



State of California – Natural Resources Agency
DEPARTMENT OF FISH AND WILDLIFE
Inland Deserts Region
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GAVIN NEWSOM, Governor
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April 7, 2025
Sent via email

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PSR#TD004 Baker Boulevard Over Mojave River Bridge Replacement Project (Project)
Mitigated Negative Declaration (MND)
SCH# 2025030204

Dear Arnold (AJ) Gerber:

The California Department of Fish and Wildlife (CDFW) received a Notice of Intent to Adopt an MND from the San Bernardino County (County) 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.

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.

AJ Gerber, Senior Planner
San Bernardino County Department of Public Works
April 7, 2025
Page 2

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 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: San Bernardino County (County)

Objective: The Project proposes the replacement of an existing two-lane 22 span simple-supported stringer timber bridge on Baker Boulevard over the Mojave River. The new bridge will be a four-lane, 10-span cast-in-place reinforced concrete slab structure founded on cast-in-drilled hole piles or driven concrete pile extensions. The Project will also include approximately 1,200 feet of roadway work on Baker Boulevard, several potential temporary construction staging areas, potential temporary construction easements, utility relocation, installation of roadway/bridge lighting, and associated grading activities to accommodate the bridge demolition, replacement bridge installation, permanent channel access ramp construction, and channel modifications to ensure the replacement bridge has sufficient hydraulic capacity.

Location: The Project is located in the unincorporated community of Baker in San Bernardino County, northwest of Interstate 15 and southwest of the southern terminus of State Route 127, at the Mojave River. The Project site's latitude and longitude are 35.264109°N, -116.077048°W.

Timeframe: Not specified

COMMENTS AND RECOMMENDATIONS

CDFW offers the comments and recommendations below to assist the County 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.

AJ Gerber, Senior Planner
San Bernardino County Department of Public Works
April 7, 2025
Page 3

COMMENT #1: Nesting Birds

Issue: The Project may have impacts on nesting birds, including CESA-listed birds, species of special concern, and common birds that are subject to Fish and Game Code sections 3503.5, and 3513, and the Migratory Bird Treaty Act of 1918.

Specific impact: Project implementation could result in the loss of nesting and/or foraging habitat for passerine and raptor species from construction activities including bridge demolition and vegetation removal. CDFW is concerned about the impacts to nesting birds including loss of nesting/foraging habitat and potential take from ground disturbing activities and construction.

Conducting work outside the peak nesting season is an important avoidance and minimization measure, but CDFW recognizes that this is not always feasible, and thus recommends the completion of nesting bird surveys *regardless* of the time of year to ensure that impacts to nesting birds are avoided. This is also considering that the timing of the nesting season varies greatly depending on several factors, such as bird species, weather conditions in any given year, and long-term climate changes (e.g., drought, warming, etc.). In response to warming, birds have been reported to breed earlier, thereby reducing temperatures that nests are exposed to during breeding and this shift has led to a change in availability of resources (Socolar et al., 2017). CDFW staff have observed that climate change conditions may result in nesting bird season occurring earlier and later in the year than historical nesting season dates. CDFW recommends that disturbance to occupied nests of non-migratory passerine birds, migratory birds, and raptors within the Project site and surrounding area be avoided any time birds are nesting onsite. CDFW therefore recommends the completion of nesting bird surveys *regardless of the time of year* to ensure compliance with all applicable laws pertaining to nesting and migratory birds.

Why impact would occur: The MND includes BIO-16, which requires a pre-construction survey for nesting birds. However, BIO-16 specifies that the preconstruction survey would only occur during a defined nesting season (i.e., February 1 -September 30), which may lead to impacts to birds that nest outside of this defined nesting season.

Evidence impact would be significant: Fish and Game Code section 3503 makes it unlawful to take, possess, or needlessly destroy the nest or eggs of any bird, except as otherwise provided by Fish and Game Code or any regulation made pursuant thereto. Fish and Game Code section 3513 makes it unlawful to take or possess any migratory nongame bird except as provided by the rules and regulations adopted by the Secretary of the Interior under provisions of the Migratory Bird Treaty Act of 1918, as amended (16 U.S.C. § 703 et seq.). Fish and Game Code section 3503.5 makes it unlawful to take, possess, or destroy any birds in the orders Falconiformes or Strigiformes (birds-of-

AJ Gerber, Senior Planner
San Bernardino County Department of Public Works
April 7, 2025
Page 4

prey) to take, possess, or destroy the nest or eggs of any such bird except as otherwise provided by Fish and Game Code or any regulation adopted pursuant thereto.

