

<p><i>Special-status plant species listed under ESA or CESA were found under SPR BIO-1's review. Of the 32 special-status plant species returned from the CNDDDB 12-quad search, nine are listed under ESA or CESA. Five of the nine listed plant species were ruled off the project due to the plant's biology not matching the project habitat, soil, or elevation range. The four remaining species have the potential to inhabit the project area. SPR BIO-7 directs protocol-level surveys to be completed for those species, since they have the potential to exist within the project. If any special-status plants or species from the ecoregion list that are listed under ESA or CESA are found during the surveys, avoidance strategy will be implemented as per MM BIO-1a. See special-status plants summary tables at the end of "EC-5 Biological Resources" for reasonings and avoidance strategy.</i></p>			
<p>MM BIO-1b: Avoid Loss of Special-Status Plants Not Listed Under ESA or CESA If non-listed special-status plant species (i.e., species not listed under ESA or CESA, but meeting the definition of special-status as stated in Section 3.6.1 of the Program EIR) are determined to be present through application of SPR BIO-1 and SPR BIO-7, the project proponent will implement measures to avoid loss of individuals and maintain habitat function of occupied habitat.</p>	Yes	CAL FIRE Prior-During	CAL FIRE
<p><i>Special-status plant species not listed under ESA or CESA were found during SPR BIO-1 review. Of the 32 special-status plant species returned from the CNDDDB 12-quad search, 23 are not listed under ESA or CESA. Ten of the 23 not listed plant species were ruled off the project due to the plant's biology not matching the project habitat, soil, or elevation range. The thirteen remaining species have the potential to inhabit the project area. SPR BIO-7 directs protocol-level surveys to be completed for those species, since they have the potential to exist within the project. If any special-status plant species or species from the ecoregion list that are not listed under ESA or CESA are found during the surveys, avoidance strategy will be implemented as per MM BIO-1b. See special-status plants summary tables at the end of "EC-5 Biological Resources" for reasonings and avoidance strategy.</i></p>			
<p>MM BIO-1c: Compensate for Unavoidable Loss of Special-Status Plants If significant impacts on listed or non-listed special-status plants cannot feasibly be avoided as specified under the circumstances described under Mitigation Measures BIO-1a and 1b, the project proponent will prepare a Compensatory Mitigation Plan that identifies the residual significant impacts that require compensatory mitigation and describes the compensatory mitigation strategy being implemented and how unavoidable losses of special-status plants will be compensated. If the special-status plant taxa are listed under ESA or CESA, the plan will be submitted to CDFW and/or USFWS (as appropriate) for review and comment. Compensatory mitigation may be satisfied through compliance with permit conditions, or other authorizations obtained by the project proponent (e.g., incidental take permit for state-listed plants), if these requirements are equally or more effective than the mitigation identified above.</p>	No	CAL FIRE N/A	CAL FIRE
<p><i>All listed and non-listed special-status plants can feasibly be avoided as specified under the circumstances described under MM BIO-1a and BIO-1b. No significant impacts are expected, and no unavoidable loss of special-status plants will occur. MM BIO-1c is not applicable to this project.</i></p>			
<p>MM BIO-2a: Avoid Mortality, Injury, or Disturbance and Maintain Habitat Function for Listed Wildlife Species and California Fully Protected Species (All Treatment Activities)</p>	Yes	CAL FIRE Prior-During	CAL FIRE
<p><i>Special-status wildlife species listed under ESA or CESA were found under SPR BIO-1's review. Of the 23 special-status wildlife species returned from the CNDDDB 12-quad search, thirteen are listed under ESA or CESA. Nine of the thirteen listed wildlife species were ruled off the project due to the wildlife's biology not matching the project habitat or elevation range. The four remaining species have the potential to inhabit the project area. SPR BIO-10 directs protocol-level surveys to be completed for those species, since they have the potential to exist</i></p>			

