



State of California – Natural Resources Agency  
DEPARTMENT OF FISH AND WILDLIFE  
South Coast Region  
3883 Ruffin Road  
San Diego, CA 92123  
(858) 467-4201  
[www.wildlife.ca.gov](http://www.wildlife.ca.gov)

**GAVIN NEWSOM, Governor**  
**CHARLTON H. BONHAM, Director**



Governor's Office of Planning & Research

August 27, 2020

**Aug 27 2020**

## STATE CLEARINGHOUSE

Mr. Donald Nielsen  
City of Thousand Oaks  
2100 Thousand Oaks Blvd  
Thousand Oaks, CA 91362  
[Dnielsen@toaks.org](mailto:Dnielsen@toaks.org)

**Subject: Mitigated Negative Declaration for Conejo Canyons Bridge at Hill Canyon Treatment Plant, SCH #2020070531, City of Thousand Oaks, Los Angeles County**

Dear Mr. Nielsen:

The California Department of Fish and Wildlife (CDFW) has reviewed the above-referenced Mitigated Negative Declaration for the Conejo Canyons Bridge at Hill Canyon Treatment Plant project (Project). Thank you for the opportunity to provide comments and recommendations regarding those activities involved in the Project that may affect California fish and wildlife. Likewise, we appreciate the opportunity to provide comments regarding those aspects of the Project that CDFW, by law, may be required to carry out or approve through the exercise of its own regulatory authority under the Fish and Game Code.

### CDFW's Role

CDFW is California's Trustee Agency for fish and wildlife resources and holds those resources in trust by statute for all the people of the State [Fish & G. Code, §§ 711.7, subdivision (a) & 1802; Pub. Resources Code, § 21070; California Environmental Quality Act (CEQA) Guidelines, § 15386, subdivision (a)]. CDFW, in its trustee capacity, has jurisdiction over the conservation, protection, and management of fish, wildlife, native plants, and habitat necessary for biologically sustainable populations of those species (Id., § 1802). Similarly, for purposes of CEQA, CDFW is charged by law to provide, as available, biological expertise during public agency environmental review efforts, focusing specifically on projects and related activities that have the potential to adversely affect state fish and wildlife resources.

CDFW is also submitting comments as a Responsible Agency under CEQA (Pub. Resources Code, § 21069; CEQA Guidelines, § 15381). CDFW expects that it may need to exercise regulatory authority as provided by the Fish and Game Code, including lake and streambed alteration regulatory authority (Fish & G. Code, § 1600 *et seq.*). Likewise, to the extent implementation of the Project as proposed may result in "take", as defined by State law, of any species protected under the California Endangered Species Act (CESA) (Fish & G. Code, § 2050 *et seq.*), or CESA-listed rare plant pursuant to the Native Plant Protection Act (NPPA; Fish & G. Code, § 1900 *et seq.*), CDFW recommends the Project proponent obtain appropriate authorization under the Fish and Game Code.

Mr. Donald Nielsen  
City of Thousand Oaks  
August 27, 2020  
Page 2 of 53

## Project Description and Summary

**Objective:** The City of Thousand Oaks (City; Lead Agency), Conejo Recreation and Park District (CRPD), and Conejo Open Space Conservation Agency (COSCA) are proposing to construct a steel truss bridge with an accompanying short access road across Arroyo Conejo creek (Arroyo Conejo). The western end of the bridge will be positioned to tie into the existing Hill Canyon Road which descends into the canyon from Rancho Conejo Drive. The east end of the bridge will connect to Hill Canyon Road through construction of a short, new access road.

- a) **Steel truss bridge:** The proposed bridge will be 12 feet wide and 140 feet long. The structure is a prefabricated steel truss bridge with a concrete walking surface. It will be secured to concrete abutments on either side of the creek; no supports in the creek will be necessary. The eastern abutments will utilize 24-inch Cast-In-Drilled-Hole piles, while the western abutments will be anchored in bedrock. The abutments will be poured on site above the 100-year peak flow elevation.
- b) **Access road:** The access road that will connect the bridge to Hill Canyon Road on the east will be approximately 375 feet long. It will be 20 feet wide at Hill Canyon Road, and taper to 12 feet wide at the bridge connection. The road surface will consist of 4 inches of asphalt concrete, underlain with 10 inches of Class 2 aggregate base. Approximately 36 inches of native soil will be removed and recompacted, which will then be topped with approximately 3,000 cubic yards of imported fill. It will take approximately 215 truck trips to import this material based on trucks of 14 cubic yard capacity.
- c) **Culvert:** A culvert will be installed at approximately the midpoint of the access road to accommodate an existing swale. The culvert will be an 18-inch corrugated High-Density Polyethylene pipe approximately 80 feet long with grouted riprap pads at either end. The riprap pads will be approximately 5 feet long by 4 feet wide, for a total volume of 40 cubic feet.
- d) **Groundwater:** Water will not need to be extracted or diverted for this Project. However, groundwater may be encountered when piles are constructed for the east abutment. In anticipation of this, the contractor will prepare and submit a dewatering plan for approval that covers how expelled water will be captured and/or contained and treated. If necessary, a location for a sump has been identified adjacent to the Project site.
- e) **Construction:** Construction is anticipated to take approximately 180 days. Equipment consistent with bridge construction and earth moving will be utilized for this Project, such as loaders, dozers, drilling rigs, and cranes. No construction will occur in Arroyo Conejo and erosion control measures will be in place to prevent soil from entering the stream.

**Location:** In the northwest quadrant of the City of Thousand Oaks, on the west side of Hill Canyon Road, approximately 1.75 miles south of the intersection of Santa Rosa Road and Hill Canyon Road, and approximately 330 feet northwest of the treatment ponds at the Hill Canyon Treatment Plant. The Project site is located on approximately 0.61 acres of a larger 495.105-acre parcel more commonly referred to as Assessor's Parcel Number 667-0-120-160.

Mr. Donald Nielsen  
City of Thousand Oaks  
August 27, 2020  
Page 3 of 53

## COMMENTS AND RECOMMENDATIONS

CDFW offers the comments and recommendations below to assist the City in adequately identifying, avoiding, 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 MND. CDFW recommends the measures or revisions below be included in a science-based monitoring program that contains adaptive management strategies as part of the Project's CEQA mitigation, monitoring, and reporting program (Public Res. Code, § 21081.6; CEQA Guidelines, § 15097).

### Specific Comments

#### Comment #1: Biological Baseline Assessment and Pre-Construction Surveys

**Issue #1:** The MND proposes mitigation measure BIO-5 which states, "Biological surveys will be conducted immediately prior to the start of construction (vegetation removal) and wildlife species found in the construction area will be relocated." CDFW is concerned that preconstruction surveys for special status plants and wildlife prior to the start of construction will be inadequate to detect those species and take appropriate actions to avoid or mitigate impacts to those species and habitat.

**Issue #2:** Page 21 of the MND states, "Padre Associates (Padre) conducted a biological baseline assessment [2018 Assessment, Appendix C] in June 2018 of approximately three (3) acres, composed of the proposed bridge site and access road/trail alignment between the bridge site and Hill Canyon Road, with a 100-foot buffer." Page 22 of the MND states, "Padre's assessment occurred prior to the Hill Fire of November 2018. Postfire habitat assessment was conducted by staff in April 2019 [2019 Assessment] which found the study area sustained significant changes to habitat quality."

CDFW is concerned that the MND's conclusions regarding presence/absence of biological resources and subsequent avoidance, minimization, and mitigation measures may be primarily based on an outdated biological assessment. CDFW typically considers assessments for rare plants as valid for a period of up to three years and wildlife for up to one year, except when significant environmental changes occur, such as disturbance resulting from wildfire. Other than concluding that "the study area sustained significant changes to habitat quality," the 2019 assessment does not provide an updated and more recent post-fire survey for rare plants or discuss the potential for rare plants to now occur in the Project site. Additionally, the MND does not provide an updated map of vegetation communities, even though vegetation composition and structure has changed post-fire.

**Issue #3:** Page 2 of the 2018 Assessment states, "The field survey area encompassed the proposed bridge and access road/trail alignment with a 100-foot buffer, as shown in Figure 1." CDFW is concerned that the 2018 Assessment did not apply a standard 500-foot buffer zone around the immediate Project site. Accordingly, the 2018 Assessment may have missed detections of plants, wildlife, wildlife habitat, and sensitive vegetation communities adjacent to the Project site that may be impacted by construction and activities. Wildlife species with a large home range or movement may seek refuge in the Project site or feasibly move through the Project site from adjacent areas but could have been missed.

Mr. Donald Nielsen  
City of Thousand Oaks  
August 27, 2020  
Page 4 of 53

**Issue #4:** Page 23 of the MND states, “Padre’s literature search and field surveys indicated that 15 special status wildlife species occur within 2 miles of the study area.” CDFW is concerned that the MND does not include data, results, and conclusions drawn from a nine-quadrangle search of CDFW’s California Natural Diversity Database (CNDDDB) for sensitive and special status plants, wildlife, and vegetation communities. Additionally, raptors should have been evaluated within a 5-mile radius of the Project site.

**Specific Impacts:** Direct impacts to plants and wildlife not previously known or identified to be on the Project site or within its vicinity could possibly occur. This may result in mortality, reduced reproductive capacity, population declines, or local extirpation of a sensitive or special status plant or wildlife species.

**Why impacts would occur:** Wildfires are significant drivers of landscape change and can act as a catalyst for promoting biological diversity. Many California endemic and rare plants are fire dependent or adapted, which means fire is necessary for seed dispersal and seed germination, and for promoting species success in fire-prone environments. Rare plants may have established in the Project site and went undetected absent a thorough post-fire survey. Additionally, changes in the landscape with respect to vegetation composition and structure may have created habitat and refugia inviting to wildlife species that were previously undetected or absent from the Project site.

Project construction and activities such as vegetation clearing, operating large equipment (e.g., loaders, dozers, drilling rigs, and cranes), and ground disturbance (e.g., staging, access, grading, excavating, drilling) may have direct impacts on sensitive or special status plant or wildlife species and indirect impacts by modifying or removing habitat, foraging habitat, nesting structure, and refugia that support those species.

**Evidence impacts would be significant:** Relying on future surveys is considered deferred mitigation under CEQA. CEQA Guidelines sections 15070 and 15071, require the MND to analyze if the Project may have a significant effect on the environment as well as review if the Project will ‘avoid the effect or mitigate to a point where clearly no significant effects would occur’. In order to analyze if a project may have a significant effect on the environment, the Project related impacts, including protocol survey results for CEQA-rare, California Species of Special Concern (SSC), or CESA-listed species that could occur in the Project footprint need to be disclosed. This disclosure is necessary to allow CDFW to comment on alternatives to avoid impacts, as well as to assess the significance of the specific impact relative to the species (e.g., current range, distribution, population trends, and connectivity).

Impacts to special status plants and wildlife species should be considered significant under CEQA unless they are clearly mitigated below a level of significance. Inadequate avoidance, minimization, and mitigation measures for impacts to special status plant and wildlife species will result in the Project continuing to have a substantial adverse direct, indirect, and cumulative 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 United States Fish and Wildlife Service (USFWS).

Mr. Donald Nielsen  
City of Thousand Oaks  
August 27, 2020  
Page 5 of 53

### **Recommended Potentially Feasible Mitigation Measure(s):**

**Mitigation Measure #1:** CDFW recommends modifying the MND's proposed mitigation measure BIO-5 by removing the language with strikethrough and including the underlined language:

~~BIO - 5 Biological surveys will be conducted immediately prior to the start of construction (vegetation removal) and wildlife species found in the construction area will be relocated.~~  
Biological surveys for special status plants and wildlife species shall be performed to adequately conclude presence/absence of special status species. A biological survey shall include a search of appropriate databases and a field survey, both performed by a qualified biologist familiar with southern California flora. Species-specific protocol surveys shall be conducted if there is evidence to suggest a special status species could be present (e.g., suitable habitat) and survey protocol is available from a State or Federal agency. Survey results shall be made available in the final environmental document. If a special status plant or wildlife species is present, the City shall coordinate with CDFW to determine appropriate measures to avoid, minimize, or mitigate impacts to those species. A list of species-specific measures shall be prepared prior to any project construction, activities, or staging.

**Mitigation Measure #2:** CDFW recommends the Lead Agency retain a qualified biologist to perform an additional biological assessment to supplement the 2018 and 2019 Assessments. A supplemental assessment should provide the most accurate picture practically possible of existing conditions and document any post-fire physical or biological changes. The biological assessment should include two components:

- 1) Database search: The biological assessment should include a documented search of the CNDDDB for records of sensitive plants and wildlife in the following nine quadrangles containing and surrounding the Project site: Thousand Oaks; Calabasas; Simi Valley East; Simi Valley West; Moorpark; Newbury Park; Triunfo Pass; Point Dume; and Malibu Beach. The City should also search California Native Plant Society (CNPS) and Calflora databases for rare plants that may occur in or adjacent to the Project site.
- 2) Field survey: A qualified biologist that is also familiar with southern California rare plants should conduct at least two surveys in the spring, or peak flowering and nesting bird season, to maximize detection of any rare plants and nesting birds. The survey should occur before the peak growing season of non-native invasive plants so biologists may detect rare plants growing close to the ground. When tall invasive plants such as black mustard (*Brassica nigra*), summer mustard (*Hirschfeldia incana*), milk thistle (*Silybum marianum*), and poison hemlock (*Conium maculatum*) form dense stands, the vegetation may obstruct view of the ground/soil. Also, birds could nest in poison hemlock [e.g., red-winged blackbirds (*Agelaius phoeniceus*)] so an earlier spring survey would minimize impacts to any birds nesting in invasive plants as surveyors move through the area searching for rare plants.

The qualified biologist should assess the habitat suitability for each sensitive plant and wildlife species identified from database search not previously evaluated in the 2018 Assessment, in addition to any species – regardless of whether it was evaluated in the 2018 Assessment - that could potentially occur in a post-fire landscape. For wildlife,

Mr. Donald Nielsen  
City of Thousand Oaks  
August 27, 2020  
Page 6 of 53

wintering, roosting, nesting, and foraging habitat should be evaluated.

CEQA requires that information developed in environmental documents 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 by completing and submitting [CNDDDB Field Survey Forms](#).

**Mitigation Measure #3:** CDFW recommends the City provide a report with sufficient detail and resolution that documents the methods and results of a supplementary spring-time field survey under existing conditions. The report should provide the most accurate picture of existing conditions and document any post-fire physical or biological changes. The report should include the following information at a minimum:

- a) A list of data sources accessed to include at a minimum:
  - [California Natural Diversity Database \(CNDDDB\)](#) provided by the CDFW.
  - [Information on Wild California Plants](#) database provided by Calflora.
  - [Inventory of Rare and Endangered Plants of California](#) database provided by the CNPS.
- b) A detailed map of the Project site, study area (i.e., Biological Study Area; BSA), and immediate surroundings. The BSA should include the Project site, 500-foot buffer, and all areas where the Project will potentially increase noise levels and vehicle and foot traffic, and be used for staging equipment, vehicles, and soil or fill material. Staging area(s), access point(s), and ingress/egress routes should be clearly shown on the map.
- c) A brief description of field survey conditions that should include name(s) of qualified biologist(s) and brief qualifications; date and time of survey; survey duration; general weather conditions; and survey goals.
- d) A description of survey methods.
- e) A detailed description of post-fire physical and biological conditions and discuss any changes to the BSA, specifically along 250 feet of the North Fork Arroyo Conejo channel and 240 feet of the Arroyo Conejo channel (downstream of the confluence). This should include current soil composition; any changes to topography; a list of any new native, non-native/invasive, and ornamental grasses, forbs, shrubs, vines, ferns, and trees present post-fire (i.e., not listed in Appendix A); a list of any new wildlife present post-fire (i.e., not listed in Appendix B); any new habitat structures that could support wildlife with emphasis on special status wildlife species (e.g., logs, pools, burrows in drylands); any changes to the alignment, channel width, bed composition, stream bank vegetation, stream bank stability, etcetera along Arroyo Conejo.
- f) A list of sensitive plants and wildlife species evaluated with emphasis on plants and wildlife species identified from database search not previously evaluated in the 2018 Assessment, in addition to any species – regardless of whether it was evaluated in the 2018 Assessment - that could now potentially occur in a post-fire landscape. A list should be provided in a table format providing the species scientific (i.e., Latin) name,

Mr. Donald Nielsen  
City of Thousand Oaks  
August 27, 2020  
Page 7 of 53

Genus and species, subspecies/variety if applicable; species common name; CESA and Federal Endangered Species Act (ESA) listing status; and a brief evaluation of the potential for that species to occur in the BSA.