Recommended potentially feasible mitigation measure to reduce impacts to less than significant: CDFW strongly recommends the following revisions to BIO-16 (edits are in strikethrough and bold) for adoption in the final MND.

Mitigation Measure: BIO-16 ~~Migratory Birds~~ (Revised)

Prior to vegetation removal or initial ground disturbance ~~during the nesting bird season (February 1—September 30)~~ a pre-construction nesting bird survey must be conducted by a Project Biologist prior to the start of work. The nesting bird survey must include the Project area plus a 300-foot buffer. Within 1 week of the nesting bird survey, all vegetated areas that are designated for removal must be cleared by the contractor or a supplemental nesting bird survey is required. An **appropriate buffer shall be established around each nest site, based on the professional judgment of a qualified biologist** ~~initial 100-foot no-disturbance buffer will be established around any active nest of migratory birds and a minimum 300-foot no-disturbance buffer will be established around any nesting raptor species.~~ The contractor ~~must immediately stop work in the buffer area until the appropriate buffer is established and~~ is prohibited from conducting work that could disturb the birds (as determined by the Project Biologist and in coordination with wildlife agencies) in the buffer area until a Project Biologist determines the young have fledged. A reduced no-work buffer can be established if determined appropriate by the Project Biologist, and will consider various factors including species of bird, location of nest, stage of nest, existing environment, and type of active work.

COMMENT #2: Bats

Issue: The Project will impact suitable roosting habitat for bats (i.e., bridges) and avoidance and minimization measures were not proposed within the MND to avoid impacts to bats.

Specific impact: Project implementation may result in both direct and indirect impacts to various species of bats including potential species of special concern.

Why impact would occur: The existing Baker Boulevard Bridge over the Mojave River is a timber bridge. Timber bridges are known to provide day roosting habitat for various bat species (California Department of Transportation 2019, Geluso and Mink 2009). The Project will include the demolition of the existing bridge that provides suitable day roosting habitat for bats. The new deck is proposed as a reinforced concrete slab structure which does not offer structures that are suitable for bat day roosting (Johnston 2005, California Department of Transportation 2019). Additionally, the Project will

AJ Gerber, Senior Planner
San Bernardino County Department of Public Works
April 7, 2025
Page 5

include streetlights which have been documented to negatively impact bat individuals (Pauwels et al 2021, California Department of Transportation 2022, Stone et al 2009). The current bridge does not include any streetlights and the closest streetlighting is 95 feet to the west and 210 feet to the east of the bridge abutments. The addition of streetlighting has the potential to impact bat populations that may be present at the bridge.

Evidence impact would be significant: Bats are considered non-game mammals and are afforded protection by State law from take and/or harassment (Fish & G. Code, § 4150; Cal. Code of Regs, § 251.1). Several bat species are considered Species of Special Concern (SSC) and impacts on SSC could require a mandatory finding of significance under CEQA (CEQA Guidelines, § 15065). Impacts on bats, either directly or indirectly through disturbances to roosts and loss of habitat, would be a significant impact.

Recommended potentially feasible mitigation measure to reduce impacts to less than significant: CDFW strongly recommends the adoption of BIO-17 below in the final MND.

Mitigation Measure: BIO-17 Bats (New)

Prior to finalizing design of the bridge structure and before Project activities begin, a bat habitat assessment followed by nighttime emergent and acoustic surveys shall be conducted by a qualified bat biologist at an appropriate time of year to determine the type of roost (i.e., day, night, maternity, etc.), size of the bat population, and bat species present at the bridge. The results of the habitat assessment and surveys shall be utilized in the design of the bridge, if roosts are detected. If roosts are detected, the County shall provide CDFW a Bat Avoidance and Mitigation Plan (BAMP) 30 days prior to Project activities for review and approval. If roosts are detected during surveys, the new bridge shall provide both temporary and permanent bat roosting structures or the County shall provide compensatory mitigation for permanent impacts to roosts, such as, but not limited to, constructing artificial bat roosting habitats (e.g., bat boxes or panels). Additionally, if roosts are detected and the new bridge provides suitable habitat for bats, the results of the assessment and surveys shall be utilized to design street lighting for the Project.