<i>within the project. If any special-status wildlife or species from the ecoregion list that are listed under ESA or CESA are found during the surveys, avoidance strategy will be implemented as per MM BIO-2a. See special-status plants summary tables at the end of "EC-5 Biological Resources" for reasonings and avoidance strategy.</i>			
<p>MM BIO-2b: Avoid Mortality, Injury, or Disturbance and Maintain Habitat Function for Other Special-Status Wildlife Species (All Treatment Activities) If other special-status wildlife species (i.e., species not listed under CESA or ESA or California Fully Protected, but meeting the definition of special status as stated in Section 3.6.1 of the Program EIR) are observed during reconnaissance surveys (conducted pursuant to SPR BIO-1) or focused or protocol-level surveys (conducted pursuant to SPR BIO-10), the project proponent will avoid or minimize adverse effects to the species.</p> <p>The only exception to this mitigation approach is in cases where it is determined by a qualified RPF or biologist that the special-status wildlife would benefit from treatment in the occupied habitat area even though some of the non-listed special-status wildlife may be killed, injured, or disturbed during treatment activities. If it is determined that treatment activities would be beneficial to special-status wildlife, no compensatory mitigation will be required.</p>	Yes	<u>CAL FIRE</u> Prior-During	<u>CAL FIRE</u>
<i>Special-status wildlife species not listed under ESA or CESA were found during SPR BIO-1 review. Of the 23 special-status wildlife species returned from the CNDDDB 12-quad search, 10 are not listed under ESA or CESA. Seven of the 10 not listed wildlife species were ruled off the project due to the wildlife's biology not matching the project habitat or elevation range. The three remaining species have the potential to inhabit the project area. SPR BIO-10 directs protocol-level surveys to be completed for those species, since they have the potential to exist within the project. If any special-status wildlife species or species from the ecoregion list that are not listed under ESA or CESA are found during the surveys, avoidance strategy will be implemented as per MM BIO-2b. See special-status plants summary tables at the end of "EC-5 Biological Resources" for reasonings and avoidance strategy.</i>			
<p>MM BIO-2c: Compensate for Mortality, Injury, or Disturbance and Loss of Habitat Function for Special-Status Wildlife if Applicable (All Treatment Activities) If the provisions of Mitigation Measure BIO-2a, BIO-2b, BIO-2d, BIO-2e, BIO-2f, or BIO-2g cannot be implemented and the project proponent determines that additional mitigation is necessary to reduce significant impacts, the project proponent will compensate for such impacts to species or habitat by acquiring and/or protecting land that provides (or will provide in the case of restoration) habitat function for affected species that is at least equivalent to the habitat function removed or degraded as a result of the treatment.</p> <p>Compensatory mitigation may be satisfied through compliance with permit conditions, or other authorizations obtained by the project proponent (e.g., incidental take permit), if these requirements are equally or more effective than the mitigation identified above.</p>	No	<u>CAL FIRE</u> N/A	<u>CAL FIRE</u>
<i>No significant mortality, injury, disturbance, or loss of habitat function for special-status wildlife is expected and can feasibly be avoided as specified under the circumstances described in MM BIO-2a and MM BIO-2b. No significant impacts are expected, and no unavoidable loss of special-status wildlife or habitat will occur. Thus, Mitigation Measure BIO-2c is not applicable to this project.</i>			
<p>MM BIO-2d: Implement Protective Measures for Valley Elderberry Longhorn Beetle (All Treatment Activities)</p>	No	<u>CAL FIRE</u> N/A	<u>CAL FIRE</u>
<i>The Valley Elderberry Longhorn Beetle (VELB) (<i>Desmocerus californicus dimorphus</i>) is in the CNDDDB 12-quad search results. However, the project area is outside the critical habitat range and the current documented range of the VELB. There is no riparian habitat on this project making it unlikely that their host plant, <i>Sambucus</i> species, is in the project. No host plants, <i>Sambucus</i> species, were noted during field surveys. Therefore, MM BIO-2d is not applicable to this project. If VELB exit holes are observed, then MM BIO-2d will be implemented to avoid impact.</i>			

