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Governor's Office of Planning & Research

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STATE CLEARINGHOUSE

Paula Pereira
Project Manager
Town of Apple Valley
14955 Dale Evans Pkwy.
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BEAR VALLEY ROAD BRIDGE OVER THE MOJAVE RIVER REHABILITATION
PROJECT (PROJECT) ADDENDUM TO THE INITIAL STUDY/MITIGATED NEGATIVE
DECLARATION (MND) SCH# 2016111018

Dear Ms. Pereira:

The California Department of Fish and Wildlife (CDFW) received a Notice of Completion from Town of Apple Valley for the Project pursuant the California Environmental Quality Act (CEQA) and CEQA Guidelines.¹

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

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

proposed, for example, the Project may be subject to CDFW's 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.), the project proponent may seek related take authorization as provided by the Fish and Game Code.

PROJECT DESCRIPTION SUMMARY

Proponent: Town of Apple Valley

Objective: The objective of the Project is to widen, rehabilitate, and seismically retrofit Bear Valley Road Bridge over the Mojave River. Primary Project activities include partial bridge removal of the section built in 1963 and rehabilitation of the section built in 1988. Activities include widening the structure approximately 31 feet to the north and 15 feet to the south, bridge footing, pier and abutment work, bridge deck widening, and utility relocation. The approach roadways will also be widened and improved.

Location: Town of Apple Valley, City of Victorville, and City of Hesperia, San Bernardino County, where Bear Valley Road crosses the Mojave River, 34.47101°, - 117.2539°.

Timeframe: 38 months

COMMENTS AND RECOMMENDATIONS

CDFW offers the comments and recommendations below to assist Town of Apple Valley in adequately identifying and/or mitigating the Project's significant, or potentially significant, direct and indirect impacts on fish and wildlife (biological) resources. Editorial comments or other suggestions may also be included to improve the document. Based on the Project's avoidance of significant impacts on biological resources with implementation of mitigation measures, including those CDFW recommends below, CDFW concludes that a Mitigated Negative Declaration is appropriate for the Project.

I. Environmental Setting and Related Impact Shortcoming

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 USFWS?

COMMENT 1: Impacts to Pallid Bats

Section IV, Page 25 of MND

Issue: CDFW has concerns that the MND states no impacts are anticipated to pallid bat, a Species of Special Concern, if mitigation measures are followed. Bat habitat assessment and acoustic monitoring were conducted on July 22, 2016, and the bat survey report prepared by ECORP Consulting, Inc. was provided to CDFW for review. Pallid bats were not observed on the structure yet heard through acoustic monitoring within the Project Area. The survey concluded pallid bats utilize the bridge, but the extent of the use is unknown. The report states it is possible pallid bats were roosting deep in the crevice, and not visible.

Specific impact: Pallid bat roosting sites were not identified; therefore, Project impacts and their significance were not fully analyzed for the species. Pallid bats utilize day and night roosts which are usually different sites in proximity to each other, and reproductive female pallid bats utilize maternity roosts. The overwintering and maternity roosts for pallid bats are usually different locations, but the colonies often remain in the same general area year-round (Johnston, 2020; and Johnston, Reyes, Rodriguez, and Briones, 2018). Pallid bats are known to day roost in obscure locations where they can retreat from view and are known to night roost in bridges (Brylski et al., 1998; Johnston, 2020; and Johnston, Briones, and Pincetich, 2019).

Due to seasonal utilization of different roost sites, pallid bats and other bat species may roost and forage in the Project area throughout the year. Species assemblages may vary seasonally at the Project site, as multiple species frequently utilize the same bridge as roosting habitat (Pierson, Rainey, and Corben, 2001). Project Activities have the potential to cause temporal or permanent loss of roosting habitat and deter individuals from potential foraging habitat.

Why impact would occur: Studies have shown that pallid bats have abandoned roost sites after activities that resulted in disturbance (Johnston et al., 2019).

Evidence impact would be significant: Pallid bats are sensitive to disturbance, urbanization, and human activity, and their populations have been extirpated throughout the state (CDFW, 2014; Johnston et al., 2019). Pallid bats are identified by CDFW as a species of special concern.

Recommended Potentially Feasible Mitigation Measure(s) (Regarding Project Description and Related Impact Shortcoming)

Mitigation Measure BIO-11:

To minimize significant impacts: CDFW has concerns that Project activities may be performed after sunset. CDFW appreciates the condition of limited lighting, and avoidance of work during bat emergence. However, if pallid bats utilize the bridge as a night roost, any disturbance during foraging hours may impact the species. CDFW

recommends the Lead Agency considers conditioning the document to only allow work during daylight hours to avoid bat emergence and impacting bat species that utilize the bridge for night roosting.