COMMENT #3: Permanent Lighting

Issue: The MND does not adequately analyze the impacts of new artificial nighttime lighting on fish and wildlife resources.

AJ Gerber, Senior Planner
San Bernardino County Department of Public Works
April 7, 2025
Page 6

Specific impact: The Project has the potential to adversely affect wildlife in open space areas adjacent to the Project site. Artificial lighting alters ecological processes including, but not limited to, the repair and recovery of physiological function; the measurement of time through interference with the detection of circadian and lunar and seasonal cycles; the detection of resources and predators; and navigation (Gatson, et al., 2013).

Why impact would occur: The Project proposes the installation of roadway/bridge lighting. The MND mentions that the lighting will be faced downward and shielded, however the MND does not provide any further context or design for shielding or structure for lighting. CDFW does not find this information adequately addresses the potential impacts to wildlife from artificial lighting for the Project. CDFW recommends the final MND includes an analysis of the direct, indirect, and cumulative impacts of permanent artificial nighttime lighting on biological resources within open-space adjacent to the Project.

Evidence impact would be significant: Artificial nighttime lighting often results in light pollution, which has the potential to significantly and adversely affect fish and wildlife. Many species use photoperiod cues for communication (e.g., bird song; Miller 2006), determining when to begin foraging (Stone et al. 2009), behavior thermoregulation (Beiswenger 1977), and migration. Phototaxis, a phenomenon which results in attraction and movement towards light, can disorient, entrap, and temporarily blind wildlife species that experience it (Longcore and Rich 2004).

Recommended Potentially Feasible Mitigation Measures: CDFW strongly recommends the adoption of BIO-18 below in the final MND.

BIO-18: Artificial Nighttime Lighting (New)

Throughout construction and the lifetime operations of the Project, San Bernardino County shall eliminate all nonessential lighting throughout the Project area and avoid or limit the use of artificial light at night during the hours of dawn and dusk when many wildlife species are most active. San Bernardino County shall ensure that all lighting for the Project is fully shielded, cast downward and directed away from surrounding open-space, reduced in intensity to the greatest extent possible, and does not result in lighting trespass including glare into surrounding areas or upward into the night sky (see the International Dark-Sky Association standards at <http://darksky.org/>). San Bernardino County shall ensure use of LED lighting with a correlated color temperature of 3,000 Kelvins or less, proper disposal of hazardous waste, and recycling of lighting that contains toxic compounds with a qualified recycler.

AJ Gerber, Senior Planner
San Bernardino County Department of Public Works
April 7, 2025
Page 7

COMMENT #4: Burrowing owl (*Athene cunicularia*)

Issue: Burrowing owl is a candidate species under CESA. The Project has the potential to result in permanent and temporary loss and degradation of burrowing owl habitat. The Project may result in take of burrowing owl during construction and the life of the Project. If the Project, including Project construction or any Project related activity during the life of this Project, may result in the take of a CESA-listed species, CDFW recommends that the Project proponent seek appropriate authorization (i.e., Incidental Take Permit [ITP]) prior to Project implementation.

Specific impact: The MND does not include pre-construction surveys for burrowing owl, a CESA candidate species.

Why impact would occur: Construction activities have the potential to take burrowing owls by collapsing burrows and modifying foraging and nesting habitat. California Fish and Game Code section 86 defines “take” as “hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill”.

Evidence impact would be significant: The Project, as described, may result in injury, direct mortality, indirect mortality, disruption of breeding behavior, and/or may reduce reproductive capacity of burrowing owl. On October 10, 2024, the Fish and Game Commission designated burrowing owl as a candidate species under CESA. CDFW considers the take of burrowing owl and the loss of the species’ habitat as a significant impact, unless mitigated to a level of less than significant, which would occur through a CESA ITP. Further, burrowing owl is protected under Fish and Game Code section 3503.5 and the Migratory Bird Treaty Act.

