



State of California – Natural Resources Agency  
DEPARTMENT OF FISH AND WILDLIFE  
Bay Delta Region  
2825 Cordelia Road, Suite 100  
Fairfield, CA 94534  
(707) 428-2002  
[www.wildlife.ca.gov](http://www.wildlife.ca.gov)

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



May 17, 2024

Amber Lo, Principal Civil Engineer  
Alameda County Public Works Agency  
399 Elmhurst Street  
Hayward, CA 94554  
[Amberl@acpwa.org](mailto:Amberl@acpwa.org)

Subject: Niles Canyon Trail Project, Draft Environmental Impact Report,  
SCH No. 2021060647, Alameda County

Dear Ms. Lo:

The California Department of Fish and Wildlife (CDFW) received a Notice of Availability of a Draft Environmental Impact Report (EIR) from Alameda County Public Works Agency for the Niles Canyon Trail Project (Project) pursuant to the California Environmental Quality Act (CEQA) and CEQA Guidelines.<sup>1</sup>

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 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, subd. (a) & 1802; Pub. Resources Code, § 21070; CEQA Guidelines § 15386, subd. (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 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. As proposed, for example, the Project may be subject to CDFW's Lake and Streambed

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

Amber Lo  
Alameda County Public Works Agency  
May 17, 2024  
Page 2

Alteration (LSA) 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.), related authorization as provided by the Fish and Game Code will be required.

## **PROJECT DESCRIPTION SUMMARY**

**Proponent:** County of Alameda

**Objective:** The objective of the Project is to construct an approximately six-mile trail alignment through Niles Canyon between the Niles District in the City of Fremont and the unincorporated Community of Sunol in Alameda County. The Project would construct a six-mile, Class I, multi-use trail for pedestrians and bicyclists through Niles Canyon in order to achieve the following objectives:

1. Establish a safe and functional Class I trail to provide recreation and multimodal transportation opportunities for pedestrians, bicyclists, and equestrians;
2. Provide a connection to Palomares Road that allows off-State Route (SR)-84 travel for pedestrians and bicyclists;
3. Minimize impacts to environmental resources;
4. Enhance or maintain stakeholder access to infrastructure;
5. Develop a proposed trail alignment with a realistic cost that can be implemented in a reasonable timeframe; and
6. Serve nonmotorized commuters and remain open 24 hours each day.

Primary Project activities include:

- Phase 1—Vallejo Mill to Palomares Road. The first phase would complete the connection from Vallejo Mill to Palomares Road. To provide independent utility, the Project would create a new crossing of SR-84 parallel to the Farwell Bridge.
- Phase 2—Palomares Road to Old Highway 84/Union Pacific Railroad (UPRR) Access Road. The second phase would begin at Palomares Road and end at Old Highway 84/UPRR Access Road on the south side of SR-84.
- Phase 3—Old Highway 84/UPRR Access Road to Sunol. The final phase would complete the trail between Niles and Sunol, extending from the UPRR Access Road to the Community of Sunol, along the north side of SR-84 through the Brightside Rail Yard.

Amber Lo  
Alameda County Public Works Agency  
May 17, 2024  
Page 3

**Location:** The Project is located in Niles Canyon between the Niles District in the City of Fremont and the unincorporated Community of Sunol in Alameda County.

**Timeframe:** The trail is proposed to be developed in three phases. Phase 1 is anticipated to begin in 2025, with completion in 2027. Phases 2 and 3 would be developed as funding becomes available (however, likely no sooner than 2030).

## **COMMENTS AND RECOMMENDATIONS**

CDFW offers the comments and recommendations below to assist Alameda County Public Works Agency in adequately identifying and/or mitigating the Project's significant, or potentially significant, direct and indirect impacts on fish and wildlife (biological) resources. Editorial comments or other suggestions may also be included to improve the document. Based on the potential for the Project to have a significant impact on biological resources CDFW concludes that an EIR is appropriate for the Project.

### **I. Project Description and Related Impact Shortcoming**

#### **COMMENT #1: Incomplete Project Description**

**Issue:** The Phase 1 trail section was not fully surveyed and analyzed due to steep slopes. The Phase 2 and Phase 3 trail sections are conceptual and only analyzed at a programmatic level, therefore; CDFW is unable to fully assess the accuracy of the impacts of the design of the trails on Alameda Creek, its tributaries and fish and wildlife resources. Also, CDFW strongly recommends that the draft EIR include a procedure or checklist for subsequent projects in an appendix to ensure subsequent project impacts to fish and wildlife resources are appropriately evaluated in compliance with CEQA and impacts are mitigated to less-than-significant.

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

#### **COMMENT #2: Potentially Significant Impact to Special-Status Plant Species**

##### **Section Impact BIO-1, Page 4.3-43**

**Issue:** The draft EIR proposes to reduce impacts to special-status plants by requiring pre-construction protocol level surveys prior to construction of each trail segment. If special-status plants are found then a Rare Plant Mitigation Plan would be prepared for CDFW approval. It is unclear how the timing of protocol level surveys will meet a construction schedule. According to CDFW's *Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and*

Amber Lo  
Alameda County Public Works Agency  
May 17, 2024  
Page 4

*Sensitive Natural Communities* the protocol botanical field surveys should be conducted in the field at the times of year when plants will be both evident and identifiable. Usually this is during flowering or fruiting. Space botanical field survey visits throughout the growing season to accurately determine what plants exist in the Project area. This usually involves multiple visits to the Project area (e.g., in early, mid, and late-season) to capture the floristic diversity at a level necessary to determine if special-status plants are present. The timing and number of visits necessary to determine if special-status plants are present is determined by geographic location, the natural communities present, and the weather patterns of the year(s) in which botanical field surveys are conducted.

**Recommended Potentially Feasible Mitigation Measures to reduce impacts to less-than-significant or to minimize significant impacts:** Mitigation Measures BIO-1 should be revised to require protocol surveys be conducted over multiple years prior to construction to ensure surveys are able to be conducted during the bloom period. Also, if seed collection is required, the seeds will need to be collected when they are ripe and dry which could vary depending on the species.

