

Submission 971 (Dean Borg, California Department of Corrections and Rehabilitation, April 12, 2021)

STATE OF CALIFORNIA — DEPARTMENT OF CORRECTIONS AND REHABILITATION

GAVIN NEWSOM, GOVERNOR

FACILITY PLANNING, CONSTRUCTION AND MANAGEMENT P.O. Box 942883 Sacramento, CA 94283-0001



April 12, 2021

California High-Speed Rail Authority 355 S. Grand Avenue, Suite 2050 Los Angeles, CA 90071

Attn: Revised Draft EIR/Supplemental Draft EIS for the Bakersfield to Palmdale Project Section

The California High-Speed Rail Authority, as Lead Agency, has published the Bakersfield to Palmdale Project Section Revised Draft Environmental Impact Report/Supplemental Draft Environmental Impact Statement (RDEIR/SDEIS) for the California High-Speed Rail Project (HSR Project), under the California Environmental Quality Act and the National Environmental Policy Act.

971-1221

As a participating agency of the HSR Project, the California Department of Corrections and Rehabilitation (CDCR) appreciates the opportunity to review and provide comments to the HSR Project RDEIR/SDEIS. As presented, CDCR has no comments regarding the HSR Project RDEIR/SDEIS at this time.

If you have any questions, please contact Peter Connelly, Senior Environmental Planner, at (916) 255-3010, or via email at Peter.Connelly@cdcr.ca.gov.

Sincerely,

DEAN L. BORG

Director

Facility Planning, Construction and Management

Than he Borg

cc: Peter Connelly

Response to Submission 971 (Dean Borg, California Department of Corrections and Rehabilitation, April 12, 2021)

971-1221

While this comment is not related to the new information about the monarch butterfly and Southern California and Central Coast mountain lion as candidate species under the Endangered Species Act, and new mitigation measures to address impacts to wildlife resulting from lighting during construction and project operation in the Revised Draft EIR/Supplemental Draft EIS, the Authority appreciates all comments and is responding in full here.

The Authority appreciates the California Department of Corrections and Rehabilitation's review of the Revised Draft EIR/Supplemental Draft EIS. No revisions have been made to this Final EIR/EIS in response to this comment.



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GAVIN NEWSOM, Governor CHARLTON H. BONHAM, Director



April 12, 2021

Serge Stanich Director of Environmental Services California High-Speed Rail Authority 770 L Street, Suite 620 MS1 Sacramento, California 95814

Subject: California High-Speed Rail Project, Bakersfield to Palmdale Section (Project) Revised Draft Environmental Impact Report/Supplemental Draft

Environmental Impact Study (RDEIR/SDEIS)

SCH No. 2009082062

Dear Mr. Stanich:

The California Department of Fish and Wildlife (CDFW) received a Notice of Availability of a RDEIR/SDEIS from the California High-Speed Rail Authority (Authority) for the above-referenced Project pursuant to the California Environmental Quality Act (CEQA) and CEQA Guidelines. CDFW previously commented on related environmental documents as stated in our comment letter for the Draft EIR/EIS for the Bakersfield to Palmdale Section on April 28, 2020.

Following the Authority's publication of the Draft EIR/EIS in February 2020, the Authority learned that the California Fish & Game Commission advanced the Southern California and Central Coast mountain lion (*Puma concolor*) populations to candidacy for listing under the California Endangered Species Act. The Authority also learned that the U.S. Fish & Wildlife Service (USFWS) determined that listing the monarch butterfly (*Danaus plexippus*) under the Federal Endangered Species Act is warranted, but that listing is precluded by other priorities; therefore, the monarch butterfly is now a candidate species under the Federal Endangered Species Act. The U.S. Fish & Wildlife Service will review the species' status annually until a listing decision is made. These listing actions led to the Authority to revise the DEIR/EIS for analysis of impacts to mountain lion and monarch butterfly, as well as including additional mitigation measures for impacts to wildlife resulting from lighting during construction and during project operation.

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, CDFW appreciates the opportunity to provide comments regarding those

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

PROJECT DESCRIPTION SUMMARY

Proponent: California High-Speed Rail Authority (Authority)

Objective: Bakersfield to Palmdale (B-P) Project Section, which extends approximately 80 miles between High-Speed Rail (HSR) stations in Bakersfield and Palmdale, from the southern San Joaquin Valley and northern Antelope Valley. The Project Section extends from Kern County in the north to Los Angeles (LA) County in the south, with the Bakersfield and Palmdale HSR stations making up this section's beginning and ending points, or the project termini. Four primary build alternatives are considered with two design options.

Location: The proposed Bakersfield to Palmdale Section is located in Kern and Los Angeles counties. The Project northern termini is located in the City of Bakersfield at the intersection of 34th and L streets (latitude 35°23'25.90"N/longitude -119°0'58.97"W). The southern Project terminus is in the City of Palmdale, terminating at Spruce Court, just past the proposed Palmdale Station (latitude 34°33'47.8"N/longitude - 118°6'55.4"W).

Timeframe: Unspecified.

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.

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COMMENTS AND RECOMMENDATIONS

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CDFW offers the following comments and recommendations to assist the California High-Speed Rail Authority in adequately identifying and/or mitigating the Project's significant, or potentially significant, direct and indirect impacts on fish and wildlife (biological) resources. Comments that were provided in the April 28, 2020 comment letter for the DEIR/EIS remain the same and will not be restated in this letter. Editorial comments or other suggestions may also be included to improve the document.

Currently, the RDEIR/SDEIS indicates that the Project's impacts would be less than significant with the implementation of mitigation measures described in the RDEIR/SDEIS. However, as currently drafted, it is unclear whether the mitigation measures described will be enforceable or sufficient in reducing impacts to a level that is less than significant. CDFW is concerned regarding adequacy of mitigation measures for special-status species including, but not limited to: the State Candidate Species for listing as threatened, Southern California/Central Coast evolutionarily significant unit (ESU) mountain lion (*Puma concolor*) and the U.S. Fish and Wildlife Service (USFWS) candidate for listing monarch butterfly (*Danaus plexippus plexippu*

I. Mitigation Measure or Alternative 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 United States Fish and Wildlife Service (USFWS)?

COMMENT 1: Mountain Lion (ML)

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Issue: The Project alignment transects the Southern California/Central Coast ESU and the Western Sierra Nevada (WSN) population. The RDEIR/SDEIS acknowledges that mountain lion have the potential to occur within or near the Project. However, the RDEIR/SDEIS (Section 3.7 and BIO Impact #2) lacks the Project impact analysis of the genetically distinct subpopulations of the Southern California ESU (San Gabriel San Bernardino (SGSB), the Central Coast-South (CC-S), Santa Monica Mountains (SAM)) and the WSN as a source of genetics. The SGSB, CC-S, and SAM, have small population numbers. The effective subpopulation size for SGSB is 5 and the estimated adult subpopulation size of 10-20 (Yap et al., 2019). The RDEIR/SDEIS does not address impacts of the potential gene-flow disruption between these subpopulations. nor does it address how impacts to the WSN population (genetic source) would impact the other subpopulations. The Impact BIO#2 is a generalized analysis of Project impacts to mammals that included mountain lion. CDFW recommends Section 3.7 be revised to contain specific analysis on the mountain lion Southern California/Central Coast ESU (SGSB, WSN, CC-S, and SAM genetic subpopulations) impacts to dispersal and genetic exchange between populations, including issues of connectivity and fragmentation of habitat adjacent to the Project, which will be impacted by the alignment. CDFW also recommends the DEIR/EIS be revised to include robust feasible DocuSign Envelope ID: 26FDDE30-B078-4083-A8CB-729C25CF8A0D

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avoidance, minimization, and mitigation measures to reduce impacts to these isolated subpopulations providing connectivity for WSN mountain lion population to less than significant. CDFW recommends referencing the attached mapping (Attachment 1) for analysis.

Specific impacts: The Project as proposed will impact the Southern California/Central Coast ESU mountain lion subpopulations by cutting off the source of genetics and impede movement between the WSN and the SGSB, CC-S, and SAM. These subpopulation islands (SGSB, SAM, and CC-S) can currently persist by genetic connectivity to a larger population (WSN), without this connection the subpopulations would go extinct. The Project has the potential to cause impacts during construction by increasing human presence, traffic, noise, vibration, air pollutants and dust, artificial lighting, and will significantly and permanently reduce and potentially eliminate the existing wildlife movement corridor.

Evidence impact would be significant: The mountain lion is a specially protected mammal in the State (Fish and G. Code, § 4800). In addition, on April 21, 2020, the California Fish and Game Commission accepted a petition to list an ESU of mountain lion in southern and central coastal California as threatened under CESA (CDFW 2020a). As a CESA-candidate species, the mountain lion in southern California is granted full protection of a threatened species under CESA.

The Project would continue to have significant impacts because mitigation as proposed would not result in adequate and successful mitigation for the unavoidable direct and indirect, permanent, or temporal losses, of genetic connectivity between subpopulations of mountain lion.

The WSN population provides a source of genetic diversity for the rest of the State and Nevada (Gustafson et al., 2019). The WSN population appear to be large (i.e., high effective population size), genetically diverse, and well-connected. (Gustafson et al., 2019). It is important that this population remain connected to adjacent populations via suitable habitat and unobstructed sizeable movement corridors. Currently, the only area connecting the WSN population to adjacent areas in southern and central California is the Tehachapi Mountains in Kern County. Decreased and impeded connectivity in this area would quickly increase the decline in genetic diversity of mountain lions in southern and central parts of the State (Dellinger et al., 2020). Loss of wildlife connectivity is another primary driver for the potential demise of the southern California mountain lion population (Yap et al. 2019). Habitat loss and fragmentation due to roads and development has driven the southern California mountain lion population towards extinction (Yap et al. 2019). Conserving and restoring habitat connectivity and corridors is essential for mitigating impacts to mountain lions.

Mountain lions will use caves and other natural cavities, thickets in brush, and timber for cover and denning. Mountain lions require extensive areas of riparian vegetation and brushy stages of various habitats, with interspersions of irregular terrain, rocky outcrops, and tree/brush edges. These habitat types are throughout the Project area. Mountain



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lions are active yearlong (mostly nocturnal and crepuscular). The home range for male are a minimum of 40 km² (15 mi²) and female home ranges usually are 8-32 km² (3-12 mi²). The main diet for mountain lion is mule deer (CWHR). Mule deer migration corridors will also be impeded by the Project. Mountain lions have a wide-ranging nature and large territories, as well as the need for dispersal (especially of young males). In order to maintain genetic diversity, large blocks of conserved habitat and unobstructed and sizable safe travel corridors between them are essential for long term population persistence and stability (Vickers, 2014). Thermal characteristics cause mountain lions to select north-facing slopes at high elevations, with more vegetation and cooler temperatures in the summer and south-facing slopes with little snow cover in winter. These habitats were also strongly correlated with the density and distribution of deer. Den sites are preferentially located in nearly impenetrable vegetation areas and mountain lion feed on cached prey primarily after sunset and often rested long distances from the cache site during the day (Pierce and Bleich 2003). Cutting off or restricting access to these habitats will reduce opportunities for genetic exchange, foraging, and fecundity.

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Recommended Potentially Feasible Mitigation Measure(s):

Because the RDEIR/SDEIS identifies the potential for mountain lion to occur within the Project footprint, CDFW recommends conducting the following evaluation of the Project, updating the RDEIR/SDEIS to include the following measures, and that these measures be made Conditions of Approval for the Project. CDFW recommends quantitative and enforceable measures that will reduce the impacts to less than significant levels.

Recommended Mitigation Measure 1: ML Habitat Assessment

CDFW recommends that a qualified biologist conduct a habitat assessment and suitable habitat mapping of individual Project areas in advance of Project implementation, to determine if the Project area or its vicinity contains suitable habitat as well as caves and other natural cavities and thickets of brush and timber which provide cover and are used for denning. Mapping should also include the following: the project area with identified wildlife linkages within the ESU subpopulations, identified Project undercrossing, overcrossing, tunnels, viaducts, and designated wildlife crossing locations and adjacent habitat to assist with development and implementation of avoidance, minimization, and mitigation measures.

Recommended Mitigation Measure 2: ML Wildlife Crossing Monitoring

CDFW recommends that the Authority devise and implement a Mountain Lion Crossing Monitoring Plan. CDFW recommends the Authority consult with CDFW during the drafting of the Monitoring Plan and obtain approval of the Plan prior to Project implementation. CDFW recommends that the proposed Mitigation Measure #64 Establish Wildlife Crossings, include a design that establishes specific criteria for monitoring the performance of the crossings (viaducts, undercrossing, overcrossings) for routine and ongoing use by mountain lion and its prey. The monitoring plan should be contingent with action-based monitoring performance objectives and be adaptive. Goals of the monitoring plan should at a minimum include: 1) to provide data to assist in designing crossings and inform placement for future HSR segments in Southern

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California (Palmdale to Burbank and Burbank to LA); 2) conduct long-term population monitoring for use by the mountain lion sub-populations; 3) track progress of use; and 4) evaluate overall effectiveness of the crossings.

Recommended Mitigation Measure 3: ML-Avoidance-Buffer for Corridor Areas CDFW recommends that during construction, movement corridors such as drainages and riparian areas maintain a ¼ mile buffer to minimize impacts to mountain lion movement through these areas.

Recommended Mitigation Measure 4: ML-No Night Work in Corridor Areas
To minimize impacts to movement of mountain lion during construction, CDFW
recommends that no night work occur in drainages and riparian areas of the Project.

Recommended Mitigation Measure 5: ML-Avoidance Use of Rodenticides CDFW discourages the use of rodenticides and second-generation anticoagulant rodenticides due to their harmful effects on the ecosystem and wildlife. CDFW recommends the Authority include a mitigation measure prohibiting the use of such materials during construction and operation and maintenance of the HST.

Recommended Mitigation Measure 6: ML-Provide Dedicated Wildlife Crossings CDFW recommends that recurrently positioned dedicated wildlife crossings for mountain lion and deer be a "required" design feature in the final design of the Project.

Recommended Mitigation Measure 7: ML-Take Authorization

There should be no net loss of suitable habitat for mountain lions. CDFW recommends that the Authority identify opportunities for the Project to enhance nearby areas and create movement opportunities including wildlife corridor restoration or enhancement as potential mitigation strategies. Since the RDEIR/SDEIS assumes wildlife movement and corridor impacts, the inherent loss of gene-flow, cannot be avoided between the subpopulations, thus the Authority must ensure some level of conservation is present in the areas that provide connectivity. CDFW recommends improving habitat connectivity (e.g., wildlife road-crossing structures) to facilitate unimpeded wildlife movement and gene-flow between adjacent areas of the WSN. CDFW recommends the replacement habitat be located adjacent to the Project and Wildlife Linkage and Corridor, see Attachment 1.

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The Authority should consult and collaborate with CDFW to conserve areas beneficial to the Southern California ESU and the WSN subpopulation that may improve and maintain connectivity. The mitigation lands should be protected in perpetuity under a conservation easement dedicated to a local land conservancy or other appropriate entity that has been approved by CDFW to hold and manage mitigation lands.

