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Subject: Bouquet Canyon Project, Draft Environmental Impact Report (DEIR), SCH #2018121009, Los Angeles County

Dear Mr. Nguyen:

The California Department of Fish and Wildlife (CDFW) has reviewed the above-referenced Bouquet Canyon Project (Project). The DEIR's supporting documentation includes a *Biological Technical Report* (BTR). 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; Public 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 (Public 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 state-listed rare plant pursuant to the Native Plant Protection Act (NPPA; Fish & G. Code, §1900 et seq.) authorization as provided by the applicable Fish and Game Code will be required.

Project Description and Summary

Objective: The proposed Project will include the development of 375 homes in five distinct neighborhoods. The development of the site will include extensive alterations to the existing landscape and topography, with substantial site improvements to support a residential community. A major element is the reconfiguration of Bouquet Creek and its adjacent floodplain. Other improvements include internal streets, storm drainage, water, sewer, electrical and natural gas infrastructure. This includes off-site connections to existing distribution mains for water, sewer, energy and telecommunications services, private recreation areas, and public parkland and trails. An additional facet of the Project is the realignment of a segment of Bouquet Canyon Road. It would involve abandoning a portion of the existing Bouquet Canyon Road between Hob Avenue and Pam Court and constructing a new segment starting 1,500 feet north of Plum Canyon Road and extending to 700 feet south of Shadow Valley Lane. The new portion of Bouquet Canyon Road would be a four-lane roadway with bicycle lanes and parkways on both sides.

Location: The Project site is approximately 67.6 acres of undeveloped land located in the Saugus area of the City of Santa Clarita, approximately 0.2 miles to the north of the junction of Bouquet Canyon Road and Plum Canyon Road. The site is currently undeveloped and is covered by a mixture of natural and altered landscapes, prominent hills on the west, and Bouquet Creek, which flows along the northern portion of the site from east to west.

Comments and Recommendations

CDFW offers the comments and recommendations below to assist the City of Santa Clarita (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. 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 Resources Code, § 21081.6 and CEQA Guidelines, § 15097).

Comment #1: Impacts to Unarmored Threespine Stickleback (*Gasterosteus aculeatus williamsoni)*

Issue: CDFW is concerned that the Project is impacting Bouquet Creek, which is occupied by unarmored threespine stickleback. According to CNDDB, there are numerous historical records of unarmored threespine stickleback, a state fully protected species, in Bouquet Creek. Except as provided in the Fish and Game Code (e.g., for necessary scientific research), take of any fully protected species is prohibited and cannot be authorized by CDFW (Fish and Game Code § 5515 and § 3511). "Take" is defined in Section 86 of Fish and Game Code as "hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill."

CDFW cannot authorize the take of any fully protected species as defined by State law. State fully protected species may not be taken or possessed at any time and no licenses or permits may be issued for its take except for collecting those species for necessary scientific research and relocation of the bird species for protection of livestock (Fish & G. Code, §§ 3511, 4700, 5050, 5515). CDFW has advised the Permittee that take of any species designated as fully protected under the Fish and Game Code is prohibited. CDFW recognizes that certain fully

protected species are documented to occur on, or in, the vicinity of the project area, or that such species have some potential to occur on, or in, the vicinity of the project area, due to the presence of suitable habitat.

Specific impacts: The Project may result in the loss of streams, associated watershed function, and biological diversity that could directly or indirectly impact the local population of unarmored threespine stickleback.

Why impacts would occur: Unarmored threespine stickleback is a small, freshwater fish inhabiting slow-moving reaches or quiet-water microhabitats of streams and rivers. Unarmored threespine stickleback feed primarily on benthic insects, small crustaceans, and snails, and to a lesser degree on flatworms, nematodes, and terrestrial insects. Unarmored threespine stickleback typically prefer a lower stream gradient, slower water velocity, broader channel, and lack of native or invasive aquatic predators. Juveniles and sub-adults also tend to be found in the protection of vegetation, in slow moving or standing water. Adults are found in all areas of the stream. They tend to gather in areas of slower moving or standing water. In places where water is moving rapidly, they tend to be found behind obstructions or at the edge of the stream, especially under the edge of algal mats (Sasaki, 1977). Ground disturbing activities from grading and filling, water diversions and dewatering would physically remove or otherwise alter existing streams or their function and associated riparian habitat on the Project site. Downstream and upstream areas and associated biological resources beyond the Project development footprint may also be impacted by Project related releases of sediment and altered watershed effects resulting from Project activities.

Water diversions can cause changes in flow regimes of streams. Thus, diversions can impact unarmored threespine stickleback by:

- Reducing the transport of fine sediment downstream causing streams to become graded or buried (Poff et al., 1997, Bauer et al., 2015);
- Disconnecting channels from still or slow-moving backwaters that are used by UTS, leading to reductions in reproduction and recruitment (Junk et al., 1989, Sparks, 1995, Poff et al., 1997);
- Wash-out and stranding of fish (Cushman, 1985);
- Changing benthic food sources;
- Altering habitat cover and algae;
- Dewatering small streams used by unarmored threespine stickleback; and
- Increasing water temperatures of streams that can slow growth, increase predation risk, and increase susceptibility to disease (Moore and Townsend, 1998, Marine and Cech, Jr., 2004).

