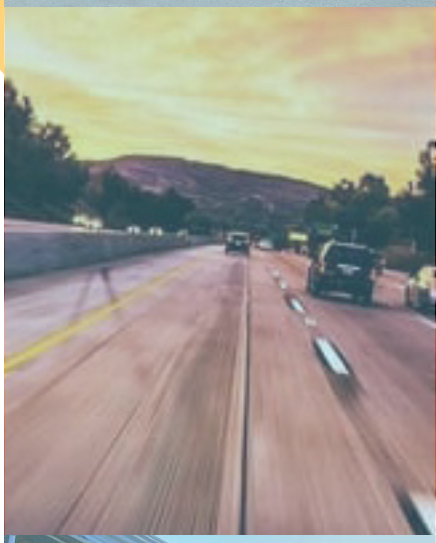
Kern Council of Governments

2022 Regional Transportation Plan
Final Program Environmental Impact Report

SCH No. 2021050012



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June 2022

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June 2022

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1.0 INTRODUCTION

This document is the Final Program Environmental Impact Report ("PEIR" or "EIR") for the 2022 Regional Transportation Plan ("2022 RTP" or "Plan"). This document together with the Draft PEIR and its technical appendices comprise the Final PEIR. The document has been prepared by the Kern Council of Governments (Kern COG) in accordance with the California Environmental Quality Act (CEQA).

The Final PEIR is required under Section 15132 of the *State CEQA Guidelines* to include the Draft PEIR, comments and recommendations received on the Draft PEIR, the responses of the lead agency to significant environmental issues raised by those comments in the review and consultation process, and any other relevant information added by the lead agency (including minor changes to the PEIR). A Mitigation Monitoring and Reporting Program is also required; it can be a separate document, or, as in this case, included in the Final PEIR.

The evaluation and response to comments is an important part of the CEQA process as it allows the following: (1) the opportunity to review and comment on the methods of analysis contained within the Draft PEIR; (2) the ability to detect any omissions which may have occurred during preparation of the Draft PEIR; (3) the ability to check for accuracy of the analysis contained within the Draft PEIR; (4) the ability to share expertise; (5) the ability to discover public concerns.

This document provides revisions to the Draft PEIR made in response to comments, staff review, and/or changes to the proposed project. These revisions also correct, clarify, and amplify the text of the Draft PEIR, as appropriate, and do not alter the conclusions of the Draft PEIR.

1.1 PROCESS

In accordance with Section 15050 of the *State CEQA Guidelines* Kern COG is the lead agency that prepared both the Draft and Final PEIR for the project, the 2022 RTP.

Kern COG prepared and circulated the Draft PEIR for a period of 45 days, extending from May 2, 2022, and ending on June 16, 2022. The Draft PEIR was available for review at the office of Kern COG and an electronic copy of the Draft PEIR was posted on the Kern COG website. Public hearings on the Draft PEIR were held May 16, 2022, at Ridgecrest City Hall and on May 19, 2022, at Kern COG's offices in Bakersfield. A Notice of Availability of the Draft PEIR was transmitted to responsible and trustee agencies, regulatory agencies and other to request comments on the Draft PEIR, pursuant to *State CEQA Guidelines* Section 15086. Comments on the Draft PEIR were received during the comment period, and

those comments are responded to in this Final PEIR. The Final PEIR, together with the Final RTP, will be submitted to Kern COG Board for review, and the Board will consider certification of the Final PEIR and approval of the RTP.

1.2 CONTENT OF THE FINAL PROGRAM EIR

As discussed above, the primary intent of the Final PEIR is to provide a forum to air and address comments pertaining to the analysis contained within the Draft PEIR. Pursuant to Section 15088 of the *State CEQA Guidelines*, Kern COG has reviewed and addressed all comments received on the Draft PEIR by the comment period deadline. Included within the Final PEIR are the written comments that were submitted during the public comment period as well as oral comments (relevant to the PEIR) received at the two public hearings.

In order to adequately address the comments provided by interested agencies and the public in an organized manner, this Final PEIR includes the following chapters and appendices:

Section 1.0, Introduction. This chapter provides a brief introduction to the Final PEIR and its contents.

Section 2.0, Responses to Comments. This chapter provides a list of commenting agencies, organizations, and individuals. Responses to all comments on the Draft PEIR are also included in this chapter. Some of the comment letters received provided comments on the Plan (not the anticipated environmental impacts). These Plan-related comments are addressed separately as part of the RTP process. This chapter also provides a list of corrections and additions to the Draft PEIR. None of the changes significantly impact the conclusions presented in the Draft PEIR.

Section 3.0, Mitigation Monitoring and Reporting Program. This chapter includes the Mitigation Monitoring and Reporting Program (MMRP) prepared in compliance with the requirements of Section 21081.6 of the California Public Resources Code and Section 15091(d) and 15097 of the *State CEQA Guidelines*.

The Final EIR also includes the previously circulated Draft PEIR.

1.3 REVIEW AND CERTIFICATION OF THE FINAL PEIR

Consistent with CEQA (Public Resource Code Section 21092.5), responses to agency comments are being forwarded to each commenting agency 10 days prior to certification of the Final PEIR. In addition, responses are also being distributed to all commenters via email. The Final PEIR can be downloaded at www.kerncog.org

2.0 COMMENT LETTERS AND RESPONSES

The Draft Program EIR (PEIR) was submitted to the State Clearinghouse Office of Planning and Research and circulated for a 45-day public review on May 2, 2022. The Draft 2022 Regional Transportation Plan/ Sustainable Communities Strategy (RTP/SCS) was circulated for an additional 10 days of public comments during the same period as the Draft Program EIR (55 days, from April 22, 2022, to June 16, 2022). Comments were received on both the RTP/SCS and the PEIR.

One comment letter on the RTP/SCS from Tejon Ranch addressed the growth forecast included in the RTP/SCS and evaluated in the PEIR. Changes to the distribution of growth have the potential to affect environmental impacts as the distribution of growth may affect the transportation and air quality modeling undertaken by Kern COG. The Kern COG models are used to provide gross estimates of regional environmental parameters (Vehicle Miles Traveled [VMT], criteria pollutant emissions and GHG emissions). However, the inputs to these models are subject to variability (location and density of land uses, travel patterns, fuel make up, pricing assumptions and many more). Because of this, minor changes to assumptions result in minor changes to modeling results that are not statistically significant. Kern COG has made technical refinements to the growth forecast at the sub-jurisdictional (i.e., TAZ) level to reflect the Tejon projects. The 2022 RTP/SCS planning assumptions and growth forecasts account for full buildout of the approved and entitled TRCC, Grapevine, and TMV projects by the end of the planning period. The technical refinements do not result in substantial changes to the information presented in the Draft PEIR, including modeling results. While adjustments were made at the sub jurisdictional level, at the regional level, impacts would remain as presented in the Draft PEIR. The technical refinements would not result in any new significant impacts at the regional level because the changes are minor and occur at the sub jurisdictional level.