**COMMENT #3 Special-Status Reptile, Alameda whipsnake.**

**Section Impact BIO-4 Construction of the proposed Project could directly and indirectly result in potentially significant impacts to Alameda whipsnake, if this species is present in the Project area during construction.**

**Issue:** The Project could permanently impact habitat of Alameda whipsnake (*Masticophis lateralis euryxanthus*), a state and federally threatened species. The draft EIR assumes Alameda whipsnake would have low presence based on lack of scrub habitats and associated rock outcrops through the Project alignment. Alameda whipsnake has been documented using the following habitats: annual grassland, oak savanna, oak-bay woodland, mixed evergreen forest, riparian and areas with rock outcrop features. The draft EIR does not provide information from multiple intensive and focused surveys (i.e. use of cover boards, trapping, multi-line transect visual surveys) for Alameda whipsnake during the peak of the season in which detection probabilities are highest. Therefore, CDFW recommends that the draft EIR presuppose that the species is present and utilizes the Project site.

**Recommended Potentially Feasible Mitigation Measures to reduce impacts to less-than-significant or to minimize significant impacts:**

CDFW recommends Mitigation Measure 4b be revised to include mapping of the above listed habitat types within the Project site and the Project impacts, such as, permanent destruction of habitat and permanent ongoing impacts from the trail be identified in the draft EIR. The draft EIR should also address cumulative impacts to

Amber Lo  
Alameda County Public Works Agency  
May 17, 2024  
Page 5

the Alameda whipsnake from fragmentation of habitat, permanent loss of habitat and impacts from bicycle traffic on the trail. CDFW recommends that the Project mitigate for these impacts to Alameda whipsnake and their habitats to a less-than-significant level by requiring compensatory mitigation in the form of conserved lands at 10:1 (mitigation to impact) ratio for the trail, a 3:1 ratio for all other permanent impacts and a 1:1 ratio for temporary impacts. Conserved lands should be protected in perpetuity under a legal instrument such as a conservation easement and be managed in perpetuity through an endowment with an appointed land manager. CDFW recommends that priority for conserved lands be given to on-site locations. CDFW recommends that the Project applicant consult with CDFW on the necessity to obtain an Incidental Take Permit (ITP) pursuant to Fish and Game Code Section 2081(b) prior to Project implementation.

#### **COMMENT #4 Special-Status Animals, San Francisco Dusky-footed Woodrat**

##### **Section Impact BIO-8: Proposed construction of the trail could result in a potentially significant impact to San Francisco dusky-footed woodrat.**

**Issue:** San Francisco dusky-footed woodrat (*Neotoma fuscipes annectens*) houses on the ground and in trees could be destroyed by tree removal and trail construction, leading to direct and indirect mortality of San Francisco dusky-footed woodrat. The draft EIR proposes preconstruction surveys within 14 days prior to tree removal or ground-disturbing activities. If a woodrat nest is found and cannot be avoided the biologist will prepare a relocation plan for CDFW approval.

**Recommended Potentially Feasible Mitigation Measures to reduce impacts to less-than-significant or to minimize significant impacts:** CDFW recommends a phased removal dusky-footed woodrat nests where disturbance to nests is unavoidable. Mitigation Measure BIO-8b should be revised to include the following measures:

- A qualified biologist should monitor and direct all activities associated with the removal of dusky-footed woodrat nests (structures);
- Only as necessary and to the minimal extent possible, Project site vegetation should be removed to provide access to the dusky-footed woodrat nest(s);
- Vegetation should be removed to access dusky-footed wood rat structures using hand tools. Small amounts of vegetation may be removed as needed by a qualified biologist. If significant amounts of vegetation must be removed to access a house such as dense poison oak or scrub, contractors with hand-tools should remove vegetation with a qualified biologist monitoring the activity. Gas-powered tools should be used as little as possible to reduce disturbance to occupied dusky-footed woodrat structures;

Amber Lo  
Alameda County Public Works Agency  
May 17, 2024  
Page 6

- Over a two-week period and prior to any construction activities, dusky-footed woodrat structures or nest(s) should slowly and progressively be dismantled to allow individuals of an occupied nest(s) to allow for gradual movement away from the exposed section of the nest;
- The dismantling of the nest should occur during daylight hours and mostly in the early morning (between 0700 and 1000 hours) to reduce the likelihood of a predation event and minimize sunlight exposure;
- To enhance adjacent habitat a portion of the woody vegetation that was removed from the Project site should be placed in adjacent habitat to provide cover for dispersing dusky-footed wood rats;
- Dusky-footed woodrat nest material and other woody vegetation should be relocated at least 200 feet from the Project site to ensure that the area is not re-colonized and potentially impacted by the construction activities;
- Where feasible, nest material, food caches and woody debris should be salvaged from the dismantled woodrat nest(s) and used to create cover and provide supplemental shelter for dispersing individual(s). Noting that food from the dismantled nest should be placed under the created cover;
- If a dusky-footed woodrat young are located, the removal of vegetation and/or dismantling of nest should immediately be suspended for a period of two to four weeks in order for the young eyesight to develop and become mobile. Noting that the removed material should be placed back on to the nest to re-cover the exposed litter and young. After two-to-four-week period, based on the development of the young, and in agreement with CDFW, the above phased-removal procedure of the dusky-footed wood rat nest may resume; and
- Within 24 hours of vegetation removal and completion of the nest dismantling, an additional visual survey of the work area should be conducted to ensure that no new dusky-footed woodrat nests have been constructed.

#### **COMMENT #5 Special-Status Animals/Invertebrate, Crotch's Bumble Bee**

**Issue:** The draft EIR does not analyze potential impacts to Crotch's bumble bee (*Bombus crotchii*) which is currently a Candidate Endangered species under CESA. The Project will result in permanent impacts to grassland and oak woodland habitats, which may be suitable to support Crotch's bumble bee. The draft EIR does not address whether the proposed Project could result in impacts to Crotch's bumble bee. Absence of or lack of specificity in occurrence locations should not be interpreted as absence of the species at or near a given site. The Project location is within the Crotch's bumble bee range (<https://wildlife.ca.gov/Conservation/CESA>)

Amber Lo  
Alameda County Public Works Agency  
May 17, 2024  
Page 7

and grassland within and adjacent to the Project site may contain potential habitat for Crotch's bumble bee.

