



State of California – Natural Resources Agency
DEPARTMENT OF FISH AND WILDLIFE
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GAVIN NEWSOM, Governor
CHARLTON H. BONHAM, Director



September 15, 2022

Governor's Office of Planning & Research

Sep 19 2022

STATE CLEARINGHOUSE

Jeff Mitchem
Planning and Building Director
City of Calistoga
1232 Washington Street
Calistoga, CA 94515
jmitchem@ci.calistoga.ca.us

Subject: City of Calistoga 2023-2031 Housing Element, Mitigated Negative Declaration, SCH No. 2022080505, Napa County

Dear Mr. Mitchem:

The California Department of Fish and Wildlife (CDFW) received a Notice of Intent to Adopt a Mitigated Negative Declaration (MND) from the City of Calistoga (City) for the 2023-2031 Housing Element (Project) pursuant to the California Environmental Quality Act (CEQA) and CEQA Guidelines.¹

CDFW is submitting comments on the MND to inform the City, as the Lead Agency, of our concerns regarding potentially significant impacts to sensitive biological resources associated with the project.

CDFW ROLE

CDFW is a **Trustee Agency** with responsibility under CEQA pursuant to CEQA Guidelines section 15386 for commenting on projects that could impact fish, plant, and wildlife resources. CDFW is also considered a **Responsible Agency** if a project would require discretionary approval, such as permits issued under the California Endangered Species Act (CESA), the Lake and Streambed Alteration (LSA) Program, or other provisions of the Fish and Game Code that afford protection to the state's fish and wildlife trust resources.

PROJECT DESCRIPTION SUMMARY

Proponent: City of Calistoga

Objective: The objective of the Project is to update the City's General Plan Housing Element. The updated Housing Element will include seven sites, primarily concentrated downtown and along Lincoln Avenue, with General Plan Designations of Community

¹ CEQA is codified in the California Public Resources Code in section 21000 et seq. The "CEQA Guidelines" are found in Title 14 of the California Code of Regulations, commencing with section 15000.

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Commercial, High Density Residential, or Light Industrial. The sites are surrounded by vacant and developed properties with designations of Community Commercial, Downtown Commercial, High Density Residential, Light Industrial, or Public/Quasi Public.

Location: Citywide in the City of Calistoga. The seven sites are located on the following Assessor Parcel Numbers: 011-062-009; 011-062-008; 011-072-020; 011-050-024; 011-101-002; 011-214-001; 011-214-002; 011-214-006; 011-215-001; 011-215-011.

Timeframe: The updated Housing Element will be applicable from 2023-2031.

REGULATORY REQUIREMENTS

California Endangered Species Act

Please be advised that a CESA Incidental Take Permit (ITP) must be obtained if the Project has the potential to result in “take” of plants or animals listed under CESA, either during construction or over the life of the Project, pursuant to Fish and Game Code section 2080 *et seq.* **The Project has the potential to impact Calistoga popcornflower (*Plagiobothrys strictus*), CESA listed as threatened; Napa blue grass (*Poa napensis*), Burke’s goldfields (*Lasthenia burkei*), Sebastopol meadowfoam (*Limnanthes vinculans*), and Clara Hunt’s milk-vetch (*Astragalus claranus*), all CESA listed as endangered (Attachment 1).** However, CDFW cannot issue a CESA ITP if the issuance would jeopardize the continued existence of a species (Fish & G. Code, § 2081, subd. (c); Cal. Code Regs., tit.14, § 783.4 subd. (b)). Additionally, it is the policy of the Legislature that public agencies like the City “should not approve projects as proposed which would jeopardize the continued existence of any endangered species or threatened species or result in the destruction or adverse modification of habitat essential to the continued existence of those species, if there are reasonable and prudent alternatives available consistent with conserving the species or its habitat which would prevent jeopardy.” (Fish & G. Code, § 2053, subd. (a)). **CDFW believes the City’s updated 2023-2031 Housing Element may jeopardize the continued existence of Calistoga popcornflower and Napa blue grass. Therefore, CDFW recommends removing potential development sites from the Project where avoidance of direct and indirect impacts to these species is not possible or providing information within the MND supporting an assertion that impacts would not jeopardize their continued existence, in addition to the below recommendations.**

