

Appendix C  
**Evaluation of Species  
Considered for Coverage**

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## C.1 Introduction

Pursuant to the Endangered Species Act (ESA) and Natural Community Conservation Planning Act (NCCPA), incidental take authorizations may be required for species covered under the Yolo HCP/NCCP (“covered species”) to implement the covered activities over the term of the Yolo HCP/NCCP. Species the Yolo Habitat Conservancy (Conservancy) considered for coverage were special-status species that could be present in the Plan Area. The Conservancy limited consideration for coverage of nonlisted species to special-status species because, by definition, federal and state wildlife agencies recognize these species as declining and therefore more likely than other nonlisted species to become listed at some time during implementation of the covered activities. For the purpose of the HCP/NCCP, the Conservancy defines special-status species as species that meet one or more of the following criteria:

- Listed as threatened or endangered under the ESA;
- Proposed or candidates for listing under the ESA;
- Listed as threatened or endangered under the California Endangered Species Act (CESA);
- Candidates for listing under CESA;
- California species of concern;
- Plants listed as rare under the California Native Plant Protection Act (NPPA); or
- Plants included in the California Native Plant Society (CNPS) Rank 1A, 1B, or 2.

Sources of information used to identify the special-status species that could be present in the Plan Area are as follows:

- Department of Fish and Wildlife’s (DFW’s) California Natural Diversity Database (CNDDDB);<sup>1</sup>
- U.S. Fish and Wildlife Service (USFWS) list of endangered and threatened species that occur in or may be affected by projects in Yolo County;<sup>2</sup>
- Yolo County General Plan; and
- Recorded observations of special-status species provided by local resource experts.

The Conservancy evaluated approximately 175 species for inclusion as covered species. The Conservancy assembled the evaluation list based on species legal status, conservation status, and potential occurrence in the Plan Area based on the sources of information described above. Table C-1 lists these special-status species and evaluates them for coverage.

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<sup>1</sup> Source: CNDDDB RareFind 3 database (2006) and [http://imaps.dfg.ca.gov/viewers/cnddb\\_quickviewer/](http://imaps.dfg.ca.gov/viewers/cnddb_quickviewer/).

<sup>2</sup> Source: [http://www.fws.gov/sacramento/es/spp\\_lists/auto\\_list.cfm](http://www.fws.gov/sacramento/es/spp_lists/auto_list.cfm).

## C.2 Selection of Proposed Covered Species

The Conservancy used five criteria to evaluate the potential species identified in Table C-1. The Conservancy recommended these species for coverage if they met all five criteria described below.

- **Geographic Range.** The species is currently known to occur or is expected to occur in the Plan Area based on knowledge of the species' geographic range and the presence of suitable habitat.
- **Listing Status.** The species is either currently listed under the ESA or CESA, is likely to become listed during the term of the Permits, or is fully protected under the California Fish and Game Code.
- **Effects of Covered Activities.** The species could be adversely affected by covered activities that are currently occurring within the Plan Area or are likely to occur over the life of the Permits.
- **Adequacy of Existing Data on the Species.** Sufficient data is available regarding the species' life history, habitat requirements, and presence in the Plan Area to adequately evaluate effects on the species and develop appropriate conservation measures.
- **Cost and Funding.** Funding will be available to provide sufficient monitoring and conservation over the 50-year permit term to meet NCCP standards for the species.

The Conservancy applied these criteria iteratively from reviews conducted by the planning team based on a variety of published and unpublished information sources and input from the Advisory Committee, DFW, USFWS, the Independent Science Advisors, independent species experts, and the public.

Table C-1 presents the evaluation process and results of the process for each of the special-status animal and plant species considered. As a result of this evaluation, the Conservancy identified 12 species as meeting the criteria for inclusion as covered species in the Yolo HCP/NCCP; Chapter 1, *Introduction*, Table 1-1, lists these species.

### C.2.1 Species Range Evaluation

The Conservancy used the following data sources to evaluate the potential for the species on the draft species list to occur within Yolo County.

The Conservancy used available database sources to display species ranges in an interactive form and on hardcopy maps. Biologists used these ranges to determine the likelihood of a species occurring within the study area. The ranges provided rationale for inclusion on the list based on the potential for a species to occur within the study area. Range and distribution sources included:

- **CNPS Quads.** A database containing U.S. Geological Survey (USGS) 7.5-minute quadrangles for which plant species are known to occur.
- **CalJep Ranges.** A database containing distributions for plant species based on suitable habitat. In addition to known distributions, this database provides possible distributions for each species based on potential habitat.
- **Critical Habitat.** Proposed and designated USFWS critical habitats for plant and wildlife species within the study area. Critical habitats represent important areas of habitat that should be protected to ensure recovery of threatened and endangered species.

- **California Wildlife Habitat Relationships (CWHR) Ranges.** A database containing distributions for wildlife species. Ranges are given only for the species level; subspecies are not recognized in this database.
- **Online Databases** (e.g., Birds of North America, Butterflies and Moths of North America), regional experts and their knowledge of species on selected species when GIS data was unavailable for a given species.

Location databases provided documentation of known locations for individual species. These locations are based on confirmed sightings of a species in a specific area. The Conservancy combined this data with known or predicted ranges to further refine the draft species list. Locations sources included:

- **CNDDB Locations.** Location database containing confirmed species locations for both plant and wildlife species.
- **USFWS Locations.** Location database containing confirmed species points for both plant and wildlife species.
- **Conservancy Database.** A database compilation based on several local data sources of confirmed species locations for both plant and wildlife species.

Species were evaluated to determine whether they occur or are likely to occur within Yolo County. Existing information regarding locations of occurrences and suitability of habitat conditions were assessed for the Plan Area. On the basis of this review, each species was placed in one of the following three categories:

- **Present.** The species has been documented to occur in the Plan Area.
- **Potentially Present.** Suitable habitat exists in the Plan Area and the known current or historical range of the species is sufficiently close to the Plan Area such that species presence is possible.
- **Absent.** Neither the species nor its habitat has been documented to occur within the Plan Area and its known current or historical ranges do not indicate a potential for occurrence.

The Conservancy retained species categorized as present or potentially present for consideration for coverage under this criterion.

## C.2.2 Listing Status Evaluation

The Conservancy intended this criterion to identify those species on the initial list that either are currently listed as state or federally endangered or threatened or have a designated sensitivity status or known trend that indicates they are likely to be state-listed or federally listed over the life of the plan.

The Conservancy updated the state and federal listing status for all species on the draft covered species list, including the following state or federal listing or status categories to indicate species appropriateness for coverage:

- Listed or proposed for listing as endangered or threatened under the federal ESA.
- Listed or candidate for listing as endangered, threatened, or rare under CESA.

- Listed as rare under California NPPA.
- Species designated as Fully Protected under the California Fish and Game Code.
- DFW Species of Special Concern Species.
- Designated as Sensitive by the U.S. Bureau of Land Management (BLM) or U.S. Department of Agriculture (USDA) Forest Service (USFS).
- Identified by the California Native Plant Society (CNPS) Rare Plant Ranks 1 and/or 2, as species that meet the definition of threatened, or endangered as defined under the California Environmental Quality Act (CEQA).