Recommended potentially feasible mitigation measure to reduce impacts to less than significant: CDFW strongly recommends the adoption of the following new measure, BIO-19, for inclusion in the final MND.

Mitigation Measure: BIO-19 Burrowing Owl (New)

Prior to the initiation of construction activities (i.e., grubbing, clearing, staging, digging), focused burrowing owl surveys shall be conducted by a qualified biologist according to the CDFW Staff Report on Burrowing Owl Mitigation (CDFG, 2012 or most recent version) for the Project site and surrounding 500 ft radius. Take avoidance surveys shall be conducted no less than 14 days prior to the start of Project-related activities. Burrowing owls may re-colonize a site after only a few days, thus time lapses between Project activities require subsequent take avoidance surveys including but not limited to a final survey conducted within 24 hours prior to ground disturbance, in accordance with the Staff Report on Burrowing Owl Mitigation (CDFG 2012 or most recent version). If the surveys

AJ Gerber, Senior Planner
San Bernardino County Department of Public Works
April 7, 2025
Page 8

confirm the presence of burrowing owls, impacts to burrowing owl shall be fully avoided. If impacts to burrowing owl are unavoidable, the County should apply for a CESA ITP.

COMMENT #5: Special Status Plants

Issue: CDFW is concerned the Project may affect sensitive plant species with the potential to occur onsite, such as small-flowered androstephium (*Androstephium breviflorum*) and alkali marsh aster (*Almutaster pauciflorus*) considering no floristic surveys were performed. Both small-flowered androstephium and alkali marsh aster have a state rare plant ranking of 2B.2 thereby indicating it is rare, threatened, or endangered in California.

Specific impact: Grading, vegetation removal, and other ground disturbances are likely to result in direct mortality of sensitive plants.

Why impact would occur: The plant survey documented in the Natural Environment Study occurred on August 14, 2024, which is past the flowering and fruiting period for the special status plants that have the potential to occur in the Project area, and thus when these plants are the least identifiability and detectability. Impacts to potential special status species present in the Project area cannot be determined without surveys conducted at the appropriate season.

Evidence impact would be significant: Plants constituting California Rare Plant Ranks 1A, 1B, 2A, and 2B (i.e., small-flowered androstephium and alkali marsh aster) generally meet the criteria of a CESA-listed species and should be considered as an endangered, rare, or threatened species for the purposes of CEQA analysis. Likewise, CDFW considers State listed communities to be imperiled habitats having both local and regional significance. Plant communities, alliances, and associations with a statewide ranking of S1, S2, and S3 should be considered sensitive and declining at the local and regional level. These ranks can be obtained by querying the California Natural Diversity Database (CNDDDB) and are included in the Manual of California Vegetation (CNPS 2022).

Recommended potentially feasible mitigation measure to reduce impacts to less than significant: CDFW strongly recommends the adoption of the following new measure, BIO-20, for inclusion in the final MND.

Mitigation Measure: BIO-20 Pre-Construction Rare Plant Survey

Prior to Project implementation, and during the appropriate season, a qualified biologist shall conduct botanical field surveys within the Project area following protocols set forth in the California Department of Fish and Wildlife's (CDFW)

AJ Gerber, Senior Planner
San Bernardino County Department of Public Works
April 7, 2025
Page 9

2018 Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Sensitive Natural Communities (CDFW 2018). The surveys shall be conducted by a CDFW approved botanist(s) experienced in conducting floristic botanical field surveys, knowledgeable of plant taxonomy and plant community ecology and classification, familiar with the plants of the area, including special-status and locally significant plants, and familiar with the appropriate state and federal statutes related to plants and plant collecting. The botanical field surveys shall be conducted at the appropriate time of year when plants will both be evident and identifiable (usually, during flowering or fruiting) and, in a manner, which maximizes the likelihood of locating special-status plants and sensitive natural communities that may be present.

