggerhead shrike	*Lanius ludovicianus*	None	SC	N/A	Annual grasslands and agricultural areas throughout the Central Valley.	Low: there are very few trees and shrubs in the site that could be used for nesting by this species. Loggerhead shrike may fly over or forage in the site on occasion. The closest occurrence of loggerhead shrike in the CNDDB (2016) search area is approximately 8 miles southeast of the site.
MAMMALS						
San Joaquin kit fox	*Vulpes macrotis mutica*	E	T	N/A	Annual grasslands or grassy open stages with scattered shrubby vegetation.	Unlikely: the cropland and ruderal grassland in the site provides potentially suitable foraging habitat for San Joaquin kit fox. However, this species primarily occurs in the hills south and west of the site, and is rarely seen on the valley floor. The nearest occurrence of San Joaquin kit fox in the CNDDB (2016) search area is approximately 6 miles southeast of the site.
Fresno kangaroo rat	*Dipodomys nitratoides exilis*	E	E	N/A	Alkali sink scrub habitats throughout the southwestern San Joaquin Valley.	Unlikely: there is no suitable habitat in the site for this species. There are no occurrences of Fresno kangaroo rat in the CNDDB (2016) search area.

TABLE 3

SPECIAL-STATUS PLANT AND WILDLIFE SPECIES DOCUMENTED IN THE GREATER PROJECT VICINITY

Common Name	Scientific Name	Federal Status[1]	State Status[1]	CNPS List[2]	Habitat	Likeliness of Occurrence in the Project Site
American badger	*Taxidea taxus*	None	SC	N/A	Drier open stages of most shrub, forest, and herbaceous habitats, with friable soils.	Unlikely: the cropland and ruderal grassland are highly disturbed and do not provide suitable habitat for American badger. The nearest occurrence of this species in the CNDDB (2016) search area is approximately 8 miles southeast of the site.
Western red bat	*Lasiurus blossvelli*	None	SC	N/A	Roosts in trees in forests and woodlands from sea level up through the Sierra Nevada.	Possible: trees in the site may be used by this species for roosting. The nearest occurrence of western red bat in the CNDDB (2016) search area is approximately 8 miles northeast of the site.
Pallid bat	*Antrozous pallidus*	None	SC	N/A	Open, dry habitats with rocky areas for roosting.	Unlikely: the site does not provide suitable habitat for this species; there are no rocky areas in the site. The nearest occurrence of pallid bat in the CNDDB (2016) search area is approximately 4 miles northeast of the site.
REPTILES & AMPHIBIANS						
Giant garter snake	*Thamnophis gigas*	T	T	N/A	Freshwater marsh and low gradient streams; adapted to drainage canals and irrigation ditches, primarily for dispersal or migration.	Unlikely: there is no suitable habitat in or near the site for giant garter snake. The nearest occurrence of this species in the CNDDB (2016) search area is approximately 4.5 miles southeast of the site.
California red-legged frog	*Rana aurora draytonii*	T	SC	N/A	Lowlands and foothills in or near permanent sources of water with vegetation.	Unlikely: there is no suitable aquatic habitat for California red-legged frog in or near the site. The nearest occurrence of this species in the CNDDB (2016) search area is approximately 5 miles southwest of the site. The site is not in designated for California red-legged frog critical habitat (USFWS, 2006).
California tiger salamander	*Ambystoma californiense*	T	T	N/A	Breeds in seasonal water bodies such as deep vernal pools or stock ponds. Requires small mammal burrows for summer refugia.	Unlikely: there are no potentially suitable breeding ponds for California tiger salamander in the site and the cropland throughout most of the site is not suitable for aestivation. The nearest occurrence of this species in the CNDDB (2016) search area is approximately 7 miles southeast of the site. The site is not within an area designated critical habitat for California tiger salamander (USFWS, 2005a).

TABLE 3

SPECIAL-STATUS PLANT AND WILDLIFE SPECIES DOCUMENTED IN THE GREATER PROJECT VICINITY

Common Name	Scientific Name	Federal Status[1]	State Status[1]	CNPS List[2]	Habitat	Likeliness of Occurrence in the Project Site
Blunt-nosed leopard lizard	*Gambelia sila*	E	E	N/A	Sparsely vegetated alkali and desert scrub habitats in areas of low topographic relief. Requires small mammal burrows for cover.	Unlikely: the site does not contain suitable habitat for blunt-nosed leopard lizard. There are no occurrences of this species recorded in the CNDDB (2016) search area.
Western pond turtle	*Emys marmorata*	None	SC	N/A	Permanent or semi-permanent water bodies; require basking sites such as logs.	Unlikely: there is no suitable aquatic habitat for western pond turtle in site. The nearest occurrence of this species in the CNDDB (2016) search area is approximately 2.5 miles east of the site.
Western spadefoot	*Spea hammondii*	None	SC	N/A	Breeds and lays eggs in seasonal water bodies such as deep vernal pools or stock ponds.	Unlikely: there is no suitable aquatic habitat for western spadefoot in or near the site. The nearest occurrence of western spadefoot in the CNDDB (2016) search area is approximately 7 miles southeast of the site.
FISH						
Delta smelt	*Hypomesus transpacificus*	T	T	N/A	Shallow lower delta waterways with submersed aquatic plants and other suitable refugia.	Unlikely: there is no suitable aquatic habitat for delta smelt in or near the site. There are no occurrences of delta smelt recorded in the CNDDB (2016) within the search area. There is no designated critical habitat for delta smelt (USFWS, 1994) in or near the site.
Central Valley steelhead	*Oncorhynchus mykiss*	T	None	N/A	Riffle and pool complexes with adequate spawning substrates within Central Valley drainages.	Unlikely: there is no suitable aquatic habitat for Central Valley steelhead in or near the site. The closest occurrence of this species in the CNDDB (2016) search area is approximately 5 miles northeast of the site. The site is not within designated critical habitat for Central Valley steelhead (NOAA, 2005); the Merced River and the San Joaquin River downstream of the confluence of the Merced River are designated critical habitat for steelhead.
Sacramento splittail	*Pogonichthys macrolepidotus*	None	SC	N/A	Lakes and rivers of the central valley.	Unlikely: there is no suitable aquatic habitat for this species in or near the site. The closest occurrence of Sacramento splittail in the CNDDB (2016) search area is approximately 7 miles northeast of the site in the San Joaquin River.