Additional comments on the RTP/SCS were provided at the two public hearings conducted, none of the comments were related to the PEIR. A list of commenters on the PEIR is shown on the following page. Comments that address the 2022 RTP/SCS are addressed in Attachment A to the Transportation Technical Advisory Committee (TTAC) and Regional Planning Advisory Committee (RPAC) staff report dated July 6, 2022, and in Appendix H of the Final 2022 RTP/SCS.

The original bracketed comment letters are provided followed by a numbered response to each bracketed comment. Individual comments within each letter are numbered and the response is given a matching number. Where responses result in a change to the Draft PEIR, the resulting change is identified in the response.

Table 2.0-1
List of Commenters on the Draft EIR

Letter Number	Organization	Commenter Name	Comment Date	Response Page Number
Letter 1	California Department of Fish and Wildlife	Valarie Cook	June 16, 2022	2.0-4
Letter 2	San Joaquin Valley Air Pollution Control District	Brian Clements	June 16, 2022	2.0-16

2.1 RESPONSES TO COMMENTS RECEIVED ON THE DRAFT PROGRAM EIR

The numbered responses are provided on the following pages with the original bracketed comment letters at the end of this section. Individual comments within each letter are numbered and the response is given a matching number.

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State of California – Natural Resources Agency
DEPARTMENT OF FISH AND WILDLIFE
Central Region
1234 East Shaw Avenue
Fresno, California 93710
(559) 243-4005
www.wildlife.ca.gov

GAVIN NEWSOM, Governor
CHARLTON H. BONHAM, Director

June 16, 2022

Becky Napier, Deputy Director
Kern Council of Governments
1401 19th Street, Suite 300
Bakersfield, California 93301
bnapier@kerncog.org

Subject: 2022 Regional Transportation Plan and Sustainable Communities Strategy (RTP/SCS) (Project)
Draft Program Environmental Impact Report (DPEIR)
State Clearinghouse No. 2021050012

Dear Ms. Napier:

The California Department of Fish and Wildlife (CDFW) received a DPEIR from the Kern Council of Governments (COG) for the above-referenced Project pursuant to the California Environmental Quality Act (CEQA) and CEQA Guidelines.[1]

Thank you for the opportunity to provide comments and recommendations regarding those activities involved in the Project that may affect California fish and wildlife. Likewise, CDFW appreciates the opportunity to provide comments regarding those aspects of the Project that CDFW, by law, may be required to carry out or approve through the exercise of its own regulatory authority under Fish and Game Code.

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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

[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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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. 1

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 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).

PROJECT DESCRIPTION SUMMARY

Proponent: Kern COG

Objective: The Project defines the region's mobility needs and issues through 2045, sets forth an action plan of projects and programs to address the needs consistent with the adopted policies, and documents the financial resources needed to implement the plan. The Project establishes a set of regional transportation goals, policies, and actions intended to guide development of the planned multimodal transportation systems in Kern County. It has been developed through a continuing, comprehensive, and cooperative planning process, and provides for effective coordination between local, regional, state, and federal agencies. Kern COG does not implement individual projects included in the RTP/SCS; individual projects are implemented by local jurisdictions and other agencies. The RTP/SCS includes the following key components: 2

- Transportation Planning Policies
- Planning Assumptions and Growth Trends
- Sustainable Communities Strategy
- Strategic Investments/Action Element
- Financial Constraints
- Future Transportation Planning (beyond 2046)
- Monitoring progress

Location: Kern COG is an association of city and county governments created to address regional transportation issues. Its member agencies include the County of Kern and the 11

incorporated cities within Kern County including Arvin, Bakersfield, California City, Delano, Maricopa, McFarland, Ridgecrest, Shafter, Taft, Tehachapi, and Wasco.

Timeframe: Until 2046.

COMMENTS AND RECOMMENDATIONS

The biological resources section of the DPEIR provided acceptable general mitigation measures, but without specific detail. For example, Mitigation Measure BIO-2 states that species-focused and protocol-level surveys will be conducted, which CDFW agrees, but does not specifically identify them. CDFW offers the following species-specific comments and recommendations to assist Kern COG in adequately identifying and/or mitigating the Project's significant, or potentially significant, direct and indirect impacts on fish and wildlife (biological) resources. Editorial comments or other suggestions may also be included to improve the PEIR.

Given the county-wide implications of this RTP/SCS, CDFW is concerned that subsequent projects (hereafter, "projects") tiering from the Program EIR could impact special-status species. These projects may or may not undergo environmental review and therefore CDFW recommends that the EIR fully address potential impacts to special status species. In CDFW's previous comment letter dated June 8, 2021, during the Notice of Preparation for this Project, CDFW has concerns with potential impacts to special status species including, but not limited to, the following special status species: the State endangered and federally threatened western yellow-billed cuckoo (*Coccyzus americanus occidentalis*), the State and federally threatened California tiger salamander (*Ambystoma californiense*), the State threatened and federally endangered San Joaquin kit fox (*Vulpes macrotis mutica*), the State-candidate listed as endangered and federally endangered desert tortoise (*Gopherus agassizii*); the following State endangered species: Bakersfield smallscale (*Atriplex tularensis)*, San Joaquin adobe sunburst (*Pseudobahia peirsonii*), bald eagle (*Haliaeetus leucocephalus*), foothill yellow-legged frog (*Rana boylii*), Mojave tarplant (*Deinandra mohavensis*); the following State and federally endangered species: Bakersfield cactus (*Opuntia basilaris var. treleasei*), California jewelflower (*Caulanthus californicus*), Tipton kangaroo rat (*Dipodomys nitratoides nitratoides)*, blunt-nosed leopard lizard (*Gambelia sila*), giant kangaroo rat (*Dipodomys ingens*), California condor (*Gymnogyps californianus*), southwestern willow flycatcher (*Empidonax traillii extimus*), least Bell's vireo (*Vireo bellii pusillus*), and southern mountain yellow-legged frog (*Rana muscosa*); the following State threatened species: striped adobe-lily (*Fritillaria striata*), Fisher (*Pekania pennanti*), Kern Canyon slender salamander (*Batrachoseps simatus*), tricolored blackbird (*Agelaius tricolor*), Swainson's hawk (*Buteo swainsoni*), southern rubber boa (*Charina umbratica*), San Joaquin antelope squirrel (*Ammospermophilus nelsoni*), and Mohave ground squirrel (*Xerospermophilus mohavensis*); and the following State species of special concern: Le Conte's thrasher (*Toxostoma lecontei*), Tehachapi pocket mouse (*Perognathus alticola inexpectatus)*, gray vireo (*Vireo vicinior*), western pond turtle (*Emys marmorata*),