In the event that a mountain lion or den is detected during surveys, consultation with CDFW is warranted to discuss how to implement the Project and avoid take. If

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avoidance as described in the above Mitigation Measure 4 is not feasible, acquisition of an Incidental Take Permit (ITP), pursuant to Fish & Game Code section 2081 subdivision (b) prior to any ground-disturbing activities may be warranted in order to comply with CESA.

988-1248 Recommended Mitigation Measure 9: MB Surveys

If suitable habitat is present, CDFW recommends assessing presence of monarch butterflies and milkweed by conducting surveys following recommended protocols or protocol-equivalents.

COMMENT 2: Monarch Butterfly (MB)

Issue: The Project falls within the monarch butterfly spring and summer breading area (Pelton 2016). Project related activities have the potential to impact monarch butterfly. It is unclear how the following BIO-IAMFs (BIO-IAMF#1, BIO-IAMF#3, BIO-IAMF#5, BIO-IAMF#8, BIO-IAMF#9, BIO-IAMF#10, and BIO-IAMF#1) are avoiding and minimizing impacts from construction to monarch butterflies. Without appropriate avoidance and minimization measures for the species mentioned above, potential significant impacts associated with the Project's milkweed removal activities include, inadvertent entrapment, reduced reproductive success, reduction in health and vigor of eggs and/or larvae, and direct mortality of individual monarch butterflies.

CDFW advises that all milkweed be avoided if ground-disturbing activities will occur during the overwintering period (October through February) by a minimum of 50 feet to avoid potentially significant impacts. Avoidance of insecticide use within the Project area during construction and operation. Detection of special-status species within or in the vicinity of the Project area, warrants consultation with CDFW and USFWS to discuss how to implement ground-disturbing activities and avoid take, such as restoring and enhancing milkweed and nectar resources a possible minimization measure.

Specific impact: The document lacks appropriate analysis on how operations and maintenance (O&M) activities such as herbicide and vegetation removal adjacent to the HSR would remove and degrade habitat and host plants, or how train strike could injure/kill monarch butterflies. CDFW recommends addressing the following O&M impacts: dust impacts and groundwater impacts to the host plants (*Asclepia ssp.*, milkweed) and nectar producing flowers during construction and operation.

COMMENT 3: Section 3.7.4 Pre-field Investigation and Consultation, Wildlife Movement Corridor Page 1

Recommended Mitigation Measure 10: MB Take Avoidance

This section states, "The focal species included in the local permeability analysis Mountain lion (*Puma concolor*) Southern California/Central Coast ESU of the RDEIR." CDFW recommends that the focus of analysis be the movement of the WSN population.

Evidence impact would be significant: The availability of milkweed is essential to monarch butterfly reproduction and survival, the reductions in milkweed is cited as a key driver in monarch butterfly decline (USFWS 2020). Habitat loss and fragmentation is among the primary threats to the population (USFWS 2020). During the breeding season monarch butterflies lay their eggs on the milkweed host. Monarchs also need milkweed for both oviposition and larval feeding and nectar producing habitat (USFWS 2020). Project activities have the potential to significantly impact the species by reducing possible nectar producing plants and milkweed host plant for breeding. Habitat where monarch butterflies are found may be subject to insecticide use and these impacts are primarily influenced by the extent to which monarch butterflies are

COMMENT 4: Section 3.7.5.5 Special-Status Wildlife Species Page 2

Technical reports were not included as appendices to the RDEIR/SDEIS. The DIER/EIS's appendices had to be referenced instead, this did not allow easy referencing of the data. CDFW recommends providing a figure (mapping) of the mountain lion ESU subpopulations.

exposed to insecticides throughout their range (USFWS 2020).

Recommended Potentially Feasible Mitigation Measure(s)

To evaluate potential impacts of the Project to special-status species, CDFW recommends conducting the following assessment of the Project area, including the following mitigation measures, and requiring them as Conditions of Approval for the Project.

COMMENT 5: Table 3.7-7 Intersection of the Bakersfield to Palmdale Project Section Build Alternatives (Station to Station) and Modeled Federal and State Threatened/Endangered Species Habitat Pages 6-8

CDFW recommends adding the mountain lion ESU subpopulations (SGSB, WSN, CCS, and SAM) as a study area to this table. CDFW also recommends that this table describes how direct, indirect, permanent, and temporary impacts were calculated for each species and specifically for mountain lion and monarch butterfly. Table 3.7-7 and Section 3.7.6.4 Impact BIO# 2 for Insects and Mammal lacks a description of the methodology used to calculate mountain lion and monarch butterfly impacts acreages.

Recommended Mitigation Measure 8: MB Habitat Assessment

CDFW recommends that a qualified biologist conduct a habitat assessment, well in advance of Project implementation, to determine if the Project area or its immediate vicinity contain habitat suitable to support life stages of the monarch butterfly.

COMMENT 6: Section 3.7.6.4 Impact BIO #5: Construction Impacts on Wildlife Movement-Temporary Page 16

CDFW recommends that the gene-flow between each of the subpopulations of mountain lion and specifically from the source populations of the WSN to the SGSB and the CC-S and SAM to the SGSB subpopulations need to be analyzed. The BIO #5 impact analysis is a generalized assessment. Also, the period of construction is not a

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their prey base.

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short-term period, construction can last up to 5 years or more. There are also temporal impacts to wildlife from the construction period activities.

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988-1253 COMMENT 7: Section 3.7.6.4 Impact BIO #5: Construction Impacts on Wildlife Movement-CEQA Conclusion Page 17

CDFW recommends that BIO-MM#42, BIO-MM#37, BIOMM#56, BIO-MM#64, BIO-MM#77, BIO-MM#78, BIO-MM#86, and IAMF pertaining to mountain lion movement of the subpopulations be quantified and enforceable. CDFW also recommends including a CEQA significance conclusion for impacts to the mountain lion ESU and the genetic impacts to the subpopulations.

3.4 of the DEIR/EIS that analyzed noise and vibration impacts to humans. Please clarify, how these temporary disruptions of wildlife movement would impact the gene-flow between the three subpopulations of mountain lion, please provide this analysis. CDFW recommends analysis of mountain lion movement and/or their prey-base and impacts to their foraging opportunities. Potential effects could result in additional stressors during breeding cycles, effects of den selection, and force animals into movement paths/areas that could increase their vulnerability to vehicle strikes.

COMMENT 10: Section 3.7.6.5 Operations Impacts Impact BIO #8: Operational

This section lacks discussing O&M activity impacts to mountain lion and their prev base.

CDFW recommends including an impact analysis of O&M activities to mountain lion and

Impacts on Special-Status Wildlife Species-Native Fauna Page 19

COMMENT 8: Section 3.7.6.5 Operations Impacts Impact BIO #8: Operational Impacts on Special-Status Wildlife Species Page 17

Please quantify the train operation and maintenance; "infrequent" does not provide information for the analysis. It should be noted that avian line strikes, and electrocution are permanent operational impacts. Take of any State fully protected species (SFP) is prohibited, and CDFW cannot authorize their take for any Project-related reason.

COMMENT 11: Section 3.7.6.5 Operations Impacts Impact BIO #8: Operational Impacts on Special-Status Wildlife Species CEQA Conclusion Page 19

CDFW recommends quantifying the train operation and maintenance including the duration of time the train will travel through this segment daily for the full build-out analysis. CDFW also recommends including the following to properly analyze operational impacts: the maximum number of trains and the physical length of the train, the durational impacts for all special-status wildlife species, daytime and night-time train frequency during full operation, not just start-up years. It is unclear how many times "daily" is. CDFW recommends quantifying the special-status wildlife species that are impacted in number of acres based on impacts from train-travel sound, vibration, and

CDFW recommends including a CEQA significance conclusion for impacts to the mountain lion ESU and the genetic impacts to the subpopulations.

COMMENT 12: Section 3.7.6.5 Impact BIO #11: Operation Impacts on Wildlife Movement-Temporary Page 21

frequency during full operation, not just start-up years. It is unclear how many times "daily" is. CDFW recommends quantifying the special-status wildlife species that are impacted in number of acres based on impacts from train-travel sound, vibration, and light, that the train will impact from active travel and frequency during night and day-time operation. It should be noted, mountain lions are active not only during the midnight hours (active through the day, particularly the crepuscular periods, and den year-round) and can be disturbed by noises at all times of the night and day. Please clarify if maintenance of the HSR will routinely occur every night. Please clarify how thresholds-based analysis was done for mountain lion.

This section states, "Intermittent maintenance activities are unlikely to have a long-term effect on wildlife movement corridors in terms of their effectiveness for gene flow and dispersion." CDFW recommends analysis of intermittent maintenance activities impact on the mountain lion subpopulations.

COMMENT 9: Section 3.7.6.5 Operations Impacts Impact BIO #8: Operational Impacts on Special-Status Wildlife Species-Mammals Page 18

COMMENT 13: Section 3.7.6.5 Impact BIO #11: Operation Impacts on Wildlife Movement-Permanent Pages 21-22

This section lacks discussing O&M activity impacts to mountain lion. CDFW recommends including impacts from O&M activities to the subpopulations of mountain lion which will be impacted by the proposed Project. This section states, "Indirect impacts from noise, vibration, and wind could result in the displacement of mammal species. These impacts may result in shifts in foraging patterns or territories, shifts in dispersal movements, increased predation, decreased reproductive success, and reduced population viability." CDFW recommends addressing these impacts in terms of the mountain lion subpopulations found in and adjacent to the Project and provide analysis of noise and vibration to all mammals, comparable to the analysis in Section

This section states, "This result could lead to further habitat fragmentation, restricted movement within wildlife corridors, habitat shifts, increased foraging competition, and possibly increased predation near undisturbed crossings." It is unclear what this statement means to the ESU subpopulations of mountain lion. CDFW recommends that these claims should be tied to the mountain lion subpopulations. CDFW recommends analyzing the impact beyond a generalized statement of habitat fragmentation. Please correlate location of vehicle strikes and current highway locations then address the cumulative impact of the addition of the HSR to these locations to the disruption of gene-flow between the two subpopulations.

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COMMENT 14: Section 3.7.6.5 Impact BIO #11: Operation Impacts on Wildlife Movement-CEQA Conclusion Page 22

It should be noted that the IAMFs and BIO-MM#76, BIO-MM#77, BIO-MM#78, and BIO-MM#64 lack measurable, quantifiable actions and therefore enforceability to minimize, avoid, or mitigate impacts on wildlife movement during project operation.

988-1261

COMMENT 15: Section 3.7.7.2 Mitigation Measures for Biological and Aquatic Resources BIO-MM#85: Provide Compensatory Mitigation for Impacts on Mountain Lion Core and Patch Habitat Page 24

It should be noted, mountain lion Core and Patch Habitat is not described or depicted in a figure in the RDEIR/SDEIS to allow for analysis of the effectiveness of this mitigation measure. "Compensatory mitigation would be provided using one or more of the methods described in BIO-MM#53 and would, where feasible and acceptable to CDFW, contribute to preserving important movement lands across the HSR alignment." Measure# 53 is not described in the 3.7.7 mitigation section of this document.

988-1262

COMMENT 16: Section 3.7.7.2 Mitigation Measures for Biological and Aquatic Resources BIO-MM#64: Establish Wildlife Crossings Pages 22-23

This section states, "For terrestrial wildlife, all crossings will conform to the minimum spacing and dimensions identified in the Wildlife Corridor Assessment (Appendix I of the Biological and Aquatic Resources Technical Report), unless different dimensions are specified in authorizations issued under the ESA or CESA." CDFW recommends that the specifics that pertain to establish wildlife crossings for mountain lion in the Biological and Aquatic Resources Technical Report from the DEIR/EIS be included in this measure. CDFW recommends that additional language be added to include mountain lion. Please clarify how the data from this report was used in RDEIR/EIS or in the Wildlife Corridor Assessment (WCA). It should also be noted that recommendations of this measure are not enforceable design requirements for wildlife crossings.

"...the Authority will incorporate features to accommodate wildlife movement into the design of bridges and culverts that are replaced or modified as part of project construction, wherever feasible." This statement does not ensure that established crossings will be required. CDFW recommends the Authority coordinate with the California Department of Transportation (Caltrans) in their effort in conducting a SR-58 wildlife crossing study (Bakersfield to Mojave), to obtain roadkill data, inventoried culvert and bridges identified to be improved for connectivity and to ensure that these locations are not impaired by the Project and correspond with improvements of crossing locations of the Project. This study area is within one of the wildlife movement barrier priorities identified in CDFW Region 4 (CDFW 2021).

CDFW recommends that the creation of new crossing structures incorporate landovercrossings to facilitate movement of mountain lion and other wildlife. It is unclear how this measure would be enforced and CDFW recommends that these be required crossing features. Please provide the crossing design requirements for openness factor DocuSign Envelope ID: 26FDDE30-B078-4083-A8CB-729C25CF8A0D

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and clear line of sight from end to end (entrance to exit) distances. Crossing designs and locations must not result into pushing animals to small areas adjacent to highways subject to vehicle strikes. CDFW has concerns with what the wildlife crossing connects to; this is an important element to consider in the design and locations of crossings. CDFW recommends that crossing location entrance/exits be collocated with habitat areas that will be immediately encountered/adjacent and further, these habitat areas be conserved/protected to maintain effective movement corridors to sustain functional habitat for mountain lions in perpetuity.

988-1263

988-1262

COMMENT 17: Section 3.7.7.2 Mitigation Measures for Biological and Aquatic Resources BIO-MM#84: Conduct Pre-Construction Surveys and Implement Avoidance and Minimization Measures for Mountain Lion Dens Pages 23-24

"Prior to any ground-disturbing activity, regardless of the time of year, the Project Biologist would conduct pre-construction surveys for known or potential mountain lion dens within suitable habitat located within the work area and within 2,000 feet of the work area, where access is permitted." It is unclear how areas not accessible to the Project would be surveyed and it is unclear what the suitable habitat components are.

"The Project Biologist will use location-specific survey methods to identify known and potential dens. The survey method will consider topography, vegetation density, safety, and other factors. Surveys will be conducted by a qualified biologist (i.e., a biologist with demonstrated experience in mountain lion biology, identification, and survey techniques) and may involve the establishment of camera stations, scent stations, pedestrian surveys (looking for tracks, caches, etc.), or other appropriate methods. Survey methods used will be designed to avoid the disturbance of known or potential dens to the extent feasible." CDFW is concerned with the overall practicability of this approach. Please provide a way to minimize impacts prior to construction that is feasible. CDFW recommends that should employment of scent dogs for detection surveys be used, CDFW considers this as potential for take in the form of pursuit as defined in Fish and Game Code section 86. Therefore, CDFW advises prior to employing scent tracking dogs, the Authority consult with CDFW to determine if take authorization through the acquisition of an ITP is warranted. It should be noted that dens can be very difficult to detect even for mountain lion experts. Another possible approach to be incorporated into detection surveys is camera station surveys.