TABLE 3

SPECIAL-STATUS PLANT AND WILDLIFE SPECIES DOCUMENTED IN THE GREATER PROJECT VICINITY

Common Name	Scientific Name	Federal Status[1]	State Status[1]	CNPS List[2]	Habitat	Likeliness of Occurrence in the Project Site
INVERTEBRATES						
Vernal pool fairy shrimp	*Branchinecta lynchi*	T	None	N/A	Vernal pools and seasonally inundated depressions in the Central Valley.	Unlikely: there are no vernal pools or seasonal wetlands in the site. The nearest occurrence of vernal pool fairy shrimp in the CNDDB (2016) search area is approximately 8 miles southeast of the site. The site is not within designated critical habitat for vernal pool fairy shrimp (USFWS, 2005b).
Conservancy fairy shrimp	*Branchinecta conservatio*	E	None	N/A	Vernal pools and seasonally inundated depressions in the Central Valley.	Unlikely: there are no vernal pools or seasonal wetlands in the site. The nearest occurrence of Conservancy fairy shrimp in the CNDDB (2016) search area is approximately 8.5 miles southeast of the site. The site is not within designated critical habitat for any vernal pool shrimp species (USFWS, 2005b).
Longhorn fairy shrimp	Branchinecta longiantennae	E	None	N/A	Vernal pools	Unlikely: there are no vernal pools or seasonal wetlands in the site. The nearest occurrence of longhorn fairy shrimp in the CNDDB (2016) search area is approximately 6 miles southeast of the site. The site is not within designated critical habitat for longhorn fairy shrimp (USFWS, 2005b).
Vernal pool tadpole shrimp	*Lepidurus packardi*	E	None	N/A	Vernal pools and seasonally wet depressions within the Central Valley.	Unlikely: there are no vernal pools or seasonal wetlands in the site. The nearest occurrence of vernal pool tadpole shrimp in the CNDDB (2016) search area is approximately 8 miles southeast of the site. The site is not in designated critical habitat for this species (USFWS, 2005b).
Valley elderberry longhorn beetle	*Desmocerus californicus dimorphus*	T	None	N/A	Elderberry shrubs in the Central Valley and surrounding foothills	Unlikely: no blue elderberry shrubs were observed in the site. There are no occurrences of valley elderberry longhorn beetle recorded in the CNDDB (2016) within the search area.

Notes:

1 T= Threatened; E = Endangered; SC = Species of Special Concern per California Department of Fish and Wildlife.

2 CNPS List 1B includes species that are rare, threatened, or endangered in California and elsewhere.

Sanford's arrowhead (*Sagittaria sanfordii*) (Table 3 and Attachment C). There are no special-status plants in the USFWS IPac Trust Report (Attachment C).

No special-status plants or suitable habitat for special-status plants were observed in the site. Special-status plants generally occur in relatively undisturbed areas in vegetation communities such as chaparral, vernal pools, marshes and swamps, seasonal wetlands, woodlands, chenopod scrub, and areas with unusual soils. Most of the species in Table 3 occur in one of these unique habitat types that are not present on-site. In contrast, the site is disturbed upland grassland that is not suitable for any special-status plant species. Due to lack of suitable habitat, it is unlikely that special-status plants occur in the site.

Delta button celery and Sanford's arrowhead occur in marshes, swamps, and/or riparian scrub. The irrigation lateral along the south side of West Stuhr Road supports a narrow and discontinuous fringe of hydrophytic vegetation, and does not provide suitable habitat for the species in Table 3 that occur in wetland habitats. The Main Canal and on-site annually installed irrigation ditches are also not suitable for these wetland species. Alkali milk-vetch, vernal pool smallscale, hispid bird's-beak, spiny-sepaled button celery, and prostrate navarretia occur in habitats that do not occur onsite such as alkali meadows, playas, vernal pools, and vernally mesic habitats.

The remaining special-status plant species in Table 3 occur in upland grassland habitats, chenopod scrub, playas, and meadows. The small patches ruderal grassland in the site and strips of ruderal grassland along the edges of the fields, farm roads, irrigation laterals, and irrigation ditches are highly disturbed and do not provide suitable habitat for special-status species in Table 3 that occur in upland annual grassland habitats. The leveled agricultural fields are also not suitable for special-status plants that occur in uplands.