Botanical field surveys shall be conducted floristic in nature, meaning that every plant taxon that occurs in the Project area is identified to the taxonomic level necessary to determine rarity and listing status. If any special-status plants are identified, the County shall avoid the plant(s), with an appropriate buffer (i.e., fencing or flagging). If complete avoidance is not feasible, the County shall mitigate the loss of the plant(s) through the purchase of mitigation credits from a CDFW-approved bank and/or through land acquisition and conservation at a mitigation ratio determined by CDFW after Project analysis. If the Project has the potential to impact a state-listed species, the Project applicant should apply for a California Endangered Species Act (CESA) Incidental Take Permit (ITP) with CDFW.

Additional Comments and Suggestions

Habitat Connectivity

CDFW is concerned that the Project would not preserve existing habitat connectivity. The addition of lighting to the new bridge structure will impact habitat connectivity, causing a potential significant impact, since the area has been identified as a Conservation Planning Linkage (CDFW 2024), a California Desert Linkage (Penrod K et al 2012), and a Avawatz Mountains -Silurian Hills Linkage (Penrod K et al 2001). Additionally, no details are provided whether installation of riprap, paving, or other permanent structures will occur within the streambed located under the bridge. However, the Project description in Natural Environment Study for the Project includes installation of rock slope protection (RSP) around bridge abutments and in the channel inverts, which would have impacts to wildlife connectivity. Additionally, even though the RSP will be placed below the channel bottom, it will modify the vegetation that could grow in the channel and thus further deteriorate the permeability of the structure to wildlife.

AJ Gerber, Senior Planner
San Bernardino County Department of Public Works
April 7, 2025
Page 10

Streambed Impacts

While the MND recognizes the need to notify pursuant to Fish and Game Code section 1602, the MND did not adopt a mitigation measure requiring notification. Thus, CDFW recommends the adoption of the measure below in the final MND.

Mitigation Measure: BIO-21 Lake and Streambed Alteration

If Project construction activities occur within a streambed, then the California Department of Fish and Wildlife (CDFW) shall be notified pursuant to Fish and Game Code section 1602. If CDFW determines that the Project may substantially affect fish and wildlife resources, then CDFW shall issue a Streambed Alteration Agreement (Agreement). The Agreement shall include measures to avoid, minimize, and mitigate impacts to Fish and Game Code section 1602 resources.

Submitting Data on Special Status Species

CDFW strongly recommends to the Project proponent to submit data to the California Natural Diversity Database at <https://wildlife.ca.gov/Data/CNDDDB/Submitting-Data>, regarding any special status species that are observed within or adjacent to the Project area.

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 filled out and submitted online at the following link: <https://wildlife.ca.gov/Data/CNDDDB/Submitting-Data>. The types of information reported to CNDDDB can be found at the following link: <https://www.wildlife.ca.gov/Data/CNDDDB/Plants-and-Animals>.

ENVIRONMENTAL DOCUMENT FILING FEES

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

AJ Gerber, Senior Planner
San Bernardino County Department of Public Works
April 7, 2025
Page 11

CONCLUSION

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

Questions regarding this letter or further coordination should be directed to Jason Bill, Environmental Scientist at Christopher.Bill@wildlife.ca.gov

Sincerely,

DocuSigned by:

84FBB8273E4C480...
Alisa Ellsworth
Environmental Program Manager

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

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

REFERENCES

Beiswenger, R. E. 1977. Diet patterns of aggregative behavior in tadpoles of *Bufo americanus*, in relation to light and temperature. *Ecology* 58:98–108

California Department of Fish and Wildlife. 2012. Staff Report on Burrowing Owl Mitigation.

California Department of Transportation. 2019. Caltrans Bat Mitigation: A Guide to Developing Feasible and Effective Solutions.

California Department of Transportation. 2022. Roadway Lighting Environmental Assessment Fact Sheet.

California Native Plant Society. 2022. Manual of California Vegetation. Available from: Manual of California Vegetation (MCV) | California Native Plant Society (cnps.org)

Gatson, K. J., Bennie, J., Davies, T., Hopkins, J. 2013. The ecological impacts of nighttime light pollution: a mechanistic appraisal. *Biological Reviews*, 88.4: 912-927.