Why impact would occur: The proposed Project includes construction that will occur within ruderal grass and herbaceous vegetation that may be potential Crotch's bumble bee nesting and foraging habitat.

Specific impact: Direct mortality through crushing or filling of active bee colonies and hibernating bee cavities, reduced reproductive success, loss of suitable breeding and foraging habitats, loss of native vegetation that may support essential foraging habitat.

Evidence impact would be significant: Bumble bees are critically important because they pollinate a wide range of plants over the lifecycles of their colonies, which typically live longer than most native solitary bee species. As a candidate species, unauthorized take of this species pursuant to CESA is a violation of California Fish and Game Code section 2080 et seq.

**Recommended Potentially Feasible Mitigation Measures to reduce impacts to less-than-significant or to minimize significant impacts:**

CDFW recommends including mitigation measures for Crotch's bumble bee:

**Mitigation Measure #1: Habitat Assessment**

A habitat assessment should be conducted prior to Project construction.

The habitat assessment should be conducted by a qualified entomologist knowledgeable with the life history and ecological requirements of Crotch's bumblebee. The habitat assessment should include all suitable nesting, overwintering, and foraging habitats within the Project area and surrounding areas. Potential nest habitat (February through October) could include that of other *Bombus* species such as bare ground, thatched grasses, abandoned rodent burrows or bird nests, brush piles, rock piles, and fallen logs. Overwintering habitat (November through January) could include that of other *Bombus* species such as soft and disturbed soil or under leaf litter or other debris. The habitat assessment should be conducted during peak bloom period for floral resources on which Crotch's bumble bee feed. Further guidance on habitat surveys can be found within Survey Considerations for California Endangered Species Act (CESA) Candidate Bumble Bee Species (<https://wildlife.ca.gov/Conservation/CESA>).

**Mitigation Measure #2: Survey Plan**

If Crotch's bumble bee habitat is present within the Project area, the Project should include a pre-construction survey plan as a mitigation measure. The survey plan

Amber Lo  
Alameda County Public Works Agency  
May 17, 2024  
Page 8

should be submitted to CDFW for review. Surveys should be conducted by a qualified entomologist familiar with the behavior and life history of Crotch's bumble bee. If CESA candidate bumble bees will be captured or handled, surveyors should obtain a 2081(a) Memorandum of Understanding (MOU) from CDFW.

Surveys should be conducted during the colony active period (i.e. April through August) and when floral resources are in peak bloom. Bumble bees move nests sites each year, therefore, surveys should be conducted each year that Project work activities will occur. Further guidance on presence surveys can be found within Survey Considerations for California Endangered Species Act (CESA) Candidate Bumble Bee Species (<https://wildlife.ca.gov/Conservation/CESA>).

### **Mitigation Measure #3: Crotch's Bumble Bee Avoidance or Take Authorization**

If Crotch's bumble bee are detected during pre-construction surveys, a Crotch's bumble bee avoidance plan should be developed and provided to CDFW for review prior to work activities involving ground disturbance or vegetation removal.

If full take avoidance is not feasible, CDFW strongly recommends that the draft EIR state that the Project proponent will apply to CDFW for take authorization under an ITP.

### **III. Would the Project have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by CDFW or USFWS?**

#### **COMMENT #6 Riparian Habitat and Sensitive Natural Communities**

**Section Impact BIO-10: Construction of the proposed overcrossings would result in permanent and temporary impacts to riparian habitat associated with Alameda Creek. Riparian herbaceous vegetation permanently impacted by the proposed Project shall be mitigated by planting riparian trees and/or shrubs along Alameda Creek and/or the tributary at a minimum 1:1 ratio (square footage of trees/shrubs planted: square footage of herbaceous vegetation removed and additional square footage of shading of Alameda Creek and the tributary). All replacement trees and shrubs shall be from nursery stock grown from seeds or cuttings collected in the same genetic provenance as the Project site. A Riparian Revegetation Plan shall be prepared with specific success criteria and contingency measures to be implemented if success criteria are not met. The plantings shall be monitored and maintained for five years or until the success criteria are met.**

**Issue:** Impact BIO-10 implies that the only impacts to riparian habitat will be from the bridge crossings. The draft EIR does not delineate the areas where the trail is



Amber Lo  
Alameda County Public Works Agency  
May 17, 2024  
Page 9

proposed to be constructed within the riparian corridor and one section was not surveyed due to steep terrain. The draft EIR also does not provide sufficient detailed designs for such as cross sections, grading, or dimensions/shape of the pedestrian crossing. Based on the lack of details on the location and design of the trail for Phase 2 and 3, but also for Phase 1, CDFW is unable to fully assess the accuracy of the impacts of the design on Alameda Creek and its tributaries.

Mitigation Measure BIO-10 only requires riparian herbaceous vegetation permanently impacted by the proposed Project shall be mitigated by planting riparian trees and/or shrubs along Alameda Creek and/or the tributary at a minimum 1:1 ratio (square footage of trees/shrubs planted: square footage of herbaceous vegetation removed and additional square footage of shading of Alameda Creek and the tributary).

Mitigation Measure BIO\_13b only requires trees to be mitigated at a 1:1 ratio (tree planted: tree removed).

**Specific impact:** The majority of the Project corridor runs along Alameda Creek and in Phase 1 the Project proposes to remove at least 240 trees as well as grade and excavate slopes along the riparian area. Impacts from grading, excavation, and tree removal in the riparian area are a significant impact. Riparian zones vary widely in their physical characteristics and these areas are among the environment's most complex ecological systems and also among the most important for maintaining the vigor of the landscape and its rivers (Naiman and Décamps 1990, 1997).