SPECIAL-STATUS WILDLIFE: The potential for intensive use of habitats within the project site by special-status wildlife species is generally low. Special-status

wildlife species that have been recorded in greater project vicinity in the CNDDB (2016) include Swainson's hawk, burrowing owl, tricolored blackbird (*Agelaius tricolor*), San Joaquin kit fox (*Vulpes macrotis mutica*), American badger (*Taxidea taxus*), western red bat (*Lasiurus blossvelli*), pallid bat (*Antrozous pallidus*), giant garter snake (*Thamnophis gigas*), California red-legged frog (*Rana aurora draytonii*), California tiger salamander (*Ambystoma californiense*), western pond turtle (*Emys marmorata*), western spadefoot (*Spea hammondii*), Central Valley steelhead (*Oncorhynchus mykiss*), Sacramento splittail (*Pogonichthys macrolepidotus*) vernal pool fairy shrimp (*Branchinecta lynchi*), Conservancy fairy shrimp (*Branchinecta conservatio*), longhorn fairy shrimp (*Branchinecta longiantennae*), and vernal pool tadpole shrimp (*Lepidurus packardi*). Although not included in the CNDDB within the search area, Fresno kangaroo rat (*Dipodomys nitratoides exilis*), blunt-nosed leopard lizard (*Gambeila sila*), delta smelt (*Hypomesus transpacificus*), and valley elderberry longhorn beetle (*Desmocerus californicus dimorphus*) were added to Table 3 because they are included in the USFWS Species List (Attachment C).

The project site and surrounding areas may have provided habitat for the special-status wildlife species listed in Table 3 at some time in the past. However, farming, development, and construction and maintenance of roads and irrigation facilities have substantially modified natural habitats within the greater project vicinity. Of the wildlife species identified in the CNDDB, Swainson's hawk and burrowing owl are the only species that have much potential to occur in the project site on more than a transitory or very occasional basis. These species are discussed further below because they could be adversely affected by conversion of habitat to development; the birds could also be disturbed by noise if they nested on or near the project site during construction.

SWAINSON'S HAWK: The Swainson's hawk is a migratory hawk listed by the State of California as a Threatened species. The Migratory Bird Treaty Act and Fish and Game Code of California protect Swainson's hawks year-round, as well as their nests during the nesting season (March 1 through September 15).

Swainson’s hawk are found in the Central Valley primarily during their breeding season, a population is known to winter in the San Joaquin Valley.

Swainson's hawks prefer nesting sites that provide sweeping views of nearby foraging grounds consisting of grasslands, irrigated pasture, hay, and wheat crops. Most Swainson's hawks are migratory, wintering in Mexico and breeding in California and elsewhere in the western United States. This raptor generally arrives in the Central Valley in mid-March, and begins courtship and nest construction immediately upon arrival at the breeding sites. The young fledge in early July, and most Swainson's hawks leave their breeding territories by late August.

The CNDDB (2016) contains several records of nesting Swainson’s hawk in the greater project vicinity, with most of them being along the San Joaquin River corridor, several miles northeast and east of the site. The nearest occurrence of nesting Swainson’s hawks in the CNDDB (2016) search area is approximately 2 miles southeast of the site. There are suitable nest trees within and surrounding the project site and the annual croplands that make up the majority of the site provide suitable foraging habitat for this species. Due to the location of the site along the west edge of the valley along the edge of the species’ range, it is unlikely Swainson’s hawks use on-site habitats intensively. A Swainson’s hawk was observed foraging in fields to the west of the site during the May 2013 survey; however no active nests were observed in or near the site. It is possible Swainson’s hawks may nest in trees in or near the site in the future.

BURROWING OWL: The Migratory Bird Treaty Act and Fish and Game Code of California protect burrowing owls year-round, as well as their nests during the nesting season (February 1 through August 31). Burrowing owls are a year-long resident in a variety of grasslands as well as scrub lands that have a low density of trees and shrubs with low growing vegetation; burrowing owls that nest in the Central Valley may winter elsewhere.

The primary habitat requirement of the burrowing owl is small mammal burrows for nesting. The owl usually nests in abandoned ground squirrel burrows, although they have been known to dig their own burrows in softer soils. In urban areas, burrowing owls often utilize artificial burrows including pipes, culverts, and piles of concrete pieces. This semi-colonial owl breeds from March through August, and is most active while hunting during dawn and dusk. Although the site is well within the species' range, there are no occurrences of burrowing owl in the CNDDB (2016) search area.

The intensity of development, irrigation, and cultivation within and surrounding the site reduces the likelihood of burrowing owls using the site for nesting. No burrowing owls were observed in the project site during May 2013 survey. While a few suitable ground squirrel burrows were observed within the site, none had evidence of burrowing owl occupancy (i.e. whitewash, feathers and/or pellets).

OTHER SPECIAL-STATUS SPECIES: The site does not provide suitable aquatic habitat for any type of fish, giant garter snake, California tiger salamander, California red-legged frog, western spadefoot, or western pond turtle. There is no alkali sink scrub habitat in the site for Fresno kangaroo rat or blunt-nosed leopard lizard. There is no emergent wetland habitat in the site for nesting tricolored blackbirds. There are no blue elderberry shrubs in the site, precluding the potential occurrence of valley elderberry longhorn beetle. There are no vernal pools or seasonal wetlands in the site for vernal pool branchiopods (i.e., fairy and tadpole shrimp).