AJ Gerber, Senior Planner
San Bernardino County Department of Public Works
April 7, 2025
Page 12

Geluso K and Mink JN. 2009. Use of Bridges by Bats (Mammalia: Chiroptera) in the Rio Grande Valley, New Mexico. *The Southwestern Naturalist* 54(4), 421-429.

Johnston, D. S. 2005. Recreating battered bat roosts: planning & perseverance pay off at a California bridge. *Bat Conservation International Bats Magazine* 23(2).

Miller, M. W. 2006. Apparent effects of light pollution on singing behavior of American robins. *The Condor* 108:130–139.

Penrod, K., P. Beier, E. Garding, and C. Cabañero. 2012. A Linkage Network for the California Deserts.

Penrod, K, R Hunter, and M Marrifield. 2001. Missing Linkages: restoring connectivity to the California landscape. California Wilderness Coalition, The Nature Conservancy, US Geological Survey, Center for Reproduction of Endangered Species, and California State Parks.

Pauwels, J., Le Vio, I, Bas Y Valet N, and Kerbirios, C. 2021. Adapting street lighting to limit light pollution's impacts on bats. *Global Ecology and Conservation* 28

Socolar JB, Epanchin PN, Beissinger SR and Tingley MW. 2017. Phenological shifts conserve thermal niches. *Proceedings of the National Academy of Sciences* 114(49): 12976-12981.

Stone, E. L., G. Jones, and S. Harris. 2009. Street lighting disturbs commuting bats. *Current Biology* 19:1123–1127. Elsevier Ltd.

AJ Gerber, Senior Planner
 San Bernardino County Department of Public Works
 April 7, 2025
 Page 13

Attachment A

Mitigation Monitoring and Reporting Plan

Biological Resources (BIO)		
Mitigation Measure	Implementation Schedule	Responsible Party
<p>BIO-16 Birds (Revised)</p> <p>Prior to vegetation removal or initial ground disturbance a pre-construction nesting bird survey must be conducted by a Project Biologist prior to the start of work. The nesting bird survey must include the Project area plus a 300-foot buffer. Within 1 week of the nesting bird survey, all vegetated areas that are designated for removal must be cleared by the contractor or a supplemental nesting bird survey is required. An appropriate buffer shall be established around each nest site, based on the professional judgment of a qualified biologist. The contractor is prohibited from conducting work that could disturb the birds (as determined by the Project Biologist and in coordination with wildlife agencies) in the buffer area until a Project Biologist determines the young have fledged. A reduced no-work buffer can be established if determined appropriate by the Project Biologist, and will consider various factors including species of bird, location of nest, stage of nest, existing environment, and type of active work.</p>	<p>Prior to initiation of all ground disturbing activities and during construction</p>	<p>Project proponent and qualified biologist</p>
<p>BIO-Mitigation #17 Bats (New)</p> <p>Prior to finalizing design of the bridge structure and before Project activities begin, a bat habitat assessment followed by nighttime emergent and acoustic surveys shall be conducted by a</p>	<p>Prior to finalizing design of the Project and before Project initiation</p>	<p>Project proponent and qualified bat biologist</p>

AJ Gerber, Senior Planner
 San Bernardino County Department of Public Works
 April 7, 2025
 Page 14

<p>qualified bat biologist at an appropriate time of year to determine the type of roost (i.e., day, night, maternity, etc.), size of the bat population, and bat species present at the bridge. The results of the habitat assessment and surveys shall be utilized in the design of the bridge, if roosts are detected. If roosts are detected, the County shall provide CDFW a Bat Avoidance and Mitigation Plan (BAMP) 30 days prior to Project activities for review and approval. If roosts are detected during surveys, the new bridge shall provide both temporary and permanent bat roosting structures or the County shall provide compensatory mitigation for permanent impacts to roosts, such as, but not limited to, constructing artificial bat roosting habitats (e.g., bat boxes or panels). Additionally, if roosts are detected and the new bridge provides suitable habitat for bats, the results of the assessment and surveys shall be utilized to design street lighting for the Project.</p>		
<p>BIO-18: Artificial Nighttime Lighting (New)</p> <p>Throughout construction and the lifetime operations of the Project, San Bernardino County shall eliminate all nonessential lighting throughout the Project area and avoid or limit the use of artificial light at night during the hours of dawn and dusk when many wildlife species are most active. San Bernardino County shall ensure that all lighting for the Project is fully shielded, cast downward and directed away from surrounding open-space, reduced in intensity to the greatest extent possible, and does not result in lighting trespass including glare into surrounding areas or upward into the night sky (see the International Dark-Sky Association standards at http://darksky.org/). San Bernardino County shall ensure use of LED lighting with a correlated color temperature of 3,000 Kelvins or less, proper disposal of hazardous waste, and recycling of lighting that contains toxic compounds with a</p>	<p>During Project design and during Project operation</p>	<p>Project designer, Project proponent, and County road maintenance</p>