COMMENT 2: Impacts to Special Status Plants

Attachment B. Environmental Commitments Record

Issue: CDFW has concerns that several mitigation measures refer to vegetation trimming and removal (VIS-4, BIO-10), and vegetation is only protected where feasible to reduce erosion and sedimentation (BIO-3). The document does not consider special status plants.

Specific impact: Vegetation removal may result in the loss of special status plant species and the loss of habitat that supports numerous wildlife species. The activities associated with clearing may also disturb associated soil seed banks that sustain local plant populations. Removal of vegetation has also been shown to make communities vulnerable to colonization by invasive plant species (Mallery 2010).

Why impact would occur: CDFW considers biological field assessments for rare plants valid for a period of up to three years. The Environmental Commitments Record does not include a preconstruction survey to determine presence of special status plant species or measures to fully avoid and otherwise protect sensitive plant communities from project-related direct and indirect impacts.

Evidence impact would be significant: CDFW considers sensitive plant communities to be imperiled habitats having both local and regional significance. Plant communities, alliances, and associations with a statewide ranking of S-1, S-2, S-3, and S-4 should be considered sensitive and declining at the local and regional level.

Recommended Potentially Feasible Mitigation Measure(s) (Regarding Project Description and Related Impact Shortcoming)

Mitigation Measure:

To minimize significant impacts: CDFW recommends the Lead Agency require a thorough, floristic-based assessment of special status plants and natural communities, following CDFW's Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Natural Communities (<https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=18959&inline>) before the commencement of Project activities. Some aspects of the proposed Project may warrant periodic updated surveys for certain sensitive taxa, particularly if the Project is proposed to occur over a protracted time frame, or in phases, or if surveys are

completed during periods of drought. If special status plants and natural communities may be impacted from the Project, CDFW recommends that the Lead Agency include specific avoidance, minimization, and mitigation measures in the environmental document and make the implementation of each measure a requirement.

COMMENT 3: Impacts to Southwestern Willow Flycatcher

Section IV, Page 26 of the MND

Issue: CDFW has concerns that the Project is located in Southwestern Willow Flycatcher Critical Habitat and the MND states the Project does not contain habitat for the species based on surveys conducted in 2015.

Specific impact: Habitat modification through vegetation trimming and removal (VIS-4, BIO-10) will take place in Southwestern Willow Flycatcher Critical Habitat.

Why impact would occur: CDFW considers biological field assessments for wildlife to be valid for a one-year period. Southwestern willow flycatchers may be present in the Project area.

Evidence impact would be significant: CDFW has discretionary authority over activities that could result in the “take” of any species listed as candidate, threatened, or endangered, pursuant to the California Endangered Species Act (CESA; Fish and Game Code, § 2050 et seq.). CDFW considers adverse impacts to CESA-listed species, for the purposes of CEQA, to be significant without mitigation. Take of any CESA-listed species is prohibited except as authorized by state law (Fish and Game Code, §§ 2080 & 2085).

Recommended Potentially Feasible Mitigation Measure(s) (Regarding Project Description and Related Impact Shortcoming)

Mitigation Measure:

To minimize significant impacts: CDFW recommends the Lead Agency condition the environmental document to require preconstruction surveys to determine presence or absence of the species prior to commencing Project activities. CDFW also recommends a qualified avian biologist be on site during any vegetation trimming or removal to ensure Southwestern willow flycatcher individuals or habitat are not adversely affected by Project activities. Consequently, if a Project, including Project construction or any Project-related activity during the life of the Project, results in take of CESA-listed species, CDFW recommends that the Project proponent seek appropriate authorization prior to Project implementation. This may

include an incidental take permit (ITP) or a consistency determination in certain circumstances (Fish and Game Code, §§ 2080.1 & 2081).

II. Project Description and Related Impact Shortcoming

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

COMMENT 1: Impacts to Maternity Colony of Brazilian Free-tailed Bats

Page 6 of Addendum to the MND

Issue: It is unclear if the engineering designs for widening, rehabilitating, and seismically retrofitting the bridge will affect the amount of habitat availability and suitability for day and night roosting for bat species after completion of the Project. Additionally, it is unclear if a habitat assessment for suitable day and night roosting habitat on each side of the bridge was performed to ensure BIO-15 is feasible.