Evidence impacts would be significant: Unarmored threespine stickleback is an endangered species pursuant to the federal Endangered Species Act (16 U.S.C. § 1531 *et seq.*) and CESA (Fish & G. Code, § 2050 *et seq.*) and a Fully Protected species (Fish & G. Code § 5515). Therefore, this species qualifies as an endangered, rare, or threatened species under CEQA consistent with CEQA Guidelines, Section 15380.

Unarmored threespine stickleback, once widespread in streams in southern California, are now only found in the upper Santa Clara River and its tributaries. The species is threatened by loss

and alteration of their habitat through water diversions, development, dams, and pollution as well as introduction of invasive species that predate or compete with unarmored threespine stickleback (USFWS, 2009).

Based on the foregoing, Project impacts resulting from channelizing a portion of Bouquet Creek would potentially reduce the range of unarmored threespine stickleback.

Recommended Potentially Feasible Mitigation Measure(s):

Mitigation Measure: CDFW recommends the City fully avoid all impacts to Bouquet Creek and unarmored threespine stickleback.

Comment #2: Impacts to Bouquet Creek

Issue #1: Section 3.9.4 of the DEIR states "a new engineered channel would be constructed parallel to and on the southern side of the Bouquet Creek alignment within the project site".

Issue #2: The Project also proposes enhance "flood control protection along Bouquet Creek, which would eliminate much of the existing floodplain conditions…Bouquet Creek would be channelized and designed to contain 100-year and other higher intensity storm flows."

CDFW is concerned that this new landscape feature and creek channelization will permanently alter the existing drainage pattern of Bouquet Creek and its surrounding riparian area.

Specific impacts: Direct loss of stream and riparian habitat directly affect water and habitat quality downstream. Additionally, piping and undergrounding streams cause changes in the hydrograph of the stream, altering geomorphic processes within the site and the potential listed species that depend on them.

Why impact would occur: Project implementation includes grading, vegetation clearing, building construction, paved surfaces, and extensive landscaping. All these activities have potential to impact the hydrograph and geomorphic processes on site as well as the wildlife that depend on these processes.

Evidence impact would be significant: The Project may substantially adversely affect the existing stream pattern and geomorphologic processes of the Project site through the alteration or diversion of a stream. Absent specific mitigation, the Project could result in substantial erosion or siltation on-site or off-site of the Project.

In addition, a review of The Nature Conservancy's Groundwater Dependent Ecosystem (GDE) Pulse Map and California Department of Water Resources' Natural Communities Commonly Associated with Groundwater (NCCAG) dataset, indicates the presence of coast live oak, a groundwater dependent ecosystem, on the Project site. Channelization of Bouquet Creek will have impacts on fish and wildlife beneficial uses and users of groundwater, including GDEs and interconnected surface water habitats, that are impacted disproportionately by shallow groundwater trends. Therefore, channelization of Bouquet Creek may result in the removal of sensitive vegetation communities and listed species associated with them.

Recommended Potentially Feasible Mitigation Measure(s):

Mitigation Measure #1: CDFW recommends redesigning the Project to avoid impacts to the existing, natural extent of Bouquet Creek and its floodplain. This is important, especially given that this segment of drainage facilitates regional wildlife movement and provides an ephemeral source of water to terrestrial wildlife.

Mitigation Measure #2: CDFW recommends the Project proponent actively implement Best Management Practices (BMPs) to prevent erosion and the discharge of sediment and pollutants into ephemeral stream beds during Project activities. BMPs should be monitored and repaired, if necessary, to ensure maximum erosion, sediment, and pollution control. The Project proponent should prohibit the use of erosion control materials potentially harmful to fish and wildlife species, such as mono-filament netting (erosion control matting) or similar material, within stream areas. All fiber rolls, straw wattles, and/or hay bales utilized within and adjacent to the Project site should be free of nonnative plant materials. Fiber rolls or erosion control mesh should be made of loose-weave mesh that is not fused at the intersections of the weave, such as jute, or coconut (coir) fiber, or other projects without welded weaves. Non-welded weaves reduce entanglement risks to wildlife by allowing animals to push through the weave, which expands when spread.

Comment #3: Impacts to Oak Woodland

Issue #1: As stated in the DEIR Impact 3.3e, “The proposed project would remove 26 oak trees, subject 1 oak tree to major encroachment and 2 oak trees to minor encroachment”. This removal or encroachment, “would require approximately 91 replacement oak trees,” according to the DEIR.

Issue #2: Impact 3.3e of the DEIR also states, “If planting on-site is not possible, the applicant may donate the replacement oak trees to the City or provide the equivalent monetary value of the replacement trees to the City.”

CDFW does not accept “equivalent monetary value” as a means of mitigation.