Issuance of a CESA ITP is subject to CEQA; therefore, in order to issue an ITP for the Project, CDFW must rely on the environmental analysis contained in the Lead Agency’s CEQA document, including impacts, mitigation measures, and a mitigation monitoring and reporting program. If the proposed Project will impact any CESA-listed species,

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early consultation is encouraged, as significant modification to the Project and mitigation measures may be required to obtain a CESA ITP. More information on the CESA permitting process can be found on the CDFW website at <https://www.wildlife.ca.gov/Conservation/CESA>.

CEQA requires a **Mandatory Finding of Significance** if a project has the potential to substantially degrade the quality of the environment; substantially reduce the habitat of a fish or wildlife species; cause a fish or wildlife population to drop below self-sustaining levels; threaten to eliminate a plant or animal community; or substantially reduce the number or restrict the range of an endangered, rare or threatened species (Pub. Resources Code, §§ 21001, subd. (c) & 21083; CEQA Guidelines, §§ 15380, 15064, and 15065). Impacts must be avoided or mitigated to less-than-significant levels unless the CEQA Lead Agency makes and supports Findings of Overriding Consideration (FOC). The CEQA Lead Agency's FOC does not eliminate the Project proponent's obligation to comply with CESA.

Lake and Streambed Alteration Agreement

CDFW will require an LSA Notification, pursuant to Fish and Game Code sections 1600 et. seq. for Project activities affecting lakes or streams and associated riparian habitat. Notification is required for any activity that will substantially divert or obstruct the natural flow; change or use material from the bed, channel, or bank including associated riparian or wetland resources; or deposit or dispose of material where it may pass into a river, lake or stream. Work within ephemeral streams, washes, watercourses with a subsurface flow, and floodplains are subject to notification requirements. CDFW, as a Responsible Agency under CEQA, will consider the CEQA document for the Project. CDFW may not execute the final LSA Agreement until it has complied with CEQA as a Responsible Agency.

COMMENTS AND RECOMMENDATIONS

CDFW offers the comments and recommendations below to assist the City in adequately identifying and/or mitigating the Project's significant, or potentially significant, direct and indirect impacts on fish and wildlife (biological) resources. Editorial comments or other suggestions may also be included to improve the document. Based on the Project's avoidance of significant impacts on biological resources with implementation of mitigation measures, including those recommended below and summarized in **Attachment 2** (Draft Mitigation and Monitoring Reporting Plan), CDFW concludes that a mitigated negative declaration is appropriate for the Project.

- I. Mandatory Findings of Significance: Does the Project have the potential to substantially reduce the number or restrict the range of an endangered, rare, or threatened species?**

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Environmental Setting and Mitigation Measures

Comment 1: Special-Status Plants

Issue: Page 32 of the MND states that the biological assessment “shall include a discussion of the presence or absence of the popcornflower as well as any impacts that may occur on and off site.” It is unclear whether Napa blue grass or other special-status plants that have the potential to occur in the vicinity of the project site, such as those listed in Attachment 1, will be included in that assessment, as only Calistoga popcornflower is mentioned. The California Natural Diversity Database (CNDDDB) documents Burke’s goldfields, CESA listed as endangered, co-occurring with Calistoga popcornflower and Napa blue grass less than 1.5 miles from Project sites proposed in the updated Housing Element. Additionally, there is a documented occurrence of Sebastopol meadowfoam approximately 2.2 miles away and Clara Hunt’s milk-vetch approximately 4 miles away from the Project sites, both of which are CESA listed as endangered.