The report should also include a comprehensive list of all species identified for the nine quadrangles queried in the CNDDDB and plants identified from the CNPS and Calflora databases.

- g) Updated map of vegetation communities at the alliance level using the [Manual of California Vegetation](#) (MCV), second edition, (Sawyer 2008). Also, CDFW recommends an updated and thorough floristic-based assessment of special status plants and vegetation communities, following CDFW's [Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Sensitive Natural Communities](#).
- h) If there is suitable habitat within the BSA for a special status species not previously evaluated, and the species has a Moderate to High potential to occur, a species-specific protocol survey should be conducted. Protocol surveys and guidelines for a select list of special status species can be found by visiting CDFW's [Survey and Monitoring Protocols and Guidelines](#) webpage. The report should document if a protocol survey was performed.
- i) If new sensitive or special status plants and wildlife species and habitat is detected, the report should provide species-specific measures to fully avoid impacts to that species and habitat. For unavoidable Project impacts, the report should provide measures for on-site mitigation. Each species-specific mitigation plan should adopt an ecosystem-based approach and be of sufficient detail and resolution to describe the following at a minimum: 1) identify the impact and level of impact (e.g., acres or individual plants impacted); 2) location of on-site mitigation and adequacy of the location(s) to serve as mitigation; 3) assessment of appropriate reference sites; 4) if applicable, scientific [Genus and species (subspecies/variety if applicable)] and common names of plants being used for restoration; 5) location(s) of propagule source; 6) species-specific planting methods (i.e. container or seed); 7) measurable goals and success criteria for establishing self-sustaining populations (e.g., percent survival rate, absolute cover); 8) long-term monitoring, and; 9) adaptive management techniques.

**Recommendation #1:** CDFW recommends the City provide the report as an appendix to the final environmental document. If new significant effects are identified and mitigation measures or revisions must be added to the MND, CDFW recommends recirculating the environmental document so CDFW may provide additional comments on avoidance, minimization, and mitigation measures (CEQA Guidelines, § 15073.5).

#### **Comment #2: Impacts to Rare Plants**

**Issue #1:** Page 22 of the MND states, "Special status plant species observed within the study area during Padre's field surveys were limited to coast live oak, scrub oak, western sycamore, and southern California black walnut." The 2018 Assessment was prepared before the fire and the 2019 Assessment does not provide an updated and more recent post-fire survey for rare

Mr. Donald Nielsen  
City of Thousand Oaks  
August 27, 2020  
Page 8 of 53

plants. The MND may have concluded absence of rare plants without a post-fire assessment/search to adequately make this conclusion.

**Issue #2:** Table 3, page 10 of the 2018 Assessment shows the following species occurring adjacent to the BSA; Catalina mariposa lily (*Calochortus catalinae*); club-haired mariposa lily (*Calochortus clavatus* var. *clavatus*); Plummer's mariposa lily (*Calochortus plummerae*); southern tar plant (*Centromadia parryi* ssp. *australis*); Conejo dudleya (*Dudleya parva*); Blochman's dudleya (*Dudleya blochmaniae* ssp. *blochmaniae*); Conejo buckwheat (*Eriogonum crocatum*); Lyon's pentachaeta (*Pentachaeta lyonii*); Ojai navarretia (*Navarretia ojaiensis*); and Chaparral ragwort (*Senecio aphanactis*). Many of these species, specifically *Calochortus* species and Lyon's pentachaeta grow naturally in ecosystems dependent on periodic fire. The BSA overlaps with Lyon's pentachaeta critical habitat determined by USFWS. The MND does not provide sufficient support to conclude that these species are not present in the post-fire landscape within the BSA.

**Issue #3:** A nine-quadrangle search of the CNDDDB found 25 additional rare or special status plant species. A search of the Calflora database found seven additional rare plants occurring within 2 miles from the BSA. These additional 32 species were not included in the 2018 or 2019 Assessments.

**Specific Impacts:** Direct impacts to plants not previously known or identified to be on the Project site or within its vicinity could possibly occur. This may result in mortality, reduced reproductive capacity, population declines, or local extirpation of a sensitive or special status plant.

**Why impacts would occur:** Wildfires are significant drivers of landscape change and can act as a catalyst for promoting biological diversity. Many California endemic and rare plants occur in fire dependent ecosystems or are fire adapted which means seeds or bulbs generally germinate with fire-related cues (e.g., heat, smoke) (USFWS 1999). For plants with underground bulbs (i.e., geophytes), the absence of visible above-ground plants may not necessarily be indicative of actual population absence or size. A population may still exist via underground bulbs even when no above-ground individuals are observed (Miller et al. 2004). Many *Calochortus* species are gap specialists and depend on disturbances such as fire to open the habitat, to provide nutrients, and to allow for a successful reproduction year.

Rare plants may have established in the Project site post-fire and went undetected absent a post-fire survey. Project construction and activities such as vegetation clearing, operating large equipment (e.g., loaders, dozers, drilling rigs, and cranes), and ground disturbance (e.g., staging, access, grading, excavating, drilling) may have direct impacts on sensitive or special status plant species and indirect impacts by modifying or removing habitat.

**Evidence impacts would be significant:** Impacts to special status plant species should be considered significant under CEQA unless they are clearly mitigated below a level of significance. Inadequate avoidance, minimization, and mitigation measures for impacts to special status plant species will result in the Project continuing to have a substantial adverse direct, indirect, and cumulative 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 USFWS. Additionally, plants that have a CNPS



Mr. Donald Nielsen  
City of Thousand Oaks  
August 27, 2020  
Page 9 of 53

California Rare Plant Rank (CRPR) of 1A, 1B, 2A, and 2B are rare throughout their range, endemic to California, and are seriously or moderately threatened in California. All plants constituting CRPR 1A, 1B, 2A, and 2B meet the definitions of CESA and are eligible for State listing. Impacts to these species or their habitat must be analyzed during preparation of environmental documents relating to CEQA, as they meet the definition of rare or endangered (CEQA Guidelines, § 15380). Please see CNPS [Rare Plant Ranks](#) page for additional rank definitions.

**Recommended Potentially Feasible Mitigation Measure(s):** The following mitigation measures should be performed while conducting an additional biological assessment (see Comment #1 above).

**Mitigation Measure #1:** CDFW recommends an additional biological assessment as described under Comment #1. The biological assessment should include reassessing the presence/absence of 10 annual/perennial herbs listed on Table 3, page 10 of the 2018 Assessment, and additional plant species identified using a nine-quadrangle search of the CNDDDB and search of rare plant databases. 'No detections' of rare plants should also be reported in the biological assessment report.

**Mitigation Measure #2:** If sensitive and/or special status plants are found, the biological assessment should include a detailed map showing the location of individual plants or populations, and number of plants or density of plants per square feet occurring at each location.

**Mitigation Measure #3:** If sensitive and/or special status plants are found, the MND should provide species-specific measures to fully avoid impacts to those plants. This may include flagging all plants and/or perimeter of populations; no-work buffers around plants and/or populations (e.g., flagged perimeter plus 50 feet); restrictions on ground disturbing activities within protected areas; relocation of staging and other material piling areas away from protected areas; restrictions on herbicide use and/or type of herbicide and/or application method within 100 feet of sensitive plants; and worker education and training.

**Mitigation Measure #4:** If sensitive and/or special status plants are found, and Project-related impacts are unavoidable, CDFW recommends the MND provide measures to fully mitigate for loss of individual plants and habitat.

- a) The MND should provide a map showing which plants or populations will be impacted, and provide a table that clearly documents the number of plants and acres of supporting habitat impacted, and plant composition (e.g., density, cover, abundance) within impacted habitat (e.g., species list separated by vegetation class; density, cover, abundance of each species).
- b) CDFW recommends the MND be conditioned to provide a minimum mitigation ratio of 5:1 for CRPR 3 and 4 species; 7:1 for CRPR 2; and 10:1 for CRPR 1. This should be for the number of plants replaced to number impacted, including acres of habitat created to acres of habitat impacted. Rare plants are habitat specialists that require specific conditions to persist such as vegetation composition (species abundance, diversity, cover), soils, substrate, slope, hydrology, and pollinators. Accordingly, mitigation for

Mr. Donald Nielsen  
City of Thousand Oaks  
August 27, 2020  
Page 10 of 53

impacts to rare plants should also include habitat.

- c) The MND should provide species-specific measures for on-site mitigation. Each species-specific mitigation plan should adopt an ecosystem-based approach and be of sufficient detail and resolution to describe the following at a minimum: 1) identify the impact and level of impact (e.g., acres or individual plants/habitat impacted); 2) location of on-site mitigation and adequacy of the location(s) to serve as mitigation; 3) assessment of appropriate reference sites; 4) scientific [Genus and species (subspecies/variety if applicable)] of plants being used for restoration; 5) location(s) of propagule source; 6) species-specific planting methods (i.e., container or seed); 7) measurable goals and success criteria for establishing self-sustaining populations (e.g. percent survival rate, absolute cover); 8) long-term monitoring, and; 9) adaptive management techniques.

Please note that CDFW generally does not support the use of salvaging, translocation, or transplantation as the primary mitigation strategy for unavoidable impacts to rare, threatened, or endangered plant species. Please see page 36 for additional comments on *Translocation/Salvage of Plants and Animal Species*.

**Recommendation #1:** CDFW recommends the City include rare plant survey results [including negative findings (i.e., no detections)] to the biological assessment report, and the report provided as an appendix to the MND. If new significant effects to rare plants are identified and mitigation measures or project revisions must be added to the MND, CDFW recommends recirculating the environmental document so CDFW may provide additional comments on avoidance, minimization, and mitigation measures (CEQA Guidelines, § 15073.5).

### **Comment #3: Lake Streambed Alteration (LSA) Agreement - Impacts to Aquatic and Riparian Resources**

**Issue #1:** The MND does not provide a map showing waters subject to CDFW jurisdiction nor provide adequate disclosure that the Project may require Lake Streambed Alteration Agreement (LSA) notification. Project construction and activities will occur near and impact wetland resources. The Project proposes to build a bridge across Arroyo Conejo; convert a natural surface swale to subsurface flow; build a 375-foot concrete road that could impact surface flow; and impact riparian vegetation.

**Issue #2:** The MND states the following:

- 1) Mitigation Measure BIO-1 on page 25 of the MND states, "Bridge and access road construction will not occur within the bed and banks of the stream channel."
- 2) Page 27 of the MND states, "Construction of the bridge abutments will occur on upper stream banks above the 100-year peak flow elevation. No work will occur in the stream channel. Construction of the access road will occur on a dry, historic floodplain terrace which does not contain any wetland areas."
- 3) Page 46 of the MND states, "The Project does not entail alteration of a stream course and is not expected to create erosion or siltation on or off site. Project grading will take place outside of the stream channel and will be restricted to grading necessary for the

Mr. Donald Nielsen  
City of Thousand Oaks  
August 27, 2020  
Page 11 of 53

concrete abutments and short access road. Standard erosion control measures will be implemented in compliance with project plans and associated SWPPP.”

CDFW understands that the Project/City intends to avoid direct impacts to aquatic and riparian resources; however, CDFW is concerned the MND understates potential indirect, both temporary or permanent, impacts on aquatic and riparian resources. The MND should provide a thorough evaluation of the Project’s potential indirect impacts.

**Specific Impacts:** The Project would result in loss of riparian vegetation in and potentially downstream of the Project site. The Project may divert water flow and alter the amount of surface flow into Arroyo Conejo. The Project may result in increased sediment input into Arroyo Conejo for the duration of the Project and potentially long-term.

#### **Why impacts would occur:**

Loss of riparian vegetation. The Project would remove 0.14 acres of Arroyo willow (*Salix lasiolepis*) riparian forest. The Project may have additional indirect impacts on riparian vegetation by altering how water and sediment is transported. The culvert and associated riprap pads and approximately 7,500 square-feet of paved road would eliminate surface area where water would naturally flow, spread, and infiltrate into the ground to be transported as subsurface flow into Arroyo Conejo or groundwater table. The culvert and road may increase surface flow velocity, potentially increasing sediment and pollutant transport into Arroyo Conejo instead of allowing sediment to settle naturally on a soil surface. Additionally, erosion and scouring could occur adjacent to the culvert and road, potentially increasing the sediment load into Arroyo Conejo. Localized changes to direction and amount of surface water flow, temporary or permanent, may impact riparian vegetation where these changes occur. Water stress, wilting, leaf death, stem dieback, and ultimately, mortality could occur. Moreover, increased sediment deposition can bury seedlings and saplings of riparian trees, resulting in increased mortality of new recruits (Kui and Stella 2016).

Lastly, groundwater, if encountered during the Project, may be expelled, captured, and/or contained, and treated. Riparian vegetation are phreatophytes, plants with a deep root system that draws its water supply from near the water table. Accordingly, many species of riparian plants are intolerant to high water stress (Busch et al. 1992; Cooper and Merritt 2012). Riparian vegetation could become stressed should the Project extract groundwater, especially if this were to occur during times of drought.

Divert water flow and alter amount of waterflow. As described above, the culvert and associated riprap pads and approximately 7,500 square-feet of paved road would divert surface water flow from its natural course. These features would eliminate surface area where surface water would flow, spread, and infiltrate into the ground and be transported as subsurface flow into Arroyo Conejo or groundwater table. Additionally, the concrete bridge surface would eliminate an area of 1,680 square feet where rainwater would naturally fall into Arroyo Conejo.

Increased sediment input. Construction of the access road, culvert, and bridge abutments, and operation of loaders, dozers, drilling rigs, and cranes may result in ground disturbance and vibration resulting in erosion regardless of how far work occurs away from the stream channel. The Project would also excavate 36 inches of native soil and bring in 3,000 cubic yards of

Mr. Donald Nielsen  
City of Thousand Oaks  
August 27, 2020  
Page 12 of 53

imported fill. Construction and field crews moving around the Project site may also result in erosion. Erosion may be more likely to occur because the Project has recently burned. In the absence of native woody vegetation to stabilize the soil, the Project site, which consists mostly of alluvium, is more susceptible to erosion. Adjacent roads can cause soil erosion, disrupt surface waterflow, and surface runoff that can transfer sediment into streams (Beschta 1978; King and Tennyson 1984; Richardson et al. 2001; Seyedbagheri 1996; Wemple et al. 1996).

**Evidence impacts would be significant:** The Project may substantially adversely affect aquatic and riparian resources through the alteration or diversion of surface waterflow, which absent specific mitigation, could result in substantial erosion or siltation within and downstream of Project site.

### **Recommended Potentially Feasible Mitigation Measure(s):**

**Mitigation Measure #1:** CDFW recommends modifying the MND's proposed mitigation measure BIO-1 by removing the language with strikethrough and including the underlined language:

**BIO - 1** ~~Bridge and access road construction will not occur within the bed and banks of the stream channel. No project construction, activities, and equipment staging shall occur within bed and banks of the stream channel. No work, including operation of loaders, dozers, drilling rigs, cranes, and vehicles, shall occur within 30 feet from the top of stream banks to minimize impacts to special status wildlife species that include (but not limited to) least Bell's vireo, arroyo chub, two-striped garter snake, and Southern Western pond turtle. Vehicles and workers shall not be allowed to enter or cross the stream channel to move between the east and west side of the project site. Fencing and signage shall be installed 30 feet from the stream banks to exclude entry into the stream channel for the duration of the project. Fencing and signage shall not be moved and be maintained for the duration of the project. The Contractor shall advise all workers of the intent of the protection measures prior to the start of project construction and activities. No living native vegetation shall be removed from the channel, bed, or banks of the Arroyo Conejo.~~

**Recommendation #1:** A preliminary jurisdictional delineation of the streams and their associated riparian habitats should be included in the MND. Jurisdiction should evaluate all rivers, streams, and lakes, including culverts, ditches, storm channels that may transport water, sediment, pollutants, and discharge into rivers, streams, and lakes. Some wetland and riparian habitats subject to CDFW's authority may extend beyond the jurisdictional limits of the United States Army Corps of Engineers' section 404 permit and Regional Water Quality Control Board section 401 Certification.