"If known, or potential, mountain lion dens are identified or observed during preconstruction surveys, mountain lion dens will be assumed to have kittens present until the Project Biologist can document that they are not present and/or that the den is not being used." CDFW recommends additional information be included in the measure on how dens will be checked to see that dens are no longer occupied without disturbing the adult female and kittens.

"However, ground disturbance would be limited to those days between October 1 and January 31 within 2,000 feet of known or potential dens to the extent feasible." If it is not feasible to work within the proposed work window, CDFW recommends including

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another option to minimize and avoid impacts. To the "extent feasible", means aspects of the measure are not enforceable requirements. Buffer establishment should be implemented if a den is detected with kittens. If such a discovery is made, then project activities in the defined buffer area would need to halt for 2 months and a re-survey conducted to determine if the female has abandoned the den and relocated the kittens. Also recommended, is immediate consultation with CDFW upon detection of an active den. Mountain lions will den throughout the year so a proposed work window is ineffective for a minimization measure and such reference to a work window to reduce impacts to mountain lions should be removed from the document.

988-1264

COMMENT 18: Section 3.7.7.2 BIO-MM#85: Provide Compensatory Mitigation for Impacts on Mountain Lion Core and Patch Habitat Page 24

The Authority has proposed to provide compensatory mitigation for impacts on mountain lion core and patch habitats. The RDEIR/SDEIS indicates that each alternative for the Project has approximately 33.4 acres of permanent impacts and 12 acres of temporary impacts to core and patch habitats. CDFW believes the proposed ratios of 2:1 for permanent impacts on breeding/foraging habitat and high priority foraging and dispersal habitat; and 1:1 for low priority foraging and dispersal habitat do not sufficiently account for loss of habitat and is not well supported based on the RDEIR/SDEIS analysis of the impacts which was a coarse level spatial modeling exercise. Overall, the analysis of direct, indirect, permanent, and temporal impacts is lacking including the impact to loss of gene-flow between subpopulations and impacts to ESUs due to the loss of connectivity. Therefore, it is unclear whether the proposed 2:1 mitigation to impacts ratio is sufficient to reduce the impacts to the subpopulations to less than significant. The proposed mitigation ratios should ensure the persistence of the mountain lion subpopulations.

988-1265

COMMENT 19: Section 3.7.7.2 Mitigation Measures for Biological and Aquatic Resources BIO-MM#86: Implement Lighting Minimization Measures During Construction Pages 24-25

CDFW recommends including mitigating for impacts of vehicle lighting during construction. "The Authority would avoid conducting ground-disturbing activities within known wildlife habitat during nighttime hours, to the extent feasible." It should be noted that aspects of the measure are not requirements, therefore not enforceable. CDFW recommends that there be measure(s) to avoid impacts if it is not feasible to implement the proposed measure. CDFW recommends there be specifications and quantification of the proposed shielding for this mitigation measure. CDFW recommends that the analysis of light impacts calculate and consider the zone of operation of the lighting level to which it meets ambient light level. Calculate the perimeter of the light until the light is reduced to ambient light levels to create a minimum light level. CDFW also recommends analysis of night glow and construction lighting between urban areas. It is unclear if the limitation on the number of days/months lighting would be used, or the number of hours in an evening. CDFW recommends the duration of lighting be

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analyzed for operational impacts as well. CDFW also recommends manual operation of lighting.

988-1266

COMMENT 20: Section 3.7.7.2 Mitigation Measures for Biological and Aquatic Resources BIO-MM#87: Implement Lighting Minimization Measures for Operations Page 25

This section states, "To address the permanent and intermittent impacts from lighting, the Authority would implement measures to minimize the intensity and duration of operational lighting of permanent facilities (e.g., traction power facilities, radio sites, and maintenance facilities), as well as intermittent train lighting, to the extent feasible." It should be noted that aspects of the measure are not requirements and are therefore not enforceable

"Train headlights would use the minimum standard allowed by the FRA under 49 CFR 229.125 (a single headlight of at least 200,000 candelas) within non-tunnel portions of the Project Section." It is unclear if this minimum standard amount has been analyzed for impacts in the impact section. It is also unclear if 200,000 candelas is a quantity of light that reduces *or* avoids impacts to wildlife. It is also unclear what the full distance is, and the extent of, a single train headlight and associated illumination zoom-cast on a moonless night considering lowest level of night glow in the non-urban areas. The range of light and impacts to species is needed in the analysis. Please clarify if lighting from the tunnel portal entrances will be omitted only during operation of the train (timeframe of lighting at the portal) and does this measure address the light impacts from the tunnel portals.

988-1267

COMMENT 21: Section 3.19 Cumulative Impacts Page 1

This section indicates that no revisions were made because the DEIR/EIS addressed cumulative impacts and the conclusions reached for mountain lion and monarch butterfly and lighting are the same and new mitigation measures ensure that cumulative impacts do not occur. CDFW does not agree with this conclusion and recommends that the cumulative impacts and conclusions be reanalyzed to address the gene-flow impacts to each of the subpopulations adjacent and within the Project.

988-1268

COMMENT 22: Section 3.19.5.7 Biological and Aquatic Resources Page 2

This section states the following: "The cumulative impact analysis for biological and aquatic resources evaluates the potential effects of the proposed improvements within the Bakersfield to Palmdale Project Section the specific projects identified in Appendix 3.19-A,..." It should be noted that Appendix 3.19-A is missing the proposed high-speed rail from Victorville, California to Las Vegas, Nevada (XpressWest), which has a connection at the Palmdale Station.

"Widening of existing transportation corridors or new transportation improvements could result in additional impacts on biological and aquatic resources. Each of these improvement projects would be subject to environmental review, including evaluation of

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the impacts of habitat loss, habitat degradation, and "take" of special-status species. Impacts on biological and aquatic resources would be mitigated as part of those projects, including avoidance of "take" during construction, minimization of impacts during construction and operation, restoration of disturbed sites, and preservation of compensatory." CDFW does not agree with nor recommend assuming that other projects environmental evaluation and minimization and mitigation measures will be appropriate to offset cumulative impacts. CDFW advises that throughout the RDEIR/SDEIS addressing cumulative impacts of take of mountain lion from the SGSB, SAM, and CC-S subpopulations from multiple projects, the effectiveness of mitigation for a subpopulation that has such low numbers, and the compounded impacts to these subpopulations by future projects.

988-1269

COMMENT 23: Section 3.19.5.7 Construction Wildlife Movement Corridors Pages 2 and 3

This section states the following: "Construction of the proposed improvements within the Bakersfield to Palmdale Project Section and cumulative projects such as High Desert Corridor (LA-4) and Northwest 138 Corridor Improvement Plan (LA-5) could result in construction activities and placement of wildlife movement barriers in natural lands such that they would interfere with the movement of wildlife species. Opportunities for wildlife movement in the cumulative RSA would be diminished because the HSR project is a linear project, spanning hundreds of miles, which could affect known and modeled wildlife movement corridors. Similarly, the High Desert Corridor and Northwest 138 Corridor Improvement Plan are linear projects that could also restrict wildlife movement corridors." CDFW recommends including these impacts to wildlife impacts in Section 3.7 when addressing impacts to mountain lion ESU subpopulations.

II. Editorial Comments and/or Suggestions

988-1270

Western Joshua Tree: The RDEIR/SDEIS did not address western Joshua tree (Yucca brevifolia) (YUBR) as a candidate species. On November 1, 2019, CDFW accepted a petition for western Joshua tree as a threatened species for listing under the CESA (Commission 2019). CDFW determined that listing "may be warranted" and advancing the species to the candidacy stage of the CESA listing process (CDFW 2020a). On September 22, 2020, the California Fish and Game Commission determined that listing western Joshua tree as threatened or endangered under CESA may be warranted (CDFW 2020b). Possession or removal of any additional trees, portions or trees, and/or dead trees may require a permit under CESA. According to the RDEIR/SDEIS "Impacts to the western Joshua tree, however, were analyzed in the Draft EIR/EIS, and no changes were necessary based on the subsequent change in legal status." CDFW provided comments in the B-P DEIR/EIS April 28, 2020 comment letter and are currently recommending additional analysis on western Joshua tree.

The Project will remove approximately 268.2 to 300.3 acres of western Joshua tree habitat resulting in a net loss of a valuable habitat type. The Project falls within the one of the two geographically separate populations, YUBR South, in the Mojave Basin

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Range (CDFW 2020). Joshua tree woodland is considered a California Native Plant Society 3 listed rare vegetation community that has limited distribution in California. Project implementation would result in a substantial adverse effect, either directly or through habitat modifications, on a rare vegetation community identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations or by CDFW or USFWS. CDFW advises that throughout the Project footprint, the Joshua tree habitat appears to be of good to excellent functional quality displaying a high percentage of recruitment (juvenile trees). This is significant given the recent drought experienced in the region.

Beyond the physical removal of mature Joshua trees, Project activities are likely to have compounding negative impacts to the local population. Fruit and seed production of western Joshua trees fluctuates yearly depending on factors that include availability of pollinators (Sirchia et al. 2018). The yucca moth (*Tegeticula synthetica*) is the sole pollinator of western Joshua trees. After feeding on fruits, yucca moth caterpillars drop onto the soil and retreat to pupate underground (Baker 1986; Bogler 1995). The Project would pave over soils that may otherwise support the yucca moth's pupal stage. Regional collapses of yucca moth populations have led to complete failure of fruit production in the closely related banana yucca (*Y. baccatta*) in the Mojave Desert (St. Clair and Hoines 2018).

Furthermore, the permanent placement of rail may result in permanent loss of seeds buried by abiotic processes and seed caches made by rodents (Waitman et al. 2010). Local extirpation of western Joshua trees may occur in the absence of a seed source that could be dispersed to adjacent areas. Due to Project site clearing, grading, and rail placement, Western Joshua trees and their supportive ecology would be permanently extirpated from the Project site.

CDFW acknowledges that Joshua tree habitat was addressed in the DEIR/EIS for the Project, however the DEIR/EIS lacked analysis and mitigation for the temporal loss of Joshua tree habitat. BIO-MM# 1 does not include a specific and enforceable avoidance buffer for Joshua trees. CDFW notes that the DEIR/EIS does not discuss or propose compensatory mitigation to offset the loss of the habitat type in the implementation of the Project. Therefore, it is unclear how Project impacts would be reduced to less than significant without specific and enforceable avoidance, minimization, or mitigation measures identified in the DEIR/EIS. As stated in the DEIR/EIS COMMENT #12 from CDFW comment letter dated April 28, 2020. CDFW recommends the RDEIR/SDEIS identify, map, and discuss the specific vegetation communities and habitat communities within the Project Area following CDFW's "Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Sensitive Natural Communities" (Survey Protocols) see:

(https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=18959&inline). Please note, this protocol was updated, and the 2018 version referenced here should be used. In order to determine the rarity ranking of vegetation communities potentially affected by the Project, the Manual of California Vegetation (MCV) alliance/association community



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names should be provided as CDFW tracks rare natural communities using this classification system.

Joshua tree mitigation areas should be protected against anthropogenic impacts for the life of the Project. CDFW recommends mitigation lands be preserved and managed in perpetuity under a conservation easement and managed by a local land conservancy. The proposed specific mitigation location should be identified in the CEQA document in order to ensure that mitigation is not deferred until some future time; however, the RDEIR/SDEIS document "may specify performance standards which would mitigate the significant effect of the Project and which may be accomplished in more than one specified way" (CEQA Guidelines, § 15126.4(a)(1)(B)).

As a CESA candidate species, western Joshua tree is granted full protection of a threatened species under CESA. If impacts to western Joshua trees cannot be avoided, please be advised that acquisition of an ITP may be required (pursuant to Fish & Game Code, § 2080 et seq.) prior to vegetation and ground disturbance activities.

988-1271

Wildlife Corridor Movement: The RDEIR/SDEIS asserts, "As part of the B-P Build Alternatives and both CCNM Design Options, the project would minimize impacts on wildlife movement through the incorporation of tunnels and viaducts into the design that allow wildlife to freely move over or under the alignment." This statement assumes that the viaduct locations will remain in place; however, as with other HSR segments currently under construction, these viaduct locations could later be redesigned to be fenced at-grade and impermeable to wildlife. CDFW advises that a stronger design criterion be developed and included in the RDEIR/SDEIS to ensure that areas of planned viaduct and tunnel cannot be changed to less permeable features by the Design-Build contractor.

As CDFW has discussed during early consultation and in previous comment letters to the Authority, the single biggest potential biological impact arising from construction of the HSR project is the impact on regional movements of wildlife and connections between habitats. The HSR has the potential to disrupt wildlife movement corridors that are already hindered with existing obstacles, create long stretches of impediments, and further narrow areas of low or compromised permeability, many of which are already threatening the continued viability of mountain lion, deer, and several species. Construction of access-controlled rail lines may create barriers to the movement of wildlife, thereby cutting them off from important food, shelter, and breeding areas. Resulting isolation of mountain lion subpopulations (WSN, SGSB, SAM, and CC-S) limits the exchange of genetic material and puts populations at risk of local extirpation through genetic and environmental factors. Barriers can prevent the re-colonization of suitable habitat following natural population expansions, ultimately putting the species at risk of extinction of the SSB, SAM and CC-S subpopulation of mountain lion.

The construction and operation of the HSR will severely inhibit north-south as well as east-west wildlife movement along the B-P segment. While the Authority suggests it will examine the feasibility of implementing a variety of wildlife passages to aid animal

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to move unimpeded throughout its range.

movement along both sides of the rail alignment, it is unclear where and at what intervals these will be placed. This is a concern, especially considering recent design changes in the Fresno to Bakersfield segment of the Project where originally designed elevated structures are being changed to an at-grade design and elevated structures over waterways are being significantly reduced in length, narrowing the available space for wildlife passage. Later changes of this nature could limit the ability of mountain lion

Potential future design changes that could result in reduced wildlife permeability and increased wildlife impacts need to either be considered in the DEIR/EIS, or somehow precluded from occurring at the construction phase. An elevated or below ground rail design could reduce the impacts that the HSR system would have on animal movement and migration, by allowing wildlife to pass unimpeded underneath or over the top of the entire length of the railway while providing access-controlled tracks. Elevated or below ground railways would be more effective in facilitating animal movement than the proposed wildlife underpasses and overpasses, which are not always effective or have untested efficacy for most taxa. Because wildlife would be more likely to move underneath an elevated rail, or over a below ground rail, as opposed to using a tunnel or vegetated overpass, CDFW advises the inclusion of the at-grade embankment in the DEIR/EIS as an impact to wildlife movement and that this impact be thoroughly analyzed as a barrier to movement, gene-flow, reproductive success, loss of colonization opportunities, and to discuss this in the context of planned wildlife crossings.

If wildlife passage structures will be used instead of elevated or below ground rail, CDFW continues to recommend that an extensive evaluation be conducted before final wildlife passage locations are selected to determine the appropriate and most effective locations and number and types of such wildlife passage structures. As was recommended in previous correspondence, methods to determine best locations of wildlife passage structures or avoidance should include things such as: 1) track station surveys; 2) ditch and canal crossing surveys; 3) monitoring trails with infrared or Trailmaster cameras; and 4) geographic information system (GIS) habitat modeling to identify likely wildlife travel corridors and anthropogenic barriers (such as highways, canals, reservoirs) at the landscape level. In addition, wildlife habitat passage structures, such as underpasses, overpasses, elevating or placing below grade the alignment and tunnels, may not be suitable for all species and locations and would need to be evaluated carefully. Dedicated wildlife crossing structures should ensure permeability, be evaluated on a species-specific basis, and be required to meet specific minimum dimensions for increased probability of wildlife utilizing these structures for crossing opportunities.