The intensively cultivated cropland and ruderal grassland in the site provides potentially suitable foraging habitat for San Joaquin kit fox and American badger, but there is no suitable denning habitat in the site for these species. San Joaquin kit fox also primarily occurs in the hills south and west of the site, and is rarely seen on the valley floor. Western red bat, pallid bat, and other special-status bats may fly over or forage in the site; western red bat and other bats may also roost in on-site trees.

CRITICAL HABITAT: The site is not within designated critical habitat for California red-legged frog (USFWS, 2006), California tiger salamander (USFWS, 2005a), federally listed vernal pool shrimp or plants (USFWS, 2005b), delta smelt (USFWS, 1994), valley elderberry longhorn beetle (USFWS, 1980), or Central Valley steelhead (NOAA, 2005).

Discussion and Conclusions

According to the CEQA Guidelines' Attachment G Environmental Checklist, to determine whether impacts to biological resources are significant environmental effects, six resource issues are analyzed and evaluated. Each of the checklist items is addressed below.

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

The body of the site consists of leveled cropland farmed in grain and vegetable crops. Most of the on-site habitats are biologically unremarkable. The likelihood of occurrence of special-status plant species in the site is considered extremely low due to a lack of suitable habitat. Future development in the Master Plan area is expected to have less than significant impacts to special-status plants.

The likelihood of occurrence of special-status wildlife species in the site is low. With the exception Swainson's hawk and burrowing owl, no special-status wildlife species are expected to occur at or near the site on more than a very occasional or transitory basis.

Conversion of the alfalfa fields, grain fields, ruderal grassland, and annual cropland within the site to development will result in a permanent loss of potential Swainson's hawk foraging habitat. However, due to the location of the site along the west edge of the valley along the edge of the species' range, it is unlikely Swainson's hawks intensively use on-site habitats.

CDFW's Staff Report regarding Mitigation for Impacts to Swainson's Hawks (*Buteo Swainsoni*) in the Central Valley of California (1994) provides measures to minimize potential construction impacts to nesting hawks through setbacks from active nests. Pre-construction surveys for nesting Swainson's hawks within 0.5 miles of the project site are recommended if construction commences between March 1 and September 15. If active nests are found, a qualified biologist should determine the need (if any) for temporal restrictions on construction. The determination should be pursuant to criteria set forth by CDFW (CDFG, 1994).

CDFW's Staff Report on Burrowing Owl Mitigation (CDFG, 2012) provides the framework for minimizing potential construction impacts to burrowing owls through setbacks from active nests and relocation of any non-nesting owls that move into construction areas. Pre-construction surveys for burrowing owls in the site should be conducted if construction commences between February 1 and August 31. If occupied burrows are found, a qualified biologist should determine the need (if any) for temporal restrictions on construction. The determination should be pursuant to criteria set forth by CDFW (CDFG, 2012).

On-site trees could be used by birds protected by the Migratory Bird Treaty Act of 1918 and/or Fish and Game Code of California. If vegetation removal or any type of site disturbance or construction occurs during the avian nesting season (February 1 to August 31), a qualified wildlife biologist should conduct a nesting bird survey encompassing areas within 100 feet of the project site. The survey should be undertaken no more than 15 days prior to any site-disturbing activities, including vegetation removal or grading. Active nests should be protected with an appropriate buffer determined by the biologist in consideration of species,

stage of nesting, nest location, and type of construction activity. The buffers should be maintained until after the nestlings have fledged and left the nest.

Western red bat, pallid bat, and other special-status bats may roost in on-site trees or structures such as barns. In order to avoid take of special-status bats, removal of trees should be scheduled to occur between August 1 and February 28, if possible. Within 30 days of the removal of trees or structures between March 1 to July 31, a pre-construction survey for roosting bats should be performed by a qualified biologist. If active maternity roosts or hibernacula are found, removal of trees or structures should be delayed until after July 31 or until a qualified biologist determines the young are volant (i.e., flying).

2. ***Will the project have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, and regulations or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?***

No riparian habitats or other sensitive natural communities were observed in the Master Plan area. Therefore, the project will not have a substantial adverse effect on any riparian habitats or other sensitive natural communities.

3. ***Will the project have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?***

The project will not have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act The only potentially jurisdictional Waters of the U.S. in the site are Main Canal and an irrigation lateral. No other areas were observed in the site appearing to meet the technical and regulatory criteria of jurisdictional waters of the U.S. or wetlands.

Jurisdictional Waters of the U.S. should be avoided to the maximum extent practicable. The project will not involve work in Main Canal. If the open irrigation lateral would be converted to an underground conveyance (i.e., pipe), this activity would likely be exempt from ACOE permit requirements per Regulatory Guidance Letter No. 07-02 (ACOE, 2007). If construction such as an off-site road, utility line, or storm drain outfall structure needs to be constructed within Main Canal or the irrigation lateral, wetland permits and/or certification may be required from or more agencies including ACOE a RWQCB. The necessity and type of permits will depend on the location and nature of the improvements.

4. ***Will the project interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of wildlife nursery sites?***

There are no creeks, valleys, or other wildlife movement corridors in the site. The intensively cultivated fields, orchards, and developed lands in the site are not suitable nursery sites. The project will not interfere substantially with wildlife movement or impede the use of wildlife nursery sites.