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Townsend's big-eared bat (*Corynorhinus townsendii*), two-striped gartersnake (*Thamnophis hammondii*), short-nosed kangaroo rat (*Dipodomys nitratoides brevinasus*), Buena Vista Lake ornate shrew (*Sorex ornatus relictus*), coast horned lizard (*Phrynosoma blainvillii*), American badger (Taxidea taxus), long-eared owl (*Asio otus*), yellow-breasted chat (*Icteria virens*), pallid bat (*Antrozous pallidus*), western mastiff bat (*Eumops perotis californicus*), short-nosed kangaroo rat (*Dipodomys nitratoides brevinasus*), fulvous whistling-duck (*Dendrocygna bicolor*), San Joaquin coachwhip (*Masticophis flagellum ruddocki*), spotted bat (*Euderma maculatum*), purple martin (*Progne subis*), California glossy snake (*Arizona elegans occidentalis*), Southern Sierra legless lizard (*Anniella campi*), Bakersfield legless lizard (*Anniella grinnelli*), western spadefoot (*Spea hammondii*), and burrowing owl (*Athene cunicularia*). While this list may not include all special-status species present Project area, it does provide a robust source of information as to which species could potentially be impacted. 3

San Joaquin Kit Fox (SJKF)

SJKF den in right-of-ways, vacant lots, etc., and populations can fluctuate over time. It is important to note that SJKF populations are known to fluctuate and a negative finding from biological surveys in any one year does not necessarily demonstrate absence of kit fox on a site. In addition, SJKF may be attracted to both construction materials (pipes, etc.) and construction footprints due to the type and level of activity (excavation, etc.) and the loose, friable soils that are created as a result of intensive ground disturbance.

CDFW recommends the Program EIR quantify and describe the potential for subsequent projects to result in direct and indirect impacts to SJKF. This information, in addition to adequate description of habitat features on individual projects sites, is essential to adequately assess project impacts. Prior to ground-disturbing activities, CDFW recommends that a qualified wildlife biologist assess individual project sites to determine if habitat suitable to support SJKF is present. If suitable habitat is present, CDFW recommends that a qualified biologist assess presence/absence of SJKF by conducting surveys following the United States Fish and Wildlife Service's (USFWS) "Standardized recommendations for protection of the San Joaquin kit fox prior to or during ground disturbance" (2011) and implementing no-disturbance buffers around den sites, as described in the USFWS document. SJKF detection warrants consultation with CDFW to discuss how to avoid take, or if avoidance is not feasible, to acquire an Incidental Take Permit (ITP) prior to ground-disturbing activities, pursuant to Fish and Game Code section 2081 subdivision (b). 4

Swainson's Hawk (SWHA)

Projects tiering from the Program EIR have the potential to impact SWHA. Without appropriate avoidance and minimization measures for SWHA, potential significant impacts that may result from subsequent project activities include nest abandonment, and reduced nesting success (loss or reduced health or vigor of eggs or young). 5

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To avoid impacts to nesting SWHA, CDFW recommends that subsequent project's ground-disturbing activities be timed to avoid the normal bird breeding season (February 1 through September 15). However, if ground-disturbing activities must take place during that time, CDFW recommends that a qualified wildlife biologist determine if suitable habitat is present on or adjacent to individual project sites. If suitable habitat is present, CDFW recommends a qualified wildlife biologist conduct surveys following the survey methods developed by the Swainson's Hawk Technical Advisory Committee (SWHA TAC 2000) be conducted by a qualified wildlife biologist prior to project implementation. If active nests are detected, CDFW recommends a minimum no-disturbance buffer of 0.5-mile be delineated around them until the breeding season has ended or until a qualified biologist has determined that the birds have fledged and are no longer reliant upon the nest or parental care for survival. If an active SWHA nest is detected during surveys and a 0.5-mile buffer is not feasible, consultation with CDFW is warranted to discuss how to implement the project and avoid take. If take cannot be avoided, take authorization through the acquisition of an ITP, pursuant to Fish and Game Code section 2081 subdivision (b) is necessary to comply with CESA. 5

Tricolored Blackbird (TRBL)

TRBL are known to nest in alfalfa, wheat, and other low agricultural crop fields. TRBL aggregate and nest colonially, forming colonies of up to 100,000 nests (Meese et al. 2014). Approximately 86% of the global population is found in the San Joaquin Valley (Kelsey 2008, Weintraub et al. 2016). Increasingly, TRBL are forming larger colonies that contain progressively larger proportions of the species' total population (Kelsey 2008). In 2008, for example, 55% of the species' global population nested in only two colonies, which were located in silage fields (Kelsey 2008). In 2017, approximately 30,000 TRBL were distributed among only 16 colonies in Merced County (Meese 2017). Nesting can occur synchronously, with all eggs laid within one week (Orians 1961). For these reasons, depending on timing, disturbance to nesting colonies can cause abandonment, significantly impacting TRBL populations (Meese et al. 2014). 6

Without appropriate avoidance and minimization measures for TRBL, potential significant impacts of projects tiering from the Program EIR include nest and/or colony abandonment, reduced reproductive success, and reduced health and vigor of eggs and/or young. CDFW recommends that project ground-disturbing activities be timed to avoid the normal bird breeding season (February 1 through September 15). However, if ground-disturbing activities must take place during that time, CDFW recommends that a qualified wildlife biologist determine if suitable habitat is present on or adjacent to individual project sites. If suitable habitat is present, CDFW recommends a qualified wildlife biologist conduct surveys for nesting TRBL no more than 10 days prior to the start of ground-disturbing activities. If an active TRBL nesting colony is found during pre-activity surveys, CDFW recommends implementation of a minimum 300-foot no-disturbance buffer around the colony in accordance with CDFW's "*Staff Guidance Regarding Avoidance of Impacts to Tricolored Blackbird Breeding Colonies on Agricultural Fields in 2015*" (CDFW 2015). CDFW advises that this buffer remain in place until the breeding season has ended or until a qualified biologist has determined that nesting has ceased, the birds have fledged, and are no longer

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reliant upon the colony or parental care for survival. It is important to note that TRBL colonies can expand over time. For this reason, CDFW recommends conducting additional pre-activity surveys within 10 days prior of project initiation to reassess the colony's areal extent. If a TRBL nesting colony is detected during surveys, consultation with CDFW is warranted to discuss how to implement the project and avoid take, or if avoidance is not feasible, to acquire an ITP, pursuant to Fish and Game Code section 2081 subdivision (b), prior to any ground-disturbing activities. 6

Desert Tortoise: The Project site is within the range of suitable habitat for desert tortoise. CDFW recommend that surveys following the protocol contained in "Preparing for any action that may occur within the range of the Mojave desert tortoise (*Gopherus agassizii*)" (USFWS 2010) be conducted during the appropriate survey period to determine the potential for desert tortoise to use the Project site and surrounding area. Survey results will need to be submitted to both CDFW and the United States Fish and Wildlife Service. If surveys indicate the presence or potential presence of desert tortoise, consultation with CDFW and the USFWS is essential to develop appropriate avoidance, minimization, and mitigation measures.