Specific care should be afforded to ensure that any wildlife crossing structure design incorporates generous openness and clear line of sight from entry to exit to maximize detection of the crossing by species at the time of encounter and to ensure use. Currently, the RDEIR/SDEIS does not provide specific dimensions listed for the openness, what constitutes a "slight grade of approaches to prevent flooding", and the

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number of crossings that would ensure permeability for such a long linear feature. Without these specifics and other relevant assumptions, it is not possible to determine if the effectiveness of this mitigation measure will reduce the level of significance. CDFW recommends that wildlife crossing locations, configurations, and demonstrated efficacy for mountain lion and other target species use (e.g., desert kit fox, Mohave ground squirrel, desert tortoise, etc.) be a requirement of the final design.

Finally, the RDEIR/SDEIS does not analyze the impact of design elements, such as the Intrusion Protection Barriers (IPBs) and Access Restriction (AR) fencing, in terms of impacts to wildlife corridor movements and/or the reduction of effectiveness of wildlife crossings compounded by the additional infrastructure fencing. The RDEIR/SDEIS includes information that the at-grade segments of the project would be entirely fenced or walled and thereby eliminate adverse interactions with wildlife, including direct strikes. While this may be true in some instances at the individual or localized level, the total length and linear nature of the project's fencing/walls, along with other projects in the area, may cause site-specific and cumulative impacts involving species fragmentation and impediments to wildlife movement. CDFW agrees that inclusion of proper placement and design of the dedicated wildlife crossings will be a very important component of the environmental planning process for the Project.

It is paramount that the final appropriate and effective design features, dimensions, and locations for elevated rail, viaduct, tunnel, and wildlife crossings through the Tehachapi Mountains remain as minimum criteria and are not a design-build option to reduce dimensions or alter locations without approval from the wildlife agencies to ensure connectivity of gene-flow for the WSN to the other mountain lion subpopulations (CC-S, SGSB, and SAM).

988-1272

Use of Modeling for Impact Analysis

CDFW has previously expressed its concern with using coarse-level predictive models for the impact analysis without having site-specific surveys to supplement the modeling effort. We are concerned that the lack of current, site-specific information to accurately quantify the magnitude of impact to CESA-listed species may cause delays in the impact of the taking analyses necessary for CESA and issuance of an ITP. CDFW is also concerned how the modeled output is proposed to be used for areas where there are no occurrence data. As a reminder, CNDDB captures voluntarily reported detections only, areas without records should not be treated as areas where species do not occur. Our primary concerns with using modeling without site-specific protocol surveys to assess and quantify impacts for purposes of CESA include the following:

 Modeling alone may not capture the full extent of species occurrences and habitat suitability due to data sources, timing of surveys, limited access to significant portions of the alignments, and the inherent accuracy issues associated with using regionally-based data to determine site-specific impacts without a reliable verification method (e.g., protocol surveys). Using predictive modeling only to evaluate species presence/absence and to quantify project-specific impacts (acreages) could miss marginal or atypical habitat usage, DocuSign Envelope ID: 26FDDE30-B078-4083-A8CB-729C25CF8A0D

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especially by highly mobile species, and impose a risk of unauthorized take. In addition, some areas not ranked as suitable have not been surveyed recently or have never been surveyed.

- Due to the stochasticity and cryptic nature of some species, it is very difficult to
 accurately "detect" species and determine mitigation requirements using
 modeling. Some species are unpredictable due to variables the modeling may
 not or cannot adequately capture, habitat requirements that are constantly
 evolving over time or space and/or have distributions that can be analyzed
 statistically but not be predicted precisely. For example, opportunistic species
 can have dynamic ranges and use areas not ranked at all by the model based on
 its current parameters.
- As an estimation of reality, the current model includes a defined range of species and conditions (using the rules selected) based on a snapshot of time and may not accurately capture use by all species when impacts occur and/or translate down to the site-specific (e.g., footprint) level. Modeling alone can provide a statistically significant underrepresentation of habitats potentially occupied by State-listed species. For example, some listed plants may only occur at specific times of the year under certain conditions and only be adequately evaluated with protocol surveys within the project footprint at the appropriate time. Likewise, some SFP bird species not known to nest or breed in the project area (e.g., white-tailed kite, peregrine falcon and bald eagle) could be transient to the area at certain times of the year.

It should be noted that the WCA is not an adequate analysis of the genetic landscape. The landscape connectivity/permeability vs. the genetic connectivity. Habitat quality landscape does not capture the movement through the Project for WSN population of mountain lions who breed and pass on genes to other subpopulations. The WCA (Appendix 3.7B of the DEIR/EIS) modeling limitations pose issues and assumptions that are problematic in addressing the genetic permeability of mountain lion.

CDFW continues to emphasize that although the current modeling can be a helpful tool for the Authority's own preliminary evaluation, as well as for compensatory mitigation planning, it will not be a substitute for our analysis when it comes to CESA permitting. CDFW will need to conclude whether or not listed species will be impacted by the project. If predictive modeling is used in lieu of biological surveys by the CHSRA, CDFW's ITP related analysis we will need to err on the side of assuming presence in the Project footprint. Our impact and take analysis and required minimization and mitigation measures will be reflective of this assumption.

988-1273

Nesting Birds: CDFW has jurisdiction over actions with potential to result in the disturbance or destruction of active nest sites or the unauthorized take of birds. Fish and Game Code sections that protect birds, their eggs and nests include, sections 3503 (regarding unlawful take, possession or needless destruction of the nest or eggs of any

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Submission 988 (Julie Vance, California Department of Fish and Wildlife, Region 4, April 12, 2021) - Continued

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988-1273 bird), 3503.5 (regarding the take, possession or destruction of any birds-of-prey or their nests or eggs), and 3513 (regarding unlawful take of any migratory nongame bird).

Water Pollution: Pursuant to Fish and Game Code section 5650, it is unlawful to deposit in, permit to pass into, or place where it can pass into "Waters of the State" any substance or material deleterious to fish, plant life, or bird life, including non-native species. It is possible that without mitigation measures implementation of the Project could result in pollution of Waters of the State from storm water runoff or construction-related erosion. Potential impacts to the wildlife resources that utilize these watercourses include the following: increased sediment input from road or structure runoff; toxic runoff associated with development activities and implementation; and/or impairment of wildlife movement along riparian corridors. The Regional Water Quality Control Board and United States Army Corps of Engineers also have jurisdiction regarding discharge and pollution to Waters of the State.

In this role, CDFW is responsible for providing, as available, biological expertise during public agency environmental review efforts (e.g., CEQA), focusing specifically on project activities that have the potential to adversely affect fish and wildlife resources. CDFW provides recommendations to identify potential impacts and possible measures to avoid or reduce those impacts.

Federally Listed Species: CDFW recommends consulting with the USFWS on potential impacts to federally listed species including, but not limited to, monarch butterfly. Take under the Federal Endangered Species Act (FESA) is more broadly defined than CESA; take under FESA also includes significant habitat modification or degradation that could result in death or injury to a listed species by interfering with essential behavioral patterns such as breeding, foraging, or nesting. Consultation with the USFWS in order to comply with FESA is advised well in advance of any ground-disturbing activities.

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 CNDDB. The CNDDB field survey form can be found at: https://www.wildlife.ca.gov/Data/CNDDB/Submitting-Data. The completed form can be mailed electronically to CNDDB at the following email address: CNDDB@wildlife.ca.gov/Data/CNDDB/Plants-and-Animals.

FILING FEES

If it is determined that the Project has the potential to impact biological resources, an assessment of filing fees will be necessary. Fees are payable upon filing of the Notice

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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).

CDFW appreciates the opportunity to comment on the Project to assist the Authority in identifying and mitigating the Project's impacts on biological resources.

More information on survey and monitoring protocols for sensitive species can be found at CDFW's website (https://www.wildlife.ca.gov/Conservation/Survey-Protocols). Please see the enclosed Mitigation Monitoring (MMRP) table which corresponds with recommended mitigation measures in this comment letter. If you have any questions, please contact Ms. Primavera Parker, Senior Environmental Scientist (Specialist), at the address provided on this letterhead, by telephone at (559) 320-6666, or by e-mail at Primavera.Parker@wildlife.ca.gov.

Sincerely,

Docusigned by:

Bob Strafford

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Julie A. Vance

Regional Manager

Attachment 1- Mountain Lion ESU Subpopulation Mapping Attachment 2- MMRP

ec: See Page Twenty-three

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Central Valley Regional Water Quality Control Board

CDFW Region 4: Ferranti, Tomlinson, Parker CDFW Region 5: Wilson-Olgin, R. Rodriguez, M. Evans DocuSign Envelope ID: 26FDDE30-B078-4083-A8CB-729C25CF8A0D

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REFERENCES

- Baker, H.G. 1986. Yuccas and Yucca Moths-A Historical Commentary. Annals of the Missouri Botanical Garden 73(3): 556-564.
- Beir, P. 1995. Dispersal of Juvenile Cougars in Fragmented Habitat. The Journal of Wildlife Management. 59(2): 228-237.
- Bogler, D.J., Neff, J.L., and B.B. Simpson. 1995. Multiple origins of the yucca-yucca moth association. Proc. Natl. Acad. Sci. 92: 6864-6867.
- California Wildlife Habitat Relationships (CWHR) System were originally published in: Zeiner, D.C., W.F.Laudenslayer, Jr., K.E. Mayer, and M. White, eds. 1988-1990. California's Wildlife. Vol. I-III. California Depart. of Fish and Game, Sacramento, California. California Wildlife Habitat Relationships System California Department of Fish and Wildlife California Interagency Wildlife Task Group.
- California Department of Fish and Wildlife (CDFW). 2005. California Interagency Wildlife Task Group, California Wildlife Habitat Relationships System. Life History Account.
- CDFW. 2013. CDFW Departmental Bulletin. Human/Wildlife Interactions in California: Mountain Lion Depredation, Public Safety, and Animal Welfare. Available from: https://nrm.dfq.ca.gov/FileHandler.ashx?DocumentID=68271&inline
- CDFW. 2018. Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Sensitive Natural Communities. California Department of Fish and Wildlife, March 2018.
- CDFW. 2020. Notice of Findings Mountain Lion ESU declared a candidate species. Available from:

https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=178623&inline

CDFW(a) 2020. Evaluation of a Petition from the Center for Biological Diversity to List Western Joshua Tree (Yucca brevifolia) as Threatened Under the California Endangered Species Act. Available from:

https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=178625&inline

CDFW (b) 2020. California Fish and Game Commission Holds Meeting on Western Joshua Tree. Available from:

https://cdfgnews.wordpress.com/2020/09/22/california-fish-and-game-commission-holds-meeting-on-western-joshua-tree/



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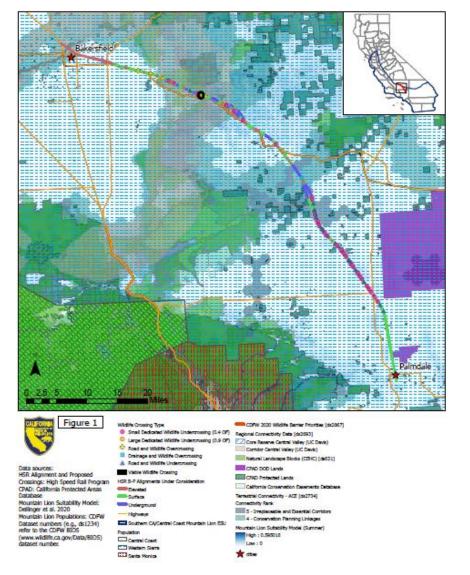
- CDFW. 2021. Biogeographic Information and Observation System (BIOS). https://www.wildlife.ca.gov/Data/BIOS. Accessed March 1, 2021.
- California Native Plant Society (CNPS), Rare Plant Program. 2020. Inventory of Rare and Endangered Plants of California (online edition, v8-03 0.39). Website http://www.rareplants.cnps.org. Accessed March 1, 2021.
- Center for Biological Diversity. 2019. A Petition to List the Western Joshua Tree (*Yucca brevifolia*) as Threatened under the California Endangered Species Act (CESA). Available from: https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=175218&inline.
- Gustafson K.D., Gagne R.B, Vickers T.W, Seth P. D. Riley, Christopher C. Wilmers, Vernon C. Bleich, Becky M. Pierce, Marc Kenyon, Tracy L. Drazenovich, Jeff A. Sikich, Walter M. Boyce, Holly B. Ernest. 2018. Genetic source–sink dynamics among naturally structured and anthropogenically fragmented puma populations. Conservation Genetics (2019) 20:215–227. https://doi.org/10.1007/s10592-018-1125-0
- Dellinger J. A., K. D. Gustafson, D. J. Gammons, H. B. Ernest, S. G Torres. Minimum habitat thresholds required for conserving mountain lion genetic diversity. Ecology and Evolution. 2020;10:10687–10696.
- Jepsen, S., D. F. Schweitzer, B. Young, N. Sears, M. Ormes, and S. H. Black. 2015. Conservation Status and Ecology of Monarchs in the United States. 36pp. NatureServe, Arlington, Virginia, and the Xerces Society for Invertebrate Conservation, Portland, Oregon.
- Pelton, E., Jepsen, C. Schultz, C. Fallon, and S.H. Black. 2016. State of the Monarch Butterfly Overwintering Sites in California. 40+vi pp. Portland, Oregon: The Xerces Society for Invertebrate Conservation. www.xerces.org
- Pierce, B. M., and V. C. Bleich. 2003. Mountain lion. Pages 744–757 in G. A. Feldhamer, B. C. Thompson, and J. A. Chapman, editors. Wild Mammals of North America. 2nd edition. The Johns Hopkins University Press. Baltimore. MD. USA.
- Sirchia, F., Hoffmann, S., and J. Wilkening. 2018. Joshua Tree Species Status Assessment. United States Fish and Wildlife Service. Available from: https://www.researchgate.net/profile/Jennifer Wilkening/publication/335600680
 Joshua Tree Species Status Assessment/links/5d6f3f02299bf16522f32097/Joshua-Tree-Species-Status-Assessment.pdf
- St. Clair, S.B. and J. Hoines. 2018. Reproductive ecology and stand structure of Joshua tree forests across climate gradients of the Mojave Desert. PLOS ONE.