**Recommendation #2:** Potential Project-related changes to drainage patterns, runoff, and sedimentation, both direct and indirect both, temporary and permanent, should be thoroughly evaluated and included in the MND. Potential changes resulting from the following should be addressed: construction of bridge abutments; construction of the access road surfaced with concrete; diversion of the swale to a culvert; and, potential groundwater extraction. Potential changes should be evaluated in the BSA defined as the Project site plus a 500-foot buffer.

Mr. Donald Nielsen  
City of Thousand Oaks  
August 27, 2020  
Page 13 of 53

**Recommendation #3:** CDFW's issuance of a Final Streambed Alteration Agreement for this Project that is subject to CEQA will require CEQA compliance actions by CDFW as a Responsible Agency. As a Responsible Agency, CDFW may consider the CEQA document (MND) of the Lead Agency for the Project. COSCA has been coordinating with CDFW to develop a Draft Streambed Alteration Agreement (Notification #1600-2019-0107-R5). The Draft Streambed Alteration Agreement may need revisions based on CDFW's review of the MND and the comments provided to the City in this letter. CDFW may need to include additional avoidance and minimization measures to the Draft Streambed Alteration Agreement to adequately avoid adverse impacts to fish and wildlife resources associated with the stream. Additional measures may include further erosion and pollution control measures. To compensate for any on-site and off-site impacts to riparian resources, additional mitigation conditioned in any Final Streambed Alteration Agreement may include the following: avoidance of resources, on-site or off-site creation, enhancement or restoration, and/or protection, and management of mitigation lands in perpetuity.

#### **Comment #4: Impacts to California Species of Special Concern**

**Issue:** CDFW is concerned that the MND does not provide avoidance, minimization, or mitigation measures for potential impacts to arroyo chub (*Gilia orcuttii*); two-striped garter snake (*Thamnophis hammondi*); and Southern Western pond turtle (*Emys marmorata pallida*). Page 24 of the 2018 Assessment describes the BSA has having suitable habitat for all three species and that these species have a high potential to occur.

**Significant impacts:** Project construction and activities, directly or through habitat modification, may result in direct mortality, reduced reproductive capacity, population declines, or local extirpation of CESA-listed species.

**Why impacts would occur:** Fish and aquatic reptiles may suffer mortality associated with vegetation removal, grading, excavating, and operation of heavy equipment and construction vehicles during construction of the bridge, culvert, and road. In addition, inadvertent sediment discharge during Project construction and activities may result in water quality impacts which may degrade aquatic habitat.

Two-striped garter snake. Highly aquatic and forage primary in and along streams for fish and amphibians. The preferred nocturnal retreats of this active diurnal snake are thought to be holes, especially mammal burrows, crevices, and surface objects. Two-striped garter snakes are a cryptic species that often evade threats from predators by remaining still and blending into the surrounding landscape. Therefore, untrained workers may not recognize the presence of this species or be able to detect snakes before impacts occur.

Southern Western pond turtle. In permanent and intermitted rivers and creeks, South Western pond turtles most frequently occupy low-velocity waters, particularly deep pools. They can move many kilometers during the active season, and some individuals can move up to 3 kilometers (approximately 9,800 feet). They spend upwards of 200 days out of water on land adjacent to water features, often underground in burrows up to 500 meters from an aquatic site. Males may be found on land for up to 10 months annually, while females can be found on land during all months of the year due to nesting and overwintering. Loss of deep pools from streams due to sedimentation and large structure such as woody debris are threats to Southern Western pond

Mr. Donald Nielsen  
City of Thousand Oaks  
August 27, 2020  
Page 14 of 53

turtles. They require pools and sunny areas within the stream environment to allow for foraging and basking.

Arroyo chub. Arroyo chub are physiologically adapted to survive in habitats with low oxygen concentrations and wide temperature fluctuations, conditions common in southern California coastal streams. They are found in habitats characterized by slow-moving water, mud, or sand substrate; however, they have also been found in pool habitats with gravel, cobble, and boulder substrates that support at least some aquatic/emergent vegetation. Arroyo chubs spawn primarily in June and July but can breed more or less continuously from February through August.

**Evidence impacts would be significant:** Two-striped garter snake, Southern Western pond turtle, and arroyo chub are considered California Species of Special Concern and meet the CEQA definition of rare, threatened, or endangered species (CEQA Guidelines, § 15065). CDFW considers impacts to SSC a significant direct and cumulative adverse effect without implementing appropriate avoidance and/or mitigation measures. Take of SSC could require a mandatory finding of significance by the Lead Agency (CEQA Guidelines, § 15065).

**Recommended Potentially Feasible Mitigation Measure(s):**

**Mitigation Measure #1:** CDFW recommends species and season appropriate surveys and protocol surveys (where applicable) for aquatic fish and reptiles. Protocol surveys should be performed by a qualified biologist covering the entire BSA. Species-specific surveys would allow for identification of any areas in the BSA where these species occur and if possible, how these areas/impacts may be avoided, as well as inform appropriate minimization and mitigation measures.

Two-striped garter snake. Perform focused surveys for two-striped garter snakes. Surveys should typically be scheduled when this animal is most likely to be encountered, usually conducted between June and July, and during the warm days of summer afternoons. To achieve 100 percent visual coverage, CDFW recommends surveys be conducted with parallel transects spaced approximately 20 feet apart. All potential refugia should be searched included holes, especially mammal burrows, crevices, under rotting logs, woodpiles, boards, and other surface debris. During the day, two-striped garter snakes often basks on streamside rocks or densely vegetated stream banks. Also, on warm days during winter snakes may emerge and bask in the sun at the entrance of hibernacula.

Southern Western pond turtle. Perform focused surveys for Southern Western pond turtles and potential habitat using the United States Geological Survey's 2006 [Western Pond Turtle Visual Survey Protocol for the Southcoast Ecoregion](#). Surveys should be conducted within the Project site and an adjacent 500-foot buffer and analyze the potential significant effects of the proposed Project on the species (CEQA Guidelines, § 15125).

Arroyo chub. Perform focused surveys for arroyo chub. Within the BSA, if Arroyo Conejo transitions to subsurface flow, the remainder of the stream shall be surveyed to determine if there are isolated pools potentially supporting fish.

Mr. Donald Nielsen  
City of Thousand Oaks  
August 27, 2020  
Page 15 of 53

CDFW recommends the City provide survey results (i.e., reports) for two-striped garter snake, Southern Western pond turtle, and arroyo chub as appendices to the MND. Results may be provided as three separate reports or combined in one report. Survey reports should include the survey area; name(s) of qualified biologist(s); list of surveyor(s) qualifications; survey methodology; presence/absence of suitable wetland, upland, and foraging habitat and refugia; results (including negative findings); map showing location of any detections; and as needed, an assessment of specific impacts with specific-specific avoidance, minimization, and mitigation measures containing specific performance criteria. Measures proposed in the MND to fully avoid impacts to aquatic reptiles and fish should be effective, specific, enforceable, and feasible actions. For the Southern Western pond turtle, any proposed mitigation area/plan should include a discussion on the territory size, breeding locations, invasive aquatic species present, food availability, and how all life cycle functions will be mitigated.

If there are potentially significant impacts and a revision of the MND is needed, CDFW recommends recirculating the environmental document. This disclosure is necessary to allow CDFW to comment and coordinate with the Lead Agency on alternatives to avoid potential impacts, as well as to assess the significance of the specific impact relative to two-striped garter snake, Southern Western pond turtle, and arroyo chub (e.g., current range, distribution, population trends, and connectivity).

**Recommendation #2:** If take, removal, disturbance, or otherwise handling of special status species would occur from Project construction or activities, an Incidental Take Permit (ITP) under CESA would be required for the Project. CDFW may consider City of Thousand Oaks' CEQA documentation for its CESA-related actions if it adequately analyzes/discloses impacts and mitigation to special status species. Additional documentation may be required as part of an ITP application for the Project for CDFW to adequately develop an accurate take analysis and identify measures that would fully mitigate for take of CESA-listed species. Please see pages 35 and 36 for additional comments on *CESA ITP* and *Translocation/Salvage of Plants and Animal Species*.

#### **Comment #5: Impacts to Least Bell's Vireo**

**Issue #1:** Page 25 of the MND states, "suitable habitat for least Bell's vireo [vireo] occurs within the Study Area. However, this species was not observed during modified protocol surveys of the Study Area conducted during the breeding season. Therefore, least Bell's vireo is considered absent from the Study Area." The 2018 Assessment used [USFWS 2001 Least Bell's Vireo Survey Guidelines](#); however, the survey was modified, and the MND/2018 Assessment does not provide a discussion of why the survey was modified. Page 1 item #1 of the survey protocol states:

"Under normal circumstances all riparian areas and any other potential vireo habitats should be surveyed at least eight (8) times during the period from April 10 to July 31. However, we [USFWS] may concur, on a case by case basis, with a reduced effort if unusual circumstances dictate that this is a prudent course of action. For instance, intensive surveys of small, marginal or extralimital habitats by experienced personnel may well result in defensible conclusions that eight (or more) individual survey are unnecessary. Under such unusual circumstances, we will consider requests for reductions in the prescribed number of individual surveys. In any case, site visits should

Mr. Donald Nielsen  
City of Thousand Oaks  
August 27, 2020  
Page 16 of 53

be conducted at least 10 days apart to maximize the detection of, for instance, late and early arrivals, females, particularly "non vocal" birds of both sexes, and nesting pairs."

The MND relied on a "modified" vireo survey that only conducted three surveys less than 10 days apart, June 1, June 4, and June 7, 2018. CDFW is concerned that a modified survey may have resulted in missed detections and is inadequate to conclude vireo is absent from the BSA. Page 2 of the 2018 Assessment provides no discussion as to why the surveys were modified beyond surveys were "modified to reduce the number and temporal spacing to three surveys spaced three days apart". Moreover, page 24 of the MND states that vireo is present 1.4 miles north at Arroyo Santa Rosa. Because there is connectivity between Arroyo Conejo and Arroyo Santa Rosa, vireo could be in the BSA.

**Issue #2:** The Project would impact 0.14 acres of Arroyo willow riparian forest and 0.02 acres of mule fat scrub (*Baccharis salicifolia*). CDFW is concerned there could be impacts to vireo as a result of habitat loss.

**Significant impacts:** Direct and indirect impacts to potential breeding and nesting vireos as a result of Project construction and activities.

**Why impacts would occur:** Project disturbance activities could result in temporary or long-term loss of suitable nesting and foraging habitats. Construction during the breeding season of nesting birds could result in the incidental loss of breeding success or otherwise lead to nest abandonment. Noise from road use, generators, and other equipment may disrupt vireo mating calls or songs, which could impact reproductive success (Patricelli and Blickley 2006, Halfwerk et al. 2011). Noise has been shown to reduce the density of nesting birds (Francis et al. 2009), and songbird abundance and density was significantly reduced in areas with high levels of noise (Bayne et al. 2008). Additionally, noise exceeding 70 dB(A) may affect feather and body growth of young birds (Kleist et al. 2018). Artificial light may attract or disorient migrating least Bell's vireo by disrupting navigation (Ogden 1996; Longcore and Rich 2004, 2016) and may also suppress their immune system (Moore and Siopes 2000). In addition, songbirds that live in areas with artificial light often begin morning choruses during night hours (Derrickson 1988, Miller 2006, Fuller et al. 2007), which may disrupt typical breeding behaviors.

**Evidence impacts would be significant:** Consistent with CEQA Guidelines section 15380, the status of vireo as an endangered species pursuant to the ESA (16 U.S.C. § 1531 *et seq.*) and CESA (Fish & G. Code, § 2050 *et seq.*) qualifies vireo as an endangered, rare, or threatened species under CEQA. Project impacts may result in substantial adverse effects, either directly or through habitat modifications, on a species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by CDFW or USFWS.

**Recommended Potentially Feasible Mitigation Measure(s):**

**Mitigation Measure #1:** Because suitable habitat for vireo is present, CDFW recommends the underlined text be included as a mitigation measure: Prior to initiation of Project construction and activities within or adjacent to suitable nesting habitat during least Bell's vireo breeding season (March 15 - September 15), a CDFW-approved biologist with experience surveying for least Bell's vireo shall conduct at least three focused surveys following USFWS established protocols to determine whether breeding and nesting least Bell's vireos are present. If least



Mr. Donald Nielsen  
City of Thousand Oaks  
August 27, 2020  
Page 17 of 53

Bell's vireo is present, no construction shall take place from March 15 through September 15. If least Bell's vireo is present and construction cannot be avoided between that time, the City of Thousand Oaks/CRPD/COSCA shall coordinate with CDFW to determine if an Incidental Take Permit may be required.

**Recommendation #1:** CDFW recommends the MND provide a detailed discussion as to why the vireo survey was modified and whether that may have resulted in missed detections. CDFW also recommends the MND provide additional details from the 2018 vireo survey (e.g., methodology, field datasheets) to demonstrate that the three surveys that were completed followed field survey guidelines and met surveyor requirements described in the survey protocol.

**Recommendation #2:** CDFW recommends the MND include additional survey data that may come from one or both recommendations below:

- 1) Another vireo survey performed by a qualified biologist consistent with USFWS's survey guidelines. The final survey report should be provided as an appendix to the MND.
- 2) 2019 survey report from the Western Foundation of Vertebrate Zoology who is partnering with COSCA on a long-term study of vireo in an area that includes the BSA.

If new significant effects are identified and mitigation measures or project revisions must be added to the MND, CDFW recommends recirculating the environmental document (CEQA Guidelines, § 15073.5). This disclosure is necessary to allow CDFW to comment on alternatives to avoid potential impacts, as well as to assess the significance of the specific impact relative to vireo (e.g., current range, distribution, population trends, and connectivity). Measures proposed by the MND to fully avoid impacts to vireo should be effective, specific, enforceable, and feasible actions.

**Recommendation #3:** If take of least Bell's vireo would occur from Project construction or activities, an ITP under CESA would be required for the Project. Please see pages 35 and 36 for additional comments on *CESA ITP* and *Translocation/Salvage of Plants and Animal Species*.

#### **Comment #6: Impacts to Nesting Birds**

**Issue:** CDFW is concerned that mitigation measures BIO-3 and BIO-4 proposed for impacts to nesting birds is inadequate for reducing Project impacts to less than significant. Multiple species of special status birds are present in the BSA and more could come into the BSA from adjacent habitats above Arroyo Conejo.

**Specific Impacts:** Project construction and activities during the breeding season for nesting birds could result in the loss of fertile eggs or nestlings or otherwise lead to nest abandonment.

**Why impacts would occur:** Yellow warbler (*Dendroica petechia brewsteri*) and Osprey (*Pandion haliaetus*) are present in the BSA. Additional species of special status passerine and raptors known to occur in adjacent areas could nest in the Project site, as well as birds and raptor species not surveyed for during the 2018 Assessment but could occur in the Project site. Riparian habitats provide important nesting habitat and cover for many species of birds.

Mr. Donald Nielsen  
 City of Thousand Oaks  
 August 27, 2020  
 Page 18 of 53

Because the Project is occurring in riparian habitat where multiple species of birds are known to occur, there is a high likelihood that birds may nest in the Project site. Impacts could result from noise disturbances, increased human activity, dust, vegetation clearing, ground disturbing activities (e.g., staging, access, grading, excavating, drilling), and vibrations caused by heavy equipment. Such disturbances could result in increased nestling mortality due to nest abandonment or decreased feeding frequency.

**Evidence impacts would be significant:** Nests of all native bird species are protected under State laws and regulations, including Fish and Game Code sections 3503 and 3503.5. Furthermore, reductions in the number of special status bird species, either directly or indirectly through nest abandonment or reproductive suppression, would constitute a significant impact absent appropriate mitigation. CDFW also considers impacts to Species of Special Concern a significant direct and cumulative adverse effect without implementing appropriate avoidance and/or mitigation measures.