If projects propose to use exclusion fencing, CDFW recommends that all perimeter fencing be raised seven (7) to eight (8) inches above ground for the length of the fencing with the bottom fencing material knuckled back to maintain movement and habitat connectivity for desert tortoise. CDFW recommends that exclusion fencing is installed after desert tortoise and Mohave ground squirrel surveys are completed and no desert tortoise or Mohave ground squirrels are detected on-site to avoid take of these species. Fish and Game Code section 86 defines take as "hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill." CDFW considers animals trapped within exclusion fencing to be captured and if this occurs absent the acquisition of a State ITP, unauthorized take has occurred in violation of CESA. 7

Mohave Ground Squirrel (MGS)

Major threats to the MGS are drought, habitat destruction, habitat fragmentation, and habitat degradation (Gustafson 1993). MGS is restricted to a small geographic range and the greatest habitat loss has occurred near desert towns such as California City (Gustafson 1993). Natural cycling is anticipated in MGS populations, therefore, the true indicators of the status of the species are the quantity, pattern of distribution, and quality of habitat (Gustafson 1993). 8

To evaluate potential project-related impacts to MGS, CDFW recommends a qualified permitted biologist conduct protocol surveys for MGS following the methods described in the "Mohave Ground Squirrel Survey Guidelines" (CDFG 2010) during the appropriate survey season prior to project implementation, including any vegetation- or ground-disturbing activities. Please note that guidelines indicate that a visual survey and up to three trapping sessions may need to be conducted (CDFG 2010). Results of

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the MGS surveys are advised to be submitted to the CDFW. As indicated above, MGS surveys are valid for one year and CDFW recommend surveys be conducted within a year from the start of ground-disturbing activities. If MGS are found within the project site during protocol surveys, preconstruction surveys, or construction activities, consultation with CDFW is recommended to discuss how to implement the project and avoid take; or if avoidance is not feasible, to acquire an ITP prior to any ground-disturbing activities, pursuant Fish and Game Code section 2081(b). Alternatively, the applicant can assume presence and acquire an ITP prior to initiating project activities.

Tipton Kangaroo Rat (TKR), Giant Kangaroo Rat (GKR) and other kangaroo rats: Both TKR and GKR may be impacted by project activities. In order to determine if TKR and GKR occupy the project site, focused protocol-level trapping surveys would need to be conducted by a qualified wildlife biologist that is permitted to do so by both CDFW and USFWS. These surveys are recommended to be conducted well in advance of ground-disturbing activities in order to determine if impacts to special status kangaroo rats could occur. In order to implement full avoidance for both these species, CDFW recommends a minimum 50-foot no-disturbance buffer be employed around all burrows that could be used by kangaroo rats. If full avoidance is not feasible and take could potentially occur as a result of construction-related activities, acquisition of an ITP (in accordance with Section 2081(b) of the Fish and Game Code) would be warranted prior to initiating ground-disturbing activities. Alternatively, the applicant has the option of assuming presence for this species and secure an ITP for TKR and GKR.

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San Joaquin Antelope Squirrel (SJAS): Subsequent project activities may impact SJAS. In order to determine if project implementation would impact SJAS, surveys focused on SJAS would need to be conducted by a qualified wildlife biologist during the appropriate conditions for detection of the species. Conditions considered appropriate for SJAS include daytime temperatures between 68 to 86 degrees Fahrenheit and between April 1 and September 30 (CDFG 1990). These surveys are recommended to be conducted well in advance of ground-disturbing activities in order to determine if impacts to SJAS could occur during construction related activities. In order to implement full avoidance for SJAS, CDFW recommends a minimum 50-foot no-disturbance buffer be employed around all burrows that could be used by SJAS. If implementation of avoidance measures is not feasible and if take could occur as a result of construction-related activities, acquisition of an ITP would be warranted prior to initiating ground-disturbing activities. Alternatively, the applicant has the option of assuming presence for this species and securing an ITP for SJAS.

California Tiger Salamander (CTS)

CTS have the potential to be impacted by project activities. Results from the California Natural Diversity Database (CNDDB) show that CTS are known to occur in northwestern Kern County (CDFW 2022). CTS breed and develop in vernal and seasonal pools and stock ponds within grassland, woodland, and scrub habitat types. They require upland refuges (i.e. small mammal burrows) when not breeding and have been demonstrated to disperse up to 1.3 miles from aquatic habitat (Searcy and Shaffer 2011).

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Prior to ground-disturbing activities that occur within the range of CTS, CDFW recommends that a qualified wildlife biologist assess individual project sites and their vicinity (i.e. up to 1.3-mile radius buffer) to evaluate potential for CTS and presence of both upland and aquatic habitat features which could support the species. If suitable habitat is present, CDFW recommends site assessments follow the USFWS's "Interim Guidance on Site Assessment and Field Surveys for Determining Presence or a Negative Finding of the California Tiger Salamander" (2003). If surveys determine that CTS have the potential to be present, CDFW advises avoidance for CTS include a minimum 50-foot no-disturbance buffer delineated around all small mammal burrows and a 250-foot buffer around all aquatic habitat features with potential to support breeding. If these no-disturbance buffers cannot be maintained, or if presence of the species is assumed, take authorization through acquisition of an ITP by CDFW, pursuant to Fish and Game Code section 2081 subdivision (b), is recommended prior to any ground disturbing activities to comply with CESA. 9

Special-Status Plant Species: Special status plant species may be impacted by project activities. CDFW recommends that the project site be surveyed by a qualified botanist. CDFW advises following the Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Natural Communities (CDFG, 2018). This protocol, which is intended to maximize detectability, includes the identification of reference populations to facilitate the likelihood of field investigations occurring during the appropriate floristic period. In the absence of protocol-level surveys being performed, additional surveys may be necessary. Further, CDFW advises that a minimum no-disturbance buffer of at least 50 feet from the outer edge of the plant population(s) or specific habitat type(s) required by special status plant species be delineated around special status plant species. If buffers cannot be maintained, then consultation with CDFW is advised to determine appropriate minimization and mitigation measures for impacts to special-status plant species. If a State- or federally listed plant species are identified during botanical surveys, then consultation with CDFW and/or the USFWS is recommended to determine the need for an ITP (issued by CDFW) or a Biological Opinion (issued by the USFWS). CDFW recommends appropriate avoidance, minimization, and mitigation measures for special status plant species are fully addressed. 10

Burrowing Owl (BUOW)

BUOW use small mammal burrows for nesting and cover. Dispersing juveniles, migrants, transients or new colonizers may occur year-round. Therefore, project activities could impact this species. CDFW recommends that a qualified biologist conduct a habitat assessment in advance of project implementation, to determine if individual project sites or their immediate vicinity contain suitable habitat for BUOW. If suitable habitat is present, CDFW recommends that a qualified biologist determine if species-specific surveys are necessary to determine if BUOW may be impacted by project activities. CDFW recommends the survey methods described in the Staff Report on Burrowing Owl Mitigation (CDFG 2012) be followed before beginning ground disturbing activities. In the event that BUOW are found, CDFW's Staff Report on Burrowing Owl Mitigation (CDFG 2012) recommends that impacts to occupied burrows be avoided in accordance with the following table unless a qualified biologist verifies through non-invasive methods that either: 1) the 11

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birds have not begun egg laying and incubation; or 2) that juveniles from the occupied burrows are foraging independently and are capable of independent survival.