DocuSign Envelope ID: 26FDDE30-B078-4083-A8CB-729C25CF8A0D

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- USFWS, 2020. Monarch (Danaus plexippus) Species Status Assessment Report. V2.1 96 pp + appendices.
- T. Winston Vickers. Mountain Lion Connectivity Study Report. June 30, 2014.
- Waitman, B.A., S.B. Vander Wall, and T.C. Esque. 2012. Seed dispersal and seed fate in Joshua tree (Yucca brevifolia). Journal of Arid Environments 81:1–8.
- Wang Y, Smith JA, Wilmers CC. 2017. Residential development alters behavior, movement, and energetics in an apex predator, the puma. PLoS ONE 12(10): e0184687. https://doi.org/10.1371/journal.pone.0184687
- Williams, D., 1986. Mammalian Species of Special Concern in California. California Department of Fish and Game, February 1986.
- Xerces Society for Invertebrate Conservation. http://www.xerces.org/monarchs Accessed March 2021
- Yap, T., Cummings, B., and J.P. Rose. 2019. A Petition to List the Southern California/Central Coast Evolutionarily Significant Unit (ESU) of Mountain Lions as Threatened under the California Endangered Species Act (CESA). Available from: https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=171208&inline

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Attachment 2

CALIFORNIA DEPARTMENT OF FISH AND WILDLIFE RECOMMENDED MITIGATION MONITORING AND REPORTING PROGRAM (MMRP)

PROJECT: California High-Speed Rail Project (Bakersfield to Palmdale

SCH No.: 2009082062 (Revised DEIR/Supplemental DEIS)

RECOMMENDED MITIGATION MEASURE	STATUS/DATE/INITIALS
Before Disturbing Soil or Vegetation	
Mitigation Measure 1: ML Habitat	
Assessment	
Mitigation Measure 2: ML Wildlife Crossing	
Monitoring	
Mitigation Measure 3: ML Avoidance-Buffer	
for Corridor Areas	
Mitigation Measure 4: ML No Night Work in	
Corridor Areas	
Mitigation Measure 5: ML Avoidance Use of	
Rodenticides	
Mitigation Measure 6: ML Provide Dedicated	
Wildlife Crossings	
Mitigation Measure 8: MB Habitat	
Assessment	
Mitigation Measure 9: MB Surveys	
During Construction	
Mitigation Measure 2: ML Wildlife Crossing	
Monitoring	
Mitigation Measure 3: ML Avoidance-Buffer	
for Corridor Areas	
Mitigation Measure 4: ML No Night Work in	
Corridor Areas	
Mitigation Measure 5: ML Avoidance Use of	
Rodenticides	
Mitigation Measure 6: ML Provide Dedicated	
Wildlife Crossings MB Take Avoidance	
Mitigation Measure 7: ML Take Authorization	
Mitigation Measure 10: MB Take Avoidance	

Rev. 2013.1.1



988-1240

The commenter expresses concern regarding whether the mitigation measures described will be enforceable or sufficient in reducing impacts to a level that is less than significant under CEQA. The mitigation measures included in the EIR/EIS are both enforceable and will effectively reduce impacts to a less than significant level.

The Authority has committed to designing the wildlife crossings consistent with Section 7.3.4 of the WCA, Appendix I of the BARTR. Applicable mitigation measures (MM) to wildlife movement include BIO-MM#37, BIO-MM#64, BIO-MM#77, BIO-MM#78, BIO-MM#84, BIO-MM#85, BIO-MM#86, and BIO-MM#87 provide mitigation for minimizing effects to wildlife movement during construction and establishing wildlife fencing, jump outs, and preconstruction mountain lion den surveys, core and patch replacement, and minimizing lighting.

BIO-MM#82 and BIO-MM#83 will reduce the impacts to a less than significant level for the monarch butterfly by avoidance and compensatory mitigation measures as described in BIO-MM#53.

The IAMFs and MMs have been developed to ensure consistency throughout all sections of the HSR project, and will be required during construction and operation, as applicable. All IAMFs and MMs are enforceable measures that will be included in the Mitigation Monitoring and Enforcement Plan (MMEP). The MMEP will be considered for adoption at the time the Authority Board considers certification of the EIR and approval of the project.

988-1241

The commenter states that the RDEIR/SDEIS does not address impacts of the potential gene-flow disruption between these subpopulations, nor does it address how impacts to the WSN population (genetic source) would impact the other subpopulations.

Regarding wildlife movement, the HSR Bakersfield to Palmdale Project Section maintains wildlife permeability across the alignment through a series of elevated viaducts, tunnels and dedicated wildlife crossings. The project includes 52 elevated viaducts, 9 underground tunnels and 39 dedicated wildlife crossings (Table 2-1 in the WCA, Appendix I in the BARTR). The Local Permeability Assessment, described in the WCA (Appendix I in the BARTR) modeled wildlife movement across a 6 KM wide corridor using South Coast Wildlands movement data for select representative focal species and compared it with project conditions that prohibit wildlife from crossing at fenced at-grade segments. Because of the number, sizes, and distribution of the elevated viaducts, underground tunnels, and dedicated wildlife crossings, the project would reduce permeability for mountain lion by 1 percent, mule deer by 2 percent, American badger by 3 percent, San Joaquin kit fox by 1 percent, desert kit fox by 9 percent, desert tortoise by 7 percent, western gray squirrel by 2 percent, blunt-nosed leopard lizard by 1 percent, and Tipton kangaroo rat by 1 percent. Further, the Southern California/Central Coast ESU mountain lion occurs within the Tehachapi Mountains and interfaces with the Western Sierra Nevada mountain lion population along SR 58. Within the mountain lion species range, genetic connectivity is maintained between these populations through the use of 14 elevated viaducts, 6 underground tunnels, and 5 dedicated wildlife crossings. As part of the development of the South Coast Missing Linkages: A Linkage Design for the Tehachapi Connection (Penrod et al. 2003), South Coast Wildlands developed modeled least cost corridors (top 1 percent of movement habitat) for a number of focal species, including mountain lion. The mountain lion least cost corridor crosses the HSR alignment at a 2.37-mile-long underground tunnel segment, which would allow mountain lion to freely cross over the project unimpeded.

Impact Bio#2 in Section 3.7 of the Final EIR/EIS has been updated to clarify that the project will facilitate movement and maintain existing genetic exchange between the Southern California/Central Coast ESU of mountain lion population and the Western Sierra Nevada population.

988-1242

The commenter states that the Project has the potential to cause impacts during construction by increasing human presence, traffic, noise, vibration, air pollutants and dust, artificial lighting, and will significantly and permanently reduce and potentially eliminate the existing wildlife movement corridor. The Authority has adopted substantial avoidance and minimization measures to address construction impacts on wildlife movement. Portions of the alignment important to mountain lion movement will be constructed underground. As discussed in Response to Comment 988-1240 and 988-1241, contained in this chapter, the HSR project maintains genetic connectivity between the southern California and central coast ESU of mountain lion from the western Sierra Nevada mountain lion population.

988-1243

The commenter states that the Project would continue to have significant impacts because mitigation as proposed would not result in adequate and successful mitigation for the unavoidable direct and indirect, permanent, or temporal losses, of genetic connectivity between subpopulations of mountain lion. As discussed in Response to Comment 988-1240 and 988-1241, the HSR project maintains genetic connectivity between the southern California and central coast ESU of mountain lion from the western Sierra Nevada mountain lion population such that the impact would not be significant.

988-1244

The commenter recommends quantitative and enforceable measures that will reduce the impacts to less than significant levels. As discussed in Responses to Comments 988-1240 and 988-1241, contained in this chapter, the HSR project maintains genetic connectivity between the southern California and central coast ESU of mountain lion with the western Sierra Nevada mountain lion population. The WCA (Appendix I in the BARTR) quantified impacts to core and patch mountain lion habitat as well as relative movement cost based on South Coast Wildland mountain lion movement data.

Mitigation Measure BIO-MM#84: Conduct Pre-Construction Surveys and Implement Avoidance and Minimization Measures for Mountain Lion Dens, requires that the Authority consult with CDFW and other mountain lion experts to develop a survey protocol to locate and identify denning mountain lions in and adjacent to the project to avoid adversely disturbing the mother and kittens, and sets specific standards for surveys and minimum buffer distances to ensure significant impacts will be avoided, BIO-MM#85; Provide Compensatory Mitigation for Impacts on Mountain Lion Core and Patch Habitat, requires compensatory mitigation for impacts on mountain lion core and patch habitat through the preservation of suitable habitat that is acceptable to CDFW. BIO-MM#64: Establish Wildlife Crossings, requires dedicated wildlife crossings to accommodate wildlife movement across permanently fenced infrastructure consistent with the details requirements in the wildlife corridor assessment that was prepared for the project and circulated with the Draft EIR/EIS. In addition, requirements for monitoring and adaptive management have been added to BIO-MM#64, and BIO-MM#37:Minimize Effects to Wildlife Movement Corridors during Construction will provide methods to minimize construction-related disturbance to terrestrial wildlife using established wildlife movement linkages. By limiting the amount of construction fencing and permanent fencing, the impacts on wildlife movement corridors would be reduced

Additional mitigation measures have been added to address lighting impacts to special-status species including the mountain lion. BIO-MM#86:Implement Lighting Minimization Measures During Construction and BIO-MM#87:Implement Lighting Minimization Measures for Operations have been added to the Final EIR/EIS to address lighting impacts to special status species including mountain lion. The project also includes numerous IAMFs that will minimize impacts to species and wildlife movement.



988-1244

The Authority will consult with CDFW and other mountain lion experts on preconstruction survey protocol and crossing design. The Authority will consult with CDFW on developing a monitoring program to monitor the effectiveness of the elevated viaducts, underground tunnels, and dedicated wildlife crossings for mountain lion movement, as part of the Section 2081 incidental take permitting process. The authority will also consult with CDFW regarding the location of compensatory mitigation as required by BIO-MM#85.

The Authority will comply with the Endangered Species Act, including applicable requirements for take authorization.

988-1245

The commenter states that the Authority should consult and collaborate with CDFW to conserve areas beneficial to the Southern California ESU and the WSN subpopulation that may improve and maintain connectivity.

The compensatory mitigation described in Section 3.7.7.2 of this Final EIR/EIS identifies mitigation measures per species that will be implemented in consultation and with oversight from regulatory agencies that are specifically charged with protecting the species. This will further ensure that the mitigation is effective and successful. Specifically, BIO-MM#53: Prepare a Compensatory Mitigation Plan (CMP) for Species and Species Habitat, as identified in specific BIO-MMs, commits the Authority to preparing compensatory mitigation plans which provide descriptions for compensatory mitigation to restore, and/or mitigate for suitable habitat affected by the Bakersfield to Palmdale Build Alternatives. The CMP would establish specifications of success criteria to gauge the effectiveness of restoration and function of the mitigation lands. The mitigation lands, their management, and monitoring serve to allow for intended ecologic function of compensation habitat for sensitive plant species and special-status species habitat loss related to the Bakersfield to Palmdale Build Alternatives. BIO-MM#85 and BIO-MM#53 include detailed requirements for compensatory mitigation, including approval from CDFW, and the Authority will comply with all applicable laws and regulations.

Additionally, refer to Responses to Comments 988-1240 through 988-1244, contained in this chapter.

988-1246

The commenter states that lit is unclear how the following BIO-IAMFs (BIO-IAMF#1, BIO-IAMF#3, BIO-IAMF#5, BIO-IAMF#8, BIO-IAMF#9, BIO-IAMF#10, and BIO-IAMF#1) are avoiding and minimizing impacts from construction to monarch butterflies. Impact BIO #8: Operational Impacts on Special-Status Wildlife Species, has been updated to address the Annual Vegetation Control Plan preparation and Implementation and how it will deter insects from host plants within the right-of-way during operation and maintenance. A dust control plan will be prepared. Note that there will not be ground disturbance within the right-of-way during operation and maintenance. No ground disturbance to habitat areas will occur during operation.

988-1247

The commenter expresses concern about the potential effects of insecticide use on native milkweed species and loss of habitat for monarch butterfly. The train track area will be already clear of vegetation and will be maintained throughout operations. Mitigation Measure #54 (Prepare and Implement an Annual Vegetation Control Plan) provided in Section 3.7.7 of this Final EIR/EIS will only allow Caltrans-approved herbicides to be used in the vegetation control program.

Additionally, as identified in Section 3.7.7.2 of this Final EIR/EIS, BIO-MM#82: Avoid Direct Impacts on Monarch Butterfly Host Plants, requires pre-construction surveys and measures to minimize impacts to milkweed, and BIO-MM#83: Provide Compensatory Mitigation for Impacts on Monarch Butterfly Breeding and Foraging Habitat, requires compensatory mitigation for impacts to monarch habitat and specifies ratios to be applied for permanent impacts. Native milkweed will also be replanted in temporary impact areas.

988-1248

The commenter recommends a mitigation measure for monarch butterfly habitat assessment. Mitigation Measure BIO-MM#82 Avoid Direct Impacts to Monarch Butterfly Host Plants provided in Section 3.7.7 of this Final EIR/EIS provides for the habitat assessment for the butterfly.

BIO-MM#82 provides for surveying prior to any ground-disturbing activities, specifically the Project Biologist would survey for monarch butterfly larval host plants (native milkweed species) within suitable habitat. If host plants are found, the Project Biologist would conduct surveys for adult butterflies during the peak flight period for Southern California (approximately October 1 through March 15) to determine presence/absence or presence may be assumed. Where adult butterflies are present or assumed to be present, construction personnel would avoid host plants in temporary impact areas, where feasible. In the event host plants are impacted in temporary impact areas, native milkweed species would be replanted.

BIO-MM#83 would provide compensatory mitigation for the monarch butterfly breeding and foraging habitat by implementing preparation of a compensatory mitigation plan (CMP) for the butterfly per BIO-MM#53.

The Authority would provide compensatory mitigation to offset impacts on breeding and foraging habitat for monarch butterfly at a ratio of 2:1, and coordinate with CDFW for updates to protocol information.



988-1249

The commenter recommends that the focus of analysis be the movement of the WSN population. The WCA in the appendix of the BARTR analyzes the effects of mountain lion across the project which would link the two populations (western Sierra Nevada and the Southern California/Central Coast ESU). As described in the WCA, the project maintains genetic connectivity across the project through a combination of 14 elevated segments, six underground segments, and five dedicated wildlife crossings. The crossing opportunities includes a 2.3-mile tunnel segment through the mountain lion least cost corridor identified by South Coast Wildlands in the development of the South Coast Missing Linkages Project: A Linkage Design for the Tehachapi Connection (Penrod 2003). Section 3.7 has been updated to clarify impacts to mountain lion. The number and spacing of crossing opportunities through viaducts, tunnels, and dedicated wildlife crossings reduces relative permeability for modeled mountain lion movement by only 1 percent across the mountain lion species range.

988-1250

The commenter recommends providing a figure (mapping) of the mountain lion ESU subpopulations. This figure is provided in the BARTR Technical Report Supplement (Authority 2021) which was provided upon request.

988-1251

The commenter recommends adding the mountain lion ESU subpopulations to Table 3.7-7 of the EIR/EIS.