### **Recommended Potentially Feasible Mitigation Measure(s):**

**Mitigation Measure #1:** CDFW recommends modifying the MND's proposed mitigation measures BIO-3 and BIO-4 by removing the language with strikethrough and including the underlined language:

~~**BIO - 3** Construction will occur outside the bird breeding season to the extent feasible (February 15—August 15). To protect nesting birds that may occur on site, no Project construction, activities, or equipment staging shall occur during the bird nesting season from February 15 through August 31, and as early as January 1 for raptors.~~

~~**BIO - 4** If the bird breeding season cannot be avoided, breeding bird surveys will be conducted. If breeding birds are documented, construction activity will be directed/scheduled to minimize disturbance of active nests.~~

### **Comment #7: Impacts to Bats**

**Issue:** Bat surveys were not conducted. Appendix B shows Yuma myotis (*Myotis yumanensis*) occurring in the BSA. Additionally, a nine-quadrangle search of the CNDDDB found the following bat species: California leaf-nosed bat (*Macrotus californicus*); hoary bat (*Lasiurus cinereus*); pallid bat (*Antrozous pallidus*); western mastiff bat (*Eumops perotis californicus*); and western small-footed myotis (*Myotis ciliolabrum*). Yuma myotis and other bats could roost in trees the BSA or structures adjacent to the BSA at the Hill Canyon Treatment Plant. Bats could forage in waters within the BSA.

**Specific Impacts:** Direct impacts include removal of trees, vegetation, and/or structures that may provide roosting habitat and therefore has the potential for the direct loss of bats. Indirect impacts to bats and roosts could result from increased noise disturbances, human activity, dust, vegetation clearing, ground disturbing activities (e.g., staging, access, grading, excavating, drilling), and vibrations caused by heavy equipment.

**Why impacts would occur:** In urbanized areas, bats use trees and man-made structures for daytime and nighttime roosts (Avila-Flores and Fenton 2005; Oprea et al. 2009; Remington and

Mr. Donald Nielsen  
City of Thousand Oaks  
August 27, 2020  
Page 19 of 53

Cooper 2014). Trees and crevices in buildings in and adjacent to the Project site could provide roosting habitat for bats. Bats can fit into very small seams, as small as a ¼ inch. Modifications to roost sites can have significant impacts on the bats' usability of the roost and can impact the bats' fitness and survivability (Johnston et al. 2004). Extra noise, vibration, or the reconfiguration of large objects can lead to the disturbance of roosting bats which may have a negative impact on the animals. Human disturbance can also lead to a change in humidity, temperatures, or the approach to a roost that could force the animals to change their mode of egress and/or ingress to a roost. Although temporary, such disturbance can lead to the abandonment of a maternity roost (Johnston et al. 2004).

**Evidence impacts would be significant:** Bats are considered non-game mammals and are afforded protection by state law from take and/or harassment (Fish & G. Code, § 4150; Cal. Code of Regs, § 251.1). Several bat species are considered California Species of Special Concern and meet the CEQA definition of rare, threatened, or endangered species (CEQA Guidelines, § 15065). Take of SSC could require a mandatory finding of significance by the Lead Agency (CEQA Guidelines, § 15065).

#### **Recommended Potentially Feasible Mitigation Measure(s):**

**Mitigation Measure #1:** CDFW recommends a qualified bat specialist conduct bat surveys within the Project site and within a 500-foot buffer to identify potential habitat that could provide daytime and/or nighttime roost sites, and any maternity roosts. CDFW recommends using acoustic recognition technology to maximize detection of bats. Night roosts are typically utilized from the approach of sunset until sunrise. Maternity colonies, composed of adult females and their young, typically occur from spring through fall.

Survey methodology and results, including negative findings, should be provide as an appendix to the MND. Depending on survey results (e.g., roosts are detected, bats observed), please discuss potentially significant effects of the proposed Project on the bats and include species-specific mitigation measures to reduce impacts to below a level of significance (CEQA Guidelines, § 15125).

**Mitigation Measure #2:** CDFW recommends the City include the following mitigation measure: "If bats are not detected, but the bat specialist determines that roosting bats may be present at any time of year and could roost in trees, trees shall be pushed down using heavy machinery rather than felling it with a chainsaw. To ensure the optimum warning for any roosting bats that may still be present, trees shall be pushed lightly two to three times, with a pause of approximately 30 seconds between each nudge to allow bats to become active. The tree shall then be pushed to the ground slowly and remain in place until it is inspected by a bat specialist. Trees that are known to be bat roosts shall not be bucked or mulched immediately. A period of at least 24 hours, and preferably 48 hours, shall elapse prior to such operations to allow bats to escape." *Note: Work shall not occur between January 1 through August 15 to avoid impacts to nesting birds and raptors.*

**Mitigation Measure #3:** If maternity roosts are found, CDFW recommends the City include the following two mitigation measures:

- a) "If maternity roosts are found, to the extent feasible, work shall be scheduled between

Mr. Donald Nielsen  
City of Thousand Oaks  
August 27, 2020  
Page 20 of 53

October 1 and February 28, outside of the maternity roosting season when young bats are present but are not yet ready to fly out of the roost (March 1 to September 30).”

*Note: Work shall not occur after January 1 to avoid impacts to nesting birds and raptors.*

- b) “If maternity roosts are found and trees must be removed during the maternity season, a qualified bat specialist shall conduct a preconstruction survey to identify those trees proposed for disturbance that could provide hibernacula or nursery colony roosting habitat. Acoustic recognition technology shall be used to maximize detection of bats. Each tree identified as potentially supporting an active maternity roost shall be closely inspected by the bat specialist no more than 7 days prior to tree disturbance to determine the presence or absence of roosting bats more precisely. If maternity roosts are detected, trees determined to be maternity roosts shall be left in place until the end of the maternity season. Work shall not occur within 100 feet of or directly under or adjacent to an active roost and work shall not occur between 30 minutes before sunset and 30 minutes after sunrise.”

### **Comment #8: Impacts to Vegetation Communities**

**Issue #1:** Attachment #9, Appendix D shows 0.16 acres of “Temporary Impact Restoration” and 0.32 acres of “Hydroseeded Shoulders”. It is not clear what plants associated with which vegetation community will be restored in these areas. Accordingly, CDFW is unable to determine if the area will restore the appropriate vegetation communities impacted by the Project. Assuming these 0.48 acres will be mitigation for temporary and permanent impacts to Arroyo willow riparian forest and mule fat scrub, CDFW is concerned that hydroseeding will be used to restore woody vegetation. Hydroseeding may be ineffective to restore woody vegetation and trees typically planted via propagules, cuttings (e.g., willow stakes), or saplings.

**Issue #2:** CDFW is concerned that the MND does not provide a list of species to be hydroseeded in these 0.48 acres. Accordingly, CDFW is unable to determine if the Project will use species that are appropriate for the vegetation communities being restored and to the Project site. Figure 1 of the 2018 Assessment shows the 0.32-acre “Hydroseeded Shoulders” consisting of Arroyo willow riparian and mule fat scrub before the fire. If the Project proposes to use the hydroseed native seed mix presented on page 26 of the MND, the seed mix does not include any plants found in Arroyo willow riparian and mule fat scrub alliance except for California sagebrush (*Artemisia californica*). Therefore, proposed mitigation for temporary and permanent impacts to Arroyo willow riparian forest and mule fat scrub may be inadequate.

**Issue #3:** Attachment #9, Appendix D shows 0.8 acres of “On Site Habitat Restoration” that will be primarily hydroseeded. CDFW is concerned that the MND does not provide a reference site or a discussion to demonstrate that the hydroseed native seed mix presented on page 26 of the MND is appropriate for the Project site. Additionally, CDFW is concerned that the soils/substrate in the area proposed for 0.8 acres of restoration may be too compacted, disturbed, and dense with non-native vegetation to result in a successful restoration effort. The area was classified as “disturbed” in the 2018 Assessment. Lastly, CDFW is concerned that the proposed restoration of these 0.8 acres does not adequately mitigate for impacts to Arroyo willow riparian and mule fat scrub that provide habitat for two-striped garter snake, Southern Western pond turtle, arroyo chub, and, vireo.

Mr. Donald Nielsen  
City of Thousand Oaks  
August 27, 2020  
Page 21 of 53

**Issue #4:** Table 8 on page 17 of the MND shows temporary impacts to 0.07 acres of mule fat scrub “outside of CDFW jurisdiction”. Without a preliminary jurisdiction map, CDFW is unable to evaluate whether any of the 0.07 acres of impacts is within CDFW jurisdiction; therefore, CDFW is unable to comment on whether the Project’s proposed mitigation plan accurately reflects Project impacts to vegetation communities.

**Specific Impacts:** Long-term, permanent loss of Arroyo willow riparian and mule fat scrub habitat absent an adequate, robust, and detailed a mitigation plan for impacts to vegetation communities. The Project would remove vegetation considered suitable habitat for special status wildlife species including vireo, two-striped garter snake, Southern Western pond turtle, yellow warbler, and yellow-breasted chat.

**Why impacts would occur:** The Project would impact 0.16 acres of Arroyo willow riparian and mule fat scrub habitat. Proposed mitigation plan for restoring 0.48 acres of Arroyo willow riparian and mule fat scrub habitat may be unsuccessful if an incorrect plant palette is used and hydroseeding is the only restoration method proposed. Hydroseeding is primary used with grass seeds to establish vegetative cover as a form of erosion control over a large area. The goal for mitigation should not be slope stability but to restore the habitat value and ecological function of Arroyo willow riparian and mule fat scrub habitat impacted by the Project.

In riparian restoration, hydroseeding should not be used as the sole restoration method. If used as the only restoration method, hydroseeding may result in a higher difficulty to perform the following: control the density and location of seed application; create a natural vegetation gradient; place specific plant species at specific locations; control plant spacing to reduce competition as plants mature; control for non-native, invasive plant seeds; and establish species that have a low seed germination rate. Hydroseeding as a riparian restoration method has a higher degree of failure compared to planting. Hydroseeding provides less soil to seed contact compared to other methods of plant establishment. Seeds may be washed away, eaten, or blown away without the proper measures to keep the seeds in place (e.g., mulch, jute netting). Because seeds of many riparian species are wind dispersed, hydroseeding of seeds with pappus may be unsuccessful.

**Evidence impacts would be significant:** The Project may substantially adversely affect aquatic and riparian resources through temporary and permanent removal of riparian vegetation, which absent specific mitigation, could result in the Project having significant impacts on the environment. The Project would remove vegetation considered suitable habitat for special status wildlife species including vireo, two-striped garter snake, Southern Western pond turtle, yellow warbler, and yellow-breasted chat. Project impacts may result in substantial adverse effects, either directly or through habitat modifications, on a species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by CDFW or USFWS.

**Recommended Potentially Feasible Mitigation Measure(s):**

**Mitigation Measure #1:** CDFW recommends the MND include an adequate, robust, and detailed restoration plan for Arroyo willow riparian and mule fat scrub (i.e., Temporary Impact Restoration and Hydroseeded Shoulders). CDFW recommends the plan focus on establishing plants using an appropriate combination of seed, propagules, cuttings, and tree saplings.

Mr. Donald Nielsen  
City of Thousand Oaks  
August 27, 2020  
Page 22 of 53

Because Arroyo willow riparian and mule fat scrub provides suitable habitat for vireo, CDFW recommends the City retain a qualified biologist and restoration specialist with experience restoring habitat for vireo to develop an ecosystem-based Least Bell's Vireo Habitat Restoration Plan (Vireo Plan). A Vireo Plan should capture critical components of vireo nesting and foraging habitat in the restoration design, which includes a structurally diverse planting palette (i.e. subshrub, shrub, tree) (Kus 1998). A Vireo Plan should be of sufficient detail and resolution to describe the following at a minimum: 1) location(s) of on-site mitigation and adequacy of the location(s) to serve as mitigation; 2) assessment of appropriate reference sites; 3) scientific [Genus and species (subspecies and variety if applicable)] and common names of plants being used for restoration; 4) location(s) of propagule source; 5) species-specific planting methods (i.e. container or seed); 6) measurable goals and success criteria for establishing self-sustaining populations (e.g., percent survival rate, absolute cover); 7) long-term monitoring, and; 8) adaptive management techniques.

CDFW recommends the City provide a Least Bell's Vireo Habitat Restoration Plan as an appendix to the MND.

**Recommendation #1:** The MND should provide evidence to support the suitability of restoring 0.8 acres ("On Site Habitat Restoration") for mitigating Project-related impacts to aquatic and riparian vegetation communities that support special status wildlife species. The MND should describe the habitat and ecological value potentially provided by restoration of these 0.8 acres with an emphasis on potential to habitat value for special status species. The MND should provide information about a reference site used to determine the proposed plant palette (i.e., hydroseed native seed mix) for these 0.8 acres; why these species are appropriate for the Project site; and a discussion whether the level of soil compaction and disturbance would hinder restoration (i.e., plant establishment) at this location.

A final plan for restoring these 0.8 acres should include all the minimum requirements described above for a Least Bell's Vireo Habitat Restoration Plan.

If the City is unable to provide adequate evidence in support of restoring 0.8 acres for mitigating Project-related impacts to aquatic and riparian vegetation communities that benefit special status species, CDFW recommends the City redirect efforts to potentially: 1) remove non-native invasive plants from 25 percent of the BSA that used to be mule fat scrub before the fire and restore mule fat scrub; 2) create a robust Integrated Pest Management Plan for *Arundo donax* control (see **Comment #9**); and, 3) propose alternative on- or off-site mitigation and provide evidence to support the ecological value of mitigating for Project-related impacts at proposed locations. Please see page 36 for information on *Compensatory mitigation*. Plans for on- and/or off-site mitigation, financial assurance, and non-wasting endowments for long-term management of mitigation lands should be disclosed, documented, and completed in the final environmental document and prior to any Project construction and activities.

**Recommendation #2:** CDFW recommends including a new map or updates to Attachment #9, Appendix D to show the location of "temporary impacts to 0.07 acres of mule fat scrub outside of CDFW jurisdiction". If any of the 0.07 acres fall within CDFW jurisdiction, CDFW recommends the City update its mitigation plan for impacts to aquatic and riparian resources using no less than 3:1 for temporary impacts and 5:1 for permanent impacts to Arroyo willow riparian and mule fat scrub, respectively.

Mr. Donald Nielsen  
City of Thousand Oaks  
August 27, 2020  
Page 23 of 53

**Recommendation #3:** CDFW recommends the following to add clarity to the Project's proposed mitigation plan for impacts to vegetation communities:

- 1) Use appropriate symbology, text boxes, and other map elements to show and distinguish the following in Attachment #9, Appendix D: CDFW or Outside CDFW Jurisdiction impacts/mitigation areas; mitigation area by community type [i.e., Arroyo willow, mule fat scrub, other (please define)]; mitigation based on permanent or temporary impacts; and restoration method based on planting or hydroseeding.
- 2) Change "On Site Habitat Restoration" in the legend on Attachment #9 to reflect jurisdiction, mitigation type, and restoration type. "On Site" is redundant because the map shows only on-site mitigation areas.
- 3) These recommended changes to Attachment #9 should also be reflected in text via modifications to Table 8 on page 17 of the 2018 Assessment. CDFW also recommends adding columns called "Mitigation ratio" and "Acres Mitigated/Restored" to document the mitigation ratios used by plant community and impact type (i.e., 3:1 or 5:1) and demonstrate the Project's proposed mitigation is adequate to reduce impacts to less than significant.

**Mitigation Measure #2:** CDFW recommends modifying the MND's proposed mitigation measure BIO-9 - subject to change to reflect final mitigation plans – by removing the language with strikethrough, including the underlined language, and providing information where it reads [Number]:

**BIO - 9** [Number] acres of compensatory mitigation is being proposed (Appendix D) and will consist of Arroyo willow and mule fat scrub restoration and giant reed (*Arundo donax*) removal and habitat restoration.