Species identified with lower status designations (e.g., CNPS Ranks 3 and 4 and species covered only under the Migratory Bird Treaty Act [MBTA]) were not considered as likely to be listed over the life of the plan, unless other supporting information was available that suggested potential for listing.

### **C.2.3 Potential for Covered Activities to Adversely Affect the Species**

The HCP/NCCP will support issuance of the permits that provide incidental take authorization for covered activities. Therefore, the Conservancy only proposed for coverage species likely to be taken by covered activities. The Conservancy determined potential for take of the species based on the habitats the species use, the timing of their occurrence, and evaluation of the types of activities covered in the HCP/NCCP and the potential to cause take as a result of direct mortality during operations, habitat modification that could lead to harm or mortality, or disturbance by human activity.

There are some species that initial evaluation indicates could be affected by covered activities, but for which the eventual Yolo HCP/NCCP conservation measures may indicate that to achieve conservation goals no take of the species would be allowed. Such species are considered to meet the potential to be affected criterion because the plan would provide for their conservation through avoidance measures and the applicants would request that such species be covered in the federal and state permits and authorizations issued.

### **C.2.4 Sufficiency of Species Data for Planning**

To obtain regulatory coverage for a species through the HCP/NCCP, sufficient data on the species' life history, habitat requirements, and occurrence in the Plan Area must be available to adequately evaluate the likely effects of covered activities and to develop appropriate conservation measures. Without sufficient data, a scientifically justified conservation strategy cannot be developed and the species would be removed from the final draft species list.

The Conservancy drafted detailed species accounts summarizing life history, distribution, and threats and limiting factors for a set of 69 species considered likely to be included as covered species (Appendix A, *Covered Species Accounts*). The Conservancy reviewed species accounts and other available information to determine the extent of known scientific information and data for each species. The Conservancy also considered recommendations from the wildlife agencies. The Conservancy did not recommend for coverage those species for which the Conservancy considered

available scientific and commercial information and data to be inadequate to support the assessment of impacts and the development of a conservation strategy.

## **C.2.5 Cost and Funding**

The Conservancy evaluated the likelihood that a conservation strategy could be implemented for each of the covered species to meet the NCCPA and FESA standards, given costs and likely funding. Species that were listed or proposed for listing were given the highest priority for coverage, and covered species that could be added to the list at a reasonable cost were then added. For example, for species that were not listed or proposed for listing, the Conservancy prioritized addition of those species that are expected to benefit from the conservation actions of another covered species and would therefore not require a relatively large additional cost to cover. The Conservancy only applied this criterion to species that met all the other four criteria for including on the covered species list.

**Table C-1. Evaluation of Special-Status Animals for Coverage under the Yolo Natural Heritage Program**

Scientific Name/ Common Name	Status <sup>a</sup> (Federal/State/ CNPS)	Selection Criteria For Coverage <sup>b</sup>					Proposed for Coverage	Comments and Rationale
		Listing Potential	Likely to Occur in the Plan Area	Potential to Adversely Affect <sup>d</sup>	Sufficient Information	Cost and Funding		
<b>Mammals</b>								
<i>Taxidea taxus</i> American badger	-/SSC/-	-	+	+	+	N/A	No	<p>Although a special-status species that has experienced local declines in some areas of the state, there is no indication that it has experienced declines sufficient to warrant listing within the plan timeframe. This species is not covered in other local HCP/NCCPs.</p> <p>While there are no documented occurrences in the Plan Area, this species could potentially occur in grassland habitats along the western edge of the valley.</p> <p>Coverage is not recommended because the species is not currently listed, has low potential to be listed within the plan timeframe, and because the lack of confirmed sightings suggest the species may not currently occur in the Plan Area.</p>
<i>Bassariscus astutus</i> Ringtail	-/FP/-	+	+	-	+	N/A	No	<p>The ringtail is state Fully Protected, and thus cannot be taken. While the species is known to occur in dense riparian woodlands, the limited extent of suitable riparian habitat in the Plan Area limits the potential for occurrence primarily to the upper reaches of Putah and Cache Creeks, and thus also limits the potential for effect. Continuing ongoing conservation efforts and additional conservation afforded under this plan are expected to benefit the ringtail.</p>

Scientific Name/ Common Name	Status <sup>a</sup> (Federal/State/ CNPS)	Selection Criteria For Coverage <sup>b</sup>					Proposed for Coverage	Comments and Rationale
		Listing Potential	Likely to Occur in the Plan Area	Potential to Adversely Affect <sup>d</sup>	Sufficient Information	Cost and Funding		
								Coverage is not recommended because the species cannot be taken due to its status as Fully Protected, and is unlikely to be affected by covered activities.
<i>Perognathus inornatus inornatus</i> San Joaquin pocket mouse	-/-/-	-	+	+	+	N/A	No	The California Department of Fish and Wildlife (DFW) includes this species on its Special Animals list because it is a BLM sensitive species and is an IUCN candidate. It is not, however, a state species of special concern, nor does it have any other status. This species' range includes the grassland and savannah habitats that occur around the perimeter of the Central Valley up to about 1,500 feet, and grassland habitats in the Central Coast ranges. Most reported occurrences from CNDDDB are from the San Joaquin Valley. Few records have been reported from the Sacramento Valley and none from Yolo County.  Coverage is not recommended because this species has low potential to be listed within the Plan timeframe.
<i>Antrozous pallidus</i> Pallid bat	-/SSC/-	-	+	+	+	N/A	No	In addition to being a state species of special concern, this species is also included on the International Union for the Conservation of Nature (IUCN) Red List as Least Concern and is designated as High Priority by the Western Bat Working Group (WBWG). While declines of this species have been reported, the pallid bat is widespread throughout California. There are insufficient data to indicate that listing of this species would be warranted within the plan timeframe. This species is not covered in most other local HCP/NCCPs.