Specific impacts: CDFW considers oak woodlands distinct biological communities, consisting of layers that include trees, shrubs, vines, and herbaceous understory vegetation. The DEIR only considers the value of the trees and does not appear to characterize the value of these unique individual communities in a biological setting. Removal or thinning of an understory or any one of these layers in oak woodland directly impacts the functions and values of the entire oak woodland. In addition, monetary means do not mitigate for the complete loss of this distinct biological community.

Why impacts would occur: Project implementation includes grading, vegetation clearing, building construction, and other activities that may result in direct mortality, population declines, or local extirpation of oak woodlands.

Evidence impacts would be significant: The goal of the mitigation is to recreate functioning oak woodland of similar composition, structure, and function to the selected oak woodland that was impacted. The mitigation site should mimic the function, density, percent basal, canopy, and vegetation cover, as well as other measurable success criteria before the mitigation should be deemed sufficient. Mitigation measures should repair, rehabilitate, or restore the impacted

environment. Monetary mitigation does not compensate for the significant impact by replacing or providing substitute resources/environments, for such unique, biologically valuable vegetation communities that, if not mitigated in kind, will be lost forever.

Recommended Potentially Feasible Mitigation Measure(s):

Mitigation Measure #1: If avoidance is not possible, impacts to the oak woodland should be mitigated through habitat restoration or conservation. All revegetation/restoration areas that will serve as mitigation should include preparation of a separate restoration plan, to be approved by USFWS and CDFW prior to any ground disturbance. The restoration plan should include restoration and monitoring methods; annual success criteria; contingency actions should success criteria not be met; long-term management and maintenance goals; and, a funding mechanism to assure for in perpetuity management and reporting. Areas proposed as mitigation should have a recorded conservation easement and be dedicated to an entity which has been approved to hold/manage lands (AB 1094; Government Code, §§ 65965-65968).

Recommendation #2: Please note, in 2007, the State Legislature required CDFW to develop and maintain a vegetation mapping standard for the state (Fish & Game Code, § 1940). This standard complies with the National Vegetation Classification System, which utilizes alliance- and association-based classification of unique vegetation stands. CDFW utilizes vegetation descriptions found in the Manual of California Vegetation (MCV), found online at http://vegetation.cnps.org/. To determine the rarity ranking and mitigation ratios of vegetation communities on the Project site, the MCV alliance/association community names should be provided as CDFW only tracks rare natural communities using this classification system.

Comment #4: Vegetation Community Classification

Issue: Table 3 in the BTR identifies Impacts to Vegetation Communities and the DEIR states, “plant communities were classified in accordance with Holland (1986) and Oberbauer (1996), with additional vegetation community information taken from the *Manual of California Vegetation*, second edition (MCV; Sawyer, et al. 2008).

Specific impact: CDFW considers grading a vegetation community a permanent impact unless mitigation is proposed that includes specific criteria that ensure the exact vegetation community is recreated, with consideration for the temporal loss of the habitat as well as defined success criteria and weed management. Revegetation or acquisition/preservation would be a mitigation measure proposed to offset impacts to a CDFW sensitive vegetation community.

Why impact would occur: Project implementation includes grading, vegetation clearing, road construction, utilities construction, road maintenance, fuel modification, and other activities that may result in direct mortality, population declines, or local extirpation of sensitive vegetation communities. If sensitive areas are not correctly identified, CDFW is unable to accurately determine proper mitigation measures for that vegetation community. CDFW considers vegetation communities, alliances, and associations with a statewide ranking of S1, S2, S3 and some S4 as sensitive and declining at the local and regional level (Sawyer et al. 2008). An S3 ranking indicates there are 21 to 80 occurrences of this community in existence in California, S2 has 6 to 20 occurrences, and S1 has less than 6 occurrences. The Project may have direct or indirect effects to these sensitive vegetation communities.

Any revegetation effort should represent the actual vegetation community being impacted. Vegetation communities are named using alliances or associations. An example is California Buckwheat Scrub Alliance. The Manual of California Vegetation (MCV) (Sawyer, et al., 2008) separates the diagnostic species for the California Buckwheat Scrub Alliance into trans and cis montane stands. The species assemblages for this one alliance change over the length of this project. CDFW is concerned spreading a generic seed mix that is not truly representative of the unique plant community alliances present will impact the existing habitat, introduce species that don't occur there, and ultimately change the structure of the vegetation community. Additionally, plants that aren't found in an area may not be suited to survive there, raising the rate of failure.

Evidence impact would be significant: Inadequate avoidance, minimization, and mitigation measures for impacts to these sensitive communities will result in the Project continuing to have a substantial adverse direct, indirect, and cumulative effect. This, 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). Impacts to all sensitive communities should be considered significant under CEQA unless they are clearly mitigated below a level of significance. Using non-conforming modifications to MCV alliances may misidentify rare or sensitive vegetation communities, resulting in impacts to the species.