5. ***Will the project have conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?***

There are no known local policies or ordinances protecting biological resources. Future development in the Master Plan area is not expected to conflict with any local policies or ordinances protecting biological resources. There are a few notable trees in the site and future development will likely involve removal of some of these trees. Oaks and other large trees with wildlife habitat values should be retained and incorporated into future development, when feasible.

6. ***Will the project have conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?***

The Master Plan area is not located within an area covered by an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan.

Thank you, again, for asking Moore Biological Consultants to assist with the project. Please call me at (209) 745-1159 with any questions.

Sincerely,

Diane S. Moore, M.S.
Principal Biologist

References and Literature Consulted

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Attachment A

Conceptual Land Use Map

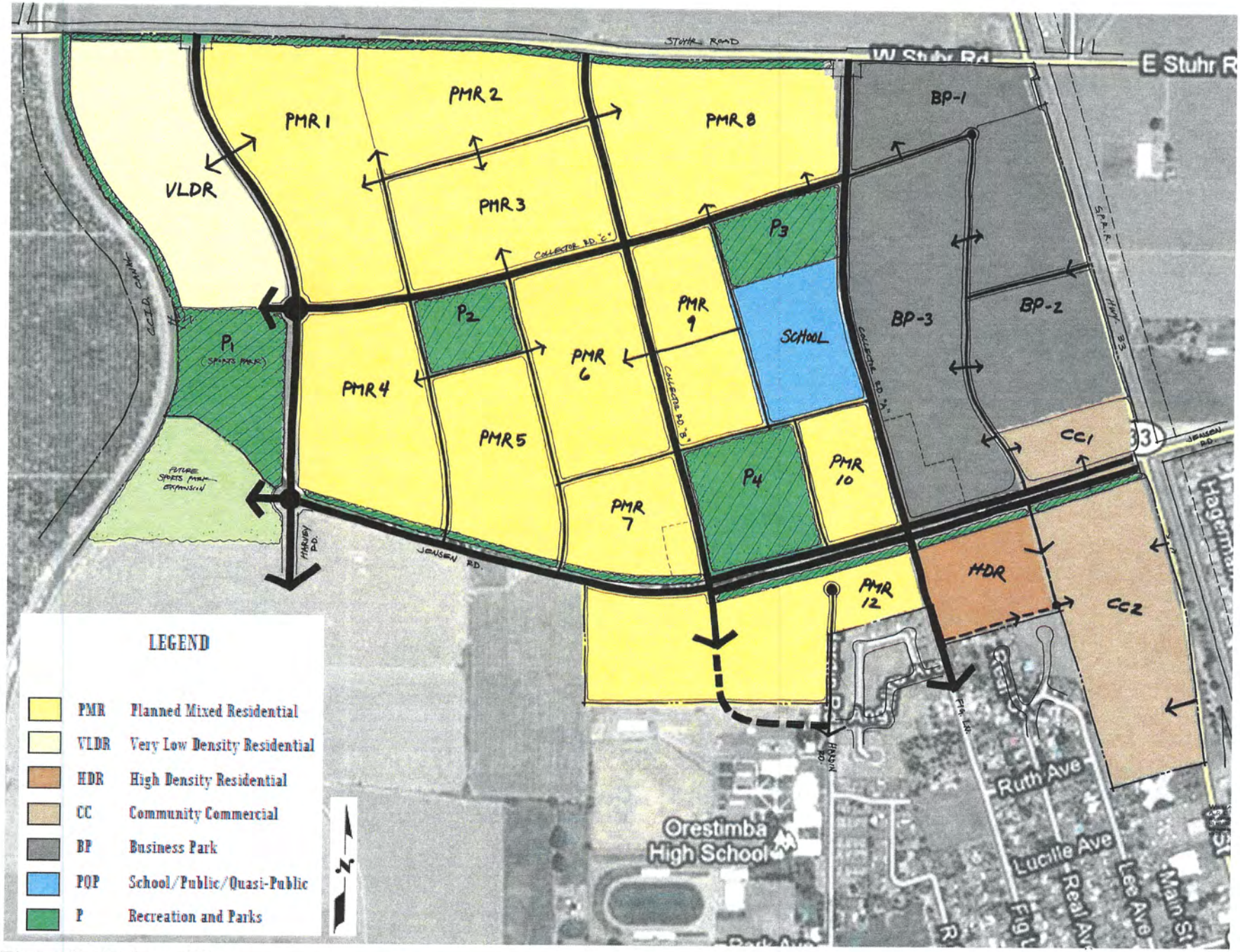


Figure 2: Preferred Plan
Source: William Hezmalhalch Architects as modified by Lamphier-Gregory

Attachment B

Photographs

Alfalfa field in the northeast part of the site, looking southeast; 05/17/13.

Corn field in the northeast part of the site, looking southwest; 05/17/13.

Tomato field in the northwest part of the site, looking northwest; 05/17/13.

Irrigation lateral that runs along the north edge of the site, looking west; 05/17/13.

Maintained irrigation pond in the northeast part of the site, looking southwest; 05/17/13.

Annually installed irrigation ditch in the central part of the site, looking west; 05/17/13.

Irrigation canal that runs along the west edge of the site, looking south; 05/17/13.

Alfalfa field in the northwest part of the site, looking southeast; 05/17/13.

Almond orchard in the south-central part of the site, looking southeast; 05/17/13.