Scientific Name/ Common Name	Status <sup>a</sup> (Federal/State/ CNPS)	Selection Criteria For Coverage <sup>b</sup>					Proposed for Coverage	Comments and Rationale
		Listing Potential	Likely to Occur in the Plan Area	Potential to Adversely Affect <sup>d</sup>	Sufficient Information	Cost and Funding		
								<p>This widely distributed species roosts in small colonies in caves, rock crevices, and tree hollows, but will also use bridges and buildings. Potential to adversely affect is based on the potential for removal of occupied trees, buildings, and bridges.</p> <p>Coverage is not recommended because the species has low potential to be listed.</p>
<p><i>Lasiurus blossevillii</i> Western red bat</p>	-/SSC/-	-	+	-	+	N/A	No	<p>In addition to being a state species of special concern, this species is also designated as High Priority by WBWG. While declines of this species have been reported, the western red bat is widespread throughout California. There are insufficient data to indicate that listing of this species would be warranted within the plan timeframe. This species is not covered in other local HCP/NCCPs.</p> <p>This species roosts in trees and is usually solitary. In the Plan Area, potentially occupied habitat includes mature riparian – usually cottonwood/sycamore riparian woodland. Potential to affect based on the potential for removal of active roost trees.</p> <p>Coverage is not recommended because the species has low potential to be listed and existing protections and proposed conservation efforts, particularly for riparian habitat, are expected to benefit this species.</p>

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		Listing Potential	Likely to Occur in the Plan Area	Potential to Adversely Affect <sup>d</sup>	Sufficient Information	Cost and Funding		
<i>Corynorhinus townsendii</i> Townsend's western big-eared bat	-/C/-	+	+	-	-	N/A	No	<p>In addition to being a state species of special concern, this species is also included on the IUCN Red List as Vulnerable and is designated as High Priority by WBWG. This species has been more widely studied in California and may be more vulnerable due to its more colonial nature relative to other sensitive bat species, such as western red bat. It is therefore reasonable to conclude that this species could be listed within the plan timeframe. It is also included as a covered species in the East Contra Costa HCP/NCCP.</p> <p>This is a highly colonial bat that typically occupies natural caves; however, it is also known to colonize old structures such as barns. It is widely distributed throughout most of California and while there are no known roosts or maternity sites from the Plan Area, suitable roost or maternity sites are likely available in the western uplands and there is potential for occurrence in old barns and other structures on the valley floor.</p> <p>Coverage is not recommended because the species does not have a high likelihood of being affected by covered activities, and because there is not sufficient information available to develop an adequate conservation strategy for the species.</p>

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<b>Birds</b>								
<i>Xanthocephalus xanthocephalus</i> Yellow-headed blackbird	-/SSC/-	-	+	+	+	N/A	No	<p>Priority 3 as a state species of special concern with relatively stable populations since 1980. Not covered or considered for coverage in other HCP/NCCPs. The species is unlikely to be listed within the plan timeframe.</p> <p>Most occurrences of this species are from wetland habitats in the Yolo Bypass, primarily on the Yolo Bypass Wildlife Area, and thus covered activities are not expected to substantially affect this species' habitat.</p> <p>Coverage is not recommended because the species has a relatively low potential for future listing and because it occurs primarily in areas not affected by covered activities.</p>

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		Listing Potential	Likely to Occur in the Plan Area	Potential to Adversely Affect <sup>d</sup>	Sufficient Information	Cost and Funding		
<i>Agelaius tricolor</i> Tricolored blackbird	BCC/SSC/ -	+	+	+	+	+	Yes	<p>Significant and dramatic population declines and covered or considered for coverage under all other regional HCP/NCCPs. This species is likely to be listed within the plan timeframe.</p> <p>Most nesting occurs in wetland habitats within the Yolo Bypass, but the species forages more widely throughout the Plan Area and has potential to nest in remnant wetland patches and some agricultural habitats. Sensitive to disturbances and habitat loss.</p> <p>Coverage is recommended because the species has a high potential for future listing and because it could be affected by covered activities.</p>
<i>Ammodramus savannarum</i> Grasshopper sparrow	-/SSC/-	+	+	-	+	-	No	<p>Population declines have been reported for this species, particularly in the Central Valley, and there is a reasonable likelihood of future listing. This species is not considered for coverage in other regional HCP/NCCPs.</p> <p>Very occasional records of the species from the Plan Area with breeding documented only in the Yolo Bypass. Potential to occur in western grasslands and some restored grassland areas in the interior of the Plan Area.</p> <p>Coverage is not recommended because the Yolo HCP/NCCP covered activities are not likely to result in take of the species.</p>
<i>Icteria virens</i>	-/SSC/-	-	+	+	+	N/A	No	<p>Covered under the San Joaquin County HCP, and considered for coverage under the Solano and South Sacramento County</p>

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		Listing Potential	Likely to Occur in the Plan Area	Potential to Adversely Affect <sup>d</sup>	Sufficient Information	Cost and Funding		
Yellow breasted chat								<p>HCPs. A fairly conspicuous species and relatively good occurrence and distribution data are available to evaluate trends. Federal and state listing are unlikely due to wide distribution.</p> <p>This species occurs in riparian habitat and has been reported from upper Putah Creek. It could be affected by actions that modify riparian habitat. However, there may be few covered activities that are likely to modify currently suitable riparian habitat.</p> <p>Coverage is not recommended for this species because state or federal listing is not anticipated, and adverse effects to occupied riparian habitat are expected to be minimal.</p>
<i>Progne subis</i> Purple martin	-/SSC/-	+	+	-	+	N/A	No	<p>There are no recent breeding occurrences of this species from the Plan Area; urban-nesting birds from Sacramento may occasionally forage in Yolo County agricultural lands. Suitable woodland habitat may occur in the western portion of the Plan Area, but there are no reported occurrences. Due to substantial population declines since the 1960s, it is reasonable that this species could become listed within the plan timeframe. Its distribution in the Central Valley is limited to several urban sites, including Sacramento.</p> <p>Since the species is not known to nest within the Plan Area, and with the exception of the Sacramento urban sites is absent from the region; project activities are not expected to adversely affect this species. Riparian protection and</p>

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								restoration and upland conservation actions are expected to benefit this species. Coverage is not recommended because the species is not known to nest within the Plan Area and thus would not be affected by covered activities. Although the species has a high potential for future listing, current and proposed protections and conservation efforts would improve habitat conditions for this species.
<i>Riparia riparia</i> Bank swallow	-/T/-	+	+	+	+	+	Yes	Possibility for nesting colonies along the Sacramento River near Fremont Weir, and along portions of Cache Creek. This species is state listed and due to long term and continuing population declines could become federally listed within the plan timeframe. Coverage is recommended because the species is currently listed and because it could be affected by covered activities.
<i>Lanius ludovicianus</i> Loggerhead shrike	BCC/SSC/ -	-	+	+	+	N/A	No	This species is fairly widespread in agricultural and grassland habitats throughout the lowland portion of the Plan Area and could be affected by covered activities. Coverage is not recommended, however, because there is a low potential for future listing.