<p>MM BIO-2e: Design Treatment to Retain Special-Status Butterfly Host Plants (All Treatment Activities) The only exception to this mitigation approach is in cases where it is determined by a qualified RPF or biologist that the special-status butterfly would benefit from treatment in the occupied habitat area even though some may be killed, injured or disturbed during treatment activities. If it is determined that treatment activities would be beneficial to special-status butterflies, no compensatory mitigation will be required.</p>	No	<p><u>CAL FIRE</u> N/A</p>	<p><u>CAL FIRE</u></p>
<p><i>No special-status butterflies were identified from SPR BIO-1. Thus, MM BIO-2e is not applicable to this project. If any special-status butterflies, including the species on the ecoregion list, are identified from reconnaissance or protocol-level surveys, then MM BIO-2e will be implemented to protect the species and host plants from significant impacts. This treatment project is only designed to target shrubs, low tree limbs, and ladder fuels. Butterflies' typical habitat is in open fields where herbaceous flower species bloom. Treatment activities are not targeting this kind of habitat and will have a less than significant impact on any potential host plants. Prescribed burning will take place outside of the flowering season when butterflies are less active.</i></p>			
<p>MM BIO-2f: Avoid Habitat for Special-Status Beetles, Flies, Grasshoppers, and Snails (All Treatment Activities)</p>	No	<p><u>CAL FIRE</u> N/A</p>	<p><u>CAL FIRE</u></p>
<p><i>No special-status beetles, flies, grasshoppers, or snails were found during SPR BIO-1 review. Thus, MM BIO-2f is not applicable to this project. If any special-status species, including the species on the ecoregion list, are identified from reconnaissance or protocol-level surveys, then MM BIO-2f will be implemented to avoid and minimize impacts to these species.</i></p>			
<p>MM BIO-2g: Design Treatment to Avoid Mortality, Injury, or Disturbance and Maintain Habitat Function for Special-Status Bumble Bees (All Treatment Activities) The only exception to this mitigation approach is in cases where it is determined by a qualified RPF or biologist that the special-status bumble bee would benefit from treatment in the occupied (or assumed to be occupied) habitat area even though some of the non-listed special-status bumble bees may be killed, injured, or disturbed during treatment activities. If it is determined that treatment activities would be beneficial to special-status bumble bees, no compensatory mitigation will be required.</p>	No	<p><u>CAL FIRE</u> N/A</p>	<p><u>CAL FIRE</u></p>
<p><i>SPR BIO-1 review returned one possible bumble bee species from the ecoregion list, the crotch bumble bee (<i>Bombus crotchii</i>). While the project is in the historic range of this species, it is outside of the current range. Thus, no special-status bumble bees are expected to be on project. Suitable habitat for bumble bee species is present on the project, in small open fields where understory herbaceous flowers bloom. This project is designed to target shrubs, low tree limbs and ladder fuels, not open fields. Therefore, treatment activities are not targeting suitable bumble bee habitat, habitat function will be maintained, and pile burning will not impact bumble bee species or habitat due to timing. Prescribed burning will happen before herbaceous understory blooming season or after they dehisced and seed out. Thus, avoiding the main flight season for any bumble bee species. With no special-status bumble bees present and suitable habitat function being maintained. The suitable habitat will benefit from treatment activities because clearing understory overgrowth allows new herbaceous flowers potential to grow, increasing suitable habitat area. MM BIO-2g is not applicable to this project, because the only exception to this mitigation approach is that this treatment benefits special-status bumble bees even though some non-listed special-status bumble bees may be taken during treatment in the occupied habitat. All treatment activities will be improving and protecting suitable habitat, therefore benefiting all bumble bees.</i></p>			
<p>MM BIO-2h: Avoid Potential Disease Transmission Between Domestic Livestock and Special-Status Ungulates (Prescribed Herbivory)</p>	No	<p><u>CAL FIRE</u> N/A</p>	<p><u>CAL FIRE</u></p>
<p><i>No prescribed herbivory is planned for this project; therefore, MM BIO-2h does not apply to this project.</i></p>			

<p>MM BIO-3a: Design Treatments to Avoid Loss of Sensitive Natural Communities and Oak Woodlands. The project proponent will implement the following measures when working in treatment areas that contain sensitive natural communities identified during surveys conducted pursuant to SPR BIO-3: The only exception to this mitigation approach is in cases where it is determined by a qualified RPF or botanist that the sensitive natural community or oak woodland would benefit from treatment in the occupied habitat area even though some loss may occur during treatment activities. If it is determined that treatment activities would be beneficial to sensitive natural communities or oak woodlands, no compensatory mitigation will be required.</p>	Yes	<u>CAL FIRE</u> Prior-During	<u>CAL FIRE</u>
<p><i>No sensitive natural communities are present, but there are oak woodlands in the project. Treatment design will return vegetation composition and structure to their natural condition to maintain or improve habitat function of the oak woodland. The oak woodland habitat would benefit from the treatment in the occupied habitat area even though some limbs might be cut down during treatment activities. As well as dead, dying, diseased, or hazard trees being removed. After treatment, this oak woodland habitat will be better protected from catastrophic wildfire events, and overall habitat function will be maintained.</i></p>			
<p>MM BIO-3b: Compensate for Loss of Sensitive Natural Communities and Oak Woodlands. If significant impacts on sensitive natural communities or oak woodlands cannot feasibly be avoided or reduced as specified under Mitigation Measure BIO-3a, the project proponent will prepare a Compensatory Mitigation Plan that identifies the residual significant effects on sensitive natural communities or oak woodlands that require compensatory mitigation and describes the compensatory mitigation strategy being implemented to reduce residual effects.</p>	No	<u>CAL FIRE</u> N/A	<u>CAL FIRE</u>
<p><i>Sensitive natural communities or oak woodlands will be avoided or reduced from MM BIO-3a; therefore, MM BIO-3b does not apply to this project.</i></p>			
<p>MM BIO-3c: Compensate for Unavoidable Loss of Riparian Habitat Compensatory mitigation may be satisfied through compliance with permit conditions, or other authorizations obtained by the project proponent (e.g., Lake and Streambed Alteration Agreement), if these requirements are equally or more effective than the mitigation identified above.</p>	No	<u>CAL FIRE</u> N/A	<u>CAL FIRE</u>
<p><i>No riparian habitats are in the project area; therefore, MM BIO-3c does not apply to this project.</i></p>			
<p>MM BIO-4: Avoid State and Federally Protected Wetlands</p>	No	<u>CAL FIRE</u> N/A	<u>CAL FIRE</u>
<p><i>No wetland habitats are in the project area; therefore, MM BIO-4 does not apply to this project.</i></p>			
<p>MM BIO-5: Retain Nursery Habitat and Implement Buffers to Avoid Nursery Sites</p>	No	<u>CAL FIRE</u> N/A	<u>CAL FIRE</u>
<p><i>No nursery sites are in the project area; therefore, MM BIO-5 does not apply to this project.</i></p>			