Specific impact: Availability of suitable habitat for day and night roosting on each side of the bridge prior to exclusion is needed to ensure continued use of the bridge by the maternity colony and other bat species during the projected 38-month Project timeframe. The survey report notes two site locations where Brazilian free-tailed bats were observed, and both were located on the north side of the bridge, built in 1988. This suggests the portion of the bridge built in 1963 may not have suitable day roosting habitat.

Why impact would occur: Due to low reproductive rates, Project impacts that span several years can result in reduced fecundity of maternity colonies that can require multiple years of reproductive success for a population to recover (Johnston et al., 2019). Roosts are essential for metabolic economy and juvenile growth (CDFW, 2014). Additionally, night roosts are essential for prey consumption, as bats consume prey and rest between foraging bouts (CDFW, 2014). Loss of night roosts has the potential to increase an individual's energy expenditure each night due to increased flight distances between day roosts and foraging habitat (Johnston et al., 2019; Mering and Chambers, 2014). Increased energy expenditure may result in mortality if energy loss is not compensated by increased prey intake. If lactating females have increased energy expenditure, it may result in limited energy allocation towards dependent young and increase juvenile mortality (Chaverri and Kuntz, 2011).

Evidence impact would be significant: Impediment of a native wildlife nursery site may be considered significant under CEQA. Urbanization has led to loss of natural roost sites, resulting in bats utilizing anthropogenic structures. It is unclear if another

suitable maternity roost site is located near the Project Area, as habitat destruction has led to decreased roost availability for many bat species (Mering and Chambers, 2014).

Recommended Potentially Feasible Mitigation Measure(s) (Regarding Project Description and Related Impact Shortcoming)

Mitigation Measure BIO-11:

To minimize significant impacts:

Modify: CDFW recommends the Lead Agency modify BIO-11 to include a requirement that the bridge engineers consult a qualified bat biologist with experience providing consultation for habitat creation on bridges. CDFW has concerns the final design may result in a loss of roosting habitat for bat species, or may not meet the species roosting requirements (i.e. temperature regime).

Add: CDFW recommends the Lead Agency add an additional mitigation measure to ensure a qualified bat biologist determines there is enough suitable habitat features for day and night roosting that will accommodate the size of the Brazilian free-tailed bat maternity colony and individuals of other bat species during exclusion of each side of the bridge. This assessment should be done prior to exclusion. CDFW suggests the Lead Agency consults an experienced bat biologist to assess the bridge and determine if additional habitat creation on the bridge will be required prior to exclusion.

COMMENT 2: Impacts to Nesting Birds

Page 8 of Attachment B. Environmental Commitments Record, BIO-16:

Issue: CDFW appreciates Project activities generating high levels of noise and vibration to be restricted to September 1- March 31 to avoid bat maternity season. However, this time period overlaps with the beginning of nesting bird season.

Specific impact: While BIO-9, BIO-10, and BIO-12 consider disturbance to nesting birds and determine a minimum buffer, high levels of noise would require an increased buffer to ensure no disturbance occurs.

Why impact would occur: High levels of noise can disrupt avian communication, increase vigilance, and cause nest abandonment.

Evidence impact would be significant: Anthropogenic noise can disrupt the communication of many wildlife species including birds and bats (Patricelli and Blickley, 2006; Gillam and McCracken, 2007; and Slabbekoorn and Ripmeester

2008). Noise can also affect predator-prey relationships as many nocturnal animals such as bats and owls primarily use auditory cues (i.e., hearing) to hunt. Additionally, many prey species increase vigilant behavior when exposed to noise, as species must rely on visual detection of predators when auditory cues are masked by noise (Rabin et al. 2006, Quinn et al. 2017). Noise has also been shown to reduce the density of nesting birds (Francis et al. 2009) and cause increased stress that results in decreased immune responses (Kight and Swaddle 2011).

Recommended Potentially Feasible Mitigation Measure(s) (Regarding Mitigation Measure or Alternative and Related Impact Shortcoming)

Mitigation Measure BIO-16 & BIO-12:

To minimize significant impacts: CDFW recommends adjusting the timeframe for high disturbance activities to September 1- December 31 to avoid nesting bird season as birds may nest within the Project area. CDFW recommends restriction of use of equipment with high levels of noise to hours least likely to disrupt wildlife by avoiding early morning, adopting CDFW's recommendation of only working during daylight hours, and increased buffer zone.