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<i>Athene cunicularia hypugaea</i> Western burrowing owl	BCC/SSC/-	+	+	+	+	+	Yes	<p>This species is a covered species under all regional Central Valley HCP/NCCPs. Populations have and continue to decline due to widespread urbanization and agricultural conversion. It has a moderate to high likelihood of becoming state-listed within the plan timeframe. It is less likely to become federally listed due to relatively stable populations in many areas outside of California. This species occurs throughout the Plan Area, but other than individual occurrences is largely restricted to the Yolo Bypass and several other localized sites.</p> <p>Burrowing owls could potentially be affected from removal of grassland and pastureland habitats associated with covered activities.</p> <p>Coverage is recommended because there is a reasonably high potential for future listing and because the species could be affected by covered activities.</p>
<i>Asio otus</i> Long-eared owl	-/SSC/-	-	+	+	+	N/A	No	<p>This species has been a state species of special concern since 1978. Its range includes all of California with the exception of much of the Central Valley. There is little recent reliable data on the abundance of this elusive species and insufficient data to indicate that a listing is warranted within the plan timeframe.</p> <p>Although there are no recently reported occurrences of this species from the plan area, long-eared owl could occur in riparian and other woodland habitats and potentially be</p>

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								<p>affected from removal of riparian woodland and other woodland nesting habitats and grassland/seasonal wetland habitats foraging habitats.</p> <p>Coverage is not recommended because there is relatively low potential for future listing, there are no recently reported breeding occurrences in the vicinity of covered activities, and conservation efforts, particularly riparian protection and restoration, are expected to increase habitat and opportunities for occurrence.</p>
<i>Asio flammeus</i> Short-eared owl	-/SSC/-	-	+	+	+	N/A	No	<p>This species has been a state species of special concern since 1978. While local population declines have been reported and there are few recent breeding records from the Plan Area, there is insufficient data on statewide populations to indicate that a listing would be warranted within the plan timeframe.</p> <p>Coverage is not recommended because there is relatively low potential for future listing and most currently suitable habitat occurs on the Yolo Bypass Wildlife Area.</p>

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<i>Coccyzus americanus occidentalis</i> Western yellow-billed cuckoo	C,BCC /E/-	+	+	+	+	+	Yes	<p>This species is currently state listed. It is a covered species in the San Joaquin County HCP. It is not known to breed in the Plan Area and there is currently insufficient available breeding habitat; however, there have been recent migratory and breeding season occurrences, including several from the Cache Creek Settling Basin and Putah Creek Sinks. Since the status of the developing riparian forest within the Cache Creek Settling Basin is unclear, the species could potentially be affected.</p> <p>Coverage is recommended because the species is listed, appears to be re-inhabiting some portions of the Plan Area, and because the species could be affected by covered activities. Existing and proposed protections and conservation effects to maintain and restore riparian habitats would benefit this species and potentially increase its occurrence and use of the Plan Area.</p>
<i>Chlidonias niger</i> Black tern	-/SSC/-	+	+	+	+	-	No	<p>This species was recently designated a state species of special concern. While local population declines are reported, particularly from the Central Valley, the species continues to occupy most of its historical range in northeastern California and adapted somewhat to rice agriculture in the Sacramento Valley. The stability of the population over the long-term is uncertain, however. While unlikely to be listed federally, there is a reasonable potential for state listing within the plan timeframe.</p>

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		Listing Potential	Likely to Occur in the Plan Area	Potential to Adversely Affect <sup>d</sup>	Sufficient Information	Cost and Funding		
								<p>Migrants have been documented in the Yolo Basin, where it is associated with rice fields. Breeding habitat is available where wetlands and rice agriculture occur in the Plan Area, but breeding has not yet been confirmed. Most observations have been on rice lands in the Yolo Bypass Wildlife Area; however, rice-associated habitat could also be affected by farm management activities on private lands in the Yolo Bypass and the Colusa Basin.</p> <p>Coverage is not recommended because there is not a high potential for future listing, and the funding expected to be available is not expected to be sufficient to cover this species.</p>
<p><i>Charadrius alexandrinus</i> Snowy plover (interior population)</p>	BCC/SSC/ -	+	+	-	+	N/A	No	<p>The range of the inland population of the snowy plover includes a small portion of the Plan Area in the Yolo Basin. This population is a state species of special concern and a federal bird of conservation concern. It is reasonable that this population (along with the coastal population that is currently federally listed) could become listed within the plan timeframe.</p> <p>However, most of the few records of this species from the Plan Area are from the Yolo Bypass Wildlife Area.</p> <p>Coverage is not recommended because the species is not expected to be affected by covered activities.</p>

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<i>Charadrius montanus</i> Mountain plover	BCC/SSC/ -	+	+	-	+	N/A	No	<p>In addition to being a state species of special concern and federal bird of conservation concern, the mountain plover is also designated as Vulnerable on the IUCN Red List. The species is being considered as a covered species on the Solano County HCP. While there is potential that the species could become federally listed within the plan timeframe, since the species only winters in California, it is unlikely that the species would become state listed.</p> <p>Mountain plovers do not breed in California, but the species has been reported during winter at several sites in Yolo and Solano Counties, including occasional occurrences in the Yolo Basin. However, given that the species only winters in a small portion of the plan area and potential winter habitat in Yolo County is abundant, potential impacts are limited to temporary displacement during winter foraging, and thus covered activities are not expected to affect this species.</p> <p>Coverage is not recommended because the species is not expected to be affected by covered activities.</p>
<i>Laterallus jamaicensis coturniculus</i> California black rail	BCC /T,FP/-	+	+	-	+	N/A	No	<p>This state-listed species is also being considered as a covered species in the Solano HCP/NCCP, and is a covered species in the San Joaquin County HCP.</p> <p>This species is closely associated with tidal marsh habitats and could potentially occur in marshes on the Yolo Basin Wildlife Area or other portions of the south bypass. Only one</p>

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								black rail has been reported from Yolo County and is presumed to have been detected in the Yolo Bypass. Coverage is not recommended because the species is not expected to be affected by covered activities.
<i>Falco peregrinus anatum</i> American Peregrine Falcon	BCC/FP/-	+	+	-	+	N/A	No	<p>The peregrine falcon was recently delisted by the USFWS and DFW, following recovery from pesticide-related population decline. It remains state fully protected; and is a federal bird of conservation concern. It is a covered species in the Natomas Basin HCP, and is being considered for coverage in the South Sacramento County HCP.</p> <p>There is only one breeding record of peregrine falcon from the extreme southwest corner of the Plan Area at Monticello Dam. It is occasionally observed foraging in the Plan Area during the winter. Potential effects are limited to temporary displacement of foraging individuals during winter. Thus, the project is not expected to adversely affect this species.</p> <p>This species is not proposed for coverage because neither conservation actions nor covered activities are expected to affect this species.</p>

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<i>Haliaeetus leucocephalus</i> Bald eagle	-/E,FP/-	+	+	-	+	N/A	No	<p>The bald eagle was recently delisted by the USFWS and currently has no federal status. It remains a state endangered species and state fully protected species. The species is being considered for coverage under the South Sacramento County HCP.</p> <p>There is currently one bald eagle nesting territory in the Plan Area. It occurs on federal Bureau of Land Management (BLM) land in the northwest corner of the county. Other potential nesting habitat occurs in remote higher elevation areas of the county that are not subject to covered activities. Wintering bald eagles occur in the Cache Creek canyon between the county line and Rumsey, an area also not subject to covered activities. Thus, project activities are not expected to adversely affect this species.</p> <p>Coverage is not recommended because the species is not expected to be affected by covered activities.</p>
<i>Circus cyaneus</i> Northern harrier	-/SSC/-	-	+	+	+	N/A	No	<p>This is a covered species under the San Joaquin County HCP and is being considered for coverage under the Solano HCP/NCCP and South Sacramento HCP. This species occurs throughout the lowland portion of the Plan Area. While declines of this species have been documented locally, it remains widespread throughout California and population trends suggest a relatively stable statewide population. However, because this species occurs in lowland areas subject to a variety of land use changes including</p>