A minimum 3:1 and 5:1 mitigation ratio shall be used for temporary and permanent impacts, respectively. For [Number] acres of temporary and [Number] acres of permanent impacts to Arroyo willow scrub, [Number] acres and [Number] acres shall be restored, respectively. For [Number] acres of temporary and [Number] acres of permanent impacts to mule fat scrub, [Number] acres and [Number] acres shall be restored, respectively. Restoration shall use an appropriate combination of seed, propagule, cuttings, willow stakes, and saplings. Arroyo willow and mule fat scrub restoration shall follow a Least Bell's Vireo Habitat Restoration Plan.

~~Giant reed removal will occur in the riparian corridor adjacent to and downstream of the project site. The length of the treatment area is approximately 1.2 miles. Approximately 76 stands of giant reed are proposed for removal. These stands total 0.9 acre in size and occur at 90-100% density.~~

~~In addition, habitat restoration shall occur in the 0.75-acre 0.8-acre area classified as disturbed, located adjacent to the project site. Restoration of these 0.8 acres activities shall consist of hydroseeding the native seed mix shown below... (provide table) and installing the following container plants... (provide list of container plants).~~

Mr. Donald Nielsen  
City of Thousand Oaks  
August 27, 2020  
Page 24 of 53

### **Comment #9: Arundo control**

**Issue:** While CDFW concurs with non-native vegetation removal along Arroyo Conejo, CDFW is concerned that Arundo control may impact special status species and habitat without developing a robust pest management plan with biomonitoring measures in place. Also, CDFW is concerned the MND does not provide adequate description for whether any planting of riparian vegetation would occur after Arundo control and whether long-term control of Arundo resprouts will occur to maintain restored areas. Lastly, CDFW is concerned that the MND does not provides measures to prevent the spread of Arundo during control efforts.

**Specific Impacts:** Arundo control may result in direct mortality to special status species. Increased stream bank and slope failure during or after Arundo control without revegetation. This may increase fine sediment input into Arroyo Conejo and impact the quality of water and special status species habitat. Improper control of Arundo may spread rhizomes and plant fragments, creating new populations and impacts to riparian habitat.

### **Why impacts would occur:**

Impacts to wildlife. Arundo forms large, dense clumps along riparian corridors which could obstruct the view of any wildlife nesting or hiding in the vegetation. Arundo control is typically performed by mowing large stands followed with herbicide application. Cryptic wildlife species like two-striped garter snake often evade threats from predators by remaining still and blending into the surrounding landscape. Untrained workers may not recognize the presence of these species which could be directly impacted by vegetation removal, operation of large equipment, and trampling. Moreover, herbicides used inappropriately may have non-target impacts to plants and wildlife.

Erosion. The removal of dense and large stands of Arundo without immediate implementation of appropriate slope and erosion control measures and revegetation can lead to stream bank failure. Additionally, workers and potentially large equipment working in a fragile landscape while controlling Arundo may cause stream bank failure. Increased fine sediment in wetlands can impair water and habitat quality and bury seedlings of woody riparian plants. Fish and herpetofauna dependent on a more coarse-grained stream bed would be impacted by temporary or long-term inputs of fine-grained sediment resulting from Arundo control.

Spreading reproductive material. Arundo reproduces vegetatively from rhizomes and plant fragments. Improper control measures can spread Arundo rhizomes and plant fragments downstream resulting in new populations of this highly invasive plant. This may lead to additional loss of riparian habitat.

**Evidence impacts are significant:** Riparian habitats provide important food, nesting habitat, cover, and migration corridors for wildlife. Only 5 to 10% of California's original riparian habitat exists today and much of the remaining habitat is in a degraded condition. The Project's proposed mitigation may substantially adversely affect aquatic and riparian resources through improper removal of Arundo, which absent a robust Integrated Pest Management Plan, could result in the Project having significant impacts on the environment. Also, improper Arundo control may result in substantial adverse effects, either directly or through habitat modifications,



Mr. Donald Nielsen  
 City of Thousand Oaks  
 August 27, 2020  
 Page 25 of 53

on a species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by CDFW or USFWS.

### **Recommended Potentially Feasible Mitigation Measure(s):**

**Mitigation Measure #1:** CDFW recommends the City retain a CDFW-approved qualified restoration specialist with experience controlling *Arundo*, preferably where there is least Bell's vireo, to prepare a Project and site specific Integrated Pest Management Plan for *Arundo* Control (IPM Plan for *Arundo*). The restoration specialist should have a Qualified Applicators License or is Pest Control Advisor issued by the California Department of Pesticide Regulation. The qualified restoration specialist should work with a CDFW-approved qualified biologist to develop species-specific biomonitoring measures to avoid and minimize impacts to wildlife during *Arundo* control including (but not limited to) vireo, two-striped garter snake, Southern Western pond turtle, and arroyo chub.

An IPM Plan for *Arundo* should be of sufficient detail and resolution to describe the following at a minimum: 1) name(s) and qualifications of plan preparers; 2) updated map of target *Arundo* populations; 3) measurable goals and success criteria to control 0.9 acres of *Arundo* (e.g., percent *Arundo* controlled, absolute cover of native plants after control); 4) species-specific wildlife biomonitoring, avoidance, and mitigation measures; 5) treatment methods based on technique, herbicide, and season; 6) description of any appropriate 'no-spray' or buffer zones to prevent impacts non-targeted plants, especially rare plants; 7) long-term monitoring and follow-up treatment, and; 8) adaptive management techniques. An IPM Plan for *Arundo* should be provided as an appendix in the MND.

**Mitigation Measure #2:** CDFW recommends modifying the MND's proposed mitigation measure BIO-9 by separating *Arundo* control to an *Arundo*-specific mitigation measure. CDFW recommends removing the language with strikethrough, include the underlined language, and providing information where it reads [Number]:

**BIO - [Number]** - Giant reed (*Arundo donax*) removal will occur in the riparian corridor adjacent to and downstream of the project site to mitigate for impacts to [Number] total acres of Arroyo willow and [Number] total acres of mule fat scrub. The length of the treatment area is approximately 1.2 miles. Approximately 76 stands of giant reed are proposed for removal. These stands total 0.9 acre in size and occur at 90-100% density. An Integrated Pest Management Plan for *Arundo* Control shall be prepared prior to project construction and activities.

### **Comment #10: Impacts to Native Trees**

**Issue #1:** Attachment #9, Appendix D shows 0.8 acres of "On Site Habitat Restoration" where the Project proposes container plants of the following species to mitigate for impacts to trees: 20 coast live oak trees (*Quercus agrifolia*); 20 blue elderberry (*Sambucus nigra* ssp. *caerulea*); 40 mule fat; and 12 southern California black walnut (*Juglans californica*). CDFW is concerned that the soils/substrate in the area proposed for 0.8 acres of restoration may be too compacted, disturbed, and dense with non-native vegetation to result in a successful restoration effort. The area was classified as "disturbed" in the 2018 Assessment. Google Earth imagery shows that this area has historically been more open without any trees until southern live oak trees

Mr. Donald Nielsen  
City of Thousand Oaks  
August 27, 2020  
Page 26 of 53

(*Quercus agrifolia* var. *oxydenia*) were planted here in 2014. Lastly, the area proposed may not have the appropriate understory species typically associated with these trees. The proposed hydroseed native seed mix for these 0.8 acres may not have the correct understory species to support the successful mitigation of impacts to trees.

**Issue #2:** Page 28 of the MND states, “A total of 32 coast live oak trees will be planted in compensation for the removed trees. As mentioned in Section 4(b) twenty of these replacement trees will be planted in the on-site habitat restoration area in conjunction with other species in the restoration plant palette. The remainder of the trees will be planted in various off-site areas within the City such as city owned properties and right-of-way.” CDFW is concerned that the Project may not fully mitigate for impacts to coast live oak trees because 12 trees would be taken off site. Because the MND does not provide a map or discussion of off-site mitigation areas, CDFW is unable to comment whether the off-site mitigation areas are appropriate, from an ecological standpoint, to mitigate for Project impacts.

**Issue #3:** CDFW is concerned that the MND does not provide measures to protect oak trees described on Table 4, page 11 of 2018 Assessment, during Project construction and activities. This includes four coast live oak trees and one Western sycamore (*Platanus racemosa*).

**Issue #4:** Table 4, page 11 of the MND states that one scrub oak (*Quercus berberidifolia*) will be “removed for the western bridge abutment”. However, the MND provides no mitigation per BIO-9 on page 26 of the MND for impacts to scrub oak, only coast live oak.

**Specific Impacts:** A short-term and long-term reduction in available nesting and perching habitat and structure for birds. Permanent loss of oak trees and other sensitive tree species absent appropriate mitigation.

**Why impacts would occur:** The Project may reduce the footprint of available nesting and perching habitat and structure for birds in the short-term and potentially long-term if the Project is inadequate in mitigating for impacts to trees. Trees will be removed, reducing habitat for the duration of the Project. Tree saplings can take many years to mature. For example, oak trees remain small and shrubby for many years and may take 20 to 40 years to reach maturity, potentially longer under drought conditions. According to Google Earth imagery, trees planted in the disturbed area next to Hill Canyon Road were planted in 2014 and the trees have taken at least to reach its current height and canopy cover. Birds will be unable to nest in planted trees, such as oak, until the oak trees mature.

Trees not targeted for removal may be impacted by heavy vehicles and equipment and other Project activities. The placement of fill dirt and ingress and egress routes of heavy construction vehicles can continually compact the root zone and roots may not be able to acquire nutrients, water, and oxygen, causing the tree to die (Hostetler and Drake 2009). Designated zones for disposal of debris and chemicals should be away from any trees meant to be preserved. Debris can be toxic or can change soil pH due to leeching of chemicals into the ground which could affect trees (Hostetler and Drake 2009).

**Evidence impacts would be significant:** The loss of occupied habitat or reductions in the number of rare bird species, either directly or indirectly through nest abandonment or reproductive suppression, would constitute a significant impact absent appropriate mitigation.

Mr. Donald Nielsen  
 City of Thousand Oaks  
 August 27, 2020  
 Page 27 of 53

Inadequate avoidance, minimization, and mitigation measures for impacts to special status plant and wildlife species will result in the Project continuing to have a substantial adverse direct, indirect, and cumulative 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 USFWS.

**Recommended Potentially Feasible Mitigation Measure(s):** CDFW recommends modifying the MND's proposed mitigation measures BIO-7 and BIO-10 - subject to change to reflect final mitigation plans - by removing the language with strikethrough, including the underlined language, and providing information where it reads [Number]; and, include additional measures 3 through 5:

**Mitigation Measure #1: BIO - 7** Necessary permits and authorizations from the City of Thousand Oaks for the removal and trimming of trees within the project footprint shall be obtained prior to Project construction and activities. Trees protected under City of Thousand Oaks ordinances will be mitigated at a 4:1 ratio. These species include coast live oak and scrub oak.

**Mitigation Measure #2: BIO - 10** Removed trees will be replaced at a 4:1 ratio. For impacts to [Number] coast live oak trees, [Number] coast live oak trees will be replanted; [Number] of trees on site and [Number] of trees off site. For impacts to [Number] scrub oak trees, [Number] scrub oak trees will be replanted; [Number] of trees on site and [Number] of trees off site. For impacts to [Number] blue elderberry trees, [Number] blue elderberry trees will be replanted; [Number] of trees on site and [Number] of trees off site. For impacts to [Number] Western sycamore trees, [Number] Western sycamore trees will be replanted; [Number] of trees on site and [Number] of trees off site. 32 coast live oak trees will be planted in compensation for the removed trees. As mentioned in Section 4(b) twenty of these replacement trees will be planted in the on-site habitat restoration area in conjunction with other species in the restoration plant palette. The remainder of the trees will be planted in various off-site areas within the City such as city owned properties and right-of-way. Tree planting shall also include restoration of appropriate ground cover, subshrub, or shrub understory species. These species are (provide list here or indicate where list may be found). (Include a brief description of off-site mitigation areas).

**Mitigation Measure #3:** If one scrub oak will be impacted, CDFW recommends the MND be conditioned to mitigate for impacts to scrub oak at no less than 4:1. Impacts and proposed mitigation should be disclosed in the final environmental document.

**Mitigation Measure #4:** To protect trees not targeted for removal, CDFW recommends the following mitigation measure, "Project activities, including (but not limited to) construction traffic, staging areas, trenching, soil compaction, and debris piles shall not occur within a tree's drip line and within a tree's Critical Root Zone (CRZ), CRZ measured based on leading forestry practices/standards or local tree protection ordinances, whichever is more protective. The perimeter of the CRZ shall be adequately flagged and marked. The Contractor shall advise all workers of the intent of the protection measures prior to the start of project construction and activities. If substantial impacts to roots and canopy of trees occur, trees shall be replaced at a minimum ratio of 4:1 for all native trees impacted."

Mr. Donald Nielsen  
City of Thousand Oaks  
August 27, 2020  
Page 28 of 53

**Mitigation Measure #5:** Replacement oak trees should be the same species (i.e., Genus, species, variety) as the trees impacted. The City shall work with a certified arborist and/or qualified restoration professional to acquire appropriately sized, locally sourced oak trees from a local native plant nursery that implements Phytophthora/Clean Nursery Stock protocols. This may reduce the probability of introducing oak trees contaminated with pests, diseases, and pathogens that could spread and infect native oak trees or habitats. A certified arborist and/or qualified restoration professional should inspect and potentially quarantine nursery stock before bringing them into the Project site and supervise the installation and transplanting of oak trees.

The City should protect and monitor the survivorship of all planted oak trees until the trees begin to produce seeds. The City should consult with the certified arborist and/or qualified restoration professional on a long-term maintenance plan to provide protective caging, shading, and irrigation. Oak trees should be protected from trampling, damage, or climbing. The City should also consult with the certified arborist and/or qualified restoration professional if oak trees show symptoms of stress and determine the appropriate response to prevent mortality.

**Recommendation #1:** The MND should provide evidence to support the suitability of the 0.8-acre area ("On Site Habitat Restoration") and off-site area for mitigating Project-related impacts to native trees. The MND should provide a discussion whether the level of soil compaction and disturbance in the 0.8-acre area would hinder restoration (i.e., tree establishment) at this location.

A final plan for on and/or off-site mitigation for impacts to trees may be combined with other mitigation plans for impacts to vegetation communities. A mitigation plan for trees should include restoration of appropriate understory species and adequately describe the understory plant palette (i.e., species being used, quantities, planting methods). CDFW recommends the MND provide an adequate and detailed map and discussion of the suitability of off-site mitigation areas for impacts to oak trees. A map should provide the mitigation areas at three scales of resolution: the city neighborhood, and location of each individual oak tree. Replacement oak tree species and quantities should be identified on the map. Provide a detailed discussion of physical and biological factors that provide evidence to support the suitability of the area to mitigate for impacts to oak trees. A discussion should also include any potential anthropogenic sources of disturbance (e.g., trash, vandalism, climbing) that could result in mortality of a planted oak tree and provide adequate measures to prevent those disturbances until planted oak trees begin to produce seeds.

If the City is unable to provide adequate support for planting trees in the 0.8-acre area or off-site areas to mitigate for Project-related impacts to native trees, CDFW recommends the City redirect efforts to potentially: 1) avoid impacts to any tree during Project construction and activities; 2) identify alternative locations for on-site mitigation; 3) identify alternative locations in open-space lands adjacent to the Project site; or 4) propose alternative off-site mitigation and provide evidence to support the ecological value of planting trees at proposed off-site locations. Please see page 36 for information on *Compensatory mitigation*. Plans for on- and/or off-site mitigation, financial assurance, and non-wasting endowments for long-term management of mitigation lands should be disclosed, documented, and completed in the final environmental document and prior to any Project construction and activities.

Mr. Donald Nielsen  
City of Thousand Oaks  
August 27, 2020  
Page 29 of 53

**Recommendation #2:** CDFW recommends the MND include a table to add clarity to the Project's proposed mitigation plan for impacts to native trees. The table should have the following information:

- Scientific (Genus, species, subspecies, or variety) and common name of each tree impacted.
- The size (diameter at breast height, inches) of each tree impacted.
- Total number of trees impacted by species.
- Mitigation ratio applied (i.e., 4:1).
- Total number of replacement trees by species.
- Total number of replacement trees by species to occur on site and/or off site.