Furthermore, Mitigation Measure BIO-1 states that the biological assessment will “include detailed field surveys conducted during the appropriate time of the year to permit detection of sensitive resources.” However, the specific survey protocol that will be used is not referenced and it is unclear if reference sites will be visited. Additionally, Mitigation Measure BIO-1 states the assessment will provide a mitigation plan as necessary, but there is no statement requiring implementation of the plan or consultation with CDFW to ensure CESA compliance.

Specific impacts and why they may occur and be potentially significant: The Project has the potential to directly and indirectly impact critically endangered ESA and CESA listed species and California Rare Plant Rank species, including but not limited to those described above and listed in Attachment 1, through crushing and killing plants, impacting viable seeds in the soil, interrupting pollination corridors, changing surface or subsurface hydrology, and introducing or spreading invasive plant species into special-status plant species habitat as a result of construction and ground disturbing activities.² In particular, Calistoga popcornflower and Napa blue grass are highly vulnerable to extinction, as there remains only two known co-occurring populations of these species.³ One of the last remaining sites where these species occur is directly adjacent to Sites F and G proposed in the updated Housing Element.

² CRPR 1B plants are considered rare, threatened, or endangered in California and elsewhere. Further information on CRPR ranks is available in CDFW’s *Special Vascular Plants, Bryophytes, and Lichens List* (<https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=109383&inline>) and on the California Native Plant Society website (<https://www.cnps.org/rare-plants/cnps-rare-plant-ranks>).

³ California Native Plant Society, Rare Plant Program. 2022. Rare Plant Inventory (online edition, v9-01 1.5). Website <https://www.rareplants.cnps.org>

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As outlined in CDFW's *Protocol for Surveying and Evaluating Impacts to Special-Status Native Plant Populations and Sensitive Natural Communities*⁴ failure to locate special-status plants during one field season may not adequately determine presence, and multiple years of surveys and visits to nearby reference sites may be necessary depending on presence of adverse environmental conditions and species life history.

Additionally, given the extremely small range of Calistoga popcornflower and Napa blue grass, mitigation would likely be insufficient to reduce direct or indirect impacts to these species to less-than-significant.

Based on the foregoing, CDFW has determined that the Project, as proposed, may require a Mandatory Finding of Significance for short-term and long-term potentially significant direct and indirect impacts to Calistoga popcornflower and Napa blue grass if these species are present on or adjacent to the Project sites. Project impacts have the *"potential to substantially degrade the quality of the environment; substantially reduce the habitat of a fish or wildlife species; cause a fish or wildlife population to drop below self-sustaining levels; threaten to eliminate a plant or animal community; or substantially reduce the number or restrict the range of an endangered, rare or threatened species"* (CEQA Guidelines, § 15065, subd. (a)(1)). Due to the potentially significant impacts raised in this letter, an Environmental Impact Report (EIR) would be warranted for the Project, unless it can be determined that the Project will have no direct impacts to Calistoga popcornflower and Napa blue grass, and that indirect impacts will be fully avoided. However, even if an EIR is prepared, CDFW cannot issue a CESA ITP for the Project if the issuance would jeopardize the continued existence of a species.

Therefore, proceeding with the Project under an EIR and potential FOC could result in unauthorized impacts to CESA listed species.

Project impacts to Burke's goldfields, Sebastopol meadowfoam, Clara Hunt's milk-vetch, and CRPR plants may also be considered a Mandatory Finding of Significance unless recommended mitigation measures are implemented to mitigate impacts to less-than-significant, as further described below.

Recommendation: CDFW recommends the Project's CEQA document include a scientifically comprehensive analysis outlining the habitat and the potential impacts for all special-status plants that have the potential to occur on or adjacent to the Project sites, including but not limited to those species described above and listed in Attachment 1.

The CEQA document should include, or reference in a mitigation measure describing, a detailed biological resources report that includes results of seasonally appropriate, multi-year plant surveys conducted by a qualified botanist as further described below.

⁴ <https://wildlife.ca.gov/Conservation/Survey-Protocols#377281280-plants>.