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								<p>urbanization and agricultural crop conversion, it continues to be susceptible to future declines.</p> <p>This species nests and forages in agricultural and grassland habitats and has potential to be affected by covered activities, including direct mortality from agricultural operations.</p> <p>Coverage is not recommended for coverage because the species has low potential for future listing.</p>
<p><i>Elanus leucurus</i> White-tailed kite</p>	-/FP/-	+	+	+	+	+	Yes	<p>The white-tailed kite is state Fully Protected and therefore cannot be taken. It is being considered for coverage under the South Sacramento County HCP. DFW considered this a 'watch' species (Shuford and Gardali 2008), but it was not included on the list of bird species of special concern primarily because breeding bird surveys conducted between 1968 to 2004 (Sauer et al. 2005) indicate relatively stable populations. However, this species has historically suffered substantial population declines with nesting populations that continue to fluctuate. While federal listing is unlikely, there is reasonable potential for the species to become state listed within the plan timeframe.</p> <p>The species uses riparian and other woodland nesting habitats and grassland/agricultural foraging habitats and could be affected by covered activities.</p> <p>Coverage is recommended because the species could become listed and would be affected by covered activities.</p>

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<i>Buteo swainsoni</i> Swainson's hawk	BCC /T/-	+	+	+	+	+	Yes	<p>The state-threatened Swainson's hawk is a covered species or is being considered for coverage in Central Valley regional HCPs/NCCPs.</p> <p>Swainson's hawks nest in riparian woodlands, roadside trees, tree rows, isolated trees, woodlots, and trees in farmyards and rural residences. They forage in grasslands and agricultural fields. Nest sites and foraging habitat would be affected by covered activities.</p> <p>Coverage is recommended because the species is listed and because it could be affected by covered activities.</p>
<i>Aquila chrysaetos</i> Golden eagle	BCC/FP/-	+	+	-	+	N/A	No	<p>The golden eagle is a state Fully Protected species and therefore cannot be taken. It is also protected under the federal Bald and Golden Eagle Protection Act. The species was formerly a state species of concern, but was removed from that list and is currently on DFW's Watch List. It is also designated as a Least Concern species on the IUCN Red List and is a federal Bird of Conservation Concern. The East Contra Costa HCP/NCCP and San Joaquin County HCP both include the golden eagle as a covered species, and the Solano and Sacramento HCPs are considering the species for coverage.</p> <p>Golden eagles nest only in the higher elevations of the western uplands and occasionally forage in the grasslands on the western edge of the valley. They also occasionally hunt on the valley floor during winter. Covered activities will have</p>

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								a minimal effect on this species other than to potentially reduce available foraging habitat on the valley floor. Coverage is not recommended because no direct effects on breeding sites are expected from covered activities and because the potential loss of lowland habitat from covered activities is not expected to substantially modify foraging use of the valley floor.
<i>Aythya Americana</i> Redhead (nesting)	-/SSC/-	-	+	-	+	N/A	No	This species has declined throughout much of its range in California in recent years. Restricted primarily to state and federal refuges, restoration activities in these areas have failed to restore deep water habitats required by redhead. However, this species would likely respond to changes in refuge management and thus there is no indication that it would become listed within the plan timeframe. It is not covered or being considered for coverage in other Central Valley regional HCPs/NCCPs.  This species breeds in the Yolo Bypass – mainly on the DFW refuge. No other suitable habitat exists for this species within the Plan Area.  Coverage is not recommended because this species is not expected to be affected by covered activities.

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<i>Ixobrychus exilis</i> Least bittern (nesting)	-/SSC/-	-	+	-	+	N/A	No	<p>This species has been documented more regularly in recent years, and while possibly attributed to an increase in observer coverage, information on population trends are unreliable. While this species has declined as a result of loss of freshwater marsh habitats, there is no indication that a listing of this species would be warranted within the plan timeframe.</p> <p>This species occurs in fresh water marsh habitats on the Yolo Bypass Wildlife Area. Available habitat may currently be limited to the Yolo Bypass Wildlife Area, but other suitable habitat may occur elsewhere in the bypass (e.g., Conaway Ranch) that could be subject to covered activities.</p> <p>Coverage is not recommended because this species is not expected to be listed within the plan timeframe and because all reported occurrences are from the Yolo Bypass Wildlife Area and thus would not be affected by covered activities.</p>
<i>Falco mexicanus</i> Prairie falcon	BCC/-/-	-	+	-	+	N/A	No	<p>Recently dropped as a state species of special concern, the prairie falcon has low potential for future listing. It is not covered under most other local HCP/NCCPs.</p> <p>This species occurs only in the high elevations of the western mountains where only two nest sites have been reported. They may occasionally use the foothill grasslands for foraging and are found occasionally in the valley during winter. Covered activities are not expected to affect this species.</p>

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								Coverage is not recommended because the species has low potential for future listing and would not be affected by covered activities.
<i>Pica nuttalli</i> Yellow-billed magpie	-/-/-	-	+	+	+	N/A	No	Susceptible to West Nile virus and suffering recent population declines that are not related to habitat loss. This species is found throughout the lowland areas of the Plan Area including urban areas. If populations rebound due to West Nile virus resistance, the potential for future listing would be very low, as habitat remains abundant. This species could be affected by covered activities. Coverage is not recommended because the species has a low potential for future listing.
<b>Reptiles</b>								
<i>Thamnophis gigas</i> Giant garter snake	T/T/-	+	+	+	+	+	Yes	This state and federally listed species is covered under all other local HCP/NCCPs. Potential effects could occur through disturbance of watercourses and adjacent upland habitats from covered activities. Coverage is recommended because this species is listed and could be affected by covered activities.

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<i>Phrynosoma coronatum frontale</i> Coast horned lizard	-/SSC/-	+	-	-	+	N/A	No	<p>This species is covered under the San Joaquin County HCP. The potential for future listing is considered moderate but may be possible within the plan timeframe.</p> <p>While considered within the range of the species, there are no documented occurrences from the Plan Area. Loss of grassland habitats along the western edge of the valley would reduce available habitat for this species, but no direct impacts on this species are expected to occur. Conservation actions through the upland strategy are expected to enhance conditions.</p> <p>This species is neither recommended for coverage nor as a species of local concern because it is not known to occur in the Plan Area and thus would not be subject to impacts from covered activities.</p>
<i>Actinemys marmorata</i> Western pond turtle	-/SSC/-	+	+	+	+	+	Yes	<p>In addition to being a state species of special concern, this species is also designated as Vulnerable on the IUCN Red List. It is covered or considered for coverage on all local HCP/NCCPs. It is reasonable that this species could become listed within the plan timeframe.</p> <p>This species could potentially be affected by ground disturbances in watercourses and adjacent uplands associated with covered activities.</p>