Recommended Potentially Feasible Mitigation Measure(s):

Mitigation Measure #1: Vegetation Communities that do not conform to existing MCV-defined alliances might be considered rare. All data and proposed modification to existing or new alliances should be submitted to CDFW for scientific review. If a project's dominant vegetation does not fit into one of the non-native alliances or provisional alliances, then a description (scientific, including information used to determine membership for this new alliance) should be included to defend this conclusion. This process is imperative to maintain a rigorous scientific vetting process and defensible classification system.

Mitigation Measure #2: CDFW recommends that updated botanical surveys utilizing MCV-defined alliances be conducted to inform impact assessments, avoidance, minimization, and mitigation measures in the DEIR. Focused surveys for sensitive/rare plants on-site should be disclosed in the CEQA document. Based on the *Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Sensitive Natural Communities* (CDFW, 2018), a qualified biologist should "conduct botanical surveys in the field at the times of year when plants will be both evident and identifiable. Usually this is during flowering or fruiting." CEQA documentation should provide a thorough discussion on the presence/absence of sensitive plants on-site and identify measures to protect sensitive plant communities from Project-related direct and indirect impacts.

Recommendation #3: See Recommendation #2 in Comment #2

Comment #5: Mitigation for slender mariposa lily (*Calochortus clavatus var. gracilis*)

Issue #1: MM 3.3-1 of the DEIR states, "Prior to construction, a mitigation plan shall be developed that describes methods to mitigate for impacts to slender mariposa lily". Providing a mitigation plan with methods of maintenance, monitoring, performance standards, and success criteria in the future is considered deferred mitigation under CEQA.

Issue #2: MM 3.3-1 of the DEIR describes the mitigation ratio as 1:1. It is unclear if the ratio is designated for individual plants or whether that includes the acreage on which they are located. In addition, 1:1 is insufficient replacement for this rare plant species.

Issue #3: MM 3.3-1 of the DEIR states, "The mitigation plan shall include a description of the mitigation site...". CDFW does not support transplantation of rare plants, into areas they currently do not occur, as a mitigation strategy.

Issue #4: MM 3.3-1 of the DEIR states, "seeds shall be obtained from a native plant nursery if available." CDFW is not aware of any nursery that has slender mariposa lily bulbs.

Issue #5: CDFW does not accept payment into an in-lieu fee program as a viable mitigation option.

Specific impacts: Project grading and fuel modification associated with the residential development would impact approximately 142 slender mariposa lilies. Construction of the new alignment of Bouquet Canyon Road would impact approximately 320 slender mariposa lilies**.** CDFW, in general, does not recommend transplantation of rare plants, in particular bulbiferous species like the slender mariposa lily, as a mitigation/minimization measure to reduce adverse effects from the project because successful implementation of translocation is rare with minimal documented success. CDFW defines success as long-term, self-sustaining population with a positive overall population trend, demonstrated fertile seed set, and demonstrated recruitment. Even if transplantation is initially successful, they typically fail to persist over time. To ensure the conservation of sensitive plant species, transplantation should be undertaken as a last resort.

Why impacts would occur: CEQA Guidelines §15070 and §15071 require the document 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'. Relying on future surveys, the preparation of future management plans, or mitigating by obtaining permits from CDFW are considered deferred mitigation under CEQA. In order to analyze if a project may have a significant effect on the environment, the Project related impacts, including survey results for species that occur in the Project footprint need to be disclosed during the public comment period. This information 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).

These impacts would continue to be significant because MM 3.3-1 will not result in adequate avoidance or successful mitigation for the unavoidable direct, indirect and temporal losses including the uncertainties and often failures of creation or restoration practices for special status plants using transplanting of species.

Evidence impacts would be significant: Creation or restoration using the transplanting of plant species should be considered experimental in nature and not be viewed as a mitigation measure to mitigate for slender mariposa lily and other CNPS special status plants below a significant level under CEQA. In addition, because transplantation projects have a poor success rate, and demonstrate a downward trend of survival over time (GodeFroid, S., et al., 2010). Studies show success of transplantation projects within the 10 to 15 percent range, with an

optimistic outcome of 50 percent survival maintained over 5 years (or thereafter, 50% survival maintained for 1 year).

In addition, the DEIR does not address the cumulative loss of slender mariposa lily in Los Angeles County adequately. A description of the remaining acreage compared to historical range, connectivity of remaining slender mariposa lily and how the loss of 320 individuals of slender mariposa lily in this location will affect the local region should be discussed in more detail and figures. Based upon MM 3.3-1, the Project would continue to result in a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by CDFW or USFWS. Absent adequate mitigation, the ecosystem function and contribution to genetic biological diversity of slender mariposa lily and other CNPS special status plants in conjunction with their contribution to breeding, feeding and cover habitat for wildlife will be compromised.

Recommended Potentially Feasible Mitigation Measure(s):

Mitigation Measure #1: CDFW recommends as a better mitigation strategy. The preservation of areas where slender mariposa lily is located on site or an existing, similarly sized, population of slender mariposa lily in perpetuity at another location. This would be at an acreage of no less than 3 acres preservation of occupied habitat for every 1 acre of impact to occupied habitat.