Location	Time of Year	Level of Disturbance		
		Low	Med	High
Nesting sites	April 1-Aug 15	200 m*	500 m	500 m
Nesting sites	Aug 16-Oct 15	200 m	200 m	500 m
Nesting sites	Oct 16-Mar 31	50 m	100 m	500 m

* meters (m)

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Other Wildlife Species

While CDFW may not be able to cover all special status species identified in this comment letter, CDFW recommends the EIR evaluate potential impacts to other special status species that may be impacted from project activities. CDFW recommends this evaluation include identifying any potential habitat in the project area, the potential for these species to occur in the project area, and what, if any, mitigation measures are necessary to reduce impacts to less to significant.

Please note that if suitable habitat is present and species surveys are warranted, some protocols require specific seasons and/or an extended period of time (e.g., BNLL, CTS). Frequently recommended survey and monitoring protocols for special status species can be found at https://wildlife.ca.gov/Conservation/Survey-Protocols. CDFW is also available for consultation about survey methods and mitigation measures prior to completion of the draft EIR.

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Nesting birds

CDFW encourages that project implementation occur during the bird non-nesting season; however, if ground-disturbing or vegetation-disturbing activities must occur during the breeding season (February through mid-September), individual project proponents are responsible for ensuring that implementation of a project does not result in violation of the Migratory Bird Treaty Act or relevant Fish and Game Codes as referenced above.

To evaluate project-related impacts on nesting birds, CDFW recommends that a qualified wildlife biologist conduct pre-activity surveys for active nests no more than 10 days prior to the start of ground or vegetation disturbance to maximize the probability that nests that could potentially be impacted are detected. CDFW also recommends that surveys cover a sufficient area around individual project sites to identify nests and determine their status. A sufficient area means any area potentially affected by a project. In addition to direct impacts (i.e. nest destruction), noise, vibration, and movement of workers or equipment could also affect nests. Prior to initiation of project ground-disturbing activities, CDFW recommends that a qualified biologist conduct a survey to establish a behavioral baseline of all identified nests. Once ground-disturbing activities begin, CDFW recommends having a

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Letter 1

qualified biologist continuously monitor nests to detect behavioral changes resulting from the project. If behavioral changes occur, CDFW recommends halting the work causing that change and consulting with CDFW for additional avoidance and minimization measures.

If continuous monitoring of identified nests by a qualified wildlife biologist is not feasible, CDFW recommends a minimum no-disturbance buffer of 250 feet around active nests of non-listed bird species and a 500-foot no-disturbance buffer around active nests of non-listed raptors. These buffers are advised to remain in place until the breeding season has ended or until a qualified biologist has determined that the birds have fledged and are no longer reliant upon the nest or on-site parental care for survival. Variance from these no-disturbance buffers is possible when there is compelling biological or ecological reason to do so, such as when the construction area would be concealed from a nest site by topography. CDFW recommends that a qualified wildlife biologist advise and support any variance from these buffers and notify CDFW in advance of implementing a variance. 13

Lake and Streambed Alteration: Projects tiering from the Program EIR may involve work that has the potential to impact waterways within Kern County and may be subject to CDFW's regulatory authority pursuant Fish and Game Code section 1600 et seq. Fish and Game Code section 1600 et seq. requires an entity to notify CDFW prior to commencing any activity that may (a) substantially divert or obstruct the natural flow of any river, stream, or lake; (b) substantially change or use any material from the bed, bank, or channel of any river, stream, or lake (including the removal of riparian vegetation); or (c) deposit debris, waste or other materials that could pass into any river, stream, or lake. "Any river, stream, or lake" includes those that are ephemeral or intermittent as well as those that are perennial. CDFW is required to comply with CEQA in the issuance of a Lake or Streambed Alteration Agreement. For additional information on notification requirements, please contact our staff in the LSA Program at (559) 243-4593. 14

Federally Listed Species

CDFW recommends consulting with the USFWS on potential impacts to federally listed species. 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. 15

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 the following link: https://www.wildlife.ca.gov/Data/CNDDB/Submitting-Data. The completed 16

form can be mailed electronically to CNDDB at the following email address: CNDDB@wildlife.ca.gov. The types of information reported to CNDDB can be found at the following link: https://www.wildlife.ca.gov/Data/CNDDB/Plants-and-Animals. 16

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 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 Kern COG in identifying and mitigating the Project's impacts on biological resources. 17

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). If you have any questions, please contact Jaime Marquez, Environmental Scientist, at the address provided on this letterhead, by telephone at (559) 580-3200, or by electronic mail at Jaime.Marquez@wildlife.ca.gov.

Sincerely,

DocuSigned by:
Valerie Cook
96D42C58E092466...

Valerie Cook
Acting Regional Manager

Attachment 1

ec: Patricia Cole; Patricia_Cole@fws.gov
United States Fish and Wildlife Service

LSA/1600; R4LSA@wildlife.ca.gov
California Department of Fish and Wildlife

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Letter 1

Attachment 1

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

PROJECT: 2022 Regional Transportation Plan and Sustainable Communities Strategy (RTP/SCS)

SCH No.: 2021050012

RECOMMENDED MITIGATION MEASURE	STATUS/DATE/INITIALS
Before Disturbing Soil or Vegetation	
Mitigation Measure: SJKF	
SJKF habitat assessment	
SJKF take authorization	
Mitigation Measure: SWHA	
SWHA surveys	
SWHA take authorization	
Mitigation Measure: TRBL	
TRBL surveys	
TRBL take authorization	
Mitigation Measure: Desert tortoise	
Desert tortoise surveys	
Desert tortoise exclusion fencing	
Desert tortoise take authorization	
Mitigation Measure: MGS	
MGS surveys	
MGS take authorization	
Mitigation Measure: TKR and GKR	
TKR and GKR surveys	
TKR and GKR take authorization	
Mitigation Measure: SJAS	
SJAS surveys	
SJAS take authorization	
Mitigation Measure: CTS	
CTS surveys	
CTS take authorization	
Mitigation Measure: Special status plants	
Special status plant surveys	
Special status plant take authorization	
Mitigation Measure: BUOW	
BUOW surveys	