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								Coverage is recommended because there is reasonable potential for future listing and because the species could be affected by covered activities.
<b>Amphibians</b>								
<i>Rana aurora draytonii</i> California red-legged frog	T/SSC/-	+	-	-	+	N/A	No	<p>This species is covered under the East Contra Costa HCP/NCCP and the San Joaquin County HCP and is considered for coverage under the Solano HCP.</p> <p>While within the former range of the species, there are no reported occurrences from the Plan Area and the potential for occurrence is low. Suitable habitat could be affected through disturbance of ponds or streams and associated uplands, but direct impacts are not expected to occur.</p> <p>This species is not recommended for coverage because it is not known to occur in the Plan Area and would therefore not be subject to impacts from covered activities.</p>
<i>Rana boylei</i> Foothill yellow-legged Frog	-/SSC/-	+	+	+	+	-	No	<p>This species is covered under the East Contra Costa HCP/NCCP and the San Joaquin County HCP and is considered for coverage under the Solano HCP/NCCP. Reported declines of foothill yellow-legged frog range-wide could potentially lead to listing of this species within the plan timeframe.</p> <p>This species is known to occur in foothill streams within the Plan Area, portions of which could be affected by covered activities.</p>

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								Coverage is not recommended because the covered activities and conservation will focus on the eastern portion of the Plan Area, and the available funding is not expected to be sufficient to cover this species.
<i>Spea hammondi</i> Western spadefoot toad	-/SSC/-	+	+	+	+	-	No	<p>This species is covered under the San Joaquin County HCP and is considered for coverage under the South Sacramento County HCP. Reported declines of the species and ongoing range reduction and habitat degradation could potentially lead to listing with the plan timeframe.</p> <p>While within the species' range, there are no recent reported occurrences from the Plan Area. However, this species is secretive and its presence can be difficult to determine. Some grassland/wetland habitats along the western edge of the valley are suitable for this species. Potential effects to suitable habitat could occur through disturbance of vernal pools and intermittent streams and adjacent grassland habitats from covered activities, particularly in the grasslands along the western edge of the valley.</p> <p>Coverage is not recommended because listing is not highly likely in the near future, effects to this species are expected to be minimal, if any, and the available funding is not expected to be sufficient to cover this species.</p>

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<i>Ambystoma californiense</i> California tiger salamander (Central Valley DPS)	T/T/-	+	+	+	+	+	Yes	This federally listed species is covered or is being considered for coverage under most of the other local HCP/NCCPs. As of February 2009 this species is a candidate for state listing as endangered.  This species is known to occur at one site in the Dunnigan Hills and potentially occurs in other similar habitats along the western edge of the valley. Potential effects could occur through disturbance of vernal pools and ponds and adjacent grassland habitats from covered activities.  Coverage is recommended because the species is listed and could be affected by covered activities.
<b>Invertebrates</b>								
<i>Desmocerus californicus dimorphus</i> Valley elderberry longhorn beetle	T/-/-	+	+	+	+	+	Yes	This federally listed species is covered under all other local HCP/NCCPs. Associated with the elderberry shrub, a common species within the Plan Area, potentially occupied habitat for this species could be affected by covered activities.  Coverage is recommended because the species is listed and could be affected by covered activities.
<i>Lepidurus packardi</i> Vernal pool tadpole shrimp	E/-/-	+	+	-	+	N/A	No	This federally listed species is known to occur in vernal pool habitats within the Plan Area. Coverage is not recommended because this species is not expected to be adversely affected by covered activities.

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<i>Branchinecta conservatio</i> Conservancy fairy shrimp	E/-/-	+	+	+	+		No	This federally listed species is known to occur in vernal pool habitats within the Plan Area. Coverage is not recommended because this species is not expected to be adversely affected by covered activities.
<i>Branchinecta lynchi</i> Vernal pool fairy shrimp	T/-/-	+	+	-	+	N/A	No	Coverage is not recommended because this species is not expected to be adversely affected by covered activities.
<i>Branchinecta mesovalleyensis</i> Mid-valley Fairy Shrimp	-/-/-	+	+	-	+	N/A	No	Coverage is not recommended because this species is not expected to be adversely affected by covered activities.
<i>Linderiella occidentalis</i> California linderiella	-/SA/-	+	+	1	+	N/A	No	Coverage is not recommended because this species is not expected to be adversely affected by covered activities.
<i>Pryamica reliquia</i> Ancient ant	-/-/-	+	+	-	+	N/A	No	This species is known from one site in the Plan Area. While there is a reasonable potential for listing within the plan timeframe, through continued protection of the occupied site, covered activities are not expected to affect this species. Additional conservation efforts may enhance or increase potential habitat for this species.  Coverage is not recommended because the species is not expected to be affected by covered activities.

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<i>Lytta molesta</i> Molestan blister beetle	-/SSC/-	-	+	+	-		No	<p>This species is known from only one historical occurrence in the Plan Area. Its life history, distribution, and habitat requirements are largely unknown and thus the species has low potential for listing within the plan timeframe. The species is thought to be associated primarily with vernal pool grasslands and perhaps other grassland types and thus has potential to occur along the western edge of the valley. Conservation effects are likely to protect and potentially enhance habitat conditions.</p> <p>Coverage is not recommended because insufficient information on the species life history and habitat requirements are available to assess impacts and conservation strategies; and as a result the species has low potential for future listing.</p>

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<b>Plants</b>								
<i>Amsinckia lunaris</i> Bent flowered fiddleneck	-/-/1B	-	+	-	+	N/A	No	This species is widely distributed in the inner and outer Coast Ranges from Colusa and Lake Counties in the north to Santa Cruz County in the south. There are no recent records from the Plan Area. It potentially occurs in woodland and grassland habitats in the mid- to high elevations in the western portion of the Plan Area.  Coverage is not recommended because the species has low potential for future listing due to its relatively wide distribution., and low potential for take due to lack of recent records and limited extent of covered activities in its potential habitat
<i>Astragalus tener</i> var. <i>ferrisiae</i> Ferris' milk-vetch	-/-/1B	+	+	-	+	N/A	No	This species is known only from vernal pool grassland habitats on the DFW Tule Ranch Unit within the Yolo Bypass Wildlife Area. While it has a reasonable potential for future listing, this area is not expected to be affected by covered activities.  Coverage is not recommended because the species is unlikely to be affected by covered activities.