Mitigation Measure #2: CDFW recommends the DEIR include defined mitigation measures for adverse project-related impacts to sensitive plants. Mitigation measures should emphasize avoidance and reduction of project impacts. For any impacts that have been adequately demonstrated to be unavoidable, CDFW recommends that the City should require a scientifically rigorous monitoring and management program as part of the Project's CEQA mitigation, monitoring, and reporting program (MMRP) that would include adaptive management strategies (Public Resources Code 21081.6 and CEQA Guidelines Section 15097). If on-site 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 occupied habitat acquisition and preservation in perpetuity may be appropriate.

Mitigation Measure #3: CDFW recommends that all open space preservation/mitigation land be protected in perpetuity with minimal human intrusion by recording and executing a perpetual conservation easement in favor of an approved agent dedicated to conserving biological resources. CDFW recommends all open space or habitat lands considered for mitigation of environmental impact under CEQA be owned and managed by an entity with experience in managing habitat and be placed under a conservation easement. CDFW has encountered problems with using portions of privately owned lots as open space habitat mitigation under CEQA. Homeowners may grade and remove vegetation on their land and there is little legal recourse to remedy this loss under CEQA. The better option is to place ownership of any open space or habitat land considered as avoidance under CEQA with a conservancy or other land management company to allow for legal remedies should trespass and clearing/damage occur. A management and monitoring plan, including a funding commitment, should be developed for any conserved land, and implemented in perpetuity to protect existing biological functions and values. Permeable wildlife fencing should be erected around any conserved land to restrict incompatible land uses and signage posted and maintained at conspicuous locations communicating these restrictions to the public.

Mitigation Measure #4: For any land that is proposed for preservation and/or restoration, the CEQA document 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, invasive plant removal, and increased human intrusion. An appropriate non-wasting endowment should be set aside to provide for long-term management of open space preservation/mitigation lands.

Comment #6: Impacts to nesting birds

Issue: The BTR indicates that coastal California gnatcatcher (*Polioptila californica californica)*, a California Species of Special Concern and an Endangered Species Act (ESA) listed species, has the possibility of occurring on site. In addition, the BTR and a review of the California Natural Diversity Database (CNDDB) indicates an occurrence of loggerhead shrike (*Lanius ludovicianus*), a California Species of Special Concern, within a mile and a quarter of the Project site. The occurrence of oak woodland and other vegetation communities indicate the potential for nesting within and around the Project vicinity.

Specific impacts: Construction during the breeding season of nesting birds could result in the incidental loss of fertile eggs or nestlings or otherwise lead to nest abandonment in trees directly adjacent to the Project boundary. The Project could also lead to the loss of foraging habitat for sensitive bird species.

Why impact would occur: Impacts to nesting birds could result from ground disturbing activities. Project disturbance activities could result in mortality or injury to nestlings, as well temporary or long-term loss of suitable 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.

Evidence impact 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. Furthermore, nests of all native bird species are protected under state laws and regulations, including Fish and Game Code sections 3503 and 3503.5.

Recommended Potentially Feasible Mitigation Measure(s):

Mitigation Measure #1: To protect nesting birds that may occur on site or adjacent to the Project boundary, CDFW recommends that no construction should occur from February 15 (January 1 for raptors) through August 31.

Mitigation Measure #2: If avoidance is not feasible, a qualified biologist should complete a survey for nesting bird activity within a 500-foot radius of the construction site. The nesting bird surveys should be conducted at appropriate nesting times and concentrate on potential roosting or perch sites. CDFW recommends the Lead Agency require surveys be conducted by a qualified biologist no more than 14 days prior to the beginning of any Project-related activity likely to impact raptors and migratory songbirds, for the entire Project site. If Project activities are delayed or suspended for more than 14 days during the breeding season, repeat the

surveys. If nesting raptors and migratory songbirds are identified, CDFW recommends the following minimum no-disturbance buffers be implemented: 300 feet around active passerine (perching birds and songbirds) nests, 500 feet around active non-listed raptor nests and 0.5 mile around active listed bird nests.

These buffers should be maintained until the breeding season has ended or until a qualified biologist has determined that the birds have fledged and are no longer reliant upon the nest or parental care for survival. These buffers should be increased if needed to protect the nesting birds.

Comment #7: Impacts to Bat Species, including California Species of Special Concern

Issue: The Project includes activities that will result in the removal of trees and vegetation that may provide habitat for bats. In addition, Appendix J (Sensitive Animal Species Potential to Occur) in the BTR, identifies Townsend's big-eared bat *(Corynorhinus townsendii*), a California Species of Special Concern, as possible likelihood to occur on site.

Specific impacts: Project activities include the removal of trees, vegetation, and/or structures that may provide foraging habitat and therefore has the potential for the direct loss of bats.

Why impacts would occur: The removal of vegetation and trees will potentially result in the loss of foraging habitat for bats.