Removal of riparian vegetation, including grass and shrubs, can cause destabilization of stream morphology, alteration of hydrology, degraded water quality, and reductions in many types of fish and wildlife. (Davis, Mitchell, Wakeley, Fischenich, Craft, 1996).

Riparian areas that are subject to activities such as trail or road building, terracing, and vegetation removal can experience increased erosion and delivery of sediment to streams, particularly fine particles. Increased inputs of sediment to streams can have numerous environmental effects and can be particularly damaging to certain freshwater organisms.

Streams are linear systems that move mass and energy along the channel primarily in upstream/downstream directions and through the floodplain in all directions. It is critical that these connections are well understood and analyzed before any work in the stream takes place.

**Recommended Potentially Feasible Mitigation Measures to reduce impacts to less than significant or to minimize significant impacts:** To reduce impacts to stream and riparian habitat, and sensitive natural communities, to less-than-

Amber Lo  
Alameda County Public Works Agency  
May 17, 2024  
Page 10

significant, CDFW recommends relocating the trail segments within the riparian area to outside of the riparian zone to reduce loss of riparian habitat. CDFW also recommends clarifying the acreage of impacts to stream and riparian habitat and sensitive natural communities, and revising Mitigation Measures BIO-10 and 13 to include the following mitigation measures:

Temporarily impacted areas within the riparian zone or other sensitive natural community shall be restored and planted with native trees, shrubs and grasses. Permanently impacted areas within the riparian zone or other sensitive natural community, such as from channel crossings, should be restored at a 3:1 mitigation to impact ratio for acreage and linear feet impacted. Restoration should occur on-site to the extent feasible. If off-site restoration is necessary, it should be as close to the Project site as possible and within the same watershed, unless otherwise approved in writing by CDFW. Restoration should occur in the same year of the impacts. Trees within the riparian zone or sensitive natural community shall be replaced at the following mitigation to impact ratios, unless otherwise approved in writing by CDFW:

Oak (*Quercus* sp.) trees:

- 4:1 replacement for trees up to 7 inches diameter at breast height (DBH)
- 5:1 replacement for trees greater than 7 inches and up to 15 inches DBH
- 10:1 replacement for trees greater than 15 inches DBH, which are considered old-growth oaks

Non-oak trees:

- 1:1 replacement of non-native trees with native trees.

**IV. Would the Project interfere substantially with movement of any native resident or migratory fish and wildlife species or with established native resident or migratory wildlife corridors, or impede use of native wildlife nursery sites?**

**COMMENT #7: Wildlife Corridors and Habitat Connectivity**

**Section Impact: Wildlife Corridors and Native Wildlife Nursery Sites**

**Issue 1:** The proposed Project includes components such as retaining walls (2-26 feet high), barrier walls between the proposed trail and railroad and Highway 84, and parking. As shown in Figure 3-4, the trail design will incorporate several different barrier options to separate trail users from railroad and highway traffic.

Amber Lo  
Alameda County Public Works Agency  
May 17, 2024  
Page 11

As noted in Table 4.A: Cumulative Projects in the Vicinity of the Project Site, the Niles Canyon Safety Improvements Project includes additional guard rails, K-rail replacement, shoulder widening, widening and barrier rail replacements on Alameda Creek Bridge which could cumulatively add to the connectivity impacts of the Project. CEQA Guidelines §15355 defines a cumulative impact as the condition under which two or more individual effects which, when considered together, are considerable or which compound or increase other environmental impacts. The cumulative impact from several projects is the change in the environment which results from the incremental impact of the Project when added to other closely related past, present, and reasonably foreseeable probable future projects.

Implementation of the proposed Project could prevent, result in a decline, or otherwise alter use of existing wildlife movement corridors for State candidate mountain lion (*Felis concolor*), black tailed deer (*Odocoileus hemionus columbianus*), bobcat (*Lynx rufus*) state and federally threatened California tiger salamander (*Ambystoma californiense*), federally threatened and State Species of Special Concern (SSC) California red-legged frog (*Rana draytonii*), Alameda whipsnake, State SSC western pond turtle (*Actinemys marmorata*), and other species. The Project could result in direct and indirect mortality, reduced reproductive success, reduced frequency of care for young resulting in reduced health or vigor of young, forcing wildlife into movement paths and areas that could increase their vulnerability to vehicle strikes and predation, and reduction in genetic exchange affecting intra-species diversity. Isolation of subpopulations limits the genetic exchange of populations and increases the risk of local extirpation.

The draft EIR includes mitigation measures for impacts of the Project on wildlife movement. CDFW does not have sufficient detail to determine if the proposed mitigation measures will be sufficient to offset wildlife movement and connectivity impacts. CDFW has ascertained that there is potential to reduce impacts of the Project on wildlife movement through Project infrastructure and component redesign, as well as compensatory mitigation measures for impacts that cannot be completely avoided that were not identified within the draft EIR.

CDFW therefore recommends that the draft EIR include feasible mitigation measures to reduce significant impacts of the Project on wildlife connectivity for species, including, but not limited to, California tiger salamander, Alameda whipsnake, the mountain lion, meso-carnivores and herbivores, and California red-legged frog and western pond.

**Evidence impact would be significant:** The Project is located alongside Highway 84 which has been identified as a priority wildlife barrier by CDFW in 2020 and 2022 (Wildlife Movement Barrier Priorities - CDFW - 2022 [ds3025], CDFW 2024) based on wildlife movement and presence data for mountain lions, black-tailed deer, California

Amber Lo  
Alameda County Public Works Agency  
May 17, 2024  
Page 12

tiger salamander, California red-legged frog, and Alameda whipsnake. Addressing the barrier would create a contiguous linkage of conserved patches and core areas for wildlife movement. The Alameda County Resource Conservation District is currently funded by the Wildlife Conservation Board to develop wildlife crossing designs within the Interstate (I)-580/I-680/Highway 84 corridor, which includes the Project area.