The methodology implemented for the biological and aquatic resources analyses is discussed in Section 3.7.4 of the Draft and this Final EIR/EIS, and is detailed in the Biological and Aquatic Resources Technical Report (BARTR) and the BARTR Technical Report Supplement (TRS). Specifically for the monarch butterfly, the breeding and foraging habitat covers all of the area of the alignment, and therefore, the impact acreages were derived from the entire footprint. As for the ESU mountain lion range, using a Geographic Information System (GIS), the footprint was overlaid with the modeled species range, which is south of SR 58 within the Tehachapi Mountains, to derive the acreages within the temporary and permanent impact areas. The impact acreages of the identified mountain lion range and monarch butterfly within the project footprint have been added to Table 3.7-7 of this Final EIR/EIS for Modeled Federal and State Threatened/Endangered Species Habitat. Species that would be potentially affected, or special-status species that have the potential to occur within the resource study area, are discussed in Section 3.7. Additionally, Section 3.7.4.2 of this Final EIR/EIS describes the IAMFs that will be implemented during design, construction, and operations of the project, and Section 3.7.6 discusses the environmental consequences of the project alternatives, outlining potential biological and aquatic resource impacts, including special-status mammal species and wildlife corridor analysis.

988-1252

The commenter recommends that the gene-flow between each of the subpopulations of mountain lion and specifically from the source populations of the WSN to the SGSB and the CC-S and SAM to the SGSB subpopulations need to be analyzed. The Southern California/Central Coast ESU mountain lion occurs within the Tehachapi Mountains and interfaces with the Western Sierra Nevada mountain lion population along SR 58. Within the mountain lion species range, genetic connectivity is maintained between these populations through the use of 14 elevated viaducts, 6 underground tunnels, and 5 dedicated wildlife crossings. As part of the development of the South Coast Missing Linkages: A Linkage Design for the Tehachapi Connection (Penrod et al. 2003), South Coast Wildlands developed modeled least cost corridors (top 1 percent of movement habitat) for a number of focal species, including mountain lion. The mountain lion least cost corridor crosses the HSR alignment at a 2.37 mile long underground tunnel segment, which would allow mountain lion to freely cross over the project unimpeded. The number and spacing of crossing opportunities through viaducts, tunnels, and dedicated wildlife crossings reduces relative permeability for modeled mountain lion movement by only 1 percent across mountain lion species range.

Mountain lion will be able to cross portions of the HSR, specifically at the viaducts and tunnels during construction. Section 3.7 has been updated to clarify impacts to mountain lion. As with sections of the project currently under construction, it is anticipated that construction will be phased so that construction would occur on a portion of the alignment at any one time, allowing wildlife to cross where no active construction is occurring.

988-1253

The commenter recommends the mitigation measures and IAMF pertaining to mountain lion movement be quantifiable and enforceable. As required by CEQA, all mitigation measures will be fully enforceable through permit conditions, agreements, or other measures. In addition, all IAMFs and mitigation measures will be included in the MMEP. The MMEP will identify responsible parties, timing of implementation, reporting criteria, and when the measure is complete. The MMEP will be considered for adoption at the time the Authority Board considers certification of the EIR and approval of the project. The MMEP satisfies the requirements of NEPA and is consistent with CEQA requirements for mitigation monitoring and reporting as set forth in Section 15097 of the CEQA Guidelines (Title 14 California Code of Regulations, Division 6, Chapter 3).

While the MMEP will be part of the Record of Decision issued pursuant to NEPA, all IAMFs and mitigation measures identified in this Final EIR/EIS will be included in the MMEP at project approval.

The commenter also recommends including CEQA significance conclusions for impacts to the mountain lion ESU and the genetic impacts to the subpopulations. Additional information regarding impact analysis for mountain lion has been added to Impact BIO #5, #8, and #11 in the Final EIR/EIS. CEQA significance conclusions are determined in species groups such as birds, mammals, etc. Mountain lion is included in the conclusion for mammals, which explains that impacts to the species will be less than significant with mitigation.



988-1254

The commenter requests that the Authority quantify the train operation and maintenance activities. Operations and maintenance activities are described in Section 2.6 of this Final EIR/EIS. As discussed in Section 2.6.2 of this Final EIR/EIS proposed maintenance activities would occur on rolling schedules. For example, track would be inspected several times per week using special measuring trains, while the overhead catenary system would be inspected nightly, and other maintenance of the right-of-way, aerial structures, and bridge sections of the alignment would include drain cleaning. vegetation control, litter removal, and other inspection that would typically occur monthly to several times per year. Refer to Section 2.6.2 of this Final EIR/EIS for a more detailed discussion of maintenance activities. Impact BIO #8 in Section 3.7.6.4 of this Final EIR/EIS addresses the impacts of operations and maintenance activities on specialstatus wildlife species, including analysis based on the frequency and duration of trains. Impact BIO #8 has been updated to clarify impacts from operations, including effects of noise and train duration. BIO-MM#86 Implement Lighting Minimization Measures During Construction and BIO-MM#87 Implement Lighting Minimization Measures for Operations, have been added to the Final EIR/EIS to address lighting impacts to special-status species including mountain lion. The project also includes numerous IAMFs that will minimize project impacts, including light and noise impacts, to species and wildlife movement.

In addition, Section 6.2.4 of the WCA, Appendix I to the BARTR addresses noise and vibration effects. Section 7.3.6 of the WCA describes noise and vibration minimization measures that have been added to BIO-MM#64, which commits to noise minimization measures such as sound barriers and berms if noise levels are exceeded. The thresholds of significance for impacts to species are described in section 3.7.4.7 and are consistent with CEQA Guidelines Appendix G. The analysis is based on extensive studies and technical analysis by qualified biologists and the conclusions are supported by substantial evidence.

988-1255

The commenter recommends including discussion of potential operation and maintenance impacts to mountain lion. This discussion has been incorporated into Section 3.7.6 of this Final EIR/EIS under impacts to mammals. Section 6.2.4 of the WCA, Appendix I to the BARTR also addresses noise and vibration effects. Section 7.3.6 of the WCA describes noise and vibration minimization measures. Further BIO-MM#64 requires noise minimization measures if noise levels are exceeded, such as sound barriers and berms.

988-1256

The WCA provides an extensive analysis of wildlife movement across the HSR alignment including mountain lion and their prey base. The change in legal status for the southern California and central coast ESU of mountain lion does not change the conclusion of the analysis in the WCA. Operational impacts, including impacts from noise and light, are also analyzed in the Draft EIR/EIS and RDEIR/SDEIS. Additional information regarding operational impacts has been added to Section 3.7 to clarify impacts to mountain lion and other species. Impact BIO #8 has been updated to include additional detail regarding O&M-related impacts. Refer to Response to Comment 988-1255, contained in this chapter, for additional information.

Operations and intermittent maintenance activities will only occur within the HSR corridor. Mountain lions and prey cannot enter the HSR corridor because it will either be in tunnel sections, elevated sections, or at-grade sections that will have fencing to prevent entry by wildlife.

As discussed under Impact BIO #8 in this Final EIR/EIS, lighting, noise and vibration impacts at the 14 elevated segments and 5 dedicated wildlife crossings due to operations and maintenance will be limited to short durations, and any such impacts will be further minimized by the measures described in BIO-MM#64. With the mitigation measures identified in Section 3.7 impacts from operations and maintenance will be less than significant.

988-1257

The commenter recommends including a CEQA significance conclusion regarding mountain lion. Impacts to the mountain lion ESU and genetic impacts to subpopulation are included in the CEQA significance conclusions for special-status mammals. The following language was added to the mammals section of BIO #8: The Southern California/Central Coast ESU mountain lion occurs within the Tehachapi Mountains and interfaces with the Western Sierra Nevada mountain lion population along SR 58. Within the mountain lion species range, genetic connectivity is maintained between these populations through the use of 14 elevated viaducts, 6 underground tunnels, and 5 dedicated wildlife crossings. As part of the development of the South Coast Missing Linkages: A Linkage Design for the Tehachapi Connection (Penrod et al. 2003), South Coast Wildlands developed modeled least cost corridors (top 1 percent of movement habitat) for a number of focal species, including mountain lion. The mountain lion least cost corridor crosses the HSR alignment at a 2.37-mile-long underground tunnel segment, which would allow mountain lion to freely cross over the project unimpeded. As explained in Section 3.7, the project would facilitate wildlife movement and maintain existing genetic exchange between the Southern California/Central Coast ESU of mountain lion population and the Western Sierra Nevada population. Refer to Response to Comment 988-1255 for additional information regarding operations impacts.

988-1258

The commenter recommends analysis of intermittent maintenance activities on mountain lion subpopulations. The following language was added to Impact Bio #11 under Permanent Operation Impacts, which applies to the comment: The Authority developed specific wildlife movement impact avoidance and minimization features (WM-IAMF#1, 2, 3, 4, 5, and 6) as discussed in the WCA and listed in Section 3.7.4.2. The Authority has incorporated details of these measures into various BIO-IAMFs and the BIO-MMs, which are described in Sections 3.7.4.2 and 3.7.7.2, respectively. These wildlife movement IAMFs and mitigation measures include measures to reduce impacts by avoidance of impediments to movement, such as measures to reduce impacts from night lighting and noise, wildlife exclusion fencing, measures to reduce impacts from vehicle traffic, and restoration and revegetation plans to address impacts from construction and operation activities on special-status species and wildlife movement corridors.

Refer to Response to Comment 988-1256 and 988-1254, contained in this chapter.



988-1259

The commenter recommends additional analysis related to vehicle strikes and gene-flow disruption regarding mountain lion. The project provides opportunities for wildlife to cross the project alignment utilizing a combination of elevated viaducts, underground tunnels, and dedicated wildlife crossings. The project includes 14 elevated sections and 6 underground segments within mountain lion range that provide opportunities for mountain lion to cross the alignment and maintain gene flow between the Sierra Nevada mountains and the southern California and central coastal ESU of mountain lion. The EIR/EIS identifies specific BIO-MMs, which are described in Section 3.7.7.2, to reduce impacts from operations and maintenance, including impacts to mountain lion. The IAMFs and mitigation measures include measures to reduce impacts by avoidance of impediments to movement, including measures to reduce impacts from night lighting and noise, wildlife exclusion fencing, measures to reduce impacts from vehicle traffic, and restoration and revegetation plans to address impacts from construction and operation activities on special-status species and wildlife movement corridors. Additional detail is provided in the BARTR and WCA.

Caltrans (2014) and TNC (2019) collected roadkill data on SR 58, which parallels the HSR project. Only one mountain lion roadkill (2019) was recorded during those two study periods at a location on SR 58, south of the César Chávez National Monument. As shown in the WCA, Appendix I of the BARTR, the number and spacing of crossing opportunities through viaducts, tunnels, and dedicated wildlife crossings reduces relative permeability for modeled mountain lion movement by only 1 percent across mountain lion species range. The 1 percent reduction in mountain lion permeability would not be considered a significant cumulative impact because of the number and spacing of crossing opportunities provided by the project.

988-1260

The commenter states certain mitigation measures and IAMFs lack measurable, quantifiable actions and are therefore unenforceable. The IAMFs have been developed by the Authority to ensure consistency across the HSR project. The mitigation measures identified in the comments are both enforceable and will be effective. As explained in the EIR/EIS, mitigation measures have been designed to work together to reduce or avoid impacts. IAMFs and mitigation measures as discussed in Section 3.7 of this Final EIR/EIS will be enforceable through the MMEP pursuant to NEPA. The MMEP is consistent with CEQA requirements for mitigation monitoring as set forth in Section 15097 of the CEQA Guidelines (Title 14 California Code of Regulations, Division 6, Chapter 3). The MMEP will identify responsible parties, timing of implementation, reporting criteria, and when the measure is complete. The MMEP will be considered for adoption at the time the Authority Board considers certification of the EIR and approval of the project. While the MMEP will be part of the Record of Decision issued pursuant to NEPA, all IAMFs and mitigation measures identified in this Final EIR/EIS will be included in the MMEP at project approval.

988-1261

The commenter states that the mountain lion core and patch habitat is not described or depicted in a figure in the RDEIR/SDEIS and that BIO-MM#53 is not described in Section 3.7.7 of the RDEIR/SDEIS.

Figure 12: Core Habitat for Mountain Lion Crossed by HSR is included on page 2-20 of the Wildlife Corridor Assessment Technical Report Supplement (Appendix I to the BARTR). BIO-MM#53: Prepare a Compensatory Mitigation Plan (CMP) for Species and Species Habitat is included in Section 3.7.7.2 of this Final EIR/EIS and was included in the Draft EIR/EIS but was not changed as a result of the new information about the monarch butterfly and Southern California and Central Coast mountain lion as candidate species under the Endangered Species Act, therefore, was not included in the RDEIR/SDEIS. BIO-MM#53 specifies the preparation of a comprehensive CMP, which will include maps and methods for compensatory mitigation on various special-status species, including the monarch butterfly and Southern California and Central Coast mountain lion.

988-1262

The commenter recommends that the specifics that pertain to establish wildlife crossings for mountain lion in the Biological and Aquatic Resources Technical Report from the DEIR/EIS be included in this measure and states that the recommendations in the measure are not enforceable design requirements. BIO-MM#64 requires that the crossing must conform to the WCA unless different dimensions are specified in authorizations issued under CESA and ESA, and thus are enforceable requirements. The designated wildlife crossings will be designed consistent with Section 7.3.4 of the WCA, Appendix I in the BARTR, including:

- Conform to the Wildlife Crossing Structure Handbook Design and Evaluation in North America (Federal Highway Administration 2011 [identical to Clevenger and Huijser 2009 and Meese et al. 2009]), where practical;
- 10-foot-tall arches within mountain lion and mule deer species range;
- Limits culvert lengths;
- · Slopes follow natural grades and contouring, less than 2 percent slope;
- Use natural substrate:
- · Plant native vegetation at the opening at large crossing where light is available;
- Physical separation for dual use crossings;
- Use fencing and riprap to funnel wildlife toward crossing;
- · Bridges will be wide enough to support riparian vegetation;
- · Utilize artificial cover such as rock and pipes for refugia of reptiles and small animals; and
- Create escape structures for kit fox were appropriate.

In addition, the Authority will consult with CDFW and wildlife experts on the design of the dedicated wildlife crossings during the preparation of construction-level design.

988-1262

dedicated wildlife crossings during the preparation of construction-level design.

988-1263

The commenter is concerned with the overall practicability of the approach for preconstruction surveys under BIO-MM#84 and recommends buffers when dens are detected with kittens. BIO-MM#84 requires a minimum 2,000-foot non-disturbance buffer around any known or potential den until the Project Biologist can document and confirm that the den is not occupied. As required by BIO-MM#84, the Authority will consult with CDFW and mountain lion experts to develop survey protocols to effectively identify denning mountain lion and establish appropriate protective disturbance buffers and the appropriate duration to halt construction activities within the defined buffer areas.

988-1264

The commenter expresses concern regarding the proposed compensatory mitigation ratios in BIO-MM#85. As stated in BIO-MM#85, habitat would be replaced at a minimum ratio of 2:1 for permanent impacts on breeding/foraging habitat and high-priority foraging and dispersal habitat; the final ratio will be determined based on further consultation with CDFW as project design progresses. As discussed in the WCA, mountain lion connectivity across the HSR alignment is maintained through the series of elevated viaducts, underground tunnels, and dedicated wildlife crossings. These mitigation ratios are provided in addition to the connectivity maintained in the design.