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). Although the Townsend's big-eared bat is the species in question, it is important to remember that there are many bat species, for example the western yellow bat, that can be found year-round in urban areas throughout the south coast region (Miner & Stokes, 2005). 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 California Species of Special Concern could require a mandatory finding of significance by the Lead Agency (CEQA Guidelines, § 15065).

In addition, "Encroachment of urban development and agriculture into areas of native vegetation likely alters the composition and abundance of insect prey in an area and may affect the ability of Townsend's big-eared bat to find adequate prey. Encroachment may also disturb roosts by increasing the rate of human visitation and increasing predation pressure from cats and other generalist predators associated with human settlement" (Gruver, J.C., 2006).

Recommended Potentially Feasible Mitigation Measure(s):

Mitigation Measure: CDFW recommends bat surveys be conducted by a qualified bat specialist to determine baseline conditions within the Project and within a 500-foot buffer. In addition, an analysis of the potential significant effects of the proposed Project on the species (CEQA Guidelines §15125). CDFW recommends the DEIR include the use of acoustic recognition technology to maximize detection of bat species to minimize impacts to sensitive bat species. The DEIR should document the presence of any bats and include species specific mitigation measures to reduce impacts to below a level of significance.

Comment #8: Impacts to California Species of Special Concern

Issue: One mammal species, San Diego black-tailed jackrabbit (*Lepus californicus bennettii*) is identified in Appendix J of the BTR (Sensitive Animal Species Potential to Occur) as having high possibility to occur onsite. In addition, four reptile species with a possible to likely potential to occur on site from Appendix J of the BTR include the California legless lizard (*Anniella pulchra*), California glossy snake (*Arizona elegans occidentalis*), coastal whiptail (*Aspidoscelis tigris stejnegeri*), and coast horned lizard (*Phrynosoma blainvillii*).

Specific impact: Project ground disturbing activities such as grading and grubbing may result in habitat destruction, causing the death or injury of adults, juveniles, eggs, or hatchlings. In addition, the Project may remove habitat by eliminating native vegetation that may support essential foraging and breeding habitat.

Why impact would occur: Project implementation includes grading, vegetation clearing, and other activities that may result in direct mortality, population declines, or local extirpation of Special Status reptile and mammal species.

Evidence impact would be significant: CEQA provides protection not only for state and federally listed species, but for any species including but not limited to California Species of Special Concern which can be shown to meet the criteria for State listing. These Species of Special Concern meet the CEQA definition of rare, threatened or endangered species (CEQA Guidelines, § 15065). Take of Species of Special Concern could require a mandatory finding of significance by the Lead Agency, (CEQA Guidelines, § 15065).

Recommended Potentially Feasible Mitigation Measure(s):

Mitigation Measure #1: Due to potentially suitable habitat within the Project site, prior to vegetation removal and/or grading, qualified biologists familiar with the reptile and mammal species behavior and life history should conduct specialized surveys to determine the presence/absence of Species of Special Concern. Surveys should be conducted during active season when the reptiles are most likely to be detected. California legless lizard are active year-round in the mornings and evenings; California glossy snake are nocturnal and active February to November (peaking in May); coastal whiptail are diurnal (activity peaking in late morning) and active from March to October; coast horned lizard are active February to November and are diurnal in the spring and crepuscular in summer and fall (Thomson, R.C. et al., 2016). Jackrabbits have yearlong diurnal and crepuscular activity (Zeiner, D.C. et al., 1988-1990). Survey results, including negative findings, should be submitted to CDFW for review 2 weeks prior to initiation of Project activities.

Mitigation Measure #2: To further avoid direct mortality, CDFW recommends that a qualified biological monitor approved by CDFW be on-site during ground and habitat disturbing activities to move out of harm's way special status species that would be injured or killed by grubbing or Project-related grading activities. It should be noted that the temporary relocation of on-site wildlife does not constitute effective mitigation for the purposes of offsetting Project impacts associated with habitat loss. If the Project requires species to be removed, disturbed, or otherwise handled, we recommend that the Project clearly identify that the designated entity should obtain all appropriate state and federal permits.

Filing Fees

The Project, as proposed, could 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 Lead Agency and serve to help defray the cost of environmental review by CDFW. Payment of the fee is required in order for the underlying Project approval to be operative, vested, and final (Cal. Code Regs, tit. 14, § 753.5; Fish & G. Code, § 711.4; Pub. Resources Code, § 21089).

Conclusion

We appreciate the opportunity to comment on the Project to assist the City in adequately analyzing and minimizing/mitigating impacts to biological resources. CDFW requests an opportunity to review and comment on any response that the City has to our comments and to receive notification of any forthcoming hearing date(s) for the Project. Questions regarding this letter and further coordination on these issues should be directed to Felicia Silva, Environmental Scientist, at Felicia.Silva@wildlife.ca.gov or (562) 430-0098.

Sincerely,

DocuSigned by:
Erinn Wilson
B6E58CFE24724F5...