Before Impacting the Bed, Bank, or Channel of any Stream or River	
Mitigation Measure: Notification to CDFW's Lake and Streambed Alteration Program	
During Construction	
Mitigation Measure: SJKF	
SJKF avoidance buffer	
Mitigation Measure: SWHA	
SWHA avoidance buffer	
Mitigation Measure: TRBL	
TRBL avoidance buffer	
Mitigation Measure: TKR and GKR	
TKR and GKR avoidance buffer	
Mitigation Measure: SJAS	
SJAS avoidance buffer	
Mitigation Measure: CTS	
CTS avoidance buffer	
Mitigation Measure: Special status plants	
Special status plant avoidance buffer	
Mitigation Measure: BUOW	
BUOW avoidance buffer	

Letter 1 **California Department of Fish and Wildlife**
Central Region
Valarie Cook, Acting Regional Manager
1234 East Shaw Avenue
Fresno, CA, 93710
June 16, 2022

Response 1-1

The comment is a set of introductory comments that provide detail on California Department of Fish and Wildlife's (CDFW's) role as a responsible and trustee agency. Kern COG acknowledges CDFW's role as a responsible and trustee agency.

Response 1-2

The comment is a summary of the proposed project. The comment does not raise an issue within the meaning of the California Environmental Quality Act (CEQA). No response is necessary.

Response 1-3

CDFW expresses general agreement with the mitigation measures provided in the PEIR and provides additional species-specific comments. Kern COG acknowledges projects tiering from the PEIR have the potential to impact sensitive species as was identified in Impact BIO-1 of the PEIR. CDFW provides a list of specific special status species of concern. Responses to specific comments on these species are addressed in the following responses.

Response 1-4

The comment relates to the San Joaquin Kit Fox. Impact BIO-1 finds that projects implemented under the 2022 RTP/SCS would have the potential to impact sensitive status species (p. 4.4-53 of the PEIR) and identifies this impact as significant and unavoidable. The identified Mitigation Measures, **MM BIO-1** through **MM BIO-5**, would help reduce potential impacts, but due to the programmatic nature of the document and the long-range nature of the RTP/SCS, it is not possible to determine the exact location or timing of projects. Many of the projects included in the RTP/SCS are conceptual, with final alignments and locations to be decided in the future. In addition, the specific location of development projects is unknown. These projects will undergo project-specific environmental review to determine the exact type and magnitude of impacts. Kern COG does not have the authority to impose project specific mitigation measures on these projects, nor would such measures be appropriate without project specific study to determine potential impacts. The most effective mitigation measures are developed at the project level, often in consultation with CDFW. Further, due to the large number of special status species in the region (161) it is not feasible or practical for Kern COG to develop individual mitigation measures for each potential circumstance and each species.

However, to address CDFW's comments, Kern COG has expanded the discussion within the PEIR on the San Joaquin Kit Fox. Mitigation Measure **MM BIO-4** has also been expanded to specifically refer to San Joaquin Kit Fox. Changes to the PEIR are provided below.

The following text is inserted on page 4.4-46 below the heading for wildlife:

> San Joaquin Kit Fox den in right of ways, vacant lots, etc. and populations can fluctuate over time. Due to these fluctuations, a negative finding form biological surveys in any one year does not necessarily demonstrate absence of kit fox on a site. San Joaquin Kit Fox may also be attracted to construction materials (pipes, etc.) and construction footprints due to the type and level of activity (excavation, etc.) and the loose friable soils that are created as a result of intensive ground disturbance.

Page 4.4-51 of the PEIR is revised as follows:

MM BIO-4: Kern COG, through its Environmental Review Program/Intergovernmental Review process will facilitate and encourage implementing and local agencies to document special-status wildlife species and their habitats as follows:

> Retain a qualified wildlife biologist to document the presence or absence of suitable habitat for special-status wildlife in the project study area. Special attention shall be paid to the following species: San Joaquin Kit Fox, Swainson's Hawk, Tricolored Blackbird, Desert Tortoise, Mojave Ground Squirrel, Tipton Kangaroo Rat, Giant Kangaroo Rat and other kangaroo rat, San Joaquin Antelope Squirrel, California Tiger Salamander, Burrowing Owl, special status plant species and nesting birds. The following steps should be implemented to document special-status wildlife and their habitats for each project:
>
> > **Review Existing Information.** The wildlife biologist should review existing information to develop a list of special-status wildlife species that could occur in the project area. The following information should be reviewed as part of this process: the United States Fish and Wildlife Service (USFWS) special-status species list for the project region, CDFW's California Natural Diversity Database (CNDDB), previously prepared environmental documents, city and county general plans, habitat conservation plans (HCPs) and natural community conservation plans (NCCPs) (if applicable), and USFWS issued biological opinions for previous projects.

Coordinate with State and Federal Agencies. The wildlife biologist should coordinate with the appropriate agencies (CDFW, USFWS, and Caltrans) to discuss wildlife resource issues in the project region and determine the appropriate level of surveys necessary to document special-status wildlife and their habitats.

Conduct Field Studies. The wildlife biologist should evaluate existing habitat conditions and determine what level of biological surveys may be required. The type of survey required should depend on species richness, habitat type and quality, and the probability of special-status species occurring in a particular habitat type. As appropriate, CDFW should be consulted regarding survey protocols. Depending on the existing conditions in the project area and the proposed construction activity, one or a combination of the following levels of survey may be required:

Habitat Assessment. A habitat assessment determines whether suitable habitat is present. This type of assessment can be conducted at any time of year and is used to assess and characterize habitat conditions and to determine whether return surveys are necessary. If no suitable habitat is present, no additional surveys should be required.

Species-Focused Surveys. Species-focused surveys (or target species surveys) should be conducted if suitable habitat is present for special-status wildlife and if it is necessary to determine the presence or absence of the species in the project area. The surveys should focus on special-status wildlife species that have the potential to occur in the region. The surveys should be conducted during a period when the target species are present and/or active.

Protocol-Level Wildlife Surveys. The project proponent should comply with protocols and guidelines issued by responsible agencies for certain special-status species. USFWS and CDFW have issued survey protocols and guidelines for several special-status wildlife species that could occur in the project region, including (but not limited to) the California red-legged frog, blunt-nosed leopard lizard, desert tortoise and San Joaquin kit fox. The protocols and guidelines may require that surveys be conducted during a particular time of year and/or time of day when the species is present and active. Many survey protocols require that only a USFWS permitted, or CDFW-approved biologist perform the surveys. The project proponent should coordinate with the appropriate state or federal agency biologist before the initiation of protocol-level surveys to ensure that the survey

results would be valid. Because some species can be difficult to detect or observe, multiple field techniques may be used during a survey period and additional surveys may be required in subsequent seasons or years as outlined in the protocol or guidelines for each species.