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Additionally, historical records, including, but not limited to local and adjacent tribal history, should be examined to learn about the historical distribution of the special-status plant species on or adjacent to the Project sites.

The CEQA document also should identify reasonably foreseeable future projects in the Project vicinity, disclose any cumulative impacts associated with these projects, determine the significance of each cumulative impact, and assess the significance of the Project's contribution to the impact (CEQA Guidelines, §15355). Cumulative impacts are often found to be considerable; a contribution to a significant cumulative impact – e.g., reduction of available habitat for a listed species – should be considered cumulatively considerable without mitigation to minimize or avoid the impact.

CDFW also recommends revising Mitigation Measure BIO-1 to include the following:

A Qualified Biologist shall conduct botanical surveys during the appropriate identification period and conditions for all special-status plants that have the potential to occur on or adjacent to the Project sites where they may be directly or indirectly impacted, prior to the start of construction. Surveys shall be conducted following CDFW's *Protocol for Surveying and Evaluating Impacts to Special-Status Native Plant Populations and Sensitive Natural Communities* (<https://wildlife.ca.gov/Conservation/Survey-Protocols#377281280-plants>). Survey reports shall be submitted to CDFW for written approval prior to the start of construction. Multiple years of surveys and visits to nearby reference populations may be necessary based on weather events such as drought or other environmental variations in the local ecology and habitats. The qualified botanist shall be knowledgeable about plant taxonomy, familiar with plants of the region, and have experience conducting botanical field surveys according to vetted protocols.

If Calistoga popcornflower or Napa blue grass are discovered on or adjacent to the Project site or potential habitat that may foster populations thereof, the Project shall be redesigned to avoid direct and indirect impacts to these species in consultation with CDFW.

If any other special-status plant species are discovered, the Project shall avoid direct and indirect impacts to all individuals and prepare and implement a CDFW-approved avoidance plan prior to Project activities. Alternatively, if other CESA listed plants are detected and cannot be avoided, the Project shall obtain a CESA ITP from CDFW prior to commencing Project activities. If special status plants will be impacted the Project shall provide mitigation prior to Project start in a form accepted in writing by CDFW which may include on-site restoration pursuant to a restoration plan prepared by the Project and approved by CDFW, off-site habitat preservation at a minimum 3:1 mitigation to impact ratio based on acreage or number of plants as appropriate, or a higher ratio if required by CDFW, unless otherwise approved in writing by CDFW.

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II. Would the Project have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by CDFW or U.S Fish and Wildlife Service (USFWS)?

Environmental Setting and Mitigation Measures

Comment 2: Special-Status Invertebrates

Issue: The Project sites contain grasslands that are potentially suitable habitat for obscure bumble bee (*Bombus caliginosus*) and western bumble bee (*Bombus occidentalis*), which are both designated as California Terrestrial and Vernal Pool Invertebrates of Conservation Priority.⁵

Specific impacts and why they may occur and be potentially significant: The Project could result in crushing or killing bees, reduction in sufficient food resources such as nectar and pollen, and removal of nesting and overwintering sites. Western bumble bee, once common in the western United States, has undergone a dramatic decline in both distribution and abundance and is now extirpated from much of its historic range (Hatfield et al. 2018). Many bumble bees are threatened with extinction due primarily to reductions in habitat from urbanization, intensive agriculture, and invasive species introductions (ibid.). The MND did not include any avoidance, minimization, and mitigation measures for bees. Therefore, if the Project impacts western bumble bee or obscure bumble bee, impacts to these special-status species would be potentially significant.