988-1265

The commenter recommends that there be measure(s) to avoid impacts if it is not feasible to implement the proposed measure BIO-MM#86. Nighttime lighting necessary during construction will be minimized and shielded to protect wildlife in adjacent wildlife habitat. BIO-MM#86 specifies numerous ways that nighttime lighting must be minimized if nighttime construction is necessary. Mitigation measures as identified in section 3.7.7 will be enforceable through the MMEP pursuant to NEPA. The MMEP is consistent with CEQA requirements for mitigation monitoring as set forth in Section 15097 of the CEQA Guidelines (Title 14 California Code of Regulations, Division 6, Chapter 3). The MMEP will identify responsible parties, timing of implementation, reporting criteria, and when the measure is complete. The MMEP will be considered for adoption at the time the Authority Board considers certification of the EIR and approval of the project. While the MMEP will be part of the Record of Decision issued pursuant to NEPA, all IAMFs and mitigation measures identified in this Final EIR/EIS will be included in the MMEP at project approval. In addition, refer to Response to Comment 789-341, contained in Chapter 25 of this Final EIR/EIS.

988-1266

The commenter suggests that the there are no assurances that BIO-MM#87 Implement Lighting Minimization Measures will be carried out, and questions whether it will effectively reduce operations-related lighting impacts to a less than significant level.

The adjacent Union Pacific Railroad utilizes the same FRA lighting requirements of 200,000 candelas and wildlife, including mountain lion, continue to utilize the area and cross the railroad tracks. BIO-MM#87 identifies measures that will be implemented to minimize the intensity and duration of operational lighting of permanent facilities, such as tunnels. As discussed in the California High-Speed Rail Design Criteria Manual (Authority 2019), lighting shall be provided in the tunnels, consistent with the California Building Standards Commission and the National Fire Protection Association requirements. During nighttime hours, lighting will be provided in the threshold zone (entrance to the tunnel) with illumination levels no greater than 10 lux (1 foot-candle), which is generally equivalent to the lighting provided in parking garages. As discussed in BIO-MM#87, nighttime lighting would be shielded to contain the lighting to the extent practicable.

This mitigation measure, and others as identified in Section 3.7.7, will be enforceable through the MMEP pursuant to NEPA. The MMEP is consistent with CEQA requirements for mitigation monitoring as set forth in Section 15097 of the CEQA Guidelines (Title 14 California Code of Regulations, Division 6, Chapter 3). The MMEP will identify responsible parties, timing of implementation, reporting criteria, and when the measure is complete. The MMEP will be considered for adoption at the time the Authority Board considers certification of the EIR and approval of the project. While the MMEP will be part of the Record of Decision issued pursuant to NEPA, all IAMFs and mitigation measures identified in this Final EIR/EIS will be included in the MMEP at project approval. In addition, please refer to Response to Comment 789-341, contained in Chapter 25 of this Final EIR/EIS.

988-1267

The commenter does not agree with the conclusions in the cumulative impact analysis regarding mountain lion. The Southern California/Central Coast ESU mountain lion occurs within the Tehachapi Mountains and interfaces with the Western Sierra Nevada mountain lion population along SR 58. Within the mountain lion species range, genetic connectivity is maintained between these populations through the use of 14 elevated viaducts, 6 underground tunnels, and 5 dedicated wildlife crossings. As part of the development of the South Coast Missing Linkages: A Linkage Design for the Tehachapi Connection (Penrod et al. 2003), South Coast Wildlands developed modeled least cost corridors (top 1 percent of movement habitat) for a number of focal species, including mountain lion. The mountain lion least cost corridor crosses the HSR alignment at a 2.37 mile long underground tunnel segment, which would allow mountain lion to freely cross over the project unimpeded. Mountain lion will be able to cross portions of the HSR, specifically at the viaducts and tunnels during construction. By maintaining wildlife connectivity the project will maintain gene flow connectivity; therefore, no cumulative impacts will occur.

988-1268

The commenter states that the cumulative project list should include Xpress West high-speed train project. Appendix 3.19-A, Cumulative Project List, of this Final EIR/EIS provides a full list of cumulative projects analyzed in the Final EIR/EIS. The cumulative analysis considers all reasonably foreseeable projects within the resource study areas. A definition for reasonably foreseeable projects was included in Section 3.19.3.2, Identify Cumulative Projects and Regional Projections. It states that a project would be considered reasonably foreseeable if:

- •The project is a foreseeable future phase of an existing project.
- Applications for project entitlements or construction are pending with a government agency (these projects may have been identified during interviews with regional and local planning agencies or may have been analyzed in a recent environmental document).
- •The project is included in regional transportation plans; regional transportation improvement programs; local long-range transportation plans; local land use, general, and specific plans; or an agency's budget or capital improvement program.

Xpress West was not included in the cumulative project list because it is a proposed HSR system that would link Las Vegas to Victorville and is not in the vicinity of the Bakersfield to Palmdale Project Section. However, the High Desert Corridor train, which would link to the California HSR System in Palmdale is included as a reasonably foreseeable project in Appendix 3.19-A and the analysis in Section 3.19, Cumulative Impacts.

Refer to Response to Comment 988-1267, contained in this chapter, regarding cumulative impacts to mountain lion.



988-1269

The commenter recommends that Section 3.7 include a discussion of the cumulative effects of the High Speed Rail, High Desert Corridor and Northwest 138 Corridor Improvement Plan on wildlife movement. The cumulative analysis is discussed in Section 3.19, Cumulative Analysis. The analysis in Section 3.7, Biological and Aquatic Resources, is focused on project-level impacts; therefore, a cumulative analysis of wildlife movement was not added to Section 3.7. As discussed in Section 3.19.5.7. High Desert Corridor and Northwest 138 Corridor Improvement Plan were considered in the cumulative impact analysis. Although cumulative development could interfere with wildlife movement, the Bakersfield to Palmdale section of the HSR includes IAMFs and mitigation measures to reduce impacts to wildlife corridors. In addition, the Authority is committed to constructing the elevated viaducts, underground tunnels, and dedicated wildlife crossings shown in the current project design. These areas will maintain wildlife connectivity and permeability and therefore would not result in a cumulative considerable contribution to cumulative impacts on wildlife corridors even with implementation of the High Desert Corridor and Northwest 138 Corridor Improvement Plan.

In addition, refer to Response to Comment 988-1262 and 988-1267, contained in this chapter.

988-1270

While this comment is not related to the new information about the monarch butterfly and Southern California and Central Coast mountain lion as candidate species under the Endangered Species Act, and new mitigation measures to address impacts to wildlife resulting from lighting during construction and project operation in the Revised Draft EIR/Supplemental Draft EIS, the Authority appreciates all comments and is responding in full here.

As discussed in responses to comments from CDFW on the Draft EIR/EIS (refer to Submission 781 in Chapter 21 of this Final EIR/EIS). Section 3.7.4.5 of this Final EIR/EIS discusses that botanical surveys and protected trees in the study area were identified based on the regulations summarized in Appendix B of the BARTR (Authority 2018c). When permission to enter was granted, surveyors classified trees into species groups such as oak trees or Joshua trees. In areas where permission to enter was not granted, survey crews mapped these protected trees and "unknown" trees using aerial photographic interpretation and ArcGIS software. To address information needs for areas where access was not granted, the Authority used habitat suitability models based on several databases, including the California Wildlife Habitat Relationship System. which assists in mapping habitat and land uses that are crossed with the species' known geographic range to determine suitable habitats for special-status wildlife species. This system is a widely used tool, and its approach assumes the presence of special-status wildlife species in areas where suitable habitat occurs (as identified in the California Wildlife Habitat Relationship System or other published agency literature). The California Wildlife Habitat Relationship approach is widely used in California on large infrastructure projects and other projects where permission to enter is limited, and it provides a reasonable and consistent approach to the assessment of potential for wildlife presence. It provides a reasonable and conservative basis for estimating potential impacts. The net result of the analysis included a very conservative approach that overestimated impacts on special-status plant communities, including Joshua tree and oak tree woodlands. Impact BIO#3 of the Final EIR/EIS discusses the construction impacts on special-status plant communities, including oak woodland and Joshua tree woodland. As discussed under Impact BIO #3, the impact on sensitive plant communities under CEQA would be potentially significant during construction.

However, with implementation of BIO-MM#1, BIO-MM#6, BIO-MM#35, BIO-MM#47,

988-1270

BIO-MM#50, BIO-MM#53, BIO-MM#54, BIO-MM#58, BIO-MM#61, and BIO- MM#75, impacts on sensitive plant communities would be reduced to a less-than-significant level.

BIO-MM#1 will enable HSR to establish revegetation goals within different vegetation communities including but not limited to oak woodland and Joshua tree, and BIO-MM#35 requires the project biologist to identify protected trees, including Joshua trees, prior to ground disturbing activities and establish environmentally sensitive area buffers around those trees. In addition, this measure commits the Authority to providing compensatory mitigation for impacts on protected trees, including impacts associated with removing or trimming a protected tree. Compensation will be based on requirements set out in applicable local government ordinances, policies, and regulations, with replacement ratios of 3:1 for native trees, 10:1 for heritage trees, or 1:1 for ornamental trees, unless higher ratios are required by local government ordinances or regulations. Additionally, refer to Response to Comment 967-1183, contained in Chapter 34 of this Final EIR/EIS.

The change in status of the Joshua tree was noted in the cover memo that accompanied the RDEIR/SDEIS and in the Final EIR/EIS. However, the change of status for Joshua tree did not require additional analysis as it was already covered in the Draft EIR/EIS.

988-1271

The commenter expresses concern that the viaduct locations could later be redesigned to be fenced at-grade and impermeable to wildlife. The Authority is committed to maintaining those area shown as elevated viaducts, underground tunnels, and dedicated wildlife crossings shown in the current project design. However, if any design changes are proposed by the Authority or its design contractors, these changes will be evaluated in an environmental reexamination under NEPA pursuant to Section 13.e of FRA's 1999 Environmental Procedures for Considering Environmental Impacts and under CEQA pursuant to Sections 15162-15164 of the CEQA Guidelines.

Refer to Responses to Comments 908-1038, contained in Chapter 33 of this Final EIR/EIS, 913-1049, 914-1053, 917-1071, and 917-1073, contained in Chapter 34 of this Final EIR/EIS, regarding impacts to wildlife movement and required crossings.

988-1272

The commenter expressed concern with using predictive models for the impact analysis. Refer to Response to Comment 781-626, contained in Chapter 21 of this Final EIR/EIS.

988-1273

While this comment is not related to the new information about the monarch butterfly and Southern California and Central Coast mountain lion as candidate species under the Endangered Species Act, and new mitigation measures to address impacts to wildlife resulting from lighting during construction and project operation in the Revised Draft EIR/Supplemental Draft EIS, the Authority appreciates all comments and is responding in full here.

The commenter notes that CDFW has jurisdiction over actions with potential to result in destruction of active nest sites or the unauthorized take of birds. Refer to Response to Comment 781-619, contained in Chapter 21 of this Final EIR/EIS.



988-1274

While this comment is not related to the new information about the monarch butterfly and Southern California and Central Coast mountain lion as candidate species under the Endangered Species Act, and new mitigation measures to address impacts to wildlife resulting from lighting during construction and project operation in the Revised Draft EIR/Supplemental Draft EIS, the Authority appreciates all comments and is responding in full here.

The commenter notes that CDFW is responsible for providing biological expertise during public agency environmental review efforts, focusing specifically on project activities that have the potential to adversely affect fish and wildlife resources. As noted in Table 2-26 of this Final EIR/EIS, the Authority acknowledges that the proposed project will require permits issued by the State Water Resources Control Board and CDFW. The Authority acknowledges CDFW's role during the public agency environmental review effort.

988-1275

The commenter recommends consulting with the USFWS on potential impacts to federally listed species. As discussed in Section 3.7.8 of this Final EIR/EIS, a draft Biological Assessment was prepared and submitted to the USFWS for review prior to the publication of the Draft EIR/EIS for public review. The Authority submitted the Biological Assessment to the USFWS on April 28, 2020 and requested the initiation of formal Section 7 Consultation (an update was submitted in September 2020). The Authority submitted the Biological Assessment Supplement to the USFWS in May 2021. The Biological Assessment and Biological Assessment Supplement evaluate the potential adverse effects of the proposed action on species that are listed as endangered or threatened are proposed for listing as endangered or threatened, or that are candidates for listing as endangered or threatened under FESA, as well as designated or proposed critical habitats.

988-1276

The commenter discusses CEQA requirements and requests the reporting of species found during surveys to CNDDB for addition to the database. The Authority appreciates the provided information and will comply with CEQA policies and report biological data per the commenter's request.

988-1277

The commenter discusses the requirement of assessment of filing fees if biological impacts are determined. The Authority appreciates the provided information and will comply with applicable CDFW fee requirements.

988-1278

The commenter provides information regarding surveys and monitoring protocols available on the CDFW website. The Authority appreciates the provided information and will comply with surveys and monitoring protocols available on the CDFW website, as appropriate.

Submission 881 (David@CALFIRE Shy, California Department of Forestry and Fire Protection Tulare Unit, March 25, 2021)

STATE OF CALIFORNIA-NATURAL RESOURCES AGENCY

Gavin Newsom, Governor



DEPARTMENT OF FORESTRY AND FIRE PROTECTION

Tulare Unit 1968 S. Lovers Lane Visalia, CA 93292 (559) 732-5954 Website: www.fire.ca.gov



March 25, 2021

LaDonna DiCamillo Southern California Regional Director Bakersfield to Palmdale Draft EIR Comment 355 S. Grand Avenue, Suite 2050 Los Angeles, CA 90071

Via email to:

RE: COMMENTS FOR THE BAKERSFIELD TO PALMDALE DRAFT EIR/SUPPLEMENTAL DRAFT EIS COMMENT

PROJECT REVIEW INPUT
AS REQUIRED BY THE
CALIFORNIA ENVIRONMENTAL QUALITY ACT
AND
FIRE SAFE REGULATION

Authority Cited

The above-referenced environmental document was submitted to CAL FIRE for review under the California Environmental Quality Act (CEQA) because the proposed project resides wholly, or in part, within State Responsibility Area (SRA), as defined in the Public Resources Code (PRC) § 4126-4127; and the California Code of Regulations (CCR) Title 14, Division 1.5, Article 1, § 1220-1220. 5. In addition to Defensible Space, CAL FIRE has responsibility for enforcement of basic fire safety regulations on all proposed construction and development within SRA as defined under PRC § 4290 (Ref: PRC § 4290-4291 and CCR Title 14 Natural Resources Division, 1.5 Department of Forestry, Chapter 7 – Fire Protection, Subchapter 2 - SRA Fire Safe Regulations). These regulations, known as "SRA Fire Safe Regulations, constitute the basic wildland fire protection standards for all proposed construction and development within SRA.