Special-status wildlife or suitable habitat identified during the field surveys should be mapped and documented as part of the CEQA and NEPA documentation, as applicable.

Responses 1-5 and 1-6

These comments relate to Swainson's Hawk and Tricolored Blackbird. See **Response 1-4** for the findings in the PEIR regarding special status species and the need for mitigation measures.

The following text is inserted on page 4.4-62 following the second paragraph:

It is thought that the historic population of Swainson's hawks in California was as many as 17,136 pairs. In 1980 a report developed by Bloom estimated 375 (+50) breeding pairs of Swainson's hawks remaining in California. Bloom's report noted number to the greatest in the Central Valley and in the Great Basin area of northeastern California, with a few Swainson's hawk territories located in Shasta Valley, the Owens Valley, and the Mohave Desert. In 1988 a Department led survey effort revealed no change in Swainson's hawk distribution from the 1980. The 1988 effort led to an estimate of 430 pairs in the Central Valley and a state-wide estimate of 550 breeding pairs. In 2005 a state-wide survey was conducted in the known range. The results showed a state-wide estimate for the number breeding pairs at 2081. Surveys conducted in Butte to San Joaquin counties during the period 2002-2009 showed numbers of breeding pairs of Swainson's hawks at 593 in 2002, 1008 in 2003 and 941 in 2009.

Tricolored Blackbird (TRBL) are known to nest in alfalfa, wheat, and other low agricultural crop fields. TRBL aggregate and nest colonially, forming colonies of up to 100,000 nests.[1]. Approximately 86% of the global population is found in the San Joaquin Valley.[2,3] Increasingly, TRBL are forming

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1 Meese, R. J., E.C. Beedy, and W.J. Hamilton, III. 2014. Tricolored blackbird (Agelaius tricolor), The Birds of North America (P. G. Rodewald, Ed.). Ithaca: Cornell Lab of Ornithology; Retrieved from the Birds of North America: https://birdsna-org.bnaproxy.birds.cornell.edu/Species-Account/bna/species/tribla. Accessed December 15, 2017.

2 Weintraub, K., T.L. George, and S.J. Dinsmore. 2016. Nest survival of tricolored blackbirds in California's Central Valley. The Condor 118(4): 850–861.

3 Kelsey, R. 2008. Results of the tricolored blackbird 2008 census. Report submitted to U.S. Fish and Wildlife Service, Portland, OR, USA.

larger colonies that contain progressively larger proportions of the species' total population.[4] In 2008, for example, 55% of the species' global population nested in only two colonies, which were located in silage fields.[5] In 2017, approximately 30,000 TRBL were distributed among only 16 colonies in Merced County.[6] Nesting can occur synchronously, with all eggs laid within one week.[7] For these reasons, depending on timing, disturbance to nesting colonies can cause abandonment, significantly impacting TRBL populations.[8]

The development under the Plan could involve construction activity during the bird nesting season, which is generally from February 1 through September 15. Without appropriate avoidance and minimization measures species such as Swainson's Hawk and Tricolored Blackbird could be affected resulting in nest abandonment, and reduced nesting success (loss or reduced health or vigor of eggs or young). However, destruction of any active nest is a violation of the federal MBTA and/or the CFGC.

Mitigation Measure **MM BIO-12** on page 4.4-63 is revised as follows:

MM BIO-12: Kern COG, through its Environmental Review Program/Intergovernmental Review process will facilitate and encourage implementing and local agencies to incorporate Design Measures to Allow Animal Movement as follows:

Prior to design approval of individual projects that contain movement habitat, the implementing agency should incorporate economically viable design measures, as applicable and necessary, to allow wildlife or fish to move through the transportation corridor, both during construction activities and post construction. Such measures may include appropriately spaced breaks in a center barrier, or other measures that are designed to allow wildlife to move through the transportation corridor. If the project cannot be designed with these design measures due to traffic safety, etc., the implementing agency should consider mitigation measures to minimize impacts on biological resources, including coordinating with the appropriate regulatory agency (i.e., USFWS, National Marine Fisheries Service [NMFS], CDFW) to obtain regulatory permits

4 Ibid.

5 Ibid.

6 Meese, R.J. 2017. Results of the 2017 Tricolored Blackbird Statewide Survey. California Department of Fish and Wildlife, Wildlife Branch, Nongame Wildlife Program Report 2017-04, Sacramento, CA. 27 pp. + appendices.

7 Orians, G.H. 1961. The ecology of blackbird (Agelaius) social systems. Ecol. Monogr. 31:285-312.

8 Meese, R. J., E.C. Beedy, and W.J. Hamilton, III. 2014. Tricolored blackbird (Agelaius tricolor), The Birds of North America (P. G. Rodewald, Ed.). Ithaca: Cornell Lab of Ornithology; Retrieved from the Birds of North America: https://birdsna-org.bnaproxy.birds.cornell.edu/Species-Account/bna/species/tribla . Accessed December 15, 2017

and implement alternative project-specific mitigation prior to any construction activities Such measures include, but are not limited to, the following:

- Consult with the USFWS, United States Forest Service [USFS], CDFW, and local agencies, where impacts to birds afforded protection pursuant to the Migratory Bird Treaty Act during the breeding season may occur.

- Consult with local jurisdictions and other local organizations when impacts may occur to open space areas that have been designated as important for wildlife movement.

- Prohibit construction activities within 500 feet of occupied breeding areas for wildlife afforded protection pursuant to Title 14 § 460 of the California Code of Regulations protecting fur-bearing mammals, during the breeding season.

- Conduct a survey to identify active raptor and other migratory nongame bird nests by a qualified biologist at least two weeks before the start of construction at project sites from February 1 through August 31. A qualified wildlife biologist should be retained to determine of suitable habitat is present for Swainson's Hawk. If suitable habitat is present, a qualified wildlife biology should conduct surveys following the survey methods developed by the Swainson's Hawk Technical Advisory Committee be conducted by a qualified wildlife biologist prior to project implementation. If active nests are detected, CDFW recommends a minimum no-disturbance buffer of 0.5-mile be delineated around them until the breeding season has ended or until a qualified biologist has determined that the birds have fledged and are no longer reliant upon the nest or parental care for survival. If an active SWHA nest is detected during surveys and a 0.5-mile buffer is not feasible, consultation with CDFW is warranted to discuss how to implement the project and avoid take. If take cannot be avoided, take authorization through the acquisition of an Incidental Take Permit, pursuant to Fish and Game Code section 2081 subdivision (b) is necessary to comply with CESA. For Tricolored Blackbird, CDFW recommends implementation of a minimum 300-foot no-disturbance buffer around the colony in accordance with CDFW's "Staff Guidance Regarding Avoidance of Impacts to Tricolored Blackbird Breeding Colonies on Agricultural Fields in 2015" (CDFW 2015). CDFW advises that this buffer remain in place until the breeding season has ended or until a qualified biologist has determined that nesting has ceased, the birds have fledged, and are no longer reliant upon the colony or parental care for survival. It is important to note

that TRBL colonies can expand over time. For this reason, CDFW recommends conducting additional pre-activity surveys within 10 days prior of project initiation to reassess the colony's areal extent. If a TRBL nesting colony is detected during surveys, consultation with CDFW is warranted to discuss how to implement the project and avoid take, or if avoidance is not feasible, to acquire an ITP, pursuant to Fish and Game Code section 2081 subdivision (b), prior to any ground-disturbing activities.