The location of the Project includes modeled core habitat for mountain lions on both sides of the Niles Canyon. Habitat suitability for mountain lion in the Project area ranges from medium to high along the Project corridor, with high suitability areas found east of Farwell and Brightside (Mountain Lion Predicted Habitat - CWHR M165 [ds2616] - California Wildlife Habitat Relationships). The Project also straddles core modeled habitat for Alameda Whipsnake Modeled Habitat [ds3138] (CDFW 2024) developed to support the Pacific Gas & Electric Bay Area Operations and Maintenance Habitat Conservation Plan. Multiple occurrences of western pond turtle along the Project corridor indicate connectivity is important for this species in the area.

The Project may severely limit and reduce opportunities to enhance permeability across Highway 84 in this area, including transportation infrastructure enhancements and protection of adjacent habitat. Project construction and operation could cause dispersing animals to become trapped along the trail barriers or retaining walls if crossing Highway 84. Construction would also result in removal of riparian habitat along Alameda Creek, which provides cover for dispersing wildlife. Riparian corridors are important to maintain connectivity for daily movement and migration, foraging, genetic interchange, and population movement in response to environmental change or natural disaster.

**Recommended Potentially Feasible Mitigation Measures to minimize significant impacts or to potentially reduce impacts of the Project on wildlife movement corridors to less-than-significant levels include the following:**

CDFW recommends including the following mitigation measures for wildlife corridors:

**Mitigation Measure #4: Wildlife Corridors and Connectivity**

CDFW recommends consultation with experts in wildlife passage design, including CDFW and Alameda County Resource Conservation District, and to conduct in-depth studies on existing use of wildlife corridors within the Project area and surrounding areas in order to evaluate extent of future impacts of the Project on wildlife connectivity, and to provide a basis for infrastructure and Project component redesign (see Mitigation Measure #2). Data collection methods should enable

Amber Lo  
Alameda County Public Works Agency  
May 17, 2024  
Page 13

detection of species that have been found to utilize the existing movement corridors, including species mentioned in the comment above.

Pre-construction study results should be used to develop biologically feasible movement corridor improvements. The cumulative impacts of adjacent projects on wildlife corridors should be considered. Post-construction monitoring should assess use of wildlife movement corridors.

CDFW recommends that monitoring data be analyzed, summarized, and results discussed in reports that may be posted to the Project webpage and be submitted to CDFW and other agencies or organizations that have a duty or interest in the effectiveness of wildlife movement corridors.

#### **Mitigation Measure #5: Infrastructure and Project Component Redesign**

CDFW recommends the draft EIR analyze feasible re-designs or relocations of Project infrastructure that would improve wildlife movement opportunities and avoid or reduce the Project's significant impacts to wildlife connectivity. Additionally, CDFW recommends a scientifically defensible wildlife corridor width be required. The functional width of usable linkages should be described and maintained outside of the zone of influence of edge effect (Beier 2018). The effective corridor width is the minimum spatial dimension needed to mitigate human influence on animal movement through the corridor (Ford *et al.*, 2020). The effectiveness of a corridor is further affected by the type and extent of human activities and land use practices within and adjacent to the corridor (Harrison 1992).

CDFW recommends coordination with regional CDFW and Conservation Engineering staff on the design and location of walls, fences, and barriers to minimize their impacts on wildlife connectivity. The proposed design of the retaining walls and barriers between the trail and Highway 84 or the railroad will impact the ability of wildlife to cross the canyon. The recommended movement studies should be used to determine locations for design modifications that support the maximum movement and connectivity for impacted species. In locations where connectivity is important, but barriers are still required, the following approaches should be considered:

- Use of a three-beam type barrier along the road instead of the proposed scuppers or gaps; and
- Retaining walls should be textured and sloped to support use by wildlife, and where possible ramps/benches be utilized to allow for movement through the retaining walls.

Amber Lo  
Alameda County Public Works Agency  
May 17, 2024  
Page 14

### **Mitigation Measure #6: Compensatory Mitigation – Local Area Wildlife Movement Corridor**

Off-site compensatory mitigation should be implemented to completely offset unavoidable impacts if Project infrastructure redesigns, and other measures to avoid significant impacts to existing wildlife corridors within the Project area do not fully avoid impacts to wildlife corridors. The EIR should include an analysis of beneficial and feasible wildlife movement corridors and/or crossings at off-site locations that could be improved or constructed, to improve wildlife connectivity.

Crossing and connectivity enhancements could include terracing for dry passage, directional fencing to prevent animals from crossing roads to reduce wildlife-vehicle strikes, removal of accumulated sediment that may block undercrossings, removal of vegetation debris, and control of invasive plant species. Enhancement of riparian habitat on both Alameda Creek, which likely serve as important movement corridors for wildlife, should also be evaluated for enhancement.

**Issue 2:** The draft EIR does not include measures to assess and/or reduce impacts of trail users on wildlife connectivity. As noted in the draft EIR, the proposed trail is expected to accommodate between 800 and 1,000 peak daily users, with average daily use estimated to be approximately 300 trail users. The trail will be open to users 24-hours per day, and no gates are proposed as part of the Project.

**Evidence impact would be significant:** Substantial evidence exists that trails may act as barriers to the movement of animals due to behavioral avoidance, the presence of a physical barrier, or development of a home range along the physical barrier (Burgin and Hardiman 2012). Recreation can degrade or fragment habitat, resulting in habitat that is otherwise of high quality being used less frequently or not at all. Behavioral reactions such as flight, flushing, or vigilance are commonly observed and studied wildlife responses to recreationists (Larson et al. 2016). Trail density is a main factor influencing how wildlife responds to trail users and the ability of wildlife to disperse or reach seasonally important habitats such as breeding grounds (D'Acunto *et al.* 2018). Recreation is associated with declines in occupancy of five-to-ten-fold, habitat use, and relative activity of reptile and mammal species (Reed and Merenlender, 2008; Reed *et al.*, 2019), including mountain lion, bobcat (*Lynx rufus*), and deer. Movement rates of mountain lions have also been shown to increase with increasing human density, leading to increased energy expenditures (Buderman *et al.*, 2017; Wang *et al.*, 2017). Fear of humans causes mountain lions to increase their energy expenditures as they move through the landscape, and this can ultimately limit the size of the home ranges they are able to maintain (Nickel *et al.*, 2021).