General

CAL FIRE is not the lead agency in planning and development and project permitting. Each County's Board of Supervisors retains lead agency status and usually delegates this function to their planning departments. CAL FIRE cannot provide individual project map reviews and redesign orders as done by County Planning Department staff professionals. Under state law, only the county planning departments may provide professional planning services and charge fees for this function. CAL FIRE provides input as a contributing agency, generally limited to plan review, and is not the approving agency for these projects.

California Government code section (GC) 66474.02 within the Subdivision Map Act states, in part, that before approving a tentative map, or a parcel map for which a tentative map was not required, for an area located in a State Responsibility Area (SRA) or a very high fire hazard severity zone, as defined in Section 51177, a legislative body of a city/county shall, with certain exceptions, make the following specific findings:

- 1. A finding supported by substantial evidence in the record that the subdivision is consistent with:
 - regulations adopted by the State Board of Forestry and Fire Protection pursuant to Sections 4290 and 4291 of the Public Resources Code, or
 - consistent with local ordinances certified by the State Board of Forestry and Fire Protection as meeting or exceeding the state regulations.
- "The Department of Forestry and Fire Protection serves and safeguards the people and protects the property and resources of California."

- A finding supported by substantial evidence in the record that structural fire protection and suppression services will be available for the subdivision through any of the following entities:
 - A county, city, special district, political subdivision of the state, or another entity organized solely to provide fire protection services that is monitored and funded by a county or other public entity
 - b. The Department of Forestry and Fire Protection by contract entered into pursuant to Section 4133, 4142, or 4144 of the Public Resources Code.

Local Responsibility Areas

CAL FIRE has no fire safe input on projects wholly contained within Local Responsibility Area (LRA). However, CAL FIRE is concerned with LRA land adjacent to (SRA) land where an uncontrolled fire may threaten SRA lands. In those areas, CAL FIRE recommends that local standards are enforced that are equal to, or more restrictive than, those CAL FIRE requires for SRA lands.

State Responsibility Areas

The State Board of Forestry & Fire Protection (Board) recognizes CAL FIRE's primary fire protection responsibilities are on lands declared by the Board to be SRA. The SRAF Fire Safe Regulations were prepared and adopted for the purposes of establishing minimum wildfire protection standards in conjunction with building, construction, and development in SRA. These regulations apply to the perimeters and access to all residential, commercial, and industrial building construction approved after January 1, 1991. The regulations include minimum standards for the following:

-) Road standards for fire equipment access.
- 2) Standards for signs identifying streets, roads, and buildings.
- Minimum private water supply reserves for emergency fire use.
- 4) Fuel breaks and greenbelts

These regulations do not supersede local regulations which equal or exceed minimum regulations adopted by the State. Additionally, exceptions to these standards may be allowed by the inspection entity listed in 14 CCR § 1270.05, where the exceptions provide the same overall practical effect as these regulations. Exceptions granted by the inspection entity listed in 14 CCR § 1270.05 shall be made on a case-by-case basis only.

The Legislature defined timber operations to include the cutting or removal of trees or other forest products during the conversion of timberlands to land uses other than the growing of timber (ref. PRC § 4527). Based upon the information included in the project description and maps for the High-Speed Rail Project, it appears timber operations maybe necessary for construction across areas defined under the Forest Practice Act as timberland (ref. PRC § 4526). Recognizing the critical need to facilitate such projects for the benefit of the public, the legislature authorized the Board of Forestry and Fire Protection (Board) to adopt rules allowing an exemption for the cutting or removal of trees for the purpose of constructing or maintaining a right-of-way (ROW) on public property (ref. PRC § 4628(a)).

All timber operations associated with the High-Speed Rail Project ROW clearing activities are subject to the Board's rules. It is CAL FIRE's expectation that the High-Speed Rail Authority or contractors working on the project will submit a Public Agency, Public and Private Utility Right-of-Way Exemption Notice (i.e., Form RM-73 (1104.1bc)). The Board's rules also indicate under 14 CCR § 1104.1 that timber operations associated with this exemption shall comply with all other applicable provisions of the Z'berg-Nejedly Forest Practice Act and regulations of the Board. This would include the need to have a Licensed Timber Operator conduct timber operations pursuant to PRC § 4571.

881-985 Based on the aforementioned regulations and the authorities granted by the State, CAL FIRE requests that you address the following comment(s) in the BAKERSFIELD TO PALMDALE DRAFT EIS:

DRAFT EIS:

Please demonstrate, in the form of written evidence, compliance with established minimum wildfire
protection standards as described under CCR Title 14 Natural Resources Division, 1.5 Department of
Forestry, Chapter 7 – Fire Protection, Subchapter 2 - SRA Fire Safe Regulations.

California High-Speed Rail Authority



Submission 881 (David@CALFIRE Shy, California Department of Forestry and Fire Protection Tulare Unit, March 25, 2021) - Continued

881-986

 All applicable provisions of the Z'berg-Nejedly Forest Practice Act and regulations of the Board shall be considered. If Timber Operations are to occur it is CAL FIRE expectation that a Public Agency, Public and Private Utility Right-of-Way Exemption Notice (i.e., Form RM-73 (1104.1bc)) be submitted to the Department.

Thank you for your consideration of these comment(s). CAL FIRE appreciates your efforts to address these critical issues

Sincerely,

David Shy

Division Chief – Pre Fire Tulare Unit 1968 S. Lovers Lane Visalia, CA 93292 (559)732-5954

Response to Submission 881 (David@CALFIRE Shy, California Department of Forestry and Fire Protection Tulare Unit, March 25, 2021)

881-985

While this comment is not related to the new information about the monarch butterfly and Southern California and Central Coast mountain lion as candidate species under the Endangered Species Act, and new mitigation measures to address impacts to wildlife resulting from lighting during construction and project operation in the Revised Draft EIR/Supplemental Draft EIS, the Authority appreciates all comments and is responding in full here.

As discussed in Section 3.11.4.2 of this Final EIR/EIS, the Preferred Alternative is on SRA and LRA land with Moderate and High Fire Hazard Severity Zones. The protection standards listed in CCR Title 14 Natural Resources Division, 1.5 Department of Forestry, Chapter 7 –Fire Protection, Subchapter 2 - SRA Fire Safe Regulations are specific to emergency access, signing and building numbering, emergency water standards, and fuel modification standards. While the standards are more focused on roadway modification projects and development of inhabited structures, the HSR project would ensure roadway modifications associated with the proposed project include roadway signage that is visible and appropriately sized. Additionally, any facilities developed as part of the HSR project would include appropriately sized signage. Finally, the Contractor will be required to remove flammable vegetation and fuels from the construction site and dispose at an approved landfill site, consistent with CCR Title 14, 1.5 Department of Forestry, Chapter 7, Subchapter 2, Article 5, Section 1276.02.

881-986

While this comment is not related to the new information about the monarch butterfly and Southern California and Central Coast mountain lion as candidate species under the Endangered Species Act, and new mitigation measures to address impacts to wildlife resulting from lighting during construction and project operation in the Revised Draft EIR/Supplemental Draft EIS, the Authority appreciates all comments and is responding in full here.

The HSR project will not involve timber operations; therefore, a Public Agency, Public and Private Utility Right-of-Way Exemption Notice (i.e., Form RM-73 (1104.1bc)) will not be required of the proposed project.



Submission 921 (Mario@DOT Mariotta, California Department of Transportation, District 7, April 8, 2021)

Bakersfield - Palmdale - RECORD #921 DETAIL

Status: Action Pending Record Date : 4/8/2021 Affiliation Type: State Agency Submission Date : 4/8/2021 Interest As: State Agency Submission Method: Project Email First Name : Mario@DOT Last Name : Mariotta Professional Title: Biologist Business/Organization: Caltrans District 7 Address: 100 South Main Street

 Apt./Suite No. :
 Mailstop 16-A

 City :
 Los Angeles

 State :
 CA

 Zip Code :
 90012

 Telephone :
 (213) 269-1656

Email: Mario.Mariotta@dot.ca.gov

Cell Phone :

Email Subscription : Add to Mailing List : EIR/EIS Comment :

Stakeholder Comments/Issues:

Hello,

921-1078

I would like a copy of the biological and aquatic resources technical report for the environmental document for the Bakersfield to Palmdale segment of the High Speed Rail project, please. It would assist me and my agency in completing our review.

Thank you,

Mario Mariotta, District Biologist

Capital Outlay Support, Division of Environmental Planning, Caltrans District 7

Email: Mario.mariotta@dot.ca.gov

Phone: 213-269-1656

Response to Submission 921 (Mario@DOT Mariotta, California Department of Transportation, District 7, April 8, 2021)

921-1078

Per the commenter's request, the Authority sent an electronic copy of the biological and aquatic resources technical report to the commenter. A USB flash drive was mailed via USPS, but because the request was received close to the comment deadline on April 8, 2021, the commenter was contacted and per their request, they were emailed a Dropbox link to the requested document.



Submission 946 (Mario Mariotta, California Department of Transportation, District 7, April 8, 2021)

Bakersfield - Palmdale - RECORD #946 DETAIL

 Status :
 Action Pending

 Record Date :
 4/12/2021

 Affiliation Type :
 State Agency

 Submission Date :
 4/8/2021

 Interest As :
 State Agency

 Submission Method :
 Program Info Line

First Name : Mario

Last Name : Mariotta

Professional Title : Biologist

Business/Organization : Caltrans District 7

Address : 100 South Main Street

Apt./Suite No. : Mailstop 16-A

 City:
 Los Angeles

 State:
 CA

 Zip Code:
 90012

 Telephone:
 (213) 269-1656

Email: Mario.Mariotta@dot.ca.gov

Cell Phone :

Email Subscription:

Add to Mailing List: Yes EIR/EIS Comment: No

Stakeholder Comments/Issues:

946-1117

Hello my name is Mario Mariotta. I'm a biologist for Caltrans District 7. I would like copy of the biological technical reports for the I guess it's the Draft EIR. Um and all attachments to it and also the required resources discussion. Um could you please um I guess and email copy or link um to my email, I would appreciate it. My email is my first name, M and I'll just spell the whole thing phonetically. Mike Alpha Romeo India Oscar. Mike Alpha Romeo Indio, India sorry Oscar Tango Tango Alpha. So that's Mario.Mariotta at Delta Oscar Tango dot Charlie Alpha dot Governor Objective Victor. Or in other words @dot.ca.gov. Um I would appreciate it very much. My phone number, if you would please be so kind as to confirm the reception of this message is 213-269-1656 um please let me know. I appreciate hearing from you. Thank you. (Email is: Mario.Mariotta@dot.ca.gov)

Response to Submission 946 (Mario Mariotta, California Department of Transportation, District 7, April 8, 2021)

946-1117

Per the commenter's request, the Authority sent an electronic copy of the biological and aquatic resources technical report to the commenter. A USB flash drive was mailed via USPS, but because the request was received close to the comment deadline on April 8, 2021, the commenter was contacted and per their request, they were emailed a Dropbox link to the requested document.



Submission 982 (Gayle Rosander, California Department of Transportation, District 9, April 9, 2021)

PSTATE OF CALIFORNIA—CALIFORNIA STATE TRANSPORTATION AGENCY

GAVIN NEWSOM, Governo

DEPARTMENT OF TRANSPORTATION

DISTRICT 9 500 SOUTH MAIN STREET BISHOP, CA 93514 PHONE (760) 874-8330 FAX (760) 872-0678 TTY 711 www.dof.ca.gov



April 9, 2021

Mr. Serge Stanich CA High-Speed Rail Authority 770 L Street, Suite 620 MS-1 Sacramento, California 95814 File: Ker-58-var RDEIR/SDEIS SCH#: 2009082062

High-Speed Rail: Bakersfield to Palmdale - Revised Draft Environmental Impact Report (RDEIR)/Supplemental Draft Environmental Impact Statement (SDEIS)

Dear Mr. Stanich:

982-1232

The California Department of Transportation (Caltrans) District 9 appreciates the opportunity to respond during this open comment phase of the High-Speed Rail (HSR) project. While not directly related to the currently proposed document revisions, some of the proposed HSR alignment affects Caltrans State Route 58 projects, which are in conceptual and other project development phases.

- Keene Pavement Rehabilitate pavement and upgrade median barrier/guardrail/ lighting between postmiles 77.2 and R88.6.
- Truck Climbing Lanes Construct eastbound truck climbing lanes at three locations between postmiles 71.8 and R86.9.
- Wildlife Connectivity Preliminary interagency discussion, TBD locations.

District 9 staff have interacted w/ HSR and other entity personnel regarding these proposals. Continued collaboration is necessary to ensure efficiency as projects progress. For further dialogue, please contact Bryan Winzenread - Deputy District Director of Project Delivery, at (760) 920-3123 or bryan.winzenread@dot.ca.gov.

We value a cooperative working relationship with the HSR Authority regarding our State's transportation system. For any questions, feel free to contact me at (760) 874-8330 or at qayle.rosander@dot.ca.gov.

Sincerely,

GAYLE J. ROSANDER External Project Ligison

c: State ClearinghouseBryan Winzenread, Caltrans D-9

[&]quot;Provide a safe, sustainable, integrated and efficient transportation system to enhance California's economy and livability"

Response to Submission 982 (Gayle Rosander, California Department of Transportation, District 9, April 9, 2021)

982-1232

While this comment is not related to the new information about the monarch butterfly and Southern California and Central Coast mountain lion as candidate species under the Endangered Species Act, and new mitigation measures to address impacts to wildlife resulting from lighting during construction and project operation in the Revised Draft EIR/Supplemental Draft EIS, the Authority appreciates all comments and is responding in full here.

The commenter states that additional collaboration is needed between High-Speed Rail and Caltrans staff regarding several Caltrans projects on State Route 58. The Authority will continue to collaborate with Caltrans to coordinate construction of the high-speed rail project and planned improvements to State Route 58. No revisions have been made to the Final EIR/EIS in response to this comment.



Submission 983 (Rudy Rodriguerz, California Highway Patrol - Antelope Valley, March 10, 2021)

983-1233

No Impact to the Antelope Valley Area's local operations and/or public safety by SCH#2009082062 was identified. If you have any questions, please contact me.

Thank you,

Lieutenant Rudy Rodriguez California Highway Patrol – Antelope Valley Area 2041 West Avenue "I" Lancaster, CA 93536 (661) 948-8541 office



From: Rodriguez, Rudy@CHP < RuRodriguez@chp.ca.gov>

Sent: Wednesday, March 10, 2021 12:48 PM **To:** Stanich, Serge <<u>Serge.Stanich@hsr.ca.gov</u>>

 $\textbf{Cc:}\ \underline{state.clearinghouse@opr.ca.gov}; Enciso, Blanca@CHP < \underline{Blanca.Enciso@chp.ca.gov}; Saunders, \\$

Joseph@CHP < JCSaunders@chp.ca.gov >; Geller, Martin@CHP < MGeller@chp.ca.gov >

Subject: Environmental Document Review - SCH # 2009082062

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Response to Submission 983 (Rudy Rodriguerz, California Highway Patrol - Antelope Valley, March 10, 2021)

983-1233

The Authority appreciates the California Highway Patrol's review of the Revised Draft EIR/Supplemental Draft EIS. No revisions have been made to this Final EIR/EIS in response to this comment.