SPECIES STATUS SUMMARY TABLE
Results of Listed Species Found in the CNDDDB Query

Wildlife

WILDLIFE		STATUS			Habitat	Potential Occurrence on Project	Reason	Avoidance Strategy
<i>SCIENTIFIC NAME</i>	COMMON NAME	Fed	State	CDFW				
Ambystoma californiense	California Tiger Salamander	TH	TH	WL	Grasslands and low foothills with pools or ponds. Breeding pools are specific, they cannot be permanent and must be temporary where wet until middle of May.	No	Habitat	No habitat.
Antrozous pallidus	Pallid Bat	N	N	SSC	Habitats include grasslands, shrublands, woodlands, and mixed conifer forests. Most common in open, dry habitats with rocky areas for roosting. Roosts include caves, mines, rock crevices, live trees, snags, bat houses, and human structures.	Yes	Yes	SPR BIO-10 and MM BIO-2b. Can be used as foraging habitat, but roosting sites will be protected from project activities. Live trees will not be removed, only limbed. Snags will be checked before removal.
Athene cunicularia	Burrowing Owl	N	N	SSC	Habitats include open, dry, grasslands, prairies, plains, deserts, agriculture land, and shrub stages of pinyon juniper and ponderosa pine. Also include urban vacant lots, airports, golf courses, and fairgrounds. Yearlong resident. Uses rodent or other burrows for roosting and nesting.	No	Habitat	No habitat.
Bombus crotchii	Crotch Bumble Bee	N	CE	N	Habitats includes warm, dry sites, open grassland, and scrub habitats. Colonies are annual, only the queens hibernate over winter and emerge early spring to search for nesting site. Nests often located underground in abandoned rodent nests or above ground in tufts of grass, old bird nests, rock piles, or cavities of dead trees.	Yes	Yes	SPR BIO-10 and MM BIO-2a. This project is in the historic range, not the current range for this species. Thus, no impact expected. ¹

1) California Department of Fish and Wildlife. (2019). Report to the fish and game commission evaluation of the petition from the xerces society, defenders of wildlife, and the center for food safety to list four species of bumble bees as endangered under the California endangered species act. State of California. https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=166804&inline .								
Branchinecta conservatio	Conservancy Fairy Shrimp	E	N	N	Large, cool water, vernal pools with moderately turbid water. They can be present from November to April. Egg cysts may remain in soil year-round or for several years.	No	Habitat	No vernal pools.
Branchinecta lynchi	Vernal Pool Fairy Shrimp	TH	N	N	Vernal pools, seasonal wetlands, and stagnant ditches (temporary pools). Cysts are extremely hardy, withstanding freezing and drying during summer and winter months. Typically hatch with the first rains of the year.	No	Habitat	No vernal pools.
Corynorhinus townsendii	Townsend's Big-Eared Bat	N	N	SSC	Mesic habitats, pine forests, and arid desert scrub. Preferred roosting sites in large open dwellings, such as caves, mines, tunnels, buildings, or other human made structures. Roosting sites are a limiting resource for this species, which they are extremely sensitive to disturbance. Do NOT impact any potential roosting sites.	Yes	Yes	SPR BIO-10 and MM BIO-2b. Can be used as foraging habitat, but roosting sites will not be disturbed from project activities.
Desmocerus californicus dimorphus	Valley Elderberry Longhorn Beetle	TH	N	N	Nearly always found on or close to its host plant, red or blue elderberry tree (Sambucus species), along rivers and streams.	No	Other	The critical habitat range for this species has decreased. It is not found outside of the Central Valley. ^{2 & 3}
2) https://ucanr.edu/sites/Elderberry/Growing/VELB/								
3) https://www.fws.gov/sacramento/es_species/Accounts/Invertebrates/valley_elderberry_longhorn_beetle/								
Emys marmorata	Western Pond Turtle	N	N	SSC	Associated with permanent to nearly permanent water in a wide variety of habitat types. Such as ponds, lakes, streams, pools along intermittent streams, or irrigation ditches. Requires basking sites, and in colder areas they hibernate underwater in mud.	No	Habitat	No habitat.
Euderma maculatum	Spotted Bat	N	N	SSC	Wide variety of foraging habitats but roosting sites are a limiting resource.	Yes	Yes	SPR BIO-10 and MM BIO-2b. Can be used as