Recommended Mitigation Measure: To reduce potential impacts to western bumble bee and obscure bumble bee to less-than-significant, CDFW recommends the following mitigation measure:

Mitigation Measure BIO-8: Special-Status Bee Habitat Assessment and Avoidance: A qualified wildlife biologist shall conduct visual surveys of areas planned for ground disturbance, including but not limited to, installation of water main, new roads, leach fields, and building sites, and within a 100-foot buffer of ground-disturbing activities. Surveys shall be conducted to coincide with the blooming period of locally common nectar sources such as vetch (*Vicia* spp.) and California poppy (*Eschscholzia californica*) during the flight season for the western and obscure bumble bee (generally late February through late June). Between two and four evenly spaced surveys shall be conducted for the highest detection probability, including surveys in early spring (late March/early April) and early summer (late June/July). Surveys shall take place when

⁵ The list of California Terrestrial and Vernal Pool Invertebrates of Conservation Priority was collated during CDFW's Scientific Collecting Permit rulemaking process:
<https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=157415&inline>

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temperatures are above 60°F, preferably on sunny days with low wind speeds (e.g., less than 8 miles per hour) and at least 2 hours after sunrise and 3 hours before sunset. On warm days (e.g., over 85°F), bumble bees will be more active in the mornings and evenings. The qualified biologist shall conduct transect surveys following the *Streamlined Bee Monitoring Protocol for Assessing Pollinator Habitat* (https://www.xerces.org/sites/default/files/2018-05/14-021_01_XercesSoc_Streamlined-Bee-Monitoring-Protocol_web.pdf), focusing on detection of foraging bumble bees and underground nests using visual aids such as binoculars. If western or obscure bumble bee nests are identified within the ground disturbance area or 100-foot buffer area, a plan to protect bumble bee nests and individuals shall be developed and implemented in consultation with CDFW. The plan shall include, but not be limited to: 1) specifications for construction timing and sequencing requirements (e.g., avoidance of raking, mowing, tilling, or other ground disturbance until late March to protect overwintering queens); 2) preconstruction surveys conducted within 30 days and consistent with any current available protocol standards prior to the start of ground-disturbing activities to identify active nests; 3) establishment of appropriate no-disturbance buffers for nest sites and construction monitoring by a qualified biologist to ensure compliance with buffers; 4) restrictions associated with construction practices, equipment, or materials that may harm bumble bees (e.g., avoidance of pesticides/herbicides, measures to minimize the spread of invasive plant species); and 5) prescription of an appropriate restoration seed mix targeted for the bumble bees, including native plant species known to be visited by native bumble bee species and containing a mix of flowering plant species with continual floral availability through the entire active season for bumble bees (March to October).

ENVIRONMENTAL DATA

CEQA requires that information developed in environmental impact reports and negative declarations be incorporated into a database which may be used to make subsequent or supplemental environmental determinations. (Pub. Resources Code, § 21003, subd. (e)). Accordingly, please report any special-status species and natural communities detected during Project surveys to the CNNDDB. The CNNDDB field survey form can be filled out and submitted online at the following link: <https://wildlife.ca.gov/Data/CNDDDB/Submitting-Data>. The types of information reported to CNDDDB can be found at the following link: <https://www.wildlife.ca.gov/Data/CNDDDB/Plants-and-Animals>.

ENVIRONMENTAL DOCUMENT FILING FEES

The Project, as proposed, would have an impact on fish and/or wildlife, and assessment of environmental document filing fees is necessary. Fees are payable upon filing of the Notice of Determination by the Lead Agency and serve to help defray the cost of environmental review by CDFW. Payment of the environmental document filing fee is

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required in order for the underlying project approval to be operative, vested, and final. (Cal. Code Regs, tit. 14, § 753.5; Fish & G. Code, § 711.4; Pub. Resources Code, § 21089).

CONCLUSION

CDFW appreciates the opportunity to comment on the MND to assist the City in identifying and mitigating Project impacts on biological resources.

Questions regarding this letter or further coordination should be directed to Alicia Bird, Environmental Scientist, at (707) 980-5154 or alicia.bird@wildlife.ca.gov; or Melanie Day, Senior Environmental Scientist (Supervisory), at (707) 210-4415 or melanie.day@wildlife.ca.gov.