This information, particularly total number of trees impacted by species, should be accurately reflected on a map, either on a new map or as updates to existing maps, and included in the MND.

### **Comment #11: Spreading Non-Native Invasive Plants**

**Issue:** CDFW is concerned that the MND does not provide measures to prevent the spread of non-native invasive plants. Page 22 of the MND states, "As a result of the Hill Fire, areas formerly classified as mule fat scrub and annual brome grasslands now consist largely of annual invasive non-native species, which are heavily dominated by black mustard, summer mustard, milk thistle, and poison hemlock." With the exception of milk thistle, these species are rated 'Moderate' by the California Invasive Plant Council (Cal-IPC), which means these have substantial and apparent - but generally not severe - ecological impacts on physical processes, plant and animal communities, and vegetation structure.

**Specific impacts:** Spreading non-native invasive plants to additional areas within and downstream from the Project site, potentially causing additional impacts to riparian and upland habitats.

**Why impacts would occur:** Habitat loss and invasive plants are a leading cause of native biodiversity loss. Invasive plant species spread quickly and can displace native plants, prevent native plant growth, and create monocultures. The Project will disturb native soil and import 14 cubic yards of fill. Disturbing native soil could spread non-native plant seed, especially seeds of milk thistle or plants that have pappus. New species of non-native plants could be brought into the Project site via fill. Construction equipment and power tools, if not properly disinfected before entering the Project site for the first time, could introduce new species of non-native plants into the Project site and adjacent areas.

**Evidence impacts would be significant:** Impacts to sensitive vegetation communities should be considered significant under CEQA unless they are clearly mitigated below a level of significance. Inadequate avoidance, minimization, and mitigation measures for impacts to sensitive plant communities will result in the Project continuing to have a substantial adverse direct, indirect, and cumulative effect, either directly or through habitat modifications, on any species or vegetation community identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by CDFW or USFWS.

Mr. Donald Nielsen  
City of Thousand Oaks  
August 27, 2020  
Page 30 of 53

**Recommended Potentially Feasible Mitigation Measure(s):**

**Mitigation Measure #1:** The undercarriage and tires of loaders, dozers, drilling rigs, cranes, and vehicles, power tools, and other equipment, should be power washed and clean from any seeds, pathogens, and mud before entering the Project site for the first time.

**Mitigation Measure #2:** All soil and fill material should be inspected and determined free of any invasive plant seed prior to leaving the facility where the material is coming from. Any straw, wood, or other mulch should be purchased from a certified weed-free vendor.

**Comment #12: Spreading Invasive Pest and Disease**

**Issue:** Page 4 of the Arborist Report (Appendix E) describes one coast live oak tree as having “boring insect damage, fire damage, major rot, large cavity in trunk.” CDFW is concerned that the MND does not describe procedures for disposal of removed trees which may be infested with invasive pests and disease such as thousand canker fungus (*Geosmithia morbida*), goldspotted oak borer (*Agrilus auroguttatus*), and Polyphagus shot-hole borer (*Euwallacea* sp.).

**Specific Impacts:** The Project may result in the spread of tree insect pests and disease into areas not currently exposed to these stressors. This could result in expediting the loss of oaks and other trees in California which support a high biological diversity including special status species.

**Why impacts would occur:** The Project would remove tree species that could host insect pests and diseases. Trees will be removed and presumably hauled to off-site locations for disposal thereby potentially exposing off-site oak and other tree species to pests and disease.

**Evidence impacts would be significant:** The Project may have a substantial adverse effect on any sensitive natural communities identified in local or regional plans, policies, and regulations or by the CDFW or USFWS. The Project may result in a substantial adverse effect, either directly or through habitat modifications, on species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by CDFW or USFWS that are dependent on oak woodlands and other woodland habitats susceptible to insect and disease pathogens.

**Recommended Potentially Feasible Mitigation Measure(s):**

**Mitigation Measure #1:** CDFW recommends the City work with a qualified arborist to develop mitigation measures to prevent the spread of invasive pests and/or diseases including thousand canker fungus, goldspotted oak borer, and Polyphagus shot-hole borer. At a minimum, CDFW recommends that infected trees are left on site, chipping the material for use as ground cover, mulch, or upland habitat structure. No tree material should be placed in the stream channel unless the City coordinates with CDFW and determines woody material would create suitable habitat structure for aquatic reptiles and fish. CDFW also recommends cleaning and disinfecting pruning and power tools before use to prevent introducing pathogens from known infested areas, and after use to prevent spread of pathogens to new areas.

Mr. Donald Nielsen  
City of Thousand Oaks  
August 27, 2020  
Page 31 of 53

### **Comment #13: Impacts to Wildlife, Wildlife Movement, and Wildlife-Human Encounters**

**Issue #1:** CDFW is concerned that any wildlife potentially moving through or seeking temporary refuge in the Project site may be impacted during Project construction and activities, resulting in mortality without appropriate mitigation measures. Page 11 of the 2018 Assessment states, “the wildlife habitat value of the Study Area is considered high because it is surrounded by open space and associated riparian wildlife habitat.” Appendix B provides evidence that the Project site is frequented by many birds and mammals, including large carnivores such as Mountain lion (*Felis concolor*), bobcats (*Lynx rufus*), and coyotes (*Canis latrans*); deer (*Odocoileus hemionus*); and small mammals such as squirrels, striped skunk (*Mephitis mephitis*), and dusky-footed woodrats (*Neotoma fuscipes macrotis*).

**Issue #2:** CDFW is concerned that potential increase in human activity, vehicle traffic, and noise in and around the Project site after the Project has finished may impact wildlife. Page 10 of the MND states, “the bridge will connect existing trails on either side of the creek and will be a key link in the trail system between the Conejo Canyons and Wildwood open space areas. It will provide trail users (hikers, mountain bikers, and equestrians) safe access between Wildwood Canyon and Santa Rosa Equestrian Park [...]”

**Specific impacts:** During the Project, Project construction, activities, and equipment may result in the mortality of various birds and other wildlife. After the Project is complete, the bridge and road may increase wildlife-human encounters, increase recreation through the area, potentially resulting in impacts to wildlife.

**Why impacts would occur:** The Project may result in the use of open pipes as fence posts, property line stakes, signs, etcetera. These structures mimic the natural cavities preferred by various bird species and other wildlife for shelter, nesting, and roosting. Raptor’s talons can become entrapped within the bolt holes of metal fence stakes resulting in mortality. Direct impacts to wildlife may occur from: ground disturbing activities (e.g., staging, access, excavation, grading, drilling); wildlife being trapped or entangled in construction materials and installation of temporary fencing; and, wildlife could be trampled by heavy equipment operating in the Project site. Phototaxis, a phenomenon which results in attraction and movement towards light, can disorient, entrap, and temporarily blind wildlife species that experience it (Longcore and Rich 2004).

After Project construction and activities, increased vehicle traffic, human activity, and noise in the area resulting from the new bridge and road may impact wildlife. Many studies have shown that birds and mammals are affected by increased traffic (e.g., vehicle strikes), artificial light, noise exposure, and human presence (Francis et al. 2009; Gillam and McCracken 2007; Kight and Swaddle 2011; Patricelli and Blickley 2006; Quinn et al. 2017; Rabin et al. 2006; Slabbekoorn and Ripmeester 2008; Sun and Narins 2005). Non-motorized nature based recreation has negative impacts on a diversity of birds from changes in physiology to reduced reproductive success (Steven et al. 2011). Nestlings that hatch near recreation facilities have been shown to develop slower and with lower body mass and poor body condition (Remacha et al. 2016).

**Evidence impacts would be significant:** Mammals occurring naturally in California are considered non-game mammals and are afforded protection by state law from take and/or

Mr. Donald Nielsen  
City of Thousand Oaks  
August 27, 2020  
Page 32 of 53

harassment (Fish & G. Code, § 4150; Cal. Code of Regs, § 251.1). Impacts to special status wildlife species should be considered significant under CEQA unless they are clearly mitigated below a level of significance. Inadequate avoidance, minimization, and mitigation measures for impacts to special status wildlife species will result in the Project continuing to have a substantial adverse direct, indirect, and cumulative 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 USFWS.

**Recommended Potentially Feasible Mitigation Measure(s):** CDFW recommends modifying the MND's proposed mitigation measure BIO-2, BIO-6, and BIO-8 by removing the language with strikethrough and including the underlined language; and, include additional measures 4 through 10:

**Mitigation Measure #1: BIO - 2** Work will not occur ~~at night~~ 30 minutes before sunset and 30 minutes after sunrise. The Project shall eliminate all non-essential lighting and avoid or limit the use of artificial light during these hours. Any artificial lighting shall be of the lowest illumination, be selectively placed, and shielded and directed away from natural habitats.

**Mitigation Measure #2: BIO - 6** A CDFW-approved qualified biologist shall be on site to conduct preconstruction surveys for vireo and bats, and additional special status species that may include two-striped garter snake and Southern Western pond turtle. A qualified biologist biological monitor shall be on site during construction prior to and during ground and habitat disturbing activities to move out of harm's way special status species or other wildlife of low mobility that would be injured or killed by grubbing or Project-related construction activities. Salvaged wildlife of low mobility shall be removed and placed onto adjacent and suitable (i.e. species appropriate) habitat out of harm's way.

If the Project requires special status species to be removed, disturbed, or otherwise handled, including (but not limited to) two-striped garter snake and Southern Western pond turtle, the City shall obtain all appropriate State and Federal permits prior to the start of any construction, activities, and staging. A qualified biological monitor shall have the authority to halt construction to prevent or avoid take of any special status species and/or to ensure compliance with all avoidance, minimization, and mitigation measures.

**Mitigation Measure #3: BIO - 8** Temporary fencing (with silt barriers) will identify the extent of construction activity ~~and any protected trees or vegetation within the construction zone,~~ and no work is permitted beyond the temporary fencing's extent. Prior to fence installation, a qualified biologist shall move any wildlife out of harm's way so that no wildlife is enclosed inside the work zone. In coordination with a qualified biologist, the Contractor shall install the fence in a manner that excludes any wildlife from entering the work zone (i.e., embedded fence such that wildlife cannot enter from under the fence). Fences shall not have any slack that may cause wildlife entanglement. Fences shall be constructed with materials that are not harmful to wildlife. Prohibited materials include, but are not limited to, spikes, glass, razor, or barbed wire.

The Contractor shall be responsible for ensuring all perimeter controls are in place prior to commencing construction. The protection measures shall be in place at the end of each working day and for the duration of the project. If determined necessary by a qualified biologist, the Contractor shall adjust the limits of the protection measures should they be inadequate to



Mr. Donald Nielsen  
City of Thousand Oaks  
August 27, 2020  
Page 33 of 53

prevent wildlife from entering the work zone. The Contractor shall consult and coordinate with a qualified biologist if protection measures need to be temporarily moved out of the way to facilitate construction, provided the protection measures are reinstalled promptly. The Contractor shall advise all workers of the intent of the protection measures prior to the start of project construction and activities. The Contractor shall ensure that project construction and activities remain within the Project footprint (i.e., outside the demarcated buffer) and that flagging/stakes/fencing are being maintained for the duration of the project.

No living native vegetation shall be removed from the channel, bed, or banks of the Arroyo Conejo. Any impacts to the stream channel, riparian, wetland, or upland habitats that occur beyond the temporary fence shall be mitigated at a minimum of 5:1 in addition to existing mitigation for temporary and permanent impacts.

**Mitigation Measure #4:** Effective mitigation of noise should be defined as maintaining ambient sound levels at 60 dBA hourly or lower. Generators should not be used except for temporary use in emergencies.

**Mitigation Measure #5:** All hollow posts and pipes shall be capped, and metal fence stakes shall be plugged with bolts or other plugging materials to prevent wildlife entrapment and mortality.

**Mitigation Measure #6:** Before staging and materials storage, a qualified biologist shall inspect the designated areas for burrows and search under any structures that could provide refugia for wildlife. A qualified biologist shall move wildlife out of harm's way before staging and materials. If moving out of harm's way is not feasible, a qualified biologist shall make that determination and establish an appropriate buffer around the burrow or refugia. No staging shall occur within the buffer until a qualified biologist has determined the animal is no longer occupying the area.

**Mitigation Measure #7:** Refueling of any equipment shall only occur in designated areas. On the west side of the stream, refueling areas shall only occur on the gravel road. On the east side of the stream, refueling shall only occur in the disturbed area by Hill Canyon Road. Designated areas shall not be located near any storm drain inlets, drainage swales, or surface waterway. When refueling gas powered equipment or mixing herbicide, workers shall refuel or mix over a drip bin to catch any spillage. Designated refueling area shall be inspected frequently to ensure no spill of hazardous materials have occurred and could contaminate the ground or water. The Contractor shall advise workers to clean and report spills immediately.

**Mitigation Measure #8:** Grubbing and grading shall be done to avoid islands of habitat where wildlife may take refuge and later be killed by heavy equipment. Grubbing and grading shall be done from the center of the Project site, working outward towards adjacent habitat off site where wildlife may safely escape.

**Mitigation Measure #9:** Before starting or moving construction vehicles, especially after a few days of nonoperation, operators shall inspect under all vehicles to avoid impacts to any wildlife that may have sought refuge under equipment. All large building materials and pieces (e.g., sections of the bridge) with crevices where wildlife can potentially hide shall be inspected before moving. If wildlife is detected, a qualified biologist shall move wildlife out of harm's way or temporarily stop activities until the animal leaves the area.

Mr. Donald Nielsen  
City of Thousand Oaks  
August 27, 2020  
Page 34 of 53

**Mitigation Measure #10:** After the Project, CDFW recommends the City install appropriate public information signage on both sides of the stream to: 1) educate and inform the public about wildlife present in the area; 2) advise on proper avoidance measures to reduce human-wildlife conflicts; 3) advise on proper use of open space trails in a manner respectful to wildlife; and, 4) provide local contact information to report injured or dead wildlife. Signage shall be written in the language(s) understandable to all those likely to recreate and use the trails. Signage shall not be made of materials harmful to wildlife such as spikes or glass. The City shall provide a long-term maintenance plan to repair and replace the signs.

**Recommendation #1:** CDFW recommends the City provide a discussion on page 27 of the MND, or where appropriate, of the Project's potential to interfere with wildlife movement with respect to bridge design. The discussion should include how each of the following elements may impact wildlife movement and potential to result in wildlife mortality: 1) security gate; 2) potential chain-link fence; 3) finished bridge surface; and 4) hanger spacing. Wildlife movement can be impeded by a security gate and chain-link fence. Wildlife can become trapped or entangled on the bridge resulting in mortality.

### **Additional Comments**

Project design and implementation. To minimize short and long-term, temporary, and permanent impacts to sensitive and special status plants, wildlife, habitat, and vegetation communities, CDFW recommends the City work with its engineer to consider the following modifications to the Project design.

- Staging areas. Move the staging and material storage area and bridge laydown area to the disturbed area closer to Hill Canyon Road where there is less vegetation. The swale natural flows through where the bridge laydown area is proposed, potentially impacting surface flow even before the swale is diverted to subsurface flow via a new culvert.
- Swale. If feasible, incorporate the swale in its natural flow state into Project design.
- Bridge. Page 18 of the 2018 Assessment recommends moving the bridge alignment approximately 30 feet downstream to avoid removal of one coast live oak tree. CDFW concurs with this recommendation. Moving the bridge may also avoid removal of potentially one scrub oak tree thus avoiding direct impacts to any oak tree. Moreover, CDFW recommends avoiding impacts to the widest part of the channel within the BSA. Project designs show that the bridge is aligned near the widest part of the stream channel. A wide channel allows water to spread across a larger surface area. As a result, water travels at a lower velocity, pools may form, and woody debris may settle. Many species of aquatic fish and reptiles require shallow pools and structure for basking, foraging, and potential nursery sites. While the Project does not suggest that the bridge or any aspect of the Project would reduce the channel width where the bridge is proposed, Project construction may inadvertently change channel dimensions at this location by causing stream bank erosion. Moreover, a bridge could potentially permanently alter basking and foraging habitat at the widest part of the channel by obstructing sunlight, which is required for basking and promoting microorganisms and algae as food sources.