Amber Lo  
Alameda County Public Works Agency  
May 17, 2024  
Page 15

**Recommended Potentially Feasible Mitigation Measures to minimize significant impacts or to potentially reduce impacts of the Project on wildlife movement corridors to less-than-significant levels include the following:**

**Mitigation Measure #7: Monitor and Enforce Restrictions to Public Access**

CDFW recommends the Project include the development and implementation of a Trail Use Enforcement Plan to reduce potential impacts of trails to wildlife connectivity. The plan should include strategies for enforcing and remediating off trail use, monitoring trail use, providing education on wildlife-human conflict, and seasonal trail closures during sensitive periods, such as breeding periods as appropriate.

**ENVIRONMENTAL DATA**

CEQA requires that information developed in environmental impact reports and negative declarations be incorporated into a database which may be used to make subsequent or supplemental environmental determinations. (Pub. Resources Code, § 21003, subd. (e)). Accordingly, please report any special-status species and natural communities detected during Project surveys to the California Natural Diversity Database (CNDDDB). The CNDDDB field survey form can be found at the following link: [http://www.dfg.ca.gov/biogeodata/cnddb/pdfs/CNDDDB\\_FieldSurveyForm.pdf](http://www.dfg.ca.gov/biogeodata/cnddb/pdfs/CNDDDB_FieldSurveyForm.pdf). The completed form can be mailed electronically to CNDDDB at the following email address: [CNDDDB@wildlife.ca.gov](mailto:CNDDDB@wildlife.ca.gov). The types of information reported to CNDDDB can be found at the following link: [http://www.dfg.ca.gov/biogeodata/cnddb/plants\\_and\\_animals.asp](http://www.dfg.ca.gov/biogeodata/cnddb/plants_and_animals.asp).

**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 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. (See: Cal. Code Regs, tit. 14, § 753.5; Fish & G. Code, § 711.4; Pub. Resources Code, § 21089).

**CONCLUSION**

CDFW appreciates the opportunity to comment on the draft EIR to assist Alameda County in identifying and mitigating Project impacts on biological resources.

Questions regarding this letter or further coordination should be directed to Marcia Grefsrud, Environmental Scientist at (707) 644-2812 or [Marcia.Grefsrud@wildlife.ca.gov](mailto:Marcia.Grefsrud@wildlife.ca.gov).

Amber Lo  
Alameda County Public Works Agency  
May 17, 2024  
Page 16

Sincerely,

DocuSigned by:

*Erin Chappell*

B77E9A6211EF486

Erin Chappell  
Regional Manager  
Bay Delta Region

Attachment 1. Draft Mitigation and Monitoring Reporting Plan

cc: Office of Planning and Research, State Clearinghouse, Sacramento

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Amber Lo  
Alameda County Public Works Agency  
May 17, 2024  
Page 17

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Amber Lo  
 Alameda County Public Works Agency  
 May 17, 2024  
 Page 18

### ATTACHMENT 1. Draft Mitigation and Monitoring Reporting Plan

Biological Resources (BIO)			
Mitigation Measure (MM)	Description	Timing	Responsible Party
<b>Subsequent Project review</b>	<p>The Lead Agency shall create a procedure or checklist for evaluating subsequent Project impacts on biological resources to determine if they are within the scope of the Program EIR or if an additional environmental document is warranted. This checklist shall be included as an attachment to the EIR. Future analysis shall include all special-status species and sensitive habitat including, but not limited to, species considered rare, threatened, or endangered species pursuant to CEQA Guidelines, section 15380.</p> <p>The checklist shall be accompanied by enough relevant information and reasonable inferences to support a “within the scope” of the EIR conclusion. For subsequent Project activities that may affect sensitive biological resources, a site-specific analysis shall be prepared by a Qualified Biologist to provide the necessary supporting information. In addition, the checklist shall cite the specific portions of the EIR, including page and section references, containing the analysis of the subsequent Project activities’ significant effects and indicate whether it incorporates all applicable mitigation measures from the EIR.</p>	Prior to EIR Certification	Lead Agency
<b>Biological resources evaluation</b>	<p>The EIR shall evaluate potential Project impacts to special-status species and include specific mitigation measures for foreseeable potentially significant impacts. Where future site-specific impacts may not be presently foreseeable based on Project’s broad scope, the checklist discussed in Comment 1 above (Subsequent Project review) shall be used to determine if a future CEQA environmental document is required.</p>	Prior to EIR Certification	Lead Agency
<b>Mitigation Measure BIO-1</b>	<p><i>Special Status Plants.</i> Revise Mitigation Measure BIO-1 to include: Protocol surveys for special status plants shall be conducted over multiple years prior to construction. Protocol botanical field surveys should be conducted in the field at the times of year when plants will be both evident and identifiable. If seed collection is required, the seeds shall be collected when they are ripe and dry which could vary depending on the species. Botanical surveys shall be conducted according to</p>	Prior to Ground Disturbance	Project Applicant