Home with large valley oak tree in the south-central part of the site, looking northwest; 05/17/13.

Home and mowed grassland in the southeast part of the site, looking northwest; 05/17/13.

Walnut orchard in the southeast part of the site, looking west; 05/17/13.

Attachment C

CNDDB Summary Report and Exhibits

& USFWS IPaC Trust Report

Selected Elements by Scientific Name

California Department of Fish and Wildlife

California Natural Diversity Database

Query Criteria: Quad IS (Crows Landing (3712141) OR Gustine (3712038) OR Hatch (3712048) OR Newman (3712131))

Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
Agelaius tricolor tricolored blackbird	ABPBXB0020	None	None	G2G3	S1S2	SSC
Ambystoma californiense California tiger salamander	AAAAA01180	Threatened	Threatened	G2G3	S2S3	WL
Antrozous pallidus pallid bat	AMACC10010	None	None	G5	S3	SSC
Astragalus tener var. tener alkali milk-vetch	PDFAB0F8R1	None	None	G2T2	S2	1B.2
Atriplex cordulata var. cordulata heartscale	PDCHE040B0	None	None	G3T2	S2	1B.2
Atriplex minuscula lesser saltscale	PDCHE042M0	None	None	G2	S2	1B.1
Atriplex persistens vernal pool smallscale	PDCHE042P0	None	None	G2	S2	1B.2
Bombus crotchii Crotch bumble bee	IIHYM24480	None	None	G3G4	S1S2	
Branchinecta conservatio Conservancy fairy shrimp	ICBRA03010	Endangered	None	G2	S2	
Branchinecta longiantenna longhorn fairy shrimp	ICBRA03020	Endangered	None	G1	S1S2	
Branchinecta lynchi vernal pool fairy shrimp	ICBRA03030	Threatened	None	G3	S3	
Branta hutchinsii leucopareia cackling (=Aleutian Canada) goose	ABNJB05035	Delisted	None	G5T3	S3	
Buteo swainsoni Swainson's hawk	ABNKC19070	None	Threatened	G5	S3	
Chloropyron molle ssp. hispidum hispid salty bird's-beak	PDSCR0J0D1	None	None	G2T2	S2	1B.1
Cismontane Alkali Marsh Cismontane Alkali Marsh	CTT52310CA	None	None	G1	S1.1	
Coastal and Valley Freshwater Marsh Coastal and Valley Freshwater Marsh	CTT52410CA	None	None	G3	S2.1	
Emys marmorata western pond turtle	ARAAD02030	None	None	G3G4	S3	SSC
Eremophila alpestris actia California horned lark	ABPAT02011	None	None	G5T3Q	S3	WL
Eryngium racemosum Delta button-celery	PDAPI0Z0S0	None	Endangered	G1Q	S1	1B.1

Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
Eryngium spinosepalum spiny-sepaled button-celery	PDAPI0Z0Y0	None	None	G2	S2	1B.2
Extriplex joaquinana San Joaquin spearscale	PDCHE041F3	None	None	G2	S2	1B.2
Lanius ludovicianus loggerhead shrike	ABPBR01030	None	None	G4	S4	SSC
Lasiurus blossevillii western red bat	AMACC05060	None	None	G5	S3	SSC
Lasiurus cinereus hoary bat	AMACC05030	None	None	G5	S4	
Lepidurus packardi vernal pool tadpole shrimp	ICBRA10010	Endangered	None	G4	S3S4	
Linderiella occidentalis California linderiella	ICBRA06010	None	None	G2G3	S2S3	
Myotis yumanensis Yuma myotis	AMACC01020	None	None	G5	S4	
Navarretia prostrata prostrate vernal pool navarretia	PDPLM0C0Q0	None	None	G2	S2	1B.1
Oncorhynchus mykiss irideus steelhead - Central Valley DPS	AFCHA0209K	Threatened	None	G5T2Q	S2	
Perognathus inornatus San Joaquin Pocket Mouse	AMAFD01060	None	None	G2G3	S2S3	
Pogonichthys macrolepidotus Sacramento splittail	AFCJB34020	None	None	GNR	S3	SSC
Puccinellia simplex California alkali grass	PMPOA53110	None	None	G3	S2	1B.2
Rana draytonii California red-legged frog	AAABH01022	Threatened	None	G2G3	S2S3	SSC
Sagittaria sanfordii Sanford's arrowhead	PMALI040Q0	None	None	G3	S3	1B.2
Spea hammondii western spadefoot	AAABF02020	None	None	G3	S3	SSC
Sycamore Alluvial Woodland Sycamore Alluvial Woodland	CTT62100CA	None	None	G1	S1.1	
Taxidea taxus American badger	AMAJF04010	None	None	G5	S3	SSC
Thamnophis gigas giant gartersnake	ARADB36150	Threatened	Threatened	G2	S2	
Valley Sacaton Grassland Valley Sacaton Grassland	CTT42120CA	None	None	G1	S1.1	
Valley Sink Scrub Valley Sink Scrub	CTT36210CA	None	None	G1	S1.1	

Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
Vulpes macrotis mutica San Joaquin kit fox	AMAJA03041	Endangered	Threatened	G4T2	S2	

Record Count: 41

vernal pool smallscale
California alkali grass
Delta button-celery
alkali milk-vetch
heartscale
lesser saltscale
spiny-sepaled button-celery
Sycamore Alluvial Woodland
Project Site
Delta button-celery
Coastal and Valley Freshwater Marsh
heartscale
Delta button-celery
Delta button-celery
Delta button-celery
vernal pool smallscale
alkali milk-vetch
Delta button-celery
spiny-sepaled button-celery
Delta button-celery
alkali milk-vetch
San Joaquin spearscale
Valley Sacaton Grassland
Valley Sink Scrub
alkali milk-vetch vernal pool smallscale
prostrate vernal pool navarretia
hispid salty bird's-beak
hispid salty bird's-beak
heartscale
Sanford's arrowhead
alkali milk-vetch
San Joaquin spearscale
hispid salty bird's-beak
hispid salty bird's-beak hispid salty bird's-beak
Valley Sacaton Grassland
vernal pool smallscale
Cismontane Alkali Marsh
hispid salty bird's-beak
round-leaved filaree
hispid salty bird's-beak
slender-leaved pondweed

CNDDB Plant

Northwest Newman Master Plan

Stanislaus County, CA

Map Date: 10/03/2016

N

0 0.5 1

Miles

Source: CDFW; National Geographic Society

CNDDB Wildlife

Northwest Newman Master Plan

Stanislaus County, CA

Map Date: 10/03/2016

Project Site

N

0 0.5 1

Miles

Source: CDFW; National Geographic Society

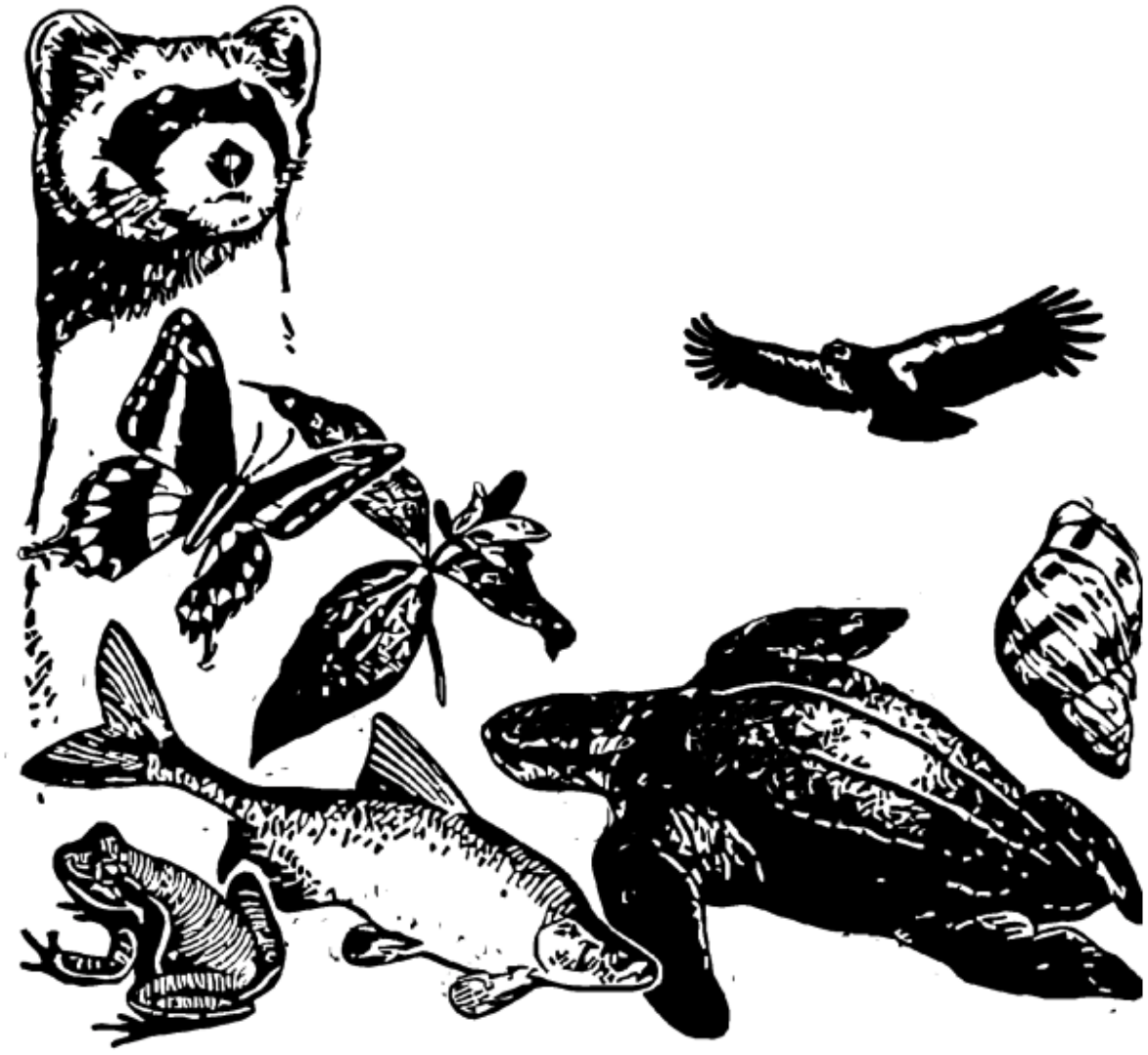
U.S. Fish & Wildlife Service

Northwest Newman Master Plan

IPaC Trust Resources Report

Generated October 03, 2016 01:42 PM MDT, IPaC v3.0.9

This report is for informational purposes only and should not be used for planning or analyzing project level impacts. For project reviews that require U.S. Fish & Wildlife Service review or concurrence, please return to the IPaC website and request an official species list from the Regulatory Documents page.