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: <https://www.wildlife.ca.gov/Data/CNDDDB/Submitting-Data>, or a completed PDF Field Survey Form (<https://www.wildlife.ca.gov/Data/CNDDDB/Submitting-Data#44524420-pdf-field-survey-form>) can be completed and mailed electronically to CNDDDB at the following email address: CNDDDB@wildlife.ca.gov. The types of information reported to CNDDDB can be found at the following link: <https://www.wildlife.ca.gov/Data/CNDDDB/Plants-and-Animals>.

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

Paula Pereira, Project Manager
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CONCLUSION

CDFW appreciates the opportunity to comment on the Addendum to the MND to assist Town of Apple Valley in identifying and mitigating Project impacts on biological resources.

Questions regarding this letter or further coordination should be directed to Ashley Rosales, Environmental Scientist at (909)980-8607 or Ashley.Rosales@Wildlife.ca.gov.

Sincerely,



Scott Wilson
Environmental Program Manager
Inland Deserts Region

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

REFERENCES

- Bolster, B.C., editor. 1998. Terrestrial Mammal Species of Special Concern in California. Draft Final Report prepared by P.V. Brylski, P.W. Collins, E.D. Pierson, W.E. Rainey and T.E. Kucera. Report submitted to California Department of Fish and Game Wildlife Management Division, Nongame Bird and Mammal Conservation Program for Contract No.FG3146WM.
- California Department of Fish and Wildlife. California Interagency Wildlife Task Group. 2014. CWHR version 9.0 personal computer program. Sacramento, CA.
- Chaverri, G., & Kunz, T. H. 2011. Response of a specialist bat to the loss of a critical resource. *PloS one*, 6(12), e28821. <https://doi.org/10.1371/journal.pone.0028821>
- Francis, C. D., C. P. Ortega, and A. Cruz. 2009. Noise pollution changes avian communities and species interactions. *Current Biology* 19:1415–1419.
- Gillam, E. H., and G. F. McCracken. 2007. Variability in the echolocation of *Tadarida brasiliensis*: effects of geography and local acoustic environment. *Animal Behaviour* 74:277–286.
- Johnston, Dave. H. T. Harvey & Associates, Ecological Consultants. Personal Communication. February 5, 2020.
- Johnston, Dave S., Kim Briones, and Christopher Pincetich. 2019. California Bat Mitigation: A Guide to Developing Feasible and Effective Solutions. H. T. Harvey & Associates, Los Gatos, CA. Prepared for the California Department of Transportation, Office of Biological Studies, Sacramento, CA. Task Order 7, Agreement No.43A0355.
- Johnston, D. S., G. A. Reyes, M. Rodriguez, and K. Briones. 2018. Mitigating for noise near roosts based on noise frequency and species of bats. *Bat Research News* 58(1):62.
- Kight, C. R., and J. P. Swaddle. 2011. How and why environmental noise impacts animals: An integrative, mechanistic review. *Ecology Letters* 14:1052–1061.
- Mallery, M. 2010. Marijuana National Forest: Encroachment on California public lands for cannabis cultivation. *Berkeley Undergraduate Journal* 23:1–17.
- Mering, E.D. and Chambers, C.L. 2014. Thinking outside the box: A review of artificial roosts for bats. *Wildl. Soc. Bull.*, 38: 741-751. doi:[10.1002/wsb.461](https://doi.org/10.1002/wsb.461)

- Patricelli, G., and J. J. L. Blickley. 2006. Avian communication in urban noise: causes and consequences of vocal adjustment. *Auk* 123:639–649.
- Pierson, E.D., W.E. Rainey, and C. Corben. 2001. Seasonal Patterns of Bat Distribution along an Altitudinal Gradient in the Sierra Nevada. Report to California State University at Sacramento Foundation, Yosemite Association, and Yosemite Fund, 70 pp.
- Quinn, J. L., M. J. Whittingham, S. J. Butler, W. Cresswell, J. L. Quinn, M. J. Whittingham, S. J. Butler, W. Cresswell, and W. Noise. 2017. Noise, predation risk compensation and vigilance in the chaffinch *Fringilla coelebs*. *Journal of Avian Biology* 37:601–608.
- Rabin, L. A., R. G. Coss, and D. H. Owings. 2006. The effects of wind turbines on antipredator behavior in California ground squirrels (*Spermophilus beecheyi*). *Biological Conservation* 131:410–420.
- Slabbekoorn, H., and E. A. P. Ripmeester. 2008. Birdsong and anthropogenic noise: Implications and applications for conservation. *Molecular Ecology* 17:72–83.