Sincerely,

DocuSigned by:

Erin Chappell

B77F9A6211EF486
Erin Chappell

Regional Manager
Bay Delta Region

Attachment 1: Special-Status Plants

Attachment 2: Draft Mitigation and Monitoring Reporting Plan

ec: Office of Planning and Research, State Clearinghouse, SCH No. 2022080505

REFERENCES

Hatfield, R., S. Jepsen, S. F. Jordan, M. Blackburn, and A. Code. 2018. A petition to the state of California Fish and Game Commission to list the Crotch bumble bee (*Bombus crotchii*), Franklin's bumble bee (*Bombus franklini*), Suckley cuckoo bumble bee (*Bombus suckleyi*), and western bumble bee (*Bombus occidentalis occidentalis*) as endangered under the California Endangered Species Act. Xerces Society for Invertebrate Conservation, Defenders of Wildlife, and Center for Food Safety. Sacramento, CA.
<https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=161902&inline>

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Attachment 1: Special-Status Plants

Species Name	Common Name	Status
<i>Poa napensis</i>	Napa blue grass	SE, FE, CRPR 1B.1
<i>Lasthenia burkei</i>	Burke's goldfields	SE, FE, CRPR 1B.1
<i>Limnanthes vinculans</i>	Sebastopol meadowfoam	SE, FE, CRPR 1B.1
<i>Astragalus claranus</i>	Clara Hunt's milk-vetch	SE, FE, CRPR 1B.1
<i>Plagiobothrys strictus</i>	Calistoga popcornflower	ST, FE, CRPR 1B.1
<i>Navarretia leucocephala</i> ssp. <i>bakeri</i>	Baker's navarretia	CRPR 1B.1
<i>Arctostaphylos stanfordiana</i> ssp. <i>decumbens</i>	Rincon Ridge manzanita	CRPR 1B.1
<i>Ceanothus confusus</i>	Rincon Ridge ceanothus	CRPR 1B.1
<i>Amorpha californica</i> var. <i>napensis</i>	Napa false indigo	CRPR 1B.2
<i>Brodiaea leptandra</i>	narrow-anthered brodiaea	CRPR 1B.2
<i>Centromadia parryi</i> ssp. <i>parryi</i>	pappose tarplant	CRPR 1B.2
<i>Erigeron greenei</i>	Greene's narrow-leaved daisy	CRPR 1B.2
<i>Layia septentrionalis</i>	Colusa layia	CRPR 1B.2
<i>Leptosiphon jepsonii</i>	Jepson's leptosiphon	CRPR 1B.2
<i>Puccinellia simplex</i>	California alkali grass	CRPR 1B.2
<i>Spergularia macrotheca</i> var. <i>longistyla</i>	long-styled sand-spurrey	CRPR 1B.2
<i>Trifolium hydrophilum</i>	saline clover	CRPR 1B.2
<i>Limnanthes floccosa</i> Howell ssp. <i>floccosa</i>	woolly meadowfoam	CRPR 4.2

SE = state listed as endangered under CESA; ST = state listed as threatened under CESA; FE = federally listed as endangered under the Endangered Species Act; CRPR = California Rare Plant Rank

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Attachment 2: Draft Mitigation and Monitoring Reporting Plan

Draft Mitigation and Monitoring Reporting Plan

CDFW provides the following language to be incorporated into the Mitigation and Monitoring Program for the Project.