AJ Gerber, Senior Planner
 San Bernardino County Department of Public Works
 April 7, 2025
 Page 15

<p>qualified recycler.</p>		
<p>BIO-19 Burrowing Owl (New)</p> <p>Prior to the initiation of construction activities (i.e., grubbing, clearing, staging, digging), focused burrowing owl surveys shall be conducted by a qualified biologist according to the CDFW Staff Report on Burrowing Owl Mitigation (CDFG, 2012 or most recent version) for the Project site and surrounding 500 ft radius. Take avoidance surveys shall be conducted no less than 14 days prior to the start of Project-related activities. Burrowing owls may re-colonize a site after only a few days, thus time lapses between Project activities require subsequent take avoidance surveys including but not limited to a final survey conducted within 24 hours prior to ground disturbance, in accordance with the Staff Report on Burrowing Owl Mitigation (CDFG 2012 or most recent version). If the surveys confirm the presence of burrowing owls, impacts to burrowing owl shall be fully avoided. If impacts to burrowing owl are unavoidable, the County should apply for a CESA ITP.</p>	<p>Prior to initiation of all ground disturbing activities</p>	<p>Project proponent and qualified biologist</p>
<p>BIO-20 Pre-Construction Rare Plant Survey</p> <p>Prior to Project implementation, and during the appropriate season, a qualified biologist shall conduct botanical field surveys within the Project area following protocols set forth in the California Department of Fish and Wildlife’s (CDFW) 2018 Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Sensitive Natural Communities (CDFW 2018). The surveys shall be conducted by a CDFW approved botanist(s) experienced in conducting floristic botanical field surveys, knowledgeable of plant taxonomy and plant community ecology and classification, familiar with the plants of the area,</p>	<p>Prior to initiation of all ground disturbing activities</p>	<p>Project proponent and qualified botanist</p>

AJ Gerber, Senior Planner
 San Bernardino County Department of Public Works
 April 7, 2025
 Page 16

<p>including special-status and locally significant plants, and familiar with the appropriate state and federal statutes related to plants and plant collecting. The botanical field surveys shall be conducted at the appropriate time of year when plants will both be evident and identifiable (usually, during flowering or fruiting) and, in a manner, which maximizes the likelihood of locating special-status plants and sensitive natural communities that may be present.</p> <p>Botanical field surveys shall be conducted floristic in nature, meaning that every plant taxon that occurs in the Project area is identified to the taxonomic level necessary to determine rarity and listing status. If any special-status plants are identified, the County shall avoid the plant(s), with an appropriate buffer (i.e., fencing or flagging). If complete avoidance is not feasible, the County shall mitigate the loss of the plant(s) through the purchase of mitigation credits from a CDFW-approved bank and/or through land acquisition and conservation at a mitigation ratio determined by CDFW after Project analysis. If the Project has the potential to impact a state-listed species, the Project applicant should apply for a California Endangered Species Act (CESA) Incidental Take Permit (ITP) with CDFW.</p>		
<p>BIO-21 Lake and Streambed Alteration</p> <p>If Project construction activities occur within a streambed, then the California Department of Fish and Wildlife (CDFW) shall be notified pursuant to Fish and Game Code section 1602. If CDFW determines that the Project may substantially affect fish and wildlife resources, then CDFW shall issue a Streambed Alteration Agreement (Agreement). The Agreement shall include measures to avoid, minimize, and mitigate impacts to Fish and Game Code section 1602 resources.</p>	<p>Prior to initiation of all ground disturbing activities</p>	<p>Project proponent</p>