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<i>Astragalus tener</i> var. <i>tener</i> Alkali milk-vetch	-/-/1B	+	+	+	+	-	No	<p>Alkali milk-vetch is almost always found on alkaline or saline soils occurring in vernal wet playas, flats, fallowed rice fields, and vernal swales in valley/foothill grasslands below 500 feet (Solano HCP, 2009; San Joaquin County HCP 2000). It is covered in the Solano and San Joaquin County HCPs. There is the potential for the listing of this species within the plan timeframe due to development impacts in the south San Francisco Bay area and agricultural impacts in the Central Valley.</p> <p>The species is known from several alkaline sites near Woodland and Davis, Grasslands Regional Park, and the Tule Ranch Preserve. Remaining suitable habitat may be subject to the effects of covered activities.</p> <p>Coverage is not recommended because the species does not have a high potential for being listed, and the available funding is not expected to be sufficient to cover this species.</p>
<i>Atriplex depressa</i> Brittlescale	-/-/1B	+	+	+	+	-	No	<p>Brittlescale grows on alkaline or clay soils occurring in grasslands contained by valleys or foothills, meadows saltbrush, vernal pools, and at the edge of playas (San Joaquin County HCP 2000; Solano HCP 2009; ECCC HCP 2007). It is covered in the Solano and San Joaquin County HCPs.</p> <p>While brittlescale is a widespread species it may be declining due to loss of habitat through current and future development which may lead to listing during the plan</p>

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								<p>timeframe. The species is known from several alkaline sites near Woodland and Davis. Remaining suitable habitat may be subject to the effects of covered activities.</p> <p>Coverage is not recommended because the species does not have a high potential for being listed, and the available funding is not expected to be sufficient to cover this species.</p>
<p><i>Atriplex joaquinana</i> San Joaquin spearscale</p>	-/-/1B	+	+	+	+	-	No	<p>San Joaquin spearscale grows on alkaline clay soils in alkali grasslands and meadows or on the margins of alkali scrub (ECCC HCP 2007), and is also found in seasonal alkali wetlands and sinks in chenopod scrub, meadows, playas, and valley/grassland foothills (Solano HCP 2009). It is covered in the Solano and East Contra Costa County HCPs. It has been reported from several locations in the Plan Area.</p> <p>While San Joaquin spearscale is a widespread species it may be declining due to loss of habitat through current and future development which may lead to listing during the plan period.</p> <p>Coverage is not recommended because the species does not have a high potential for being listed, and the available funding is not expected to be sufficient to cover this species.</p>
<p><i>Chloropyron palmatum</i> Palmate-bracted bird's-beak</p>	E/E/1B	+	+	+	+	+	Yes	<p>Palmate-bracted birds-beak is known from one extant population southeast of Woodland. Given rarity of this species and its limited distribution with the Plan Area, take</p>

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								authorization would be expected to be granted by the USFWS only for management and research purposes. Coverage is recommended because the species is listed and because future management of the extant site could affect individual plants.
<i>Fritillaria pluriflora</i> Adobe-lily	-/-/1B	-	+	+	+	N/A	No	This species is broadly distributed on gently sloping hillsides with clay soils from Yolo County to Glenn County in the inner Coast Range and in clay soils in the uplands surrounding vernal pool complexes in Butte and Tehama Counties. While recent population declines have been reported, listing potential within the plan timeframe is considered relatively low. Coverage is not recommended because there is relatively low potential for future listing and there is relatively low potential for take due to limited extent of covered activities in its potential habitat.
<i>Hibiscus lasiocarpus</i> Rose-mallow	-/-/2	-	+	+	+	N/A	No	This species is broadly distributed throughout the Delta and Sacramento Valley in riparian areas, springs, and seeps and is not likely to be listed within the plan timeframe. Therefore, coverage is not recommended.
<i>Lathyrus jepsonii</i> var. <i>jepsonii</i> Delta tule pea	-/-/1B	+	+	-	+	N/A	No	Delta tule pea grows in tidally influenced freshwater and brackish marshes, commonly along slough edges and levees (Solano HCP 2009; San Joaquin County HCP 2000). It is covered in the Solano and San Joaquin County HCPs. There

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								are no reported occurrences from the Plan Area; however, it is known from sites near the county border in Solano County and there are numerous occurrences throughout the legal Delta. It has potential to occur in fresh and brackish water marshes in the Yolo Bypass.  While it could become listed within the plan timeframe, covered activities are not expected to affect the species. Coverage is not recommended because the species is not likely to be affected by covered activities.
<i>Lepidium latipes</i> var. <i>heckardii</i> Heckard's peppergrass	-/-/1B	+	+	+	+	-	No	Heckard's peppergrass grows on alkaline flats and in alkaline grasslands along the edges of vernal pools (Solano HCP 2009). It is proposed for coverage in the Solano HCP. Present within the Plan Area in large playa pools at DFW Tule Ranch Preserve and at sites near Woodland.  Coverage is not recommended because the species does not have a high potential for being listed, and the available funding is not expected to be sufficient to cover this species.
<i>Lilaeopsis masonii</i> Mason's lilaeopsis	-/R/1B	+	+	-	+	N/A	No	Mason's lilaeopsis grows in regularly flooded tidal zones, on mud banks and flats, and along eroding creek banks, sloughs, and rivers. It is also found in freshwater marshes, brackish marshes, and riparian scrub vegetation types that are tidally influenced (Solano HCP 2009; SJ HCP 2000; DFG 2000). It is covered in the San Joaquin County HCP and proposed for coverage in the Solano HCP. It has been reported from the Plan Area, but has potential to occur in the Yolo Bypass.

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								Although broadly distributed, the species has potential to become listed within the plan timeframe; however, covered activities are not expected to affect potential habitat for this species. . Not recommended for coverage because the species is not expected to be affected by covered activities.
<i>Navarretia leucocephala</i> <i>ssp. bakeri</i> Baker's navarretia	-/-/1B	+	+	+	+	-	No	This subspecies has been observed in vernal pool and swales in northern California counties from Mendocino and Tehama in the north to Marin, Napa, and Solano in the south. It is present within the Plan Area in large playa pools at DFW Tule Ranch, and is potentially present at sites near Woodland. Coverage is not recommended because the species does not have a high potential for being listed, and the available funding is not expected to be sufficient to cover this species.
<i>Neostapfia colusana</i> Colusa grass	T/E/1B	+	+	-	+	N/A	No	This listed species is present only at Grasslands Regional Park. Given rarity of this species and its limited distribution with the Plan Area, take authorization would be expected to be granted by the USFWS only for management and research purposes. Coverage is not recommended because this species is not expected to be adversely affected by covered activities.

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		Listing Potential	Likely to Occur in the Plan Area	Potential to Adversely Affect <sup>d</sup>	Sufficient Information	Cost and Funding		
<i>Streptanthus morrisonii</i> ssp. <i>Morrisonii</i> Morrison's jewel flower	-/-/1B	+	+	-	+	N/A	No	This species is primarily restricted to rocky serpentine habitats in the higher elevations of the western portion of the Plan Area. These areas are not expected to be affected by covered activities and conservation efforts under the HCP/NCCP will target high quality sites for preservation. Coverage is not recommended because the species is not expected to be affected by covered activities, and conservation under the plan will preserve occupied sites.
<i>Layia septentrionalis</i> Colusa layia	-/-/1B	+	+	-	+	N/A	No	This species is primarily restricted to rocky serpentine habitats in the higher elevations of the western portion of the Plan Area. These areas are not expected to be affected by covered activities and conservation efforts under the HCP/NCCP will target high quality sites for preservation. Coverage is not recommended because the species is not expected to be affected by covered activities and conservation under the plan will preserve occupied sites.
<i>Harmonia hallii</i> Hall's harmonia	-/-/1B	+	+	-	+	N/A	No	This species is primarily restricted to rocky serpentine habitats in the higher elevations of the western portion of the Plan Area. These areas are not expected to be affected by covered activities. Coverage is not recommended because the species is not expected to be affected by covered activities and conservation under the plan will preserve occupied sites.