Amber Lo  
 Alameda County Public Works Agency  
 May 17, 2024  
 Page 19

	<i>CDFW's Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Sensitive Natural Communities.</i>		
<b>Mitigation Measure BIO-4b</b>	<p><i>Alameda whipsnake.</i></p> <p>Revise Mitigation Measure 4b to include:</p> <p>Habitat Types such as annual grassland, oak savanna, oak-bay woodland, mixed evergreen forest, riparian and areas with rock outcrop features should be mapped prior to construction.</p> <p>Cumulative impacts to the Alameda whipsnake from fragmentation of habitat, permanent loss of habitat and impacts from bicycle traffic on the trail should be analyzed.</p> <p>Mitigate for these impacts to Alameda whipsnake and the habitat to a less-than-significant level by requiring compensatory mitigation in the form of conserved lands at 10:1 (mitigation to impact) ratio for the trail, a 3:1 ratio for all other permanent impacts and a 1:1 ratio for temporary impacts.</p> <p>Conserved lands should be protected in perpetuity under a legal instrument such as a conservation easement and be managed in perpetuity through an endowment with an appointed land manager.</p>	Prior to Ground Disturbance	Project Applicant
<b>Mitigation Measure BIO-8</b>	<p>San Fransico dusky footed woodrat.</p> <p>Revise Mitigation measure BIO8 to include:</p> <p>Preconstruction surveys for San Francisco dusky-footed woodrat shall be conducted at least 14 days prior to ground-disturbing or tree removal activities. If a dusky-footed woodrat nest is found in the Project Area a qualified biologists shall monitor and direct all activities associated with the removal of dusky-footed woodrat nests (structures).</p> <ul style="list-style-type: none"> <li>• Only as necessary and to the minimal extant possible, Project site vegetation should be removed to provide access to the dusky-footed woodrat nest(s).</li> <li>•Vegetation shall be removed to access dusky-footed wood rat structures using hand tools. Small amounts of vegetation may be removed as needed by a qualified biologist. If significant amounts of vegetation must be removed to access a house, such as dense poison oak or scrub, contractors with hand-tools should remove vegetation with a qualified biologist monitoring the activity. Gas-powered tools should be used as little as possible to reduce disturbance to occupied dusky-footed</li> </ul>	Prior to Ground Disturbance	Project Applicant

Amber Lo  
 Alameda County Public Works Agency  
 May 17, 2024  
 Page 20

	<p>woodrat structures.</p> <ul style="list-style-type: none"> <li>• Over a two-week period and prior to any construction activities, dusky-footed woodrat structures or nest(s) should slowly and progressively be dismantled to allow individuals of an occupied nest(s) to allow for gradual movement away from the exposed section of the nest.</li> <li>• The dismantling of the nest should occur during daylight hours and mostly in the early morning (between 0700 and 1000 hours) to reduce the likelihood of a predation event and minimize sunlight exposure.</li> <li>• To enhance adjacent habitat a portion of the woody vegetation that was removed from the Project site should be placed in adjacent habitat to provide cover for dispersing dusky-footed wood rats.</li> <li>• Dusky-footed woodrat nest material and other woody vegetation should be relocated at least 200 feet from the project site to ensure that the area is not re-colonized and potentially impacted by the construction activities.</li> <li>• Where feasible, nest material, food caches and woody debris shall be salvaged from the dismantled woodrat nest(s) and used to create cover and provide supplemental shelter for dispersing individual(s). Noting that food from the dismantled nest should be placed under the created cover.</li> <li>• If a dusky-footed woodrat young are located, the removal of vegetation and/or dismantling of nest should immediately be suspended for a period of two to four weeks in order for the young eyesight to develop and become mobile. Noting that theremoved material should be placed back on to the nest to re-cover the exposed litter</li> </ul> <p>and young. After two-to-four-week period, based on the development of the young,</p> <p>and in agreement with CDFW, the above phased-removal procedure of the dusky-footed wood rat nest may resume.</p> <ul style="list-style-type: none"> <li>• Within 24 hours of vegetation removal and completion of the nest dismantling, an</li> </ul> <p>additional visual survey of the work area should be conducted to ensure that no new</p> <p>dusky-footed woodrat nests have been constructed.</p>		
<p><b>Mitigation Measure</b></p>	<p><i>Crotch's bumble bee</i>  <b>Mitigation Measure #1 Habitat Assessment</b></p>	<p>Prior to Ground Disturbance</p>	<p>Project Applicant</p>

Amber Lo  
 Alameda County Public Works Agency  
 May 17, 2024  
 Page 21

<p><b>Special Animals</b></p>	<p>A habitat assessment should be conducted prior to project construction.</p> <p>The habitat assessment should be conducted by a qualified entomologist knowledgeable with the life history and ecological requirements of Crotch's bumblebee. The habitat assessment should include all suitable nesting, overwintering, and foraging habitats within the Project area and surrounding areas. Potential nest habitat (February through October) could include that of other <i>Bombus</i> species such as bare ground, thatched grasses, abandoned rodent burrows or bird nests, brush piles, rock piles, and fallen logs. Overwintering habitat (November through January) could include that of other <i>Bombus</i> species such as soft and disturbed soil or under leaf litter or other debris. The habitat assessment should be conducted during peak bloom period for floral resources on which Crotch's bumble bee feed. Further guidance on habitat surveys can be found within Survey Considerations for California Endangered Species Act (CESA) Candidate Bumble Bee Species (<a href="https://wildlife.ca.gov/Conservation/CESA">https://wildlife.ca.gov/Conservation/CESA</a>).</p> <p><b>Mitigation Measure #2: Survey Plan</b></p> <p>If Crotch's bumble bee habitat is present within the Project area, the Project should include a pre-construction survey plan as a mitigation measure. The survey plan should be submitted to CDFW for review. Surveys should be conducted by a qualified entomologist familiar with the behavior and life history of Crotch's bumble bee. If CESA candidate bumble bees will be captured or handled, surveyors should obtain a 2081(a) Memorandum of Understanding from CDFW.</p> <p>Surveys should be conducted during the colony active period (i.e. April through August) and when floral resources are in peak bloom. Bumble bees move nests sites each year, therefore, surveys should be conducted each year that Project work activities will occur. Further guidance on presence surveys can be found within Survey Considerations for California Endangered Species Act (CESA) Candidate Bumble Bee Species (<a href="https://wildlife.ca.gov/Conservation/CESA">https://wildlife.ca.gov/Conservation/CESA</a>).</p> <p><b>Mitigation Measure #3: Crotch's Bumble Bee Avoidance or Take Authorization</b></p> <p>If Crotch's bumble bee are detected during pre-construction surveys, a Crotch's bumble bee avoidance plan should be developed and provided to CDFW for review prior to work activities involving ground disturbance or vegetation removal.</p>		
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Amber Lo  
 Alameda County Public Works Agency  
 May 17, 2024  
 Page 22