Mr. Donald Nielsen  
City of Thousand Oaks  
August 27, 2020  
Page 35 of 53

- Bridge surface. Alternatives to a concrete surface would allow for some rainwater and sunlight to reach the stream. If the bridge surface will be grated, CDFW recommends the grated surface be safe for wildlife crossing and would not cause entanglement.
- Gravel bed road instead of concrete. A 375-foot long gravel bed road, or a porous surface/material, instead of asphalt concrete, would allow for water to infiltrate the ground instead of fast-moving runoff into Arroyo Conejo, potentially transporting more sediment, debris, and pollutants.
- Security gate. CDFW recommends using only a security gate, no chain-link fence, as not impeded wildlife movement given Arroyo Conejo's importance as a wildlife movement corridor between adjacent open space lands. A chain-link fence may also cause wildlife entanglement.

### General Comments

- 1) California Endangered Species Act (CESA). CDFW considers adverse impacts to a species protected by CESA to be significant without mitigation under CEQA. As to CESA, take of any endangered, threatened, candidate species, or CESA-listed rare plant species that results from the Project is prohibited, except as authorized by state law (Fish & G. Code, §§ 2080, 2085; Cal. Code Regs., tit. 14, § 786.9). Consequently, if the Project, Project construction, or any Project-related activity for the duration of the Project will result in take of a species designated as endangered or threatened, or a candidate for listing under CESA, CDFW recommends that the Project proponent seek appropriate take authorization under CESA prior to implementing the Project. Appropriate authorization from CDFW may include an Incidental Take Permit or a Consistency Determination in certain circumstances, among other options [Fish & G. Code, §§ 2080.1, 2081, subds. (b) and (c)]. Early consultation is encouraged, as significant modification to a Project and mitigation measures may be required to obtain a CESA Permit. Revisions to the Fish and Game Code, effective January 1998, may require that CDFW issue a separate CEQA document for the issuance of an ITP unless the Project CEQA document addresses all Project impacts to CESA-listed species and specifies a mitigation monitoring and reporting program that will meet the requirements of an ITP. For these reasons, biological mitigation monitoring and reporting proposals should be of sufficient detail and resolution to satisfy the requirements for a CESA ITP.
- 2) Translocation/Salvage of Plants and Animal Species. Translocation and transplantation is the process of moving an individual plant or animal from the Project site and permanently moving it to a new location. CDFW generally does not support the use of translocation or transplantation as the primary mitigation strategy for unavoidable impacts to rare, threatened, or endangered plant or animal species. Studies have shown that these efforts are experimental and the outcome unreliable. CDFW has found that permanent preservation and management of habitat capable of supporting these species is often a more effective long-term strategy for conserving sensitive plants and animals and their habitats.
- 3) Compensatory Mitigation. The MND should include mitigation measures for adverse Project related direct or indirect impacts to sensitive plants, animals, and habitats. Mitigation measures should emphasize avoidance and reduction of Project impacts. For unavoidable impacts, on-site habitat restoration or enhancement should be discussed in detail. If on-site

Mr. Donald Nielsen  
City of Thousand Oaks  
August 27, 2020  
Page 36 of 53

mitigation is not feasible or would not be biologically viable and therefore not adequately mitigate the loss of biological functions and values, off-site mitigation through habitat creation and/or acquisition and preservation in perpetuity should be addressed. Areas proposed as mitigation lands should be protected in perpetuity with a conservation easement, financial assurance and dedicated to a qualified entity for long-term management and monitoring. Under Government Code section 65967, the Lead Agency (City of Thousand Oaks) must exercise due diligence in reviewing the qualifications of a governmental entity, special district, or nonprofit organization to effectively manage and steward land, water, or natural resources on mitigation lands it approves. Mitigation banking inquiries may be directed to the CDFW's South Coast Region Banking Coordinator, Lisa Gymer, at (858) 627-3997 or via email at [Lisa.Gymer@wildlife.ca.gov](mailto:Lisa.Gymer@wildlife.ca.gov).

- 4) Long-term Management of Mitigation Lands. For proposed preservation and/or restoration, the MND should include measures to protect the targeted habitat values from direct and indirect negative impacts in perpetuity. The objective should be to offset the Project-induced qualitative and quantitative losses of wildlife habitat values. Issues that should be addressed include (but are not limited to) restrictions on access, proposed land dedications, monitoring and management programs, control of illegal dumping, water pollution, and increased human intrusion. An appropriate non-wasting endowment should be set aside to provide for long-term management of mitigation lands.
- 5) Wetland Resources. CDFW, as described in Fish and Game Code section 703(a), is guided by the Fish and Game Commission's (Commission) policies. The Wetlands Resources policy the Commission "...seek[s] to provide for the protection, preservation, restoration, enhancement and expansion of wetland habitat in California. Further, it is the policy of the Fish and Game Commission to strongly discourage development in or conversion of wetlands. It opposes, consistent with its legal authority, any development or conversion that would result in a reduction of wetland acreage or wetland habitat values. To that end, the Commission opposes wetland development proposals unless, at a minimum, project mitigation assures there will be 'no net loss' of either wetland habitat values or acreage. The Commission strongly prefers mitigation which would achieve expansion of wetland acreage and enhancement of wetland habitat values."
  - a) The Wetlands Resources policy provides a framework for maintaining wetland resources and establishes mitigation guidance. CDFW encourages avoidance of wetland resources as a primary mitigation measure and discourages the development or type conversion of wetlands to uplands. CDFW encourages activities that would avoid the reduction of wetland acreage, function, or habitat values. Once avoidance and minimization measures have been exhausted, the Program must include mitigation measures to assure a "no net loss" of either wetland habitat values, or acreage, for unavoidable impacts to wetland resources. Conversions include, but are not limited to, conversion to subsurface drains, placement of fill or building of structures within the wetland, and channelization or removal of materials from the streambed. All wetlands and watercourses, whether ephemeral, intermittent, or perennial, should be retained and provided with substantial setbacks, which preserve the riparian and aquatic values and functions for the benefit to on-site and off-site wildlife populations. CDFW recommends mitigation measures to compensate for unavoidable impacts be included in the

Mr. Donald Nielsen  
City of Thousand Oaks  
August 27, 2020  
Page 37 of 53

MND and these measures should compensate for the loss of function and value.

- b) The Fish and Game Commission's Water policy guides CDFW on the quantity and quality of the waters of this state that should be apportioned and maintained respectively so as to produce and sustain maximum numbers of fish and wildlife; to provide maximum protection and enhancement of fish and wildlife and their habitat; encourage and support programs to maintain or restore a high quality of the waters of this state; prevent the degradation thereof caused by pollution and contamination; and, endeavor to keep as much water as possible open and accessible to the public for the use and enjoyment of fish and wildlife. CDFW recommends avoidance of water practices and structures that use excessive amounts of water, and minimization of impacts that negatively affect water quality, to the extent feasible (Fish & G. Code, § 5650).

Per CEQA Guidelines section 21081.6(a)(1), CDFW has provided the City of Thousand Oaks with a summary of our suggested mitigation measures and recommendations in the form of an attached Draft Mitigation and Monitoring Reporting Plan (MMRP; Attachment A). A final MMRP shall reflect the Project's final on- and/or off-site mitigation plans.

### Filing Fees

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

We appreciate the opportunity to comment on the Project to assist the City of Thousand Oaks in adequately analyzing and minimizing/mitigating impacts to biological resources. CDFW requests an opportunity to review and comment on any response that the City of Thousand Oaks has to our comments and to receive notification of any forthcoming hearing date(s) for the Project [CEQA Guidelines, § 15073(e)]. If you have any questions or comments regarding this letter, please contact Ruby Kwan-Davis, Senior Environmental Scientist, at [Ruby.Kwan-Davis@wildlife.ca.gov](mailto:Ruby.Kwan-Davis@wildlife.ca.gov).

Sincerely,

DocuSigned by:  
*Erinn Wilson-Olgin*  
B6E58CFE24724F5...

Erinn Wilson  
Environmental Program Manager I

ec: CDFW

Steve Gibson – Los Alamitos – [Steve.Gibson@Wildlife.ca.gov](mailto:Steve.Gibson@Wildlife.ca.gov)  
Barron Barrera – Los Alamitos – [Baron.Barrera@Wildlife.ca.gov](mailto:Baron.Barrera@Wildlife.ca.gov)  
Victoria Tang – Los Alamitos – [Victoria.Tang@Wildlife.ca.gov](mailto:Victoria.Tang@Wildlife.ca.gov)

Mr. Donald Nielsen  
City of Thousand Oaks  
August 27, 2020  
Page 38 of 53

Emily Galli – Los Alamitos – [Emily.Galli@Wildlife.ca.gov](mailto:Emily.Galli@Wildlife.ca.gov)  
Susan Howell – San Diego – [Susan.Howell@Wildlife.ca.gov](mailto:Susan.Howell@Wildlife.ca.gov)  
CEQA Program Coordinator – Sacramento – [CEQA@Wildlife.ca.gov](mailto:CEQA@Wildlife.ca.gov)

State Clearinghouse – [state.clearinghouse@opr.ca.gov](mailto:state.clearinghouse@opr.ca.gov)

City of Thousand Oaks - Brian Stark – [BStark@toaks.org](mailto:BStark@toaks.org)

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Mr. Donald Nielsen  
City of Thousand Oaks  
August 27, 2020  
Page 39 of 53

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Mr. Donald Nielsen  
City of Thousand Oaks  
August 27, 2020  
Page 40 of 53

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Mr. Donald Nielsen  
City of Thousand Oaks  
August 27, 2020  
Page 41 of 53

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State of California – Natural Resources Agency  
 DEPARTMENT OF FISH AND WILDLIFE  
 South Coast Region  
 3883 Ruffin Road  
 San Diego, CA 92123  
 (858) 467-4201  
[www.wildlife.ca.gov](http://www.wildlife.ca.gov)

**GAVIN NEWSOM, Governor**  
**CHARLTON H. BONHAM, Director**



### Attachment A: Draft Mitigation and Monitoring Reporting Plan

CDFW recommends the following language to be incorporated into a future environmental document for the Project. A final MMRP shall reflect the Project's final on and/or off-site mitigation plans.

Biological Resources (BIO)			
Mitigation Measure (MM)		Timing	Responsible Party
<b>MM-BIO-1-Biological Assessment</b>	Biological surveys for special status plants and wildlife shall be performed to adequately conclude presence/absence of special status species. A biological survey shall include a search of appropriate databases and a field survey, both performed by a qualified biologist familiar with southern California flora. Species-specific protocol surveys shall be conducted if there is evidence to suggest a special status species could be present (e.g., suitable habitat) and survey protocol is available from a State or Federal agency. Survey results shall be made available in the final environmental document. If a special status plant or wildlife species is present, the City shall coordinate with CDFW to determine appropriate measures to avoid, minimize, or mitigate impacts to those species. A list of species-specific measures shall be prepared prior to any project construction, activities, or staging.	Prior to Project construction and activities	City of Thousand Oaks (City)
<b>MM-BIO-2-Biological Assessment</b>	A qualified biologist shall perform an additional biological assessment to supplement the 2018 and 2019 Assessments as described under <b>Mitigation Measure #2, page 5</b> . An assessment shall include a documented search of databases and two spring-time field surveys. A supplemental assessment shall be intended to provide the most accurate picture practically possible of existing conditions and document any post-fire physical or biological changes.	Prior to Project construction and activities	City

Mr. Donald Nielsen  
 City of Thousand Oaks  
 August 27, 2020  
 Page 43 of 53

<b>MM-BIO-3- Biological Assessment</b>	A report shall be provided with sufficient detail and resolution that documents the methods and results of the additional biological assessment as described under <b>Mitigation Measure #3, page 6.</b>	Prior to Project construction and activities	City
<b>MM-BIO-4- Impacts to Rare Plants – assessment</b>	A biological assessment shall include reassessment of the presence/absence of 10 annual/perennial herbs evaluated in the 2018 Assessment and additional plant species identified using a nine-quadrangle search of the California Natural Diversity Database and a search of rare plant databases. 'No detections' of rare plants shall be reported in the biological assessment report.	Prior to Project construction and activities	City
<b>MM-BIO-5- Impacts to Rare Plants – detailed map</b>	If sensitive and/or special status plants are found, a detailed map showing the location of individual plants or populations, and number of plants or density of plants per square feet occurring at each location shall be included in the final environmental document.	Prior to Project construction and activities	City
<b>MM-BIO-6- Impacts to Rare Plants – avoidance measures</b>	If sensitive and/or special status plants are found, species-specific measures to fully avoid impacts to those plants shall be included. This may include flagging all plants and/or perimeter of populations; no-work buffers around plants and/or populations (e.g., flagged perimeter plus 50 feet); restrictions on ground disturbing activities within protected areas; relocation of staging and other material piling areas away from protected areas; restrictions on herbicide use and/or type of herbicide and/or application method within 100 feet of sensitive plants; and worker education and training.	Prior to/During Project construction and activities	City
<b>MM-BIO-7- Impacts to Rare Plants – mitigation measures</b>	If sensitive and/or special status plants are found, and Project-related impacts are unavoidable, measures to fully mitigate for loss of individual plants and habitat shall be provided as described under <b>Mitigation Measure #4, pages 9-10.</b> Mitigation shall be provided at the following minimum ratios: 5:1 for California Rare Plant Rank (CRPR) 3 and 4 species; 7:1 for CRPR 2; and 10:1 for	Prior to/After Project construction and activities	City

Mr. Donald Nielsen  
 City of Thousand Oaks  
 August 27, 2020  
 Page 44 of 53

	CRPR 1. This shall for the number of plants replaced to number impacted, including acres of habitat created to acres of habitat impacted.		
<b>MM-BIO-8- Impacts to Aquatic and Riparian Resources</b>	No project construction, activities, and equipment staging shall occur within bed and banks of the stream channel. No work, including operation of loaders, dozers, drilling rigs, cranes, and vehicles, shall occur within 30 feet from the top of stream banks to minimize impacts to special status wildlife species that include (but not limited to) least Bell's vireo, arroyo chub, two-striped garter snake, and Southern Western pond turtle. Vehicles and workers shall not be allowed to enter or cross the stream channel to move between the east and west side of the project site. Fencing and signage shall be installed 30 feet from the stream banks to exclude entry into the stream channel for the duration of the project. Fencing and signage shall not be moved and be maintained for the duration of the project. The Contractor shall advise all workers of the intent of the protection measures prior to the start of project construction and activities. No living native vegetation shall be removed from the channel, bed, or banks of the Arroyo Conejo.	During Project construction and activities	City/Contractor
<b>MM-BIO-9- Impacts to Species of Special Concern - surveys</b>	A qualified biologist shall perform species-specific to determine presence/absence of the following species: two-striped garter snake, Southern Western pond turtle, arroyo chub. Surveys for Southern Western pond turtles and potential habitat shall be performed using the United States Geological Survey's 2006 <a href="#">Western Pond Turtle Visual Survey Protocol for the Southcoast Ecoregion</a> . Survey results and species-specific avoidance, minimization, and mitigation measures shall be provided as described under <b>Mitigation Measure #1, pages 14-15</b> .	Prior to Project construction and activities	City

Mr. Donald Nielsen  
 City of Thousand Oaks  
 August 27, 2020  
 Page 45 of 53

<b>MM-BIO-10- Impacts to Least Bell's Vireo</b>	Prior to initiation of Project construction and activities within or adjacent to suitable nesting habitat during least Bell's vireo breeding season (March 15 and September 15) a CDFW-approved biologist with experience surveying for least Bell's vireo shall conduct at least three focused surveys following USFWS established protocols to determine whether breeding and nesting least Bell's vireos are present. If least Bell's vireo is present, no construction shall take place from March 15 through September 15. If least Bell's vireo is present and construction cannot be avoided between that time, the City of Thousand Oaks/CRPD/COSCA shall coordinate with CDFW to determine if an Incidental Take Permit may be required.	Prior to/During Project construction and activities	City
<b>MM-BIO-11- Impacts to Nesting Birds</b>	To protect nesting birds that may occur on site, no Project construction, activities, or equipment staging shall occur during the bird nesting season from February 15 through August 31, and as early as January 1 for raptors.	Prior to Project construction and activities	City
<b>MM-BIO-12- Impacts to Bats - survey</b>	A qualified bat specialist shall conduct bat surveys within the Project site and within a 500-foot buffer to identify potential habitat that could provide daytime and/or nighttime roost sites, and any maternity roosts. Acoustic recognition technology to maximize detection of bats shall be used. Survey results, including negative findings, shall be provided, including additional species-specific mitigation measures if necessary.	Prior to Project construction and activities	City
<b>MM-BIO-13- Impacts to Bats</b>	If bats are not detected, but the bat specialist determines that roosting bats may be present at any time of year and could roost in trees, trees shall be pushed down using heavy machinery rather than felling it with a chainsaw. To ensure the optimum warning for any roosting bats that may still be present, trees shall be pushed lightly two to three times, with a pause of approximately 30 seconds between each nudge to allow bats to become active. The tree shall then be pushed to the ground slowly and remain in place	During Project construction and activities	City/Contractor