Scientific Name/ Common Name	Status <sup>a</sup> (Federal/State/ CNPS)	Selection Criteria For Coverage <sup>b</sup>					Proposed for Coverage	Comments and Rationale
		Listing Potential	Likely to Occur in the Plan Area	Potential to Adversely Affect <sup>d</sup>	Sufficient Information	Cost and Funding		
<i>Hesperolinon drymarioides</i> Drymaria-like western flax	-/-/1B	+	+	-	+	N/A	No	This species is primarily restricted to rocky serpentine habitats and cismontane woodland sites in the higher elevations of the western portion of the Plan Area. These areas are not expected to be affected by covered activities. Coverage is not recommended because the species is not expected to be affected by covered activities and conservation under the plan will preserve occupied sites.
<i>Eriogonum nervulosum</i> Snow Mountain buckwheat	-/-/1B	+	+	-	+	N/A	No	This species is primarily restricted to rocky serpentine habitats in the higher elevations of the western portion of the Plan Area. These areas are not expected to be affected by covered activities. Coverage is not recommended because the species is not expected to be affected by covered activities and conservation under the plan will preserve occupied sites.
<i>Tuctoria mucronata</i> Solano grass	E/E	+	-	+	+	N/A	No	This listed species is present only at Grasslands Regional Park. Given rarity of this species and its limited distribution with the Plan Area, take authorization would be expected to be granted by the USFWS only for management and research purposes. Coverage is not recommended because the species is not expected to be adversely affected by covered activities.

Scientific Name/ Common Name	Status <sup>a</sup> (Federal/State/ CNPS)	Selection Criteria For Coverage <sup>b</sup>					Proposed for Coverage	Comments and Rationale
		Listing Potential	Likely to Occur in the Plan Area	Potential to Adversely Affect <sup>d</sup>	Sufficient Information	Cost and Funding		
<i>Astragalus rattanii</i> Jepson's milk vetch	-/-/1B	+	+	-	+	N/A	No	This species is primarily restricted to rocky serpentine habitats in the higher elevations of the western portion of the Plan Area. These areas are not expected to be affected by covered activities. Coverage is not recommended because the species is not expected to be affected by covered activities and conservation under the plan will preserve occupied sites.
<i>Atriplex cordulata</i> Heartscale	-/-/1B	+	-	-	+	N/A	No	This species occurs in alkaline soils on the valley floor. Known to occur at Jepson Prairie and several other Solano County locations, but the only reported occurrence from Yolo County has been extirpated. So currently the species is not known to occur in the Plan Area. Not recommended for coverage because the species is not known to occur in the Plan Area, very little suitable habitat remains, and remaining alkaline soil sites in the Plan Area are likely to be high priority conservation sites.
<i>Atriplex persistens</i> Vernal pool smallscale	-/-/1B	+	-	-	+	N/A	No	This species occurs in alkaline soils on the valley floor. Known to occur at Jepson Prairie, but has not been reported from Yolo County. So the species is not known to occur in the Plan Area. Not recommended for coverage because the species is not known to occur in the Plan Area, very little suitable habitat remains, and remaining alkaline soil sites in the Plan Area are likely to be high priority conservation sites.

Scientific Name/ Common Name	Status <sup>a</sup> (Federal/State/ CNPS)	Selection Criteria For Coverage <sup>b</sup>					Proposed for Coverage	Comments and Rationale
		Listing Potential	Likely to Occur in the Plan Area	Potential to Adversely Affect <sup>d</sup>	Sufficient Information	Cost and Funding		
<i>Erodium macrophyllum</i> Round-leaved filaree	-/-/2	-	-	-	-	N/A	No	This species occurs primarily in grassland habitats. While it may have occurred historically, there are no occurrence records for Yolo County. Its status as a List 2 species also suggests that it is more widespread elsewhere, reducing its potential to be listed during the Plan timeframe.  Not recommended for coverage because the species is not known to occur in the Plan Area.

**<sup>a</sup>Status Explanations**

**Federal**

- E = listed as endangered under the federal Endangered Species Act (ESA)
- T = listed as threatened under the federal ESA
- C = candidate for listing under the federal ESA
- BCC = U.S. Fish and Wildlife Service bird of conservation concern
- NSC = National Marine Fisheries Service species of concern
- = no status

**State**

- E = listed as endangered under the California ESA
- T = listed as threatened
- C = Candidate for listing under CESA
- SSC = California species of special concern
- FP = fully protected under the California Fish and Game Code
- R = listed as rare under the California Native Plant Protection Act
- = no status

**California Native Plant Society (CNPS)**

- 1A = presumed extinct in California
- 1B = rare or endangered in California and elsewhere
- 2 = rare and endangered in California, more common elsewhere
- 3 = species lacking sufficient information to determine status
- 4 = limited distribution, low threats at this time
- = no status

**<sup>b</sup> Criteria met or not**

- + = Species meets the selection criterion
- = Species does not meet the selection criterion
- U = Uncertain whether species meets selection criterion. More investigation required.

**<sup>c</sup> Listing Potential**

The potential for future listing was determined on the basis of the following criteria:

**Current status:**

If currently state or federally listed, or state Fully Protected, automatically meets criteria

If other special-status designation (SSC, CNPS List 1B, etc.) then

Range and population trends (is species trending downward or stabilized?)

Reports of substantial population declines or threats

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## C.3 References

- DFG (California Department of Fish and Game). 2000. The status of rare, threatened, and endangered animals and plants of California, Mason's lilaopsis.
- ECCC (East Contra Costa County) HCP. 2007. Final East Contra Costa County Habitat Conservation Plan/Natural Community Conservation Plan. East Contra Costa County Habitat Conservation Plan Association. October 2007.
- San Joaquin County HCP. 2000. San Joaquin County Multi-Species Habitat Conservation and Open Space Plan (SJMSCP). November 14, 2000.
- Sauer, J. R., J. E. Hines, and J. Fallon. 2005. The North American breeding bird survey, results and analysis 1966–2004. USGS Patuxent Wildlife Research Center. Laurel, MD.
- Shuford, W. D. and T. Gardali, editors. 2008. California Bird Species of Special Concern: A ranked assessment of species, subspecies, and distinct populations of birds of immediate conservation concern in California. Studies of Western Birds 1. Western Field Ornithologists, Camarillo, California, and California Department of Fish and Game, Sacramento.
- Solano HCP. 2009. Solano Multispecies Habitat Conservation Plan. Administrative Draft. Solano County Water Agency. May 2009.