	<p>If full take avoidance is not feasible, CDFW strongly recommends that the draft EIR state that the Project proponent will apply to CDFW for take authorization under an Incidental Take Permit.</p>		
<p><b>Mitigation Measures BIO 10 and 13</b></p>	<p>CDFW recommends relocating the trail segments within the riparian area to outside of the riparian zone to reduce loss of riparian habitat. CDFW also recommends clarifying the acreage of impacts to stream and riparian habitat and sensitive natural communities, and revising Mitigation Measures BIO-10 and 13 to include the following mitigation measures:</p> <p>Temporarily impacted areas within the riparian zone or other sensitive natural community shall be restored and planted with native trees, shrubs and grasses. Permanently impacted areas within the riparian zone or other sensitive natural community, such as from channel crossings, should be restored at a 3:1 mitigation to impact ratio for acreage and linear feet impacted. Restoration should occur on-site to the extent feasible. If off-site restoration is necessary, it should be as close to the Project site as possible and within the same watershed, unless otherwise approved in writing by CDFW. Restoration should occur in the same year of the impacts. Trees within the riparian zone or sensitive natural community shall be replaced at the following mitigation to impact ratios, unless otherwise approved in writing by CDFW:</p> <p>Oak (Quercus sp.) trees:</p> <ul style="list-style-type: none"> <li>• 4:1 replacement for trees up to 7 inches diameter at breast height (DBH)</li> <li>• 5:1 replacement for trees greater than 7 inches and up to 15 inches DBH</li> <li>• 10:1 replacement for trees greater than 15 inches DBH, which are considered old-growth oaks</li> </ul> <p>Non-oak trees:</p> <ul style="list-style-type: none"> <li>• 1:1 replacement for non-native trees.</li> </ul>	<p>Prior to Ground Disturbance</p>	<p>Project Applicant</p>
<p><b>Mitigation Measures Wildlife Corridors</b></p>	<p><b>Mitigation Measure #4: Wildlife Corridors and Connectivity</b></p> <p>CDFW recommends consultation with experts in wildlife passage design, including CDFW and Alameda County Resource Conservation District, and to conduct in-depth studies on existing use of wildlife corridors within the Project area and surrounding areas in order to evaluate extent of future impacts of the Project on wildlife connectivity, and to provide a basis for infrastructure</p>	<p>Prior to Ground Disturbance During Construction</p>	<p>Project Applicant</p>

Amber Lo  
Alameda County Public Works Agency  
May 17, 2024  
Page 23

	<p>and Project component redesign (see Mitigation Measure #2). Data collection methods should enable detection of species that have been found to utilize the existing movement corridors, including species mentioned in the comment above.</p> <p>Pre-construction study results should be used to develop biologically feasible movement corridor improvements. The cumulative impacts of adjacent projects on wildlife corridors should be considered. Post-construction monitoring should assess use of wildlife movement corridors.</p> <p>CDFW recommends that monitoring data be analyzed, summarized, and results discussed in reports that may be posted to the Project webpage and be submitted to CDFW and other agencies or organizations that have a duty or interest in the effectiveness of wildlife movement corridors.</p> <p><b>Mitigation Measure #5: Infrastructure and Project Component Redesign</b></p> <p>CDFW recommends the draft EIR analyze feasible re-designs or relocations of Project infrastructure that would improve wildlife movement opportunities and avoid or reduce the Project's significant impacts to wildlife connectivity. Additionally, CDFW recommends a scientifically defensible wildlife corridor width be required. The functional width of usable linkages should be described and maintained outside of the zone of influence of edge effect (Beier 2018). The effective corridor width is the minimum spatial dimension needed to mitigate human influence on animal movement through the corridor (Ford et al., 2020). The effectiveness of a corridor is further affected by the type and extent of human activities and land use practices within and adjacent to the corridor (Harrison 1992).</p> <p>CDFW recommends coordination with regional CDFW and Conservation Engineering staff on the design and location of walls, fences, and barriers to minimize their impacts on wildlife connectivity. The proposed design of the retaining walls and barriers between the trail and Highway 84 or the railroad will impact the ability of wildlife to cross the canyon. The recommended movement studies should be used to determine locations for design modifications that support the maximum movement and connectivity for impacted species. In locations where connectivity is important, but barriers are still required, the following approaches should be considered.</p> <ul style="list-style-type: none"><li>• Use of a three-beam type barrier along the road</li></ul>		
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Amber Lo  
Alameda County Public Works Agency  
May 17, 2024  
Page 24

	<p>instead of the proposed scuppers or gaps.</p> <ul style="list-style-type: none"><li>• Retaining walls should be textured and sloped to support use by wildlife, and where possible ramps/benches be utilized to allow for movement through the retaining walls. ]</li></ul> <p><b>Mitigation Measure #6: Compensatory Mitigation – Local Area Wildlife Movement Corridor</b></p> <p>Off-site compensatory mitigation should be implemented to completely offset unavoidable impacts if Project infrastructure redesigns, and other measures to avoid significant impacts to existing wildlife corridors within the Project area do not fully avoid impacts to wildlife corridors. The draft EIR should include an analysis of beneficial and feasible wildlife movement corridors and/or crossings at off-site locations that could be improved or constructed, to improve wildlife connectivity.</p> <p>Crossing and connectivity enhancements could include terracing for dry passage, directional fencing to prevent animals from crossing roads to reduce wildlife-vehicle strikes, removal of accumulated sediment that may block undercrossings, removal of vegetation debris, and control of invasive plant species. Enhancement of riparian habitat on both Alameda Creek, which likely serve as important movement corridors for wildlife, should also be evaluated for enhancement.</p> <p><b>Mitigation Measure #7: Monitor and Enforce Restrictions to Public Access</b></p> <p>CDFW recommends the Project include the development and implementation of a Trail Use Enforcement Plan to reduce potential impacts of trails to wildlife connectivity. The plan should include strategies for enforcing and remediating off trail use, monitoring trail use, providing education on wildlife-human conflict, and seasonal trail closures during sensitive periods, such as breeding periods as appropriate.</p>		
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