Biological Resources (BIO)			
Mitigation Measure (MM)	Description	Timing	Responsible Party
MM-BIO-1	<p>A Qualified Biologist shall conduct botanical surveys during the appropriate identification period and conditions for <u>all special-status plants</u> that have the potential to occur on or adjacent to the Project sites where they may be directly or indirectly impacted, prior to the start of construction. Surveys shall be conducted following CDFW's <i>Protocol for Surveying and Evaluating Impacts to Special-Status Native Plant Populations and Sensitive Natural Communities</i> (https://wildlife.ca.gov/Conservation/Survey-Protocols#377281280-plants). Survey reports shall be submitted to CDFW for written approval prior to the start of construction. Multiple years of surveys and visits to nearby reference sites may be necessary based on weather events such as drought or other environmental variations in the local ecology and habitats. The qualified botanist shall be knowledgeable about plant taxonomy, familiar with plants of the region, and have experience conducting botanical field surveys according to vetted protocols. If Calistoga popcornflower or Napa blue grass or potential habitat that may foster populations thereof are discovered on or adjacent to the Project site, the Project shall be redesigned to avoid direct and indirect impacts to these species in consultation with CDFW.</p> <p>If any other special-status plant species are discovered, the Project shall avoid direct and indirect impacts to all individuals and</p>	<p>Prior to the Lead Agency issuing construction related permits and ground disturbance</p>	<p>Project Applicant</p>

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	<p>prepare and implement a CDFW-approved avoidance plan prior to Project activities. Alternatively, if other CESA listed plants are detected and cannot be avoided, the Project shall obtain a CESA ITP from CDFW prior to commencing Project activities. If special status plants will be impacted the Project shall provide mitigation prior to Project start in a form accepted in writing by CDFW which may include on-site restoration pursuant to a restoration plan prepared by the Project and approved by CDFW, off-site habitat preservation at a minimum 3:1 mitigation to impact ratio based on acreage or number of plants as appropriate, or a higher ratio if required by CDFW, unless otherwise approved in writing by CDFW.</p>		
<p>MM-BIO-8</p>	<p>A qualified wildlife biologist shall conduct visual surveys of areas planned for ground disturbance, including but not limited to, installation of water main, new roads, leach fields, and building sites, and within a 100-foot buffer of ground-disturbing activities. Surveys shall be conducted to coincide with the blooming period of locally common nectar sources such as vetch (<i>Vicia</i> spp.) and California poppy (<i>Eschscholzia californica</i>) during the flight season for the western and obscure bumble bee (generally late February through late June). Between two and four evenly spaced surveys shall be conducted for the highest detection probability, including surveys in early spring (late March/early April) and early summer (late June/July). Surveys shall take place when temperatures are above 60°F, preferably on sunny days with low wind speeds (e.g., less than 8 miles per hour) and at least 2 hours after sunrise and 3 hours before sunset. On warm days (e.g., over 85°F), bumble bees will be more active in the mornings and evenings. The qualified biologist shall conduct transect surveys following the <i>Streamlined Bee Monitoring Protocol for Assessing Pollinator Habitat</i> (https://www.xerces.org/sites/default/files/20</p>	<p>Prior to Ground Disturbance</p>	<p>Project Applicant</p>

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	<p>18-05/14-021_01_XercesSoc_Streamlined-Bee-Monitoring-Protocol_web.pdf), focusing on detection of foraging bumble bees and underground nests using visual aids such as binoculars. If western or obscure bumble bee nests are identified within the ground disturbance area or 100-foot buffer area, a plan to protect bumble bee nests and individuals shall be developed and implemented in consultation with CDFW. The plan shall include, but not be limited to: 1) specifications for construction timing and sequencing requirements (e.g., avoidance of raking, mowing, tilling, or other ground disturbance until late March to protect overwintering queens); 2) pre-construction surveys conducted within 30 days and consistent with any current available protocol standards prior to the start of ground-disturbing activities to identify active nests; 3) establishment of appropriate no-disturbance buffers for nest sites and construction monitoring by a qualified biologist to ensure compliance with buffers; 4) restrictions associated with construction practices, equipment, or materials that may harm bumble bees (e.g., avoidance of pesticides/herbicides, measures to minimize the spread of invasive plant species); and 5) prescription of an appropriate restoration seed mix targeted for the bumble bees, including native plant species known to be visited by native bumble bee species and containing a mix of flowering plant species with continual floral availability through the entire active season for bumble bees (March to October).</p>		
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