Erinn Wilson
Environmental Program Manager I

ec: CDFW
Victoria Tang – Los Alamitos
Felicia Silva – Los Alamitos
Andrew Valand – Los Alamitos
Frederic Reiman – Los Alamitos
Malinda Santonil – Los Alamitos
Susan Howell – San Diego
CEQA Program Coordinator - Sacramento

State Clearinghouse

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GAVIN NEWSOM, Governor
CHARLTON H. BONHAM, Director

CDFW recommends the following language to be incorporated into a future environmental document for the Project.

Biological Resources			
	Mitigation Measure	**Timing**	**Responsible Party**
MM-BIO-1-Impacts to unarmored threespine stickleback	CDFW recommends the City fully avoid all impacts to Bouquet Creek and unarmored threespine stickleback.	Prior to Construction	City of Santa Clarita Project Proponent
MM-BIO-2-Impacts to Bouquet Creek	The Project will be designed to avoid impacts to the existing, natural extent of Bouquet Creek and its floodplain. This is important, especially given that this segment of drainage facilitates regional wildlife movement and provides an ephemeral source of water to terrestrial wildlife.	Prior to Construction	City of Santa Clarita Project Proponent
MM-BIO-3-Impacts to Bouquet Creek	Project proponent shall actively implement Best Management Practices (BMPs) to prevent erosion and the discharge of sediment and pollutants into ephemeral stream beds during Project activities. BMPs shall be monitored and repaired, if necessary, to ensure maximum erosion, sediment, and pollution control. The Project proponent shall prohibit the use of erosion control materials potentially harmful to fish and wildlife species, such as mono-filament netting (erosion control matting) or similar material, within stream areas. All fiber rolls, straw wattles, and/or hay bales utilized within and adjacent to the Project site shall be free of nonnative plant materials. Fiber rolls or erosion control mesh shall be made of loose-weave mesh that is not fused at the intersections of the weave, such as jute, or coconut (coir) fiber, or other projects without welded weaves. Non-welded weaves reduce entanglement risks to wildlife by	Prior to Construction	City of Santa Clarita Project Proponent

	allowing animals to push through the weave, which expands when spread.		
MM-BIO-4-Oak woodland	If avoidance is not possible, impacts to the oak woodland shall be mitigated through habitat restoration or conservation. All revegetation/restoration areas that will serve as mitigation shall include preparation of a separate restoration plan, to be approved by USFWS and CDFW prior to any ground disturbance. The restoration plan shall include restoration and monitoring methods; annual success criteria; contingency actions shall success criteria not be met; long-term management and maintenance goals; and, a funding mechanism to assure for in perpetuity management and reporting. Areas proposed as mitigation shall have a recorded conservation easement and be dedicated to an entity which has been approved to hold/manage lands (AB 1094; Government Code, §§ 65965-65968).	Prior to Construction	City of Santa Clarita Project Proponent
MM-BIO-5-Vegetation Communities	Vegetation Communities that do not conform to existing MCV-defined alliances might be considered rare. All data and proposed modification to existing or new alliances shall be submitted to CDFW for scientific review. If a project's dominant vegetation does not fit into one of the non-native alliances or provisional alliances, then a description (scientific, including information used to determine membership for this new alliance) shall be included to defend this conclusion. This process is imperative to maintain a rigorous scientific vetting process and defensible classification system.	Prior to Construction	City of Santa Clarita Project Proponent
MM-BIO-6-Vegetation Communities	Botanical surveys utilizing MCV-defined alliances shall be conducted to inform impact assessments, avoidance, minimization, and mitigation measures in the DEIR. Focused surveys for sensitive/rare plants on-site shall be disclosed in the CEQA document. Based on the	During Construction	City of Santa Clarita Project Proponent

	Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Sensitive Natural Communities (CDFW, 2018), a qualified biologist shall "conduct botanical surveys in the field at the times of year when plants will be both evident and identifiable. Usually this is during flowering or fruiting." CEQA documentation shall provide a thorough discussion on the presence/absence of sensitive plants on-site and identify measures to protect sensitive plant communities from Project-related direct and indirect impacts.		
MM-BIO-7-slender mariposa lily	Areas where slender mariposa lily is located on site shall be preserved or an existing, similarly sized population of slender mariposa lily shall be preserved in perpetuity at another location, at an acreage of no less than 3 acres preservation of occupied habitat for every 1 acre of impact to occupied habitat.	Prior to Construction	City of Santa Clarita Project Proponent
MM-BIO-8-slender mariposa lily	The DEIR shall include defined mitigation measures for adverse Project-related impacts to sensitive plants. Mitigation measures shall emphasize avoidance and reduction of Project impacts. For any impacts that have been adequately demonstrated to be unavoidable, The City shall require a scientifically rigorous monitoring and management program as part of the Project's CEQA mitigation, monitoring, and reporting program (MMRP) that would include adaptive management strategies (Public Resources Code 21081.6 and CEQA Guidelines Section 15097). If on-site 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 occupied habitat acquisition and preservation in perpetuity may be appropriate.	Prior to Construction	City of Santa Clarita Project Proponent
MM-BIO-9-slender mariposa lily	All open space preservation/mitigation land be protected in perpetuity with minimal human intrusion by recording	Prior to Construction	City of Santa Clarita