Mr. Donald Nielsen  
 City of Thousand Oaks  
 August 27, 2020  
 Page 46 of 53

	until it is inspected by a bat specialist. Trees that are known to be bat roosts shall not be bucked or mulched immediately. A period of at least 24 hours, and preferably 48 hours, shall elapse prior to such operations to allow bats to escape.		
<b>MM-BIO-14- Impacts to Bats – maternity roosts</b>	If maternity roosts are found, to the extent feasible, work shall be scheduled between October 1 and February 28, outside of the maternity roosting season when young bats are present but are not yet ready to fly out of the roost (March 1 to September 30).	Prior to Project construction and activities	City/Contractor
<b>MM-BIO-15- Impacts to Bats – maternity roosts</b>	If maternity roosts are found and trees must be removed during the maternity season, a qualified bat specialist shall conduct a preconstruction survey to identify those trees proposed for disturbance that could provide hibernacula or nursery colony roosting habitat. Acoustic recognition technology shall be used to maximize detection of bats. Each tree identified as potentially supporting an active maternity roost shall be closely inspected by the bat specialist no more than 7 days prior to tree disturbance to determine the presence or absence of roosting bats more precisely. If maternity roosts are detected, trees determined to be maternity roosts shall be left in place until the end of the maternity season. Work shall not occur within 100 feet of or directly under or adjacent to an active roost and work shall not occur between 30 minutes before sunset and 30 minutes after sunrise.	Prior to/During Project construction and activities	City/Contractor
<b>MM-BIO-16- Impacts to Vegetation Communities</b>	An ecosystem-based Least Bell's Vireo Habitat Restoration Plan shall be developed to mitigate for impacts to Arroyo willow riparian and mule fat scrub, described under <b>Mitigation Measure #1, pages 21-22.</b>	Prior to/During Project construction and activities	City

Mr. Donald Nielsen  
 City of Thousand Oaks  
 August 27, 2020  
 Page 47 of 53

<p><b>MM-BIO-17- Impacts to Vegetation Communities</b></p>	<p>A minimum 3:1 and 5:1 mitigation ratio shall be used for temporary and permanent impacts, respectively. For [insert number] acres of temporary and [insert number] acres of permanent impacts to Arroyo willow scrub, [insert number] acres and [insert number] acres shall be restored, respectively. For [insert number] acres of temporary and [insert number] acres of permanent impacts to mule fat scrub, [insert number] acres and [insert number] acres shall be restored, respectively. Restoration shall use an appropriate combination of seed, propagule, cuttings, willow stakes, and saplings. Arroyo willow and mule fat scrub restoration shall follow a Least Bell's Vireo Habitat Restoration Plan.</p> <p>In addition, habitat restoration shall occur in 0.8 acres. Restoration of these 0.8 acres activities will consist of hydroseeding native seed mix and installing container plants.</p>	<p>After Project construction and activities</p>	<p>City</p>
<p><b>MM-BIO-18- Impacts to Vegetation Communities – Arundo control</b></p>	<p>A CDFW-approved qualified restoration specialist with experience controlling Arundo, preferably where there is least Bell's vireo, shall prepare a Project and site-specific Integrated Pest Management Plan for Arundo Control (IPM Plan for Arundo) as described under <b>Mitigation Measure #1, page 25</b>.</p>	<p>Prior to Project construction and activities</p>	<p>City</p>
<p><b>MM-BIO-19- Impacts to Vegetation Communities – Arundo control</b></p>	<p>Giant reed removal will occur in the riparian corridor adjacent to and downstream of the project site to mitigate for impacts to [insert number] total acres of Arroyo willow and [insect number] total acres of mule fat scrub. The length of the treatment area is approximately 1.2 miles. Approximately 76 stands of giant reed are proposed for removal. These stands total 0.9 acre in size and occur at 90-100% density. An Integrated Pest Management Plan for Arundo Control shall be prepared prior to project construction and activities.</p>	<p>Prior to Project construction and activities</p>	<p>City</p>

Mr. Donald Nielsen  
 City of Thousand Oaks  
 August 27, 2020  
 Page 48 of 53

<b>MM-BIO-20- Impacts to Native Trees</b>	Necessary permits and authorizations from the City of Thousand Oaks for the removal and trimming of trees within the project footprint shall be obtained prior to Project construction and activities. Trees protected under City of Thousand Oaks ordinances will be mitigated at a 4:1 ratio. These species include coast live oak and scrub oak.	Prior to Project construction and activities	City
<b>MM-BIO-21- Impacts to Native Trees</b>	Removed trees will be replaced at a 4:1 ratio. For impacts to [insert number] coast live oak trees, [insert number] coast live oak trees will be replanted; [insert number] of trees on site and [insert number] of trees off site. For impacts to [insert number] scrub oak trees, [insert number] scrub oak trees will be replanted; [insert number] of trees on site and insert number] of trees off site. For impacts to [insert number] blue elderberry trees, [insert number] blue elderberry trees will be replanted; [insert number] of trees on site and [insert number] of trees off site. For impacts to [insert number] Western sycamore trees, [insert number] Western sycamore trees will be replanted; [insert number] of trees on site and [insert number] of trees off site. Tree planting shall also include restoration of appropriate ground cover, subshrub, or shrub understory species.	After Project construction and activities	City
<b>MM-BIO-22- Impacts to Native Trees</b>	If impacts to Impacts to scrub oak will occur, scrub oak will be replaced at no less than 4:1.	After Project construction and activities	City
<b>MM-BIO-23- Impacts to Native Trees</b>	Project activities, including (but not limited to) construction traffic, staging areas, trenching, soil compaction, and debris piles shall not occur within a tree's drip line and within a tree's Critical Root Zone (CRZ), CRZ measured based on leading forestry practices/standards or local tree protection ordinances, whichever is more protective. The perimeter of the CRZ shall be adequately flagged and marked. The Contractor shall advise all workers of the intent of the protection measures prior to the start of project construction and activities. If substantial impacts to roots and	During/After Project construction and activities	City/Contractor



Mr. Donald Nielsen  
 City of Thousand Oaks  
 August 27, 2020  
 Page 49 of 53

	canopy of trees occur, trees shall be replaced at a minimum ratio of 4:1 for all native trees impacted.		
<b>MM-BIO-24- Impacts to Native Trees</b>	<p>Replacement oak trees shall be the same species (i.e., Genus, species, variety) as the trees impacted. The City shall work with a certified arborist and/or qualified restoration professional to acquire appropriately sized, locally sourced oak trees from a local native plant nursery that implements Phytophthora/Clean Nursery Stock protocols. A certified arborist and/or qualified restoration professional shall inspect and potentially quarantine nursery stock before bringing them into the project site and supervise the installation and transplanting of the oak trees.</p> <p>All planted oak trees shall be protected and survivorship until the trees begin to produce seeds. The City shall consult with the certified arborist and/or qualified restoration professional on a long-term maintenance plan to provide protective caging, shading, and irrigation. Oak trees shall be protected from trampling, damage, or climbing. A certified arborist and/or qualified restoration professional shall be consulted if oak trees show symptoms of stress and determine the appropriate response to prevent mortality.</p>	After Project construction and activities	City
<b>MM-BIO-25- Reducing Spread of Non- Native Plants</b>	The undercarriage and tires of loaders, dozers, drilling rigs, cranes, and vehicles, power tools, and other equipment, shall be power washed and clean from any seeds, pathogens, and mud before entering the Project site for the first time.	Prior to Project construction and activities	City/Contractor
<b>MM-BIO-26- Reducing Spread of Non- Native Plants</b>	All soil and fill material shall be inspected and determined free of any invasive plant seed prior to leaving the facility where the material is coming from. Any straw, wood, or other mulch shall be purchased from a certified weed-free vendor.	Prior to Project construction and activities	City/Contractor

Mr. Donald Nielsen  
 City of Thousand Oaks  
 August 27, 2020  
 Page 50 of 53

<p><b>MM-BIO-27- Reducing Spread of Invasive Pest and Disease</b></p>	<p>A qualified arborist shall be consulted to develop mitigation measures to prevent the spread of invasive pests and/or diseases including thousand canker fungus, goldspotted oak borer, and Polyphagus shot-hole borer. At a minimum, infected trees shall be left on site. No tree material shall be placed in the stream channel without prior coordination with CDFW. Pruning and power tools shall be cleaned and disinfected before use to prevent introducing pathogens from known infested areas, and after use to prevent spread of pathogens to new areas.</p>	<p>Prior to/During Project construction and activities</p>	<p>City/Contractor</p>
<p><b>MM-BIO-28- Reducing Impacts to Wildlife</b></p>	<p>Work will not occur 30 minutes before sunset and 30 minutes after sunrise. The Project shall eliminate all non-essential lighting and avoid or limit the use of artificial light during these hours. Any artificial lighting shall be of the lowest illumination, be selectively placed, and shielded and directed away from natural habitats.</p>	<p>During Project construction and activities</p>	<p>City/Contractor</p>
<p><b>MM-BIO-29- Reducing Impacts to Wildlife</b></p>	<p>A CDFW-approved qualified biologist shall be on site to conduct preconstruction surveys for vireo and bats, and additional special status species that may include two-striped garter snake and Southern Western pond turtle. A qualified biologist shall be on site during prior to and during ground and habitat disturbing activities to move out of harm's way special status species or other wildlife of low mobility that would be injured or killed by grubbing or Project-related construction activities. Salvaged wildlife of low mobility shall be removed and placed onto adjacent and suitable (i.e. species appropriate) habitat out of harm's way.</p> <p>If the Project requires special status species to be removed, disturbed, or otherwise handled, including (but not limited to) two-striped garter snake and Southern Western pond turtle, the City shall obtain all appropriate State and Federal permits prior to the start of any construction, activities, and staging. A qualified biological monitor shall have the authority to halt construction to prevent or avoid take of any special status species and/or to</p>	<p>Prior to/During Project construction and activities</p>	<p>City</p>

Mr. Donald Nielsen  
 City of Thousand Oaks  
 August 27, 2020  
 Page 51 of 53

	<p>ensure compliance with all avoidance, minimization, and mitigation measures.</p>		
<p><b>MM-BIO-30-                  Reducing                  Impacts to                  Wildlife</b></p>	<p>Temporary fencing (with silt barriers) will identify the extent of construction activity, and no work is permitted beyond the temporary fencing's extent. Prior to fence installation, a qualified biologist shall move any wildlife out of harm's way so that no wildlife is enclosed inside the work zone. In coordination with a qualified biologist, the Contractor shall install the fence in a manner that excludes any wildlife from entering the work zone (i.e., embedded fence such that wildlife cannot enter from under the fence). Fences shall not have any slack that may cause wildlife entanglement. Fences shall be constructed with materials that are not harmful to wildlife. Prohibited materials include, but are not limited to, spikes, glass, razor, or barbed wire.</p> <p>The Contractor shall be responsible for ensuring all perimeter controls are in place prior to commencing construction. The protection measures shall be in place at the end of each working day and for the duration of the project. If determined necessary by a qualified biologist, the Contractor shall adjust the limits of the protection measures should they be inadequate to prevent wildlife from entering the work zone. The Contractor shall consult and coordinate with a qualified biologist if protection measures need to be temporarily moved out of the way to facilitate construction, provided the protection measures are reinstalled promptly. The Contractor shall advise all workers of the intent of the protection measures prior to the start of project construction and activities. The Contractor shall ensure that project construction and activities remain within the Project footprint (i.e. outside the demarcated buffer) and that flagging/stakes/fencing are being maintained for the duration of the project.</p> <p>No living native vegetation shall be removed from the channel, bed, or banks of the Arroyo Conejo. Any impacts to the stream</p>	<p>Prior                  to/During/                  After Project                  construction                  and activities</p>	<p>City/Contractor</p>

Mr. Donald Nielsen  
 City of Thousand Oaks  
 August 27, 2020  
 Page 52 of 53

	channel, riparian, wetland, or upland habitats that occur beyond the temporary fence shall be mitigated at a minimum of 5:1 in addition to preexisting mitigation for temporary and permanent impacts.		
<b>MM-BIO-31- Reducing Impacts to Wildlife</b>	Noise shall be maintained at sound levels at 60 dBA hourly or lower. Generators shall not be used except for temporary use in emergencies.	During Project construction and activities	City/Contractor
<b>MM-BIO-32- Reducing Impacts to Wildlife</b>	All hollow posts and pipes shall be capped, and metal fence stakes shall be plugged with bolts or other plugging materials to prevent wildlife entrapment and mortality.	Prior to/During Project construction and activities	City/Contractor
<b>MM-BIO-33- Reducing Impacts to Wildlife</b>	Before staging and materials storage, a qualified biologist shall inspect the designated areas for burrows and search under any structures that could provide refugia for wildlife. A qualified biologist shall move wildlife out of harm's way before staging and materials. If moving out of harm's way is not feasible, a qualified biologist shall make that determination and establish an appropriate buffer around the burrow or refugia. No staging shall occur within the buffer until a qualified biologist has determined the animal is no longer occupying the area.	Prior to Project construction and activities	City/Contractor
<b>MM-BIO-34- Reducing Impacts to Wildlife</b>	Refueling of any equipment shall only occur in designated areas. On the west side of the stream, refueling areas shall only occur on the gravel road. On the east side of the stream, refueling shall only occur in the disturbed area by Hill Canyon Road. Designated areas shall not be located near any storm drain inlets, drainage swales, or surface waterway. When refueling gas powered equipment or mixing herbicide, workers shall refuel or mix over a drip bin to catch any spillage. Designated refueling area shall be inspected frequently to ensure no spill of hazardous materials have occurred	Prior to/During Project construction and activities	City/Contractor

Mr. Donald Nielsen  
 City of Thousand Oaks  
 August 27, 2020  
 Page 53 of 53

	and could contaminate the ground or water. The Contractor shall advise workers to clean and report spills immediately.		
<b>MM-BIO-35- Reducing Impacts to Wildlife</b>	Grubbing and grading shall be done to avoid islands of habitat where wildlife may take refuge and later be killed by heavy equipment. Grubbing and grading shall be done from the center of the Project site, working outward towards adjacent habitat off site where wildlife may safely escape.	During Project construction and activities	City/Contractor
<b>MM-BIO-36- Reducing Impacts to Wildlife</b>	Before starting or moving construction vehicles, especially after a few days of nonoperation, operators shall inspect under all vehicles to avoid impacts to any wildlife that may have sought refuge under equipment. All large building materials and pieces (e.g., sections of the bridge) with crevices where wildlife can potentially hide shall be inspected before moving. If wildlife is detected, a qualified biologist shall move wildlife out of harm's way or temporarily stop activities until the animal leaves the area.	During Project construction and activities	City/Contractor
<b>MM-BIO-37- Reducing Impacts to Wildlife</b>	After the Project, appropriate public information signage shall be installed on both sides of the stream to: 1) educate and inform the public about wildlife present in the area; 2) advise on proper avoidance measures to reduce human-wildlife conflicts; 3) advise on proper use of open space trails in a manner respectful to wildlife; and, 4) provide local contact information to report injured or dead wildlife. Signage shall be written in the language(s) understandable to all those likely to recreate and use the trails. Signage shall not be made of materials harmful to wildlife such as spikes or glass. A long-term maintenance plan to repair and replace the signs shall be provided.	After Project construction and activities	City