- Prohibit construction activities with 250 feet of occupied nest of birds afforded protection pursuant to the Migratory Bird Treaty Act, during the breeding season.

- Ensure that suitable nesting sites for migratory nongame native bird species protected under the Migratory Bird Treaty Act and/or trees with unoccupied raptor nests should only be removed prior to February 1, or following the nesting season.

- Pursue mitigation banking to preserve habitat linkages and corridors (opportunities to purchase, maintain, and/or restore offsite habitat).

- Install wildlife fencing where appropriate to minimize the probability of wildlife injury due to direct interaction between wildlife and roads or construction. Where exclusion fencing it used, such fencing should be raised seven to eight inches above the ground for the length of the fencing with the bottom fencing material knuckled back to maintain movement and habitat connectivity for desert tortoise and Mohave ground squirrel.

- Where avoidance is determined to be infeasible, design sufficient conservation measures through coordination with local agencies and the regulatory agency (i.e., USFWS or CDFW) and in accordance with the respective counties and cities general plans to establish plans to mitigate for the loss of fish and wildlife movement corridors and/or wildlife nursery sites. The consideration of conservation measures may include the following measures where applicable:

  - Wildlife movement buffer zones
  - Corridor realignment
  - Appropriately spaced breaks in center barriers
  - Stream rerouting

- Culverts
- Creation of artificial movement corridors such as freeway under- or overpasses
- Other comparable measures

Where the Lead Agency has identified that a RTP project, or other regionally significant project, has the potential to impact other open space or nursery site areas, seek comparable coverage for these areas in consultation with the USFWS, CDFW, NMFS, or other local jurisdictions.

Response 1-7

The comment relates to desert tortoise. See **Response 1-4** for the findings in the PEIR regarding special status species and the need for mitigation measures. Mitigation Measure **MM BIO-5** includes the requirement to follow CDFW recommended survey protocols for desert tortoise.

Mitigation Measure **MM BIO-4** is revised to include mention of Desert Tortoise as shown in **Response 1-4**. Mitigation Measure **MM BIO-12** bullet point eight on page 4.4-64 of the PEIR is revised as shown above in **Response 1-5**.

Response 1-8

The comment relates to Mohave Ground Squirrel, Tipton Kangaroo Rat, and other kangaroo rats and San Joaquin Antelope Squirrel. See **Response 1-4** for the findings in the PEIR regarding special status species and the need for mitigation measures. See revisions to Mitigation Measure **MM BIO-4** above in **Response 1-4** for changes to the PEIR to include mention of Mohave Ground Squirrel, Tipton Kangaroo Rat, and other kangaroo rats and San Joaquin Antelope Squirrel.

Response 1-9

The comment relates to California Tiger Salamander (CTS) and recommends specific protocols to conduct surveys for CTS. See **Response 1-4** for the findings in the PEIR regarding special status species and the need for mitigation measures. See revisions to Mitigation Measure **MM BIO-4** above to include mention of CTS.

The following text is inserted on page 4.4-46 below the heading for wildlife:

<u>According to CDFW, CTS are known to occur in northwestern Kern County. CTS breed and develop in vernal and seasonal pools and stock ponds within grassland, woodland, and scrub habitat types.</u>

They require upland refuges (i.e., small mammal burrows) when not breeding and have been demonstrated to disperse up to 1.3 miles from aquatic habitat.[9]

Response 1-10

The comment relates to special status plant species. The RTP/SCS's ability to impact special status plant species is discussed under Impact BIO-1 of the PEIR. This impact was determined to be significant and unavoidable. See **Response 1-4**. Mitigation Measure **MM BIO-2** specifically addresses plant species and has been revised in accordance with CDFW's letter.

Mitigation Measure **MM BIO-2** on page 4.4-49 of the PEIR is revised as follows:

MM BIO-2: Kern COG, through its Environmental Review Program/Intergovernmental Review process will facilitate and encourage implementing and local agencies to document Special-Status Plant populations as follows:

Retain a qualified botanist to document the presence or absence of special-status plants before project implementation. Implement the following steps to document special-status plants:

Review Existing Information. The botanist should review the most current existing information to develop a list of special-status plants that have a potential to occur in the specific project area. Sources of information consulted should include CDFW's CNDDB, previously prepared environmental documents, city and county general plans, HCPs and NCCPs, and the CNPS electronic inventory.

Coordinate with Agencies. The botanist should coordinate with the appropriate agencies (CDFW, USFWS, Caltrans) to discuss botanical resource issues and determine the appropriate level of surveys necessary to document special-status plants.

Conduct Field Studies. The botanist should evaluate existing habitat conditions for each project and determine what level of botanical surveys may be required. The type of botanical survey should depend on species richness, habitat type and quality, and the probability of special-status species occurring in a particular habitat type.

9 Searcy, C. A., and H. B. Shaffer. 2011. Determining the migration distance of a vagile vernal pool specialist: How much land is required for conservation of California tiger salamanders? In Research and Recovery in Vernal Pool Landscapes, D. G. Alexander and R. A. Schlising, Eds. California State University, Chico, California.

Depending on these factors and the proposed construction activity, one or a combination of the following levels of survey may be required:

Habitat Assessment. A habitat assessment will be conducted to determine whether suitable habitat is present. This type of assessment can be conducted at any time of year and is used to assess and characterize habitat conditions and determine whether return surveys are necessary. If no suitable habitat is present, no additional surveys should be required.

Species-Focused Surveys. Species-focused surveys (or target species surveys) should be conducted if suitable habitat is present for special-status plants. The surveys should focus on special-status plants that could grow in the region and would be conducted during a period when the target species are evident and identifiable.

Floristic Protocol-Level Surveys. Floristic surveys that follow the CNPS Botanical Survey Guidelines should be conducted in areas that are relatively undisturbed and/or have a moderate to high potential to support special-status plants. The CNPS Botanical Survey Guidelines require that all species be identified to the level necessary to determine whether they qualify as special-status plants or are plant species with unusual or significant range extensions. The guidelines also require that field surveys be conducted when special-status plants that could occur in the area are evident and identifiable. To account for different special-status plant identification periods, one or more series of field surveys may be required in spring and summer months.

CDFW Protocols for Special Status Plant Species. CDFW advises following the Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Natural Communities.[10] This protocol