	and executing a perpetual conservation easement in favor of an approved agent dedicated to conserving biological resources. All open space or habitat lands considered for mitigation of environmental impact under CEQA be owned and managed by an entity with experience in managing habitat and be placed under a conservation easement. CDFW has encountered problems with using portions of privately owned lots as open space habitat mitigation under CEQA. Homeowners may grade and remove vegetation on their land and there is little legal recourse to remedy this loss under CEQA. The better option is to place ownership of any open space or habitat land considered as avoidance under CEQA with a conservancy or other land management company to allow for legal remedies shall trespass and clearing/damage occur. A management and monitoring plan, including a funding commitment, shall be developed for any conserved land, and implemented in perpetuity to protect existing biological functions and values. Permeable wildlife fencing shall be erected around any conserved land to restrict incompatible land uses and signage posted and maintained at conspicuous locations communicating these restrictions to the public.		Project Proponent
MM-BIO-10-slender mariposa lily	For any land that is proposed for preservation and/or restoration, the CEQA document shall include measures to protect the targeted habitat values from direct and indirect negative impacts in perpetuity. The objective shall be to offset the Project-induced qualitative and quantitative losses of wildlife habitat values. Issues that shall be addressed include, but are not limited to, restrictions on access, proposed land dedications, monitoring and management programs, control of illegal dumping, water pollution, invasive plant removal, and increased human intrusion. An appropriate non-wasting	Prior to Construction	City of Santa Clarita Project Proponent

	endowment shall be set aside to provide for long-term management of open space preservation/mitigation lands.		
MM-BIO-11-Nesting Birds	To protect nesting birds that may occur on site or adjacent to the Project boundary, no construction shall occur from February 15 (January 1 for raptors) through August 31.	Prior to Construction	City of Santa Clarita Project Proponent
MM-BIO-12-Nesting Birds	If avoidance is not feasible, a qualified biologist shall complete a survey for nesting bird activity within a 500-foot radius of the construction site. The nesting bird surveys shall be conducted at appropriate nesting times and concentrate on potential roosting or perch sites. CDFW recommends the Lead Agency require surveys be conducted by a qualified biologist no more than 14 days prior to the beginning of any Project-related activity likely to impact raptors and migratory songbirds, for the entire Project site. If Project activities are delayed or suspended for more than 14 days during the breeding season, repeat the surveys. If nesting raptors and migratory songbirds are identified, the following minimum no-disturbance buffers be implemented: 300 feet around active passerine (perching birds and songbirds) nests, 500 feet around active non-listed raptor nests and 0.5 mile around active listed bird nests. These buffers shall be maintained until the breeding season has ended or until a qualified biologist has determined that the birds have fledged and are no longer reliant upon the nest or parental care for survival. These buffers shall be increased if needed to protect the nesting birds.	Prior to Construction	City of Santa Clarita Project Proponent
MM-BIO-13-Bat Species	Bat surveys shall be conducted by a qualified bat specialist to determine baseline conditions within the Project and within a 500-foot buffer and analyze the potential significant effects of the proposed Project on	Prior to Construction	City of Santa Clarita Project Proponent

	the species (CEQA Guidelines §15125). The DEIR will include the use of acoustic recognition technology to maximize detection of bat species to minimize impacts to sensitive bat species. The DEIR shall document the presence of any bats and include species specific mitigation measures to reduce impacts to below a level of significance.		
MM-BIO-14-Species of Special Concern	Due to potentially suitable habitat within the Project site, prior to vegetation removal and/or grading, qualified biologists familiar with the reptile and mammal species behavior and life history shall conduct specialized surveys to determine the presence/absence of Species of Special Concern. Surveys shall be conducted during active season when the reptiles are most likely to be detected. California legless lizard are active year-round in the mornings and evenings; California glossy snake are nocturnal and active February to November (peaking in May); coastal whiptail are diurnal (activity peaking in late morning) and active from March to October; coast horned lizard are active February to November and are diurnal in the spring and crepuscular in summer and fall (Thomson, R.C. et al., 2016). Jackrabbits have yearlong diurnal and crepuscular activity. Survey results, including negative findings, shall be submitted to CDFW for review 2 weeks prior to initiation of Project activities.	Prior to Construction	City of Santa Clarita Project Proponent
MM-BIO-15-Out of Harm's Way	To further avoid direct mortality, a qualified biological monitor approved by CDFW be on-site during ground and habitat disturbing activities to move out of harm's way special status species that would be injured or killed by grubbing or Project-related grading activities. It shall be noted that the temporary relocation of on-site wildlife does not constitute effective mitigation for the purposes of offsetting Project impacts associated with habitat loss. If the Project requires species to be removed, disturbed,	Prior to Construction	City of Santa Clarita Project Proponent

	or otherwise handled, we recommend that the Project clearly identify that the designated entity shall obtain all appropriate state and federal permits.		