IPaC - Information for Planning and Conservation (https://ecos.fws.gov/ipac/): A project planning tool to help streamline the U.S. Fish & Wildlife Service environmental review process.

Table of Contents

U.S. Fish & Wildlife Service

IPaC Trust Resources Report

NAME

Northwest Newman Master Plan

LOCATION

Stanislaus County, California

IPAC LINK

https://ecos.fws.gov/ipac/project/NOFEE-6JHRV-GXLAB-SSNE6-AOQU6I

U.S. Fish & Wildlife Service Contact Information

Trust resources in this location are managed by:

Sacramento Fish And Wildlife Office
Federal Building
2800 Cottage Way, Room W-2605
Sacramento, CA 95825-1846
(916) 414-6600

Endangered Species

Proposed, candidate, threatened, and endangered species are managed by the Endangered Species Program of the U.S. Fish & Wildlife Service.

This USFWS trust resource report is for informational purposes only and should not be used for planning or analyzing project level impacts.

For project evaluations that require USFWS concurrence/review, please return to the IPaC website and request an official species list from the Regulatory Documents section.

Section 7 of the Endangered Species Act **requires** Federal agencies to "request of the Secretary information whether any species which is listed or proposed to be listed may be present in the area of such proposed action" for any project that is conducted, permitted, funded, or licensed by any Federal agency.

A letter from the local office and a species list which fulfills this requirement can only be obtained by requesting an official species list either from the Regulatory Documents section in IPaC or from the local field office directly.

The list of species below are those that may occur or could potentially be affected by activities in this location:

Amphibians

California Red-legged Frog Rana draytonii — Threatened

CRITICAL HABITAT

There is **final** critical habitat designated for this species.

http://ecos.fws.gov/tess_public/profile/speciesProfile.action?spcode=D02D

California Tiger Salamander Ambystoma californiense — Threatened

CRITICAL HABITAT

There is **final** critical habitat designated for this species.

http://ecos.fws.gov/tess_public/profile/speciesProfile.action?spcode=D01T

Crustaceans

Vernal Pool Fairy Shrimp Branchinecta lynchi — Threatened

CRITICAL HABITAT

There is **final** critical habitat designated for this species.

http://ecos.fws.gov/tess_public/profile/speciesProfile.action?spcode=K03G

Vernal Pool Tadpole Shrimp Lepidurus packardi — Endangered

CRITICAL HABITAT

There is **final** critical habitat designated for this species.

http://ecos.fws.gov/tess_public/profile/speciesProfile.action?spcode=K048

Fishes

Delta Smelt Hypomesus transpacificus — Threatened

CRITICAL HABITAT

There is **final** critical habitat designated for this species.

http://ecos.fws.gov/tess_public/profile/speciesProfile.action?spcode=E070

Steelhead Oncorhynchus (=Salmo) mykiss — Threatened

CRITICAL HABITAT

No critical habitat has been designated for this species.

http://ecos.fws.gov/tess_public/profile/speciesProfile.action?spcode=E08D

Insects

Valley Elderberry Longhorn Beetle Desmocerus californicus dimorphus — Threatened

CRITICAL HABITAT

There is **final** critical habitat designated for this species.

http://ecos.fws.gov/tess_public/profile/speciesProfile.action?spcode=I01L

Mammals

Fresno Kangaroo Rat Dipodomys nitratoides exilis — Endangered

CRITICAL HABITAT

There is **final** critical habitat designated for this species.

http://ecos.fws.gov/tess_public/profile/speciesProfile.action?spcode=A08O

San Joaquin Kit Fox Vulpes macrotis mutica — Endangered

CRITICAL HABITAT

No critical habitat has been designated for this species.

http://ecos.fws.gov/tess_public/profile/speciesProfile.action?spcode=A006

Reptiles

Blunt-nosed Leopard Lizard Gambelia silus — Endangered

CRITICAL HABITAT

No critical habitat has been designated for this species.

http://ecos.fws.gov/tess_public/profile/speciesProfile.action?spcode=C001

Giant Garter Snake Thamnophis gigas — Threatened

CRITICAL HABITAT

No critical habitat has been designated for this species.

http://ecos.fws.gov/tess_public/profile/speciesProfile.action?spcode=C057

Critical Habitats

There are no critical habitats in this location

Appendix D

Designated Critical Habitat

Legend

- Steelhead
- California red-legged frog
- Conservancy fairy shrimp, Longhorn fairy shrimp, Vernal pool fairy shrimp,Vernal pool tadpole shrimp

Project Site

PATTERSON
CROWS LANDING
HATCH
TURLOCK
ORESTIMBA PEAK
NEWMAN
GUSTINE
STEVINSON
CREVISON PEAK
HOWARD RANCH
INGOMAR
SAN LUIS RANCH
PACHECO PASS
SAN LUIS DAM
VOLTA
LOS BANOS

Critical Habitat

Northwest Newman Master Plan

Stanislaus County, CA

Map Date: 10/03/2016

N

0 0.5 1

Miles

Source: USFWS; National Geographic Society