

BIOLOGICAL ASSESSMENT

Capitol Station 65 Biological Resources Assessment

Prepared for:

Remy, Thomas, Moose and Manley, LLP

Prepared by:

EIP Associates

July 2006

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Station 65 Biological Resources Report Sacramento County, California

This report documents the results of a biological resources assessment conducted for Remy, Thomas, Moose and Manley, LLP at the Station 65 Project Site (Study Area) in the city of Sacramento, Sacramento County, California.

Introduction

The biological resources assessment was conducted on June 22, 2006. The area covered by this report consists of 65 acres located in the Central City/Downtown area of the City of Sacramento. The property is generally bounded by Richards Boulevard to the south, the American River to the north, North 5th Street to the west and North 7th Street to the east (Figure 1). The property has previously been developed for industrial use and contains more than two million square feet of industrial/warehouse buildings. The property is actively use for warehousing, cold storage and related uses. The majority of the property is covered with impervious surfaces (buildings, concrete or asphalt) while a portion of the property, the north western portion is bare ground.

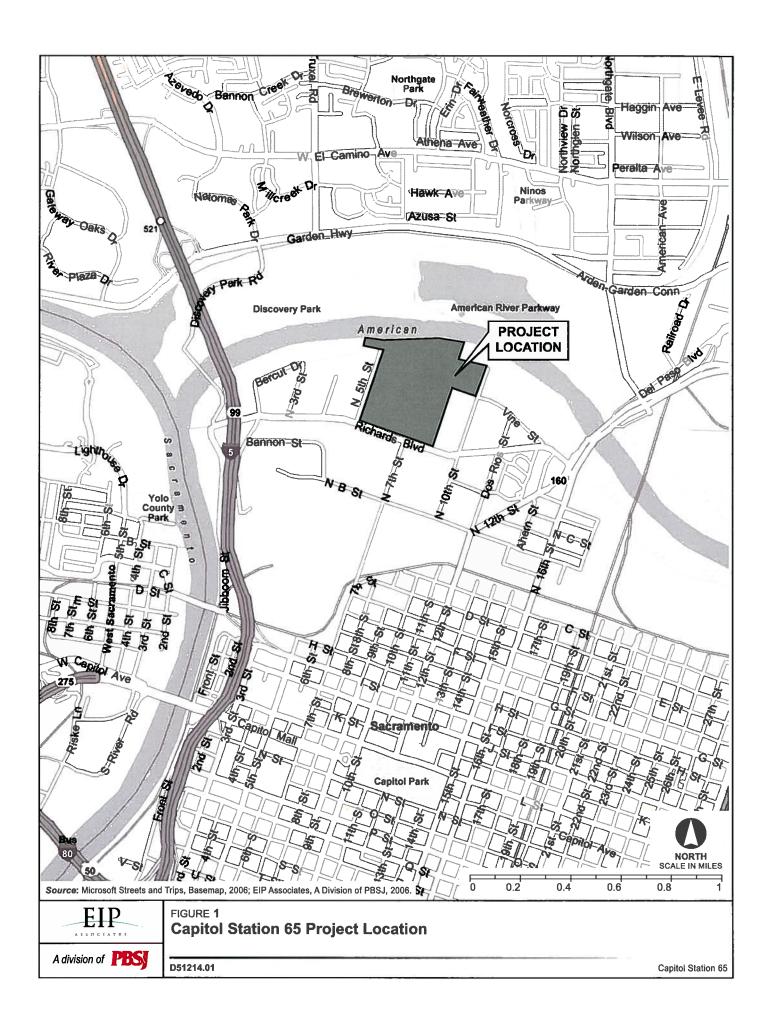
The purpose of the assessment was to determine whether the Study Area supports any special-status species, including rare, threatened, or endangered plants and wildlife, or species that would fall under the authority of the California Department of Fish and Game (CDFG), United States Fish and Wildlife Service (USFWS) and California Environmental Quality Act (CEQA). In addition the Study Area was surveyed for the presence of jurisdictional wetlands, or waters of the United States that would fall under the regulatory authority of the U.S. Army Corps of Engineers (Corps).

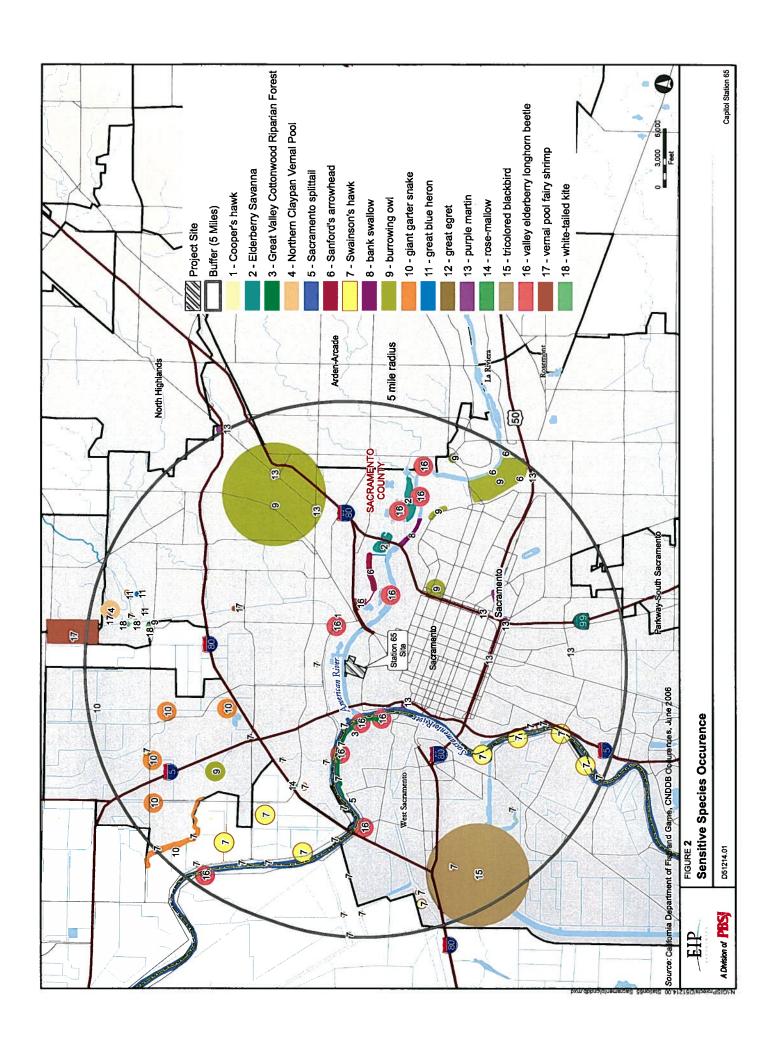
Methods

All portions of the Study Area were surveyed by walking the entire perimeter, as well as representative transects across the area to identify and map vegetation types, assess habitat suitability for special-status species, and record observed wildlife species. The California Natural Diversity Data Base (CNDDB) was queried for any recorded observations of special-status plant or wildlife species in the vicinity of the Study Area (Figure 2).

Regulatory Background

A number of federal and state statutes and local county policies provide the regulatory structure that guides the protection of biological resources. The following discussion summarizes those laws that are most relevant to biological and wetland resources on the Study Area.





The U.S. Fish and Wildlife Service (USFWS) implements the Migratory Bird Treaty Act (16 U.S.C. Section 703-712), Bald and Golden Eagle Protection Act (16 U.S.C. Section 668-668d), and the federal Endangered Species Act (ESA; 16 U.S.C. Section 1531 et seq.). Projects that would result in take of any federally-listed threatened or endangered species are required to obtain authorization from the USFWS through either Section 7 (interagency consultation) or Section 10(a) (incidental take permit) of the ESA, depending on whether the federal government is involved in permitting or funding the project. The authorization process is used to determine if a project would jeopardize the continued existence of a listed species and what mitigation measures would be required to avoid jeopardizing the species.

The federal definition of *take* includes to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct. Candidate species do not have the full protection of the ESA. However, the USFWS advises that project applicants address these species since they could be elevated to listed status prior to completion of projects with long planning or development schedules.

U.S. Army Corps of Engineers

Under Section 404 of the U.S. Clean Water Act (CWA; 33 U.S.C. Sections 1241 et seq.), the Corps has authority to regulate activities that could discharge fill or dredge material or otherwise adversely modify wetlands or other waters of the United States. The Corps implements the federal policy embodied in Executive Order 11990, which is intended to preserve wetland values or acres. In achieving the goals of the CWA, the Corps seeks to avoid adverse impacts and to offset unavoidable adverse impacts on existing aquatic resources. Any fill or adverse modification of wetlands could require a permit from the Corps prior to the start of work. Typically, permits issued by the Corps condition a project with mitigation to offset unavoidable impacts on wetlands and other waters of the United States in a manner that achieves the goal of no net loss of wetland acres or values.

California Department of Fish and Game

The California Department of Fish and Game (CDFG) derives its authority from the Fish and Game Code of California, which implements the California Endangered Species Act (CESA; Fish and Game Code Section 2050 et seq.). CESA prohibits the take of state-listed threatened or endangered species. Take under CESA is restricted to the direct killing of a listed species and does not prohibit indirect harm by way of habitat modification.

California Species of Special Concern (CSC) is a designation conferred by the CDFG for those species which are considered to be indicators of regional habitat changes or are considered to be potential future protected species. Species of special concern are not necessarily afforded protection under the Fish and Game Code unless they are also identified in the code as California Fully Protected Species. The CSC designation is intended by the CDFG for use as a management tool to take these species into special consideration when decisions are made concerning the development of natural lands.

¹ U.S.C. = United States Code

The CDFG also has authority to administer the Native Plant Protection Act (NPPA; Fish and Game Code Section 1900 et seq.). The NPPA requires the CDFG to establish criteria for determining if a species, subspecies, or variety of native plant is endangered or rare. Under Section 1913(c) of the NPPA, the owner of land where a rare or endangered native plant is growing is required to notify the CDFG at least ten days in advance of changing the land use to allow for salvage of rare or endangered plants.

Perennial and intermittent streams also fall under the jurisdiction of the CDFG pursuant to Section 1600 et seq. of the Fish and Game Code (Lake and Streambed Alteration Agreement). The CDFG jurisdiction over work within the stream zone or lake shore includes, but is not limited to, the diversion or obstruction of the natural flow or changes in the channel, bed, or bank of any river, stream, or lake.

Fish and Game Code - Sections 3503, 3503.5, and 3513

Fish and Game Code Section 3503 states that it is unlawful to take, possess, or needlessly destroy the nests or eggs of any bird, except as otherwise provided by the code or any regulation made pursuant thereto. Fish and Game Code Section 3503.5 protects all birds-of-prey (raptors) and their eggs and nests. Section 3513 states that it is unlawful to take or possess any migratory non-game bird as designated in the Migratory Bird Treaty Act. These regulations could require that elements of any proposed project (particularly vegetation removal) be reduced or eliminated during critical phases of the nesting cycle unless surveys by a qualified biologist demonstrate that nests, eggs, or nesting birds will not be disturbed, subject to approval by the CDFG and/or the USFWS. Disturbance that causes nest abandonment and/or loss of reproductive effort (killing or abandonment of eggs or young) is considered take.

California Environmental Quality Act

CEQA requires review of projects to determine their environmental effects on the physical environment and to identify mitigation measures for any effects determined to be significant. The CEQA Guidelines state an effect may be significant if it affects rare, threatened, and endangered species. In addition to state and federally listed species, Section 15380 of the CEQA Guidelines identify rare species as those that may not be presently threatened with extinction, but exist in such small numbers throughout all or a significant part of their range that they may be endangered if their environment worsens, or any species that is likely to be become endangered in the foreseeable future. Based on the CEQA Guidelines, plants designated as rare by non-regulatory organizations (e.g., the California Native Plant Society), California Species of Special Concern (CDFG), Candidate Species (USFWS), and other similar designations for plants and animals may need to be considered in CEQA analyses.

State Water Resources Control Board

The State Water Resources Control Board (SWRCB) also has authority over wetlands and waters of the U.S. through Section 401 of the CWA. The CWA requires that a Section 404 permit applicant to also obtain *certification* from the appropriate state agency that the 404 permit is consistent with the state's water quality standards. In California, this certification

authority is delegated by the SWRCB to nine Regional Water Quality Control Boards (RWQCB). A request for certification is submitted to the appropriate RWQCB at the same time that Section 404 application is filed with the Corps. The RWQCB has 60 days to review and act on the application. Because no Corps permit is valid under the CWA unless certified by the state, these boards may effectively deny or add conditions to any Corps permit.

Environmental Setting

Most of the vegetation on site consists of introduced and ruderal plant species, a few ornamental shrubs and trees are located sporadically across the Survey Area. As previously noted the north western portion contains an undeveloped lot that currently supports wild oats (Avena fatua), yellow start thistle (Centaurea solstitialis), Johnson's grass (Sorghum halepense), birds rape mustard (Brassica rapa), Bermuda grass (Cynodon dactylon), dodder (Custuta howelliana), wild radish (Raphanus sativus), prickly lettuce (Lactuca serriola), witchgrass (Panicum capillere), lams quarters (Chenopodium album), fluellin (Kickxia elatine) and field horsetail (Equisetum arvense).

Results

Habitats

There are three habitat types present in the project area; urban habitat, valley-foothill riparian and riverine habitat. The urban habitat occupies most of the project area, except for a small patch of valley-foothill riparian habitat in the northern section and immediately along the American River. The riverine habitat exists in the American River.

Urban Habitat

Urban habitat exists within developed areas where pre-development vegetation has been removed and new species of plants introduced, intentionally (ornamental species) or inadvertently (weeds). Urban vegetation accounts for most of the habitat acreage present within the project area.

Urban habitat within the project area contains elements of the Valley-foothill riparian habitat originally present on site. Some cottonwood (*Populus fremontii*), valley oak (*Quercus lobata*), oleander (*Nerium oleander*) and pine trees (*Pinus* sp.) have been retained and incorporated into landscape vegetation.

Valley-Foothill Riparian Habitat

Valley-foothill riparian habitat is found regionally in valleys bordered by sloping alluvial fans, terraces, and lower foothills. It generally occurs where there are deep alluvial soils and a high water table, such as on floodplains or on flat to gently sloping areas adjacent to low-velocity streams.

For many species of wildlife, Valley-foothill riparian habitats provide food, water and cover, as well as migration and dispersal corridors. At least 50 species of amphibians and reptiles occur in lowland riparian systems. Many are permanent residents, while others are transient

or seasonal users. As many as 147 species of birds and 35 species of mammals are known to use California's Central Valley riparian systems.

Riparian habitat exists along the American River immediately adjacent to the project area. It is represented by three plant communities: herb-scrub, willow-cottonwood woodland and riparian forest. To an extent, these plant communities reflect the successional stage, or maturity, that the Valley-Foothill riparian habitat has reached at different locations within the project area. This is closely tied to the frequency and intensity of flooding and/or human disturbance of these areas.

Riverine

Riverine habitats consist of running water originating from some elevated source such as ponds, lakes, springs, or seepage areas. Water flows downward at a rate relative to slope or gradient and the volume of surface runoff or discharge. Riverine habitats are used for reproduction, food, water and cover by many mammals, birds, reptiles, amphibians and invertebrates. Adjacent to the Planning Area, riverine habitats exist in the Sacramento River (distinct from riparian habitat, occurring on the riverbanks).

Vegetation

The project area supports a ruderal plant community such as wild oat (Avena fatua), ripgut brome (Bromus diandrus), hairy vetch (Vicia villosa), field bindweed (Convolvulus arvensis), fireweed (Epilobium angustifolium), yellow start thistle (Centuria solstitialis) and tar weed (Holocarpa sp.). These plant species are common in areas that have been highly disturbed.

Trees within the project area consist of tree-of-heaven (Ailanthus altissima), cottonwood (Populus sp.), valley oak (Quercus lobata), elm (Ulmus sp.), willow (Salix sp.). Appendix A lists the plant species found during the field survey.

The valley oak trees on the site would qualify as a heritage trees pursuant to the City of Sacramento Tree Preservation Ordinance. Heritage trees are valued for their ability to promote scenic beauty, enhance property values, reduce soil erosion, improve air quality, abate noise and provide shade to reduce energy consumption. The intent and purpose of protecting heritage trees is to promote the health, safety, and welfare of present and future residents of the City of Sacramento. Prior to initiation of project related activities, any and all appropriate measures pursuant to the City of Sacramento Tree Preservation Ordinance (Sacramento City Code Chapter 45.04) would need to be implemented.

A search of the California Natural Diversity Data Base (CNDDB) revealed that there are two plant species that have the potential to be of concern due to their ranking within the California Department of Fish and Game (CDFG), United States Fish and Wildlife Service (USFWS) and/or the California Native Plant Society (CNDP). These plants occur in the vicinity of the Study Area; Sanford's arrowhead (Sagittaria sanfordii), and rose-mallow (Hibiscus lasiocarpus). There are no recorded occurrences of these species within the project area in the CNDDB. The Sanford's arrowhead depends on marshes and swamps, although this plant has been found growing in standing or slow-moving freshwater ponds, marshes and ditches.

The project area does not support the type of habitat that could support Sanford's arrowhead. Rose-mallow grows on the margins of freshwater marshes, wet riverbanks, and on low, peat islands in sloughs. Although the project area does support the type of habitat that could support the rose-mallow, the present condition of the American River bank within the project area is unsuitable for the rose-mallow. A pre-construction survey for rose-mallow is recommended at least 15 days of any ground or river bank alteration.

At the community level, the CNDDB revealed that two plant communities, the Great Valley Cottonwood Riparian Forest and the elderberry savanna occur in the vicinity of the Study Area. The state has ranked these communities as endangered. The CNDDB has no recorded occurrences of these communities within the Study Area.

The bank of the American River does contain cottonwoods and a mix of willows, California buckeye (Aesculus californica), valley oak, Himalayan blackberry (Rubus discolor) and poison oak (Toxicodendron diversiloba).

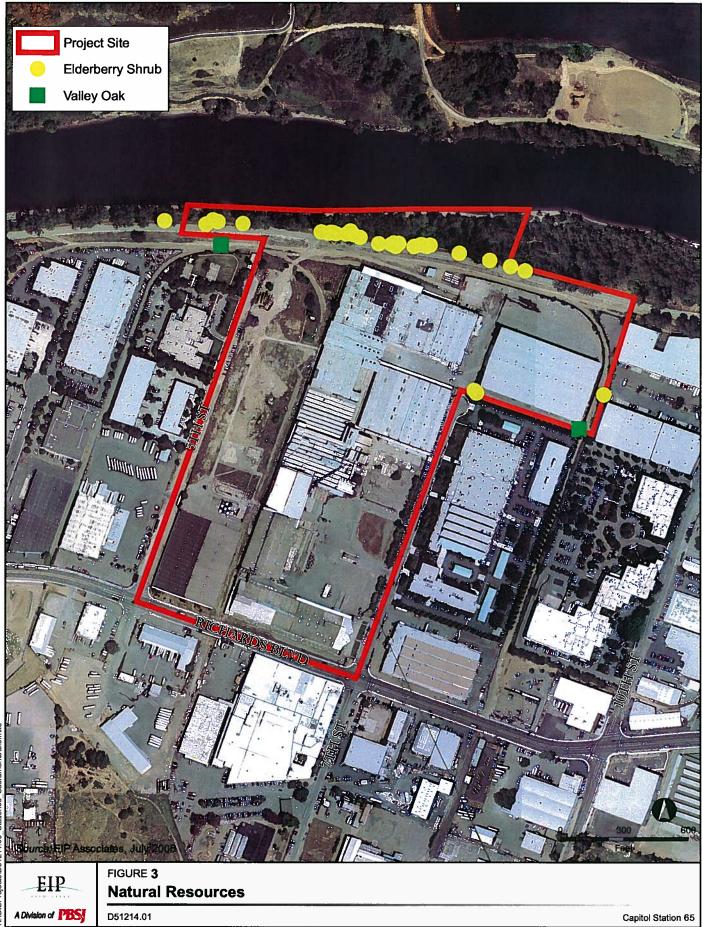
At the end of North 7th Street, adjacent to the fence in the right hand side of the drive way at least two elderberry shrubs were observed. Valley elderberry longhorn beetle exit bore holes were found in these elderberry shrubs. An additional elderberry shrub was located in the eastern boundary of the project site in what appears to be an abandoned road. (Figure 3)

Wildlife

Vacant lots within city limits support common birds and mammals that have adapted to this habitat type. Wildlife species that are expected to occur in the Study Area are western scrub jay (Aphelocoma californica), American crow (Corvus brachyrhynchos), northern mocking bird (Mimus polyglottos), Brewer's blackbird (Euphagus cyanocephalus), yellow-billed magpie (Pica nuttalli), house finch (Carpodacus mexicanus), house mouse (Mus musculus), black rat (Ratus ratus), house cat (Felis silvestris catus), raccoon (Procyon lotor), and striped skunk (Mephitis mephitis). A list of species observed during the survey is included in Appendix B.

A search of the California Natural Diversity Data Base (CNDDB) revealed that there are 13 special-status species that occur in the vicinity of the Study Area: Coopper's hawk (Accipiter cooperii), Sacramento splittail (Pogonichthys macrolepidotus), bank swallow (Riparia riparia), Swainson's Hawk (Buteo swainson), burrowing owl (Athene cunicularia), giant garter snake (Thamnophis gigas), great blue heron (Ardea herodias), great egret (Ardea alba), purple martin (Progne subis), tricolored blackbird (Agelaius tricolor), vernal pool fairy shrimp (Branchinecta lynchi), California linderiella (Linderiella occidentalis), valley elderberry longhorn beetle (), and white-tailed kite (Elanus leucurus). There are no recorded occurrences of these species within the Study Area in the CNDDB.

The Coopper's hawk is a State Species of Special Concern, Cooper's hawks breed between March and August. Usually they nest and forage in woodlands or riparian vegetation near water. This species has not been observed within the project area. However, suitable habitat for this species exists along the Sacramento River adjacent to the project area. A preconstruction raptor survey is recommended before any ground breaking or tree removal activities.



N-GISProjects/D51214 00 Station

Sacramento split-tail is a category 2 candidate for federal listing as threatened or endangered. Though this fish lives primarily within the Delta, Sacramento split-tail spawns in the Sacramento River in early spring (March-April).

Bank swallow depend on vertical banks/cliffs with fine textured sandy soils near streams and rivers to dig nesting burrows. The nearest occurrence of bank swallow to the project area is east of the business 80 bridge, in the south side of the American River. The project area does not support the type of habitat required by bank swallows.

The California linderiella is associated with seasonal pools in unplowed grasslands with old alluvial soils underlain by hardpan or in sandstone depressions. The water in these pools tends to have very low alkalinity, conductivity and TDS (total dissolved solids).

Swainson's hawk is listed as threatened by the State of California and is a category 2 candidate for federal listing as threatened or endangered. It is a migratory raptor nesting in or near valley floor riparian habitats during spring and summer months. Suitable nesting habitat for Swainson's hawks exists in all Valley-foothill riparian habitat along the Sacramento and American River. Swainson's hawks feed primarily upon small mammals, birds, and insects. Annual grasslands, some croplands, and other open habitats up to 18 miles away are used for foraging, and are critical requirements for Swainson's hawk nesting habitat. Although no Swainson's hawks have been observed within the Planning Area, they are within the foraging range of numerous Swainson's hawk nests. However, it is highly unlikely that the discontinuous patches of ruderal vegetation within the Planning Area represents significant foraging habitat for this species.

The California Department of Fish and Game considers as significant all impacts to foraging habitat within a 10-mile radius of active nesting territories. The project area lies within 10 miles of at least one known active nest in the Discovery Park.

Burrowing owl is a California Department of Fish and Game Species of Special Concern and a "fully-protected" raptor. It is also federally protected under the Migratory Bird Treaty Act (Federal Law 16 USC 703-711). According to this law, burrowing owls may not be possessed or taken in any manner without a special permit. Burrowing owls forage in open habitats for insects, mice, and small birds. They breed between March and August and frequently nest in ground squirrel burrows in berms along paved roads, dirt roads, and channels, and in ruderal vegetation or annual grassland. This species has been observed in Natomas, East and West Sacramento, but not within the project area.

Tricolored blackbird is a State Species of Special Concern and a category 2 candidate for federal listing as threatened or endangered. This bird breeds between April and July and prefers to nest in marshes with a heavy growth of cattails or bulrushes. It forages on the ground in grasslands, croplands, and wetlands. Tricolored blackbirds have been observed in West Sacramento but not within the project area. Suitable habitat for this species does not exist within the project area.

Giant Garter Snake is listed as threatened by the State of California and is a category 1 candidate for federal listing as threatened. It is among the largest and most aquatic of garter snakes. The species range extends from Butte County to Fresno County. Its habitat

includes low-gradient streams, drainage canals, irrigation ditches, and fresh emergent wetland, and the snake is known to use flooded rice fields adjacent to suitable canal and ditch habitat. This species has been observed in Natomas and West Sacramento but not within the project area and no suitable habitat for this species exists within the project area.

Great blue heron is listed as a Sensitive Species by the California Department of Forestry and Fire Protection. Found along calm freshwater and seacoasts. Usually nests in trees near water, but colonies can be found away from water. The great blue heron feeds on fish, invertebrates, amphibians, reptiles, birds, and small mammals. The project area does contain suitable nesting habitat for the great blue heron and one great blue heron was observed in the Sacramento River. The recommended pre-construction raptor survey should include great blue heron as a target species, if ground breaking or tree removal is to occur within the nesting season.

Great egret is also listed as a Sensitive Species by the California Department of Forestry and Fire Protection. The great egret nests in colonies with other species, in shrubs and trees over water, and on islands. Feeds in variety of wetlands, including marshes, swamps, streams, rivers, ponds, lakes, tide flats, canals, and flooded fields where it can find fish, invertebrates, amphibians, reptiles, birds, and small mammals. The project area does contain suitable nesting habitat for the great egret and one great egret was observed at the eastern bank of the Sacramento River. The recommended pre-construction raptor survey should include great egret as a target species, if ground breaking or tree removal is to occur within the nesting season.

Purple martin is a state Species of Special Concern. It is a breeding resident that winters in South America. Purple martins are cavity nesters that have been observed to nest in artificial structures such as nest boxes or the undersides of bridges. Loss of riparian habitat, removal of snags, and competition with starlings for nest cavities has resulted in a decline in numbers of breeding purple martins. There is a colony of martins that is known to use the underside of the I Street on-ramp to Interstate 5, adjacent to the proposed project area. This area has possibly been used by purple martins during the breeding season since 1974 and the purple martins are currently using the bridge for nesting activities.

Vernal pool fairy shrimp is federally listed as threatened. Fairy shrimp are small (11 to 27 mm) crustaceans adapted to survive the annual flooding and drying of vernal pools. They grow for about two weeks, breed, and produce eggs that the females carry in an egg sac until they mature. As the vernal pool dries, the adults die, and the eggs become embedded in the mud at the bottom of the pool. These "resting" eggs are protected by thick outer coverings that resist cold, heat, and desiccation during the summer months.

White-tailed kite is a "fully protected" raptor in California. White-tailed kite feed on rodents, small reptiles, and large insects in fresh emergent wetlands, annual grasslands, pastures, and ruderal vegetation. They breed between February and October. Unlike other raptors, kites often roost, and occasionally nest, communally; therefore, disturbance of a relatively small roost or nesting area could affect a large number of birds. No white-tailed kites were observed during the survey on June 22 2006. A pre-construction raptor survey is recommended 15 days prior any ground breaking activity.

Ringtail (Bassariscus astutus) is "fully protected" in California from unregulated take or possession. Closely related to raccoons, ringtails feed on mice, woodrats, eggs, carrion, reptiles, invertebrates and soft fruits. This species lives in riparian habitats throughout the Sacramento Valley, due to its nocturnal activity patterns, a night survey is recommended for ringtail since suitable habitat is present adjacent to the project area.

Valley elderberry longhorn beetle (VELB) (Desmocerus auripennis)is a Federally listed threatened species dependent on elderberry shrubs (Sambucus mexicana/caerulea) for every stage of its two-year life cycle. VELB adults lay their eggs on elderberry bushes (Sambucus spp.). The larvae bore into and feed upon the stems. Emergence of newly formed adults coincides with flowering of the elderberry. After emergence, adults feed upon the elderberry flowers, reproduce, and die. No VELB adults were observed, but exit bore holes were observed in two of the plants accessible during the June 22, 2006 survey.

VELB Mitigation Measures

The USFWS service will require mitigation for elderberry shrubs that occur within the Project Site with one or more stems with a stem of one inch diameter or greater at ground level. Avoidance measures include a 100-foot buffer established around elderberry shrubs that will provide adequate avoidance of potential VELB habitat. Disturbance within 100-feet of an elderberry shrub will require consultation or permitting with the USFWS. In areas where USFWS has approved encroachment into the buffer area, a minimum distance of 20-feet must be maintained from the drip line of each elderberry shrub.

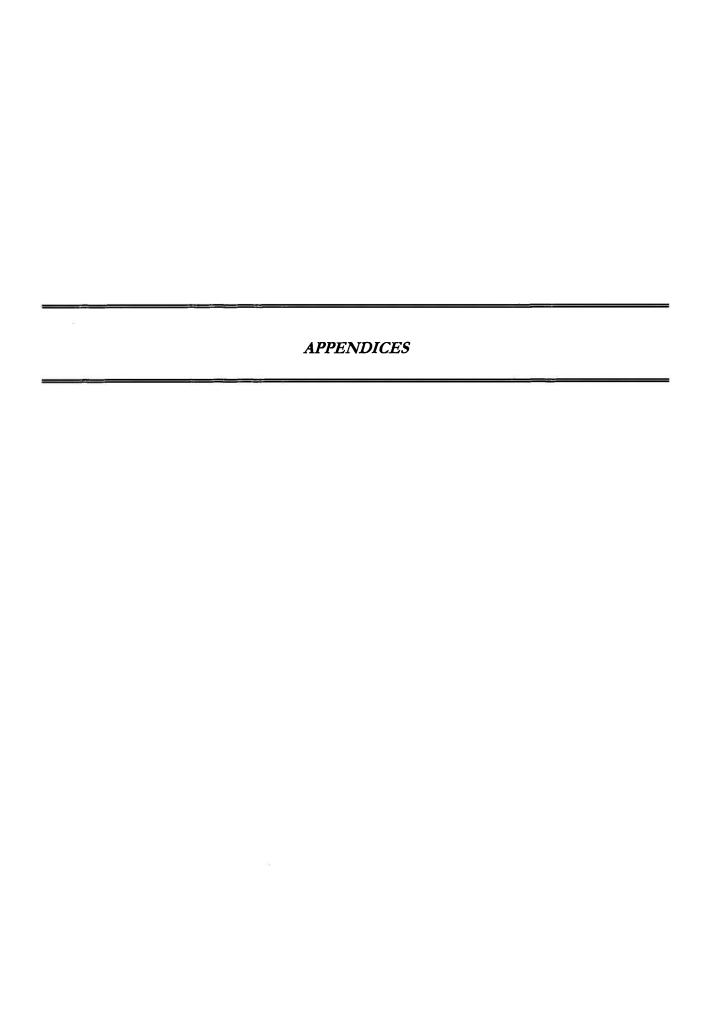
The following are examples of mitigation measures that may be required by the USFWS for activities within 100 feet of potential VELB habitat:

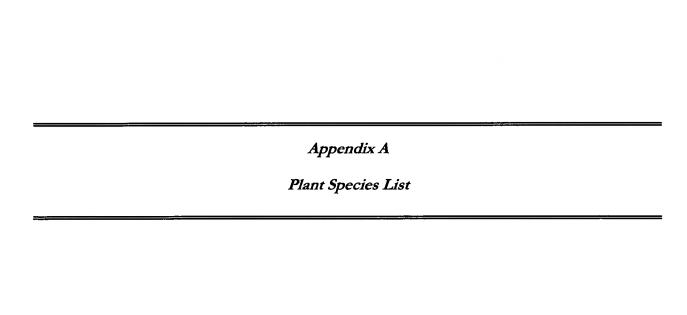
- Prepare a written description of how buffer areas will be protected, restored and maintained during and following construction.
- Identify buffer and avoidance areas with fencing and flagging during construction activities.
- Provide environmental awareness training for all project personnel that includes VELB natural history, required avoidance measures, personal responsibilities, and penalties for noncompliance.
- Post signs every 50 feet along the edge of the avoidance areas stating that the area is within protected habitat.
- Restore any damage resulting from construction activities within the 100-foot buffer area with the appropriate native plant species.
- Protect buffer areas from adverse effects resulting from the project.
- Restrict the use of insecticides, herbicides, fertilizers or other chemicals that might harm VELB or elderberry shrubs within 100 feet of identified locations.

If impacts to elderberry shrubs and surrounding riparian vegetation are unavoidable, other mitigation measures could be required by the USFWS. A mitigation measure could be that unavoidable elderberry shrubs be transplanted to an approved conservation area. The USFWS must be consulted prior to transplantation and a qualified biologist is required to monitor the transplanting activities. Transplanting must occur while the plants are dormant (generally November through early February). If transplanting is not possible, seedlings could be planted to offset the loss of VELB habitat. Another mitigation strategy could likely involve purchase of a number (to be determined on number of stems greater than one inch, with or without bore holes) of mitigation credits at an approved mitigation/conservation bank (e.g., Wildlands Incorporated).

Summary

The Study Area does appear to support the valley elderberry longhorn beetle. No other state or federal listed species of plant or wildlife were observed during the survey. If valley oak trees are to be removed as part of the proposed project, any and all appropriate measures pursuant to the City of Sacramento Tree Preservation Ordinance (Sacramento City Code Chapter 45.04) would need to be implemented.

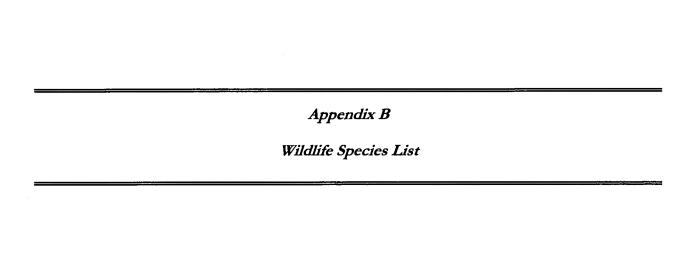




APPENDIX A

STATION 65 BIOLOGICAL ASSESSMENT PLANT LIST

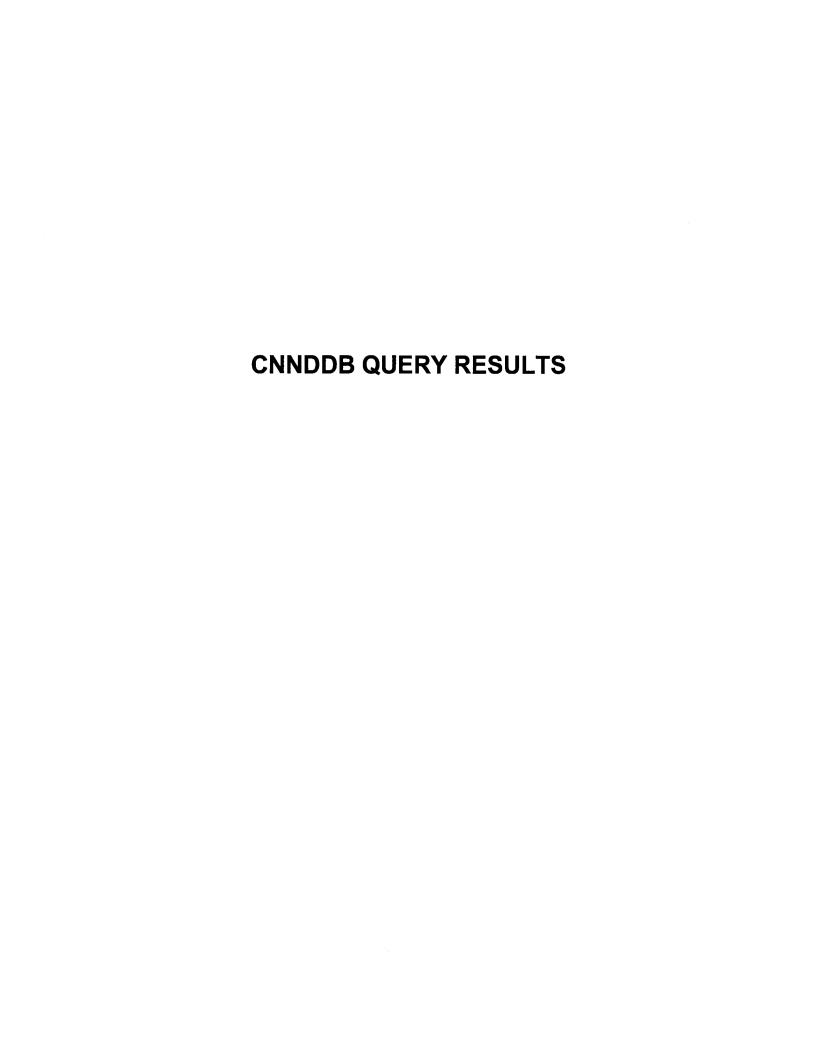
Scientific Name	Common Name
Ailanthus altissima	Tree-of-heaven
Avena fatua	Wild oats
Brassica rapa	Birdsrape mustard
Bromus diandrus	Ripgut brome
Centaurea solstitialis	Yellow start thistle
Chenipodium album	Lambs quarters
Convolvulus arvensis	Field bindweed
Cuscuta howelliana	Boggs lake dodder
Cynodon dactylon	Bermuda grass
Epilobium brachycarpum	Annual fireweed
Equisetum arvense	Field horse tail
Hedera canariensis	Algerian ivy
Juglans californica	California black walnut
Kickxia elatine	Fluellin
Lactuca serriola	Prickly lettuce
Liquidambar styraciflua	Sweet gum tree
Lolium perenne	Perennial ryegrass
Lotus purshianus var. purshianus	Spanish clover
Melilotus alba	White sweet clover
Nerium oleander	Oleander
Panicum capillere	Witchgrass
Picris echioides	Bristly ox-tongue
Plantago major	Broadleaf plantain
Polypogon monspeliensis	Rabbitfoot
Populus fremontii	Fremont cottonwood
Prunus glandulosa	Flowering almond
Quercus lobata	Valley oak
Raphanus sativus	Wild radish
Rosa californica	California wild rose
Rosa spp.	Ornamental rose
Rubus discolor	Himalayan blackberry
Salix exigua	Narrow leaf willow
Sambucus mexicanus	Blue elderberry
Senecio vulgaris	Common groundsel
Sorghum halapense	Johnsongrass
Trifolium spp.	Clover
Ulmus spp.	Elm tree
Verbascum thapsus	Common mullein
Vicia villosa	Hairy vetch
Vitis californica	California wild grape



APPENDIX B

STATION 65 BIOLOGICAL ASSESSMENT WILDLIFE SPECIES LIST

Scientific Name	Common Name			
Anas platyrhynchos	Mallard			
Aphelocoma californica	Western Scrub Jay			
Ardea alba	Great egret			
Ardea herodias	Great blue heron			
Boisea rubrolineata	Western Box-Elder Bug			
Buteo swainsoni	Swainson's hawk (Call)			
Cathartes aura	Turkey Vulture			
Charadrius vociferus	Killdeer			
Colaptes auratus	Northern Flicker			
Columbia livia	Rock Dove			
Corvus brachyrhynchos	American Crow			
Damselfly sp.	Blue damselfly			
Empidonax spp.	Flycatcher			
Euphagus cyanocephalus	Brewer's Black bird			
Felis silvestris	Feral Cat			
Lepus californicus	Black-tailed Jackrabbit			
Mephitis mephitis	Skunk (tracks and odor)			
Mimus polyglottos	Northern Mockingbird			
Murgantia histrionica	Harlequin bug			
Odonata Order	Dragonfly			
Passer domesticus	House Sparrow			
Pica nuttalli	Yellow-Billed Magpie			
Procyon lotor	Raccoon (tracks)			
Pseudacris regilla	Pacific Chorus Frog			
Sayornis nigricans	Black Phoebe			
Sceloporus occidentalis	Western Fence Lizard			
Sturnus vulgaris	European Starling			
Turdus migratorius	American Robin			
Zenaida macroura	Mourning Dove			



CNDDB Query for the Taylor Monument, Rio Linda, Sacramento West, Sacramento East, Florin and Clarksburg USGS 7.5 minute quadrangle maps.

	Scientific Name/Common Name	Element Code	Federal Status	State Status	GRank	SRank	CDFG or CNPS
1	Accipiter cooperii Cooper's hawk	ABNKC12040			G5	S3	sc
2	Agelaius tricolor tricolored blackbird	ABPBXB0020			G2G3	S2	SC
3	Archoplites interruptus Sacramento perch	AFCQB07010			G3	S1	SC
4	Ardea alba great egret	ABNGA05010			G5	S 4	
5	Ardea herodias great blue heron	ABNGA04010			G5	S4	
6	Athene cunicularia burrowing owl	ABNSB10010			G4	S2	SC
7	Branchinecta lynchi vernal pool fairy shrimp	ICBRA03030	Threatened		G3	S2S3	
8	Branchinecta mesovallensis midvalley fairy shrimp	ICBRA03150			G2	S2	
9	Buteo swainsoni Swainson's hawk	ABNKC19070		Threatened	G5	S2	
10	Coccyzus americanus occidentalis western yellow-billed cuckoo	ABNRB02022	Candidate	Endangered	G5T2Q	S1	
11	Desmocerus californicus dimorphus valley elderberry longhorn beetle	IICOL48011	Threatened		G3T2	S2	
12	Downingia pusilla dwarf downingia	PDCAM060C0			G3	S3.1	2.2
13	Egretta thula snowy egret	ABNGA06030			G5	S4	
14	Elanus leucurus white-tailed kite	ABNKC06010			G5	S3	
15	Elderberry Savanna	CTT63440CA			G2	S2.1	
16	Emys (=Clemmys) marmorata western pond turtle	ARAAD02030			G3G4	S3	SC
17	Emys (=Clemmys) marmorata marmorata northwestern pond turtle	ARAAD02031			G3G4T3	S 3	SC
18	Gratiola heterosepala Boggs Lake hedge-hyssop	PDSCR0R060		Endangered	G3	S3.1	1B.2
19	Great Valley Cottonwood Riparian Forest	CTT61410CA			G2	S2.1	
20	Hibiscus lasiocarpus rose-mallow	PDMAL0H0Q0			G4	S2.2	2.2
21	<i>Juglans hindsii</i> Northern California black walnut	PDJUG02040			G1	S1.1	1B.1
22	Legenere limosa legenere	PDCAM0C010			G2	S2.2	1B.1
23	Lepidurus packardi vernal pool tadpole shrimp	ICBRA10010	Endangered		G3	S2S3	
24	Linderlella occidentalis California linderiella	ICBRA06010			G3	S2S3	

CNDDB Query for the Taylor Monument, Rio Linda, Sacramento West, Sacramento East, Florin and Clarksburg USGS 7.5 minute quadrangle maps.

	Scientific Name/Common Name	Element Code	Federal Status	State Status	GRank	SRank	CDFG or CNPS
25	Northern Claypan Vernal Pool	CTT44120CA			G1	S1.1	
26	Northern Hardpan Vernal Pool	CTT44110CA			G3	S3.1	
27	Nycticorax nycticorax black-crowned night heron	ABNGA11010			G5	S 3	
28	Phalacrocorax auritus double-crested cormorant	ABNFD01020			G5	S 3	SC
29	Pogonichthys macrolepidotus Sacramento splittail	AFCJB34020			G2	S2	sc
30	Progne subis purple martin	ABPAU01010			G5	S3	sc
31	Riparia riparia bank swallow	ABPAU08010		Threatened	G5	S2S3	
32	Sagittaria sanfordii Sanford's arrowhead	PMALI040Q0			G3	\$3.2	1B.2
33	Taxidea taxus American badger	AMAJF04010			G5	S4	SC
34	Thamnophis gigas giant garter snake	ARADB36150	Threatened	Threatened	G2G3	S2S3	
35	Xanthocephalus xanthocephalus yellow-headed blackbird	ABPBXB3010			G5	S3S4	

USFWS QUAD SPECIES LIST

Federal Endangered and Threatened Species that Occur in or may be Affected by Projects in the Counties and/or U.S.G.S. 7 1/2 Minute Quads you requested

Document Number: 060925023649

Database Last Updated: September 15, 2006

Species of Concern - The Sacramento Fish & Wildlife Office no longer maintains a list of species of concern. However, various other agencies and organizations maintain lists of at-risk species. These lists provide essential information for land management planning and conservation efforts. See www.fws.gov/sacramento/es/spp_concern.htm for more information and links to these sensitive species lists.

Red-Legged Frog Critical Habitat - The Service has designated final critical habitat for the California red-legged frog. The designation became final on May 15, 2006. See our <u>map index</u>.

Species

Listed Species

Invertebrates

Branchinecta lynchi vernal pool fairy shrimp (T)

Desmocerus californicus dimorphus Critical habitat, valley elderberry longhorn beetle (X) valley elderberry longhorn beetle (T)

Lepidurus packardi vernal pool tadpole shrimp (E)

Fish

Hypomesus transpacificus Critical habitat, delta smelt (X) delta smelt (T)

Oncorhynchus mykiss
Central Valley steelhead (T) (NMFS)
Critical habitat, Central Valley steelhead (X) (NMFS)

Oncorhynchus tshawytscha
Central Valley spring-run chinook salmon (T) (NMFS)
Critical Habitat, Central Valley spring-run chinook (X) (NMFS)
winter-run chinook salmon, Sacramento River (E) (NMFS)

Amphibians

Ambystoma californiense
California tiger salamander, central population (T)

Rana aurora draytonii California red-legged frog (T)

Reptiles

Thamnophis gigas

giant garter snake (T)

Birds

Haliaeetus leucocephalus bald eagle (T)

Candidate Species

Fish

Oncorhynchus tshawytscha
Central Valley fall/late fall-run chinook salmon (C) (NMFS)

Selected Quads

SACRAMENTO EAST (512C)

County Lists

Listed Species

Invertebrates

Branchinecta conservatio
Conservancy fairy shrimp (E)

Branchinecta lynchi

Critical habitat, vernal pool fairy shrimp (X) vernal pool fairy shrimp (T)

Desmocerus californicus dimorphus

Critical habitat, valley elderberry longhorn beetle (X) valley elderberry longhorn beetle (T)

Elaphrus viridis

delta green ground beetle (T)

Lepidurus packardi

Critical habitat, vernal pool tadpole shrimp (X) vernal pool tadpole shrimp (E)

Fish

Hypomesus transpacificus Critical habitat, delta smelt (X) delta smelt (T)

Oncorhynchus mykiss

Central Valley steelhead (T) (NMFS)
Critical habitat, Central Valley steelhead (X) (NMFS)

Oncorhynchus tshawytscha

Central Valley spring-run chinook salmon (T) (NMFS)
Critical Habitat, Central Valley spring-run chinook (X) (NMFS)
Critical habitat, winter-run chinook salmon (X) (NMFS)
winter-run chinook salmon, Sacramento River (E) (NMFS)

Amphibians

Ambystoma californiense

California tiger salamander, central population (T)

Critical habitat, CA tiger salamander, central population (X)

Rana aurora draytonii

California red-legged frog (T)

Reptiles

Thamnophis gigas

giant garter snake (T)

Birds

Haliaeetus leucocephalus

bald eagle (T)

Plants

Castilleja campestris ssp. succulenta

Critical habitat, succulent (=fleshy) owl's-clover (X)

Oenothera deltoides ssp. howellii

Antioch Dunes evening-primrose (E)

Orcuttia tenuis

Critical habitat, slender Orcutt grass (X)

slender Orcutt grass (T)

Orcuttia viscida

Critical habitat, Sacramento Orcutt grass (X)

Sacramento Orcutt grass (E)

Candidate Species

Fish

Oncorhynchus tshawytscha

Central Valley fall/late fall-run chinook salmon (C) (NMFS)

Critical habitat, Central Valley fall/late fall-run chinook (C) (NMFS)

Birds

Coccyzus americanus occidentalis

Western yellow-billed cuckoo (C)

Key:

(E) Endangered - Listed as being in danger of extinction.

Service. Consult with them directly about these species.

- (T) Threatened Listed as likely to become endangered within the foreseeable future.
- (P) *Proposed* Officially proposed in the Federal Register for listing as endangered or threatened. (NMFS) Species under the Jurisdiction of the <u>National Oceanic & Atmospheric Administration Fisheries</u>

Critical Habitat - Area essential to the conservation of a species.

(PX) Proposed Critical Habitat - The species is already listed. Critical habitat is being proposed for it.

- (C) Candidate Candidate to become a proposed species.
- (V) Vacated by a court order. Not currently in effect. Being reviewed by the Service.
- (X) Critical Habitat designated for this species

Important Information About Your Species List

How We Make Species Lists

We store information about endangered and threatened species lists by U.S. Geological Survey 7½ minute quads. The United States is divided into these quads, which are about the size of San Francisco.

The animals on your species list are ones that occur within, **or may be affected by** projects within, the quads covered by the list.

- Fish and other aquatic species appear on your list if they are in the same watershed as your quad or if water use in your quad might affect them.
- Amphibians will be on the list for a quad or county if pesticides applied in that area may be carried to their habitat by air currents.
- Birds are shown regardless of whether they are resident or migratory. Relevant birds on the county list should be considered regardless of whether they appear on a guad list.

Plants

Any plants on your list are ones that have actually been observed in the area covered by the list. Plants may exist in an area without ever having been detected there. You can find out what's in the nine surrounding quads through the California Native Plant Society's online <u>Inventory of Rare and Endangered Plants</u>.

Surveying

Some of the species on your list may not be affected by your project. A trained biologist or botanist, familiar with the habitat requirements of the species on your list, should determine whether they or habitats suitable for them may be affected by your project. We recommend that your surveys include any proposed and candidate species on your list.

For plant surveys, we recommend using the <u>Guidelines for Conducting and Reporting Botanical</u>
<u>Inventories</u>. The results of your surveys should be published in any environmental documents prepared for your project.

Your Responsibilities Under the Endangered Species Act

All animals identified as listed above are fully protected under the Endangered Species Act of 1973, as amended. Section 9 of the Act and its implementing regulations prohibit the take of a federally listed wildlife species. Take is defined by the Act as "to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect" any such animal.

Take may include significant habitat modification or degradation where it actually kills or injures wildlife by significantly impairing essential behavioral patterns, including breeding, feeding, or shelter (50 CFR §17.3).

Take incidental to an otherwise lawful activity may be authorized by one of two procedures:

- If a Federal agency is involved with the permitting, funding, or carrying out of a project that may result in take, then that agency must engage in a formal consultation with the Service.
 - During formal consultation, the Federal agency, the applicant and the Service work together to avoid or minimize the impact on listed species and their habitat. Such consultation would result

Online Species List Page 5 of 5

in a biological opinion by the Service addressing the anticipated effect of the project on listed and proposed species. The opinion may authorize a limited level of incidental take.

• If no Federal agency is involved with the project, and federally listed species may be taken as part of the project, then you, the applicant, should apply for an incidental take permit. The Service may issue such a permit if you submit a satisfactory conservation plan for the species that would be affected by your project.

Should your survey determine that federally listed or proposed species occur in the area and are likely to be affected by the project, we recommend that you work with this office and the California Department of Fish and Game to develop a plan that minimizes the project's direct and indirect impacts to listed species and compensates for project-related loss of habitat. You should include the plan in any environmental documents you file.

Critical Habitat

When a species is listed as endangered or threatened, areas of habitat considered essential to its conservation may be designated as critical habitat. These areas may require special management considerations or protection. They provide needed space for growth and normal behavior; food, water, air, light, other nutritional or physiological requirements; cover or shelter; and sites for breeding, reproduction, rearing of offspring, germination or seed dispersal.

Although critical habitat may be designated on private or State lands, activities on these lands are not restricted unless there is Federal involvement in the activities or direct harm to listed wildlife.

If any species has proposed or designated critical habitat within a quad, there will be a separate line for this on the species list. Boundary descriptions of the critical habitat may be found in the Federal Register. The information is also reprinted in the Code of Federal Regulations (50 CFR 17.95). See our critical habitat page for maps.

Candidate Species

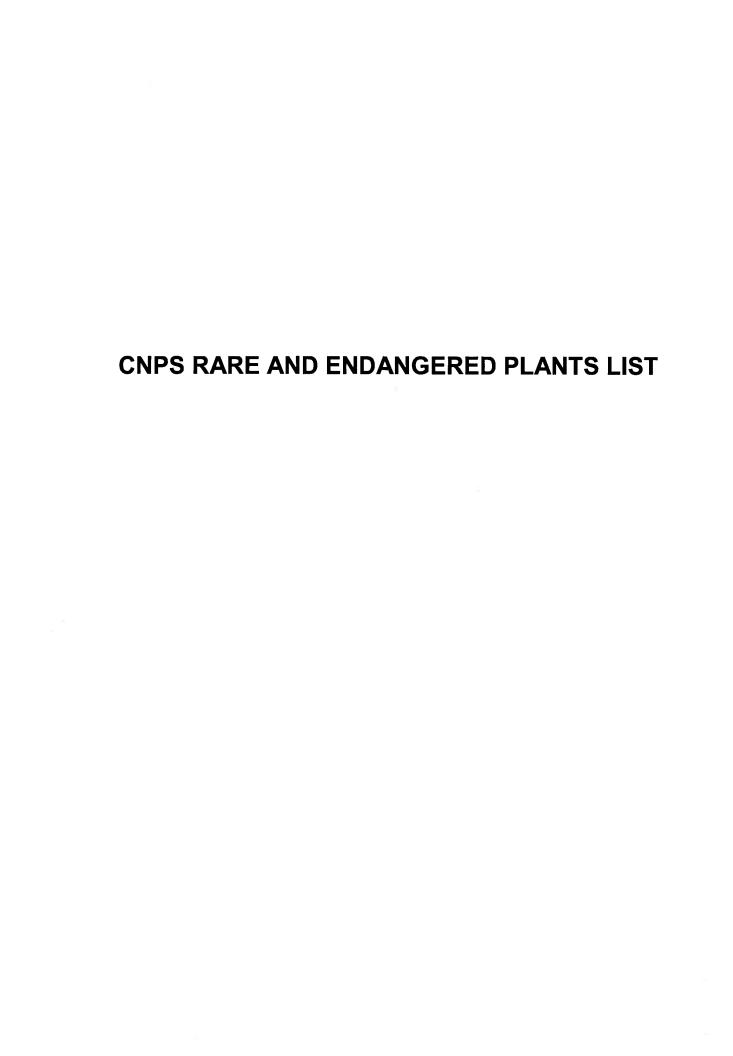
We recommend that you address impacts to candidate species. We put plants and animals on our candidate list when we have enough scientific information to eventually propose them for listing as threatened or endangered. By considering these species early in your planning process you may be able to avoid the problems that could develop if one of these candidates was listed before the end of your project.

Wetlands

If your project will impact wetlands, riparian habitat, or other jurisdictional waters as defined by section 404 of the Clean Water Act and/or section 10 of the Rivers and Harbors Act, you will need to obtain a permit from the U.S. Army Corps of Engineers. Impacts to wetland habitats require site specific mitigation and monitoring. For questions regarding wetlands, please contact Mark Littlefield of this office at (916) 414-6580.

Updates

Our database is constantly updated as species are proposed, listed and delisted. If you address proposed and candidate species in your planning, this should not be a problem. However, we recommend that you get an updated list every 90 days. That would be December 24, 2006.





Inventory of Rare and Endangered Plants v7-06c 7-11-06

Status: Search Results - Mon, Sep. 25, 2006 13:46 c



{QUADS_123} = m/512C|496A|496B|513D|513A|497A|512D|512/ Search

Tip: Terms prefixed by "+" are required, and by "-" excluded.[all tips and help.][search history]

Your Quad Selection: Sacramento East (512C) 3812154, Elk Grove (496A) 3812143, Florin (496B) 3812144, Sacramento West (513D) 3812155, Taylor Monument (513A) 3812165, Clarksburg (497A) 3812145, Carmichael (512D) 3812153, Citrus Heights (512A) 3812163, Rio Linda (512B) 3812164

Hits 1 to 9 of 9

Requests that specify topo quads will return only Lists 1-3.

To save selected records for later study, click the ADD button.

ADD checked items to Plant Press

check all

check none

Selections will appear in a new window.

open	save	hits	scientific	common	family	CNPS
		1	Downingia pusilla 🕮	dwarf downingia	Campanulaceae	List 2.2
B		1	Gratiola heterosepala	Boggs Lake hedge-hyssop	Scrophulariaceae	List 1B.2
		1	Hibiscus <u>lasiocarpus</u>	rose-mallow	Malvaceae	List 2.2
B)	ge.	1	Juglans hindsii 🕮	Northern California black walnut	Juglandaceae	List 1B.1
		1	Juncus leiospermus var. ahartii 🚳	Ahart's dwarf rush	Juncaceae	List 1B.2
	F	1	Legenere limosa 🍑	legenere	Campanulaceae	List 1B.1
		1	Orcuttia tenuis	slender Orcutt grass	Poaceae	List 1B.1
	90	1	Orcuttia viscida	Sacramento Orcutt grass	Poaceae	List 1B.1
	200	1	Sagittaria sanfordii	Sanford's arrowhead	Alismataceae	List 1B.2

To save selected records for later study, click the ADD button.

ADD checked items to Plant Press

check all

check none

Selections will appear in a new window.

No more hits.





SPECIAL STATUS SPECIES AND HABITATS WITH ZERO TO LOW POTENTIAL OF OCCURRING WITHIN THE TOWNSHIP 9 PROJECT SITE

SPECIAL STATUS SPECIES AND HABITATS WITH NONE TO LOW POTENTIAL OF OCCURRING WITHIN THE TOWNSHIP 9 PROJECT SITE

_		_	THE 9 PROJECT SITE	
Common Name	Scientific Name	Status Fed/CA/CNPS	Habitat	Likelihood of Occurrence Within the Project Site
Plants				•
Alkali milk-vetch	Astragalus tener var. tener	none/none/1B	Alkali playas, vernal pools and adjacent grasslands.	None. No suitable habitat exists on the project site.
Heartscale	Atriplex cordulata	none/none/1B	Shadscale scrub and Valley grasslands, usually on wet alkali soils.	None. No suitable habitat exists on the project site.
Brittlescale	Atriplex depressa	none/none/1B	Shadscale scrub, alkali sinks and Valley grasslands on alkali soils.	None. No suitable habitat exists on the project site.
San Joaquin saltbush	Atriplex joaquiniana	none/none/1B	Shadscale scrub and Valley grasslands on alkali soils.	None. No suitable habitat exists on the project site.
Palmate-bracted bird's-beak	Cordylanthus palmatus	none/none/1B	Alkali or saline wetlands. Requires presence of salt grass (Distichlis spicata) as a host plant.	None. No suitable habitat exists on the project site.
Rose-mallow	Hibiscus lasiocarpus	none/none/2	Margins of ponds and marshes and riparian areas.	Low The present condition of the river bank is unsuitable for this species.
Heckard's peppergrass	Lepidium latipes var. heckardi	none/none/1B	Wet grasslands on alkali soils.	None. No suitable habitat exists on the project site.
Sanford's Arrowhead	Sagittaria sanfordii	none/none/1B	Marshes, swamps and shallow margins of other waters throughout the Central Valley	Low The present condition of the river bank is unsuitable for this species.
Invertebrates				
Vernal pool fairy shrimp	Branchinecta lynchi	FT/none/none	Vernal pools and other seasonal wetlands in open grassland habitat.	None. No vernal pools exist on the project site.
Vernal pool tadpole shrimp	Lepidurus packardi	FE/none/none	Vernal pools and other seasonal wetlands in open grassland habitat.	None. No vernal pools exist on the project site.
California linderiella	Linderiella occidentalis	None/SAL/none	Vernal pools and other seasonal wetlands in open grassland habitat.	None. No vernal pools exist on the project site.
Reptiles				
Giant garter snake	Thamnophis gigas	FT/CSC/none	Historically occurred in tule and cattail marshes on the Valley floor and Sacramento-San Joaquin Delta. Now uses well vegetated marshes, streams and agricultural ditches in low elevation areas.	None. No suitable habitat exists within the project boundaries.
Fish				
Sacramento Perch	Archoplites interruptus	none/ CSC/none	Historically found in the sloughs, slow moving rivers, and lakes of the central valley. Prefer warm water. Aquatic vegetation is essential for young.	None. Extirpated from the Sacramento and American River. Populations may exist in farm ponds and reservoirs, but no instream populations remain.

SPECIAL STATUS SPECIES AND HABITATS WITH NONE TO LOW POTENTIAL OF OCCURRING WITHIN THE TOWNSHIP 9 PROJECT SITE

Common Name	Scientific Name	Status Fed/CA/CNPS	Habitat	Likelihood of Occurrence Within the Project Site
Delta smelt	Hypomesus transpacificus	FT/FT/none	Occurs in Sacramento-San Joaquin Delta most of the year. Spawns in tidally influenced freshwater wetlands and seasonally submerged uplands along the Sacramento River, downstream from its confluence with the American River.	Low. Rarely found upstream of Isleton on the Sacramento River. No spawning habitat exists.
Birds				
Cooper's hawk	Accipiter cooperii	none/CSC (Nesting)/none	Nests and forages in woodland habitats.	Low The site does not support relatively dense stands of mature trees typically used by this species for nesting.
Tricolored blackbird	Agelaius tricolor	none/CSC/none	Nest in dense stands of cattails, thickets of willows, blackberries, or tall herbs adjacent to open grasslands	None. No suitable habitat exists on the project site.
Burrowing owl	Athene cunicularia	none/CSC/none	Grasslands, open areas near human habitation; nests in old burrows of ground squirrels or other small mammals.	Low. Although ground squirrel burrows are present, no burrowing owls were observed. No suitable foraging habitat exists on the project site.
Habitats				
Great Valley Cottonwood Riparian Forest		S2.1– Very Threatened	Riparian community of which cottonwoods are the primary species.	Low quality. The riparian habitat is too degraded and fragmented to be considered cottonwood forest.
Elderberry Savanna Notes:		S2.1 – Very Threatened	Combination of elderberry bushes, in grassland mosaic with some overstory trees.	Low. Site supports elderberry bushes, but the savanna complex is not present.

Status:

Federal

FE Federally listed as Endangered FT Federally listed as Threatened

State

ST State-listed as Threatened

CSC California Department of Fish and Game designated "Species of Special Concern"
SAL Species included on the CDFG "Special Animals List"
FP Fully Protected

1B

Rare or Endangered in California and elsewhere
Rare or Endangered in California, more common elsewhere
CDFG Natural Diversity Database (CNDDB, September 2006), and the CNPS Electronic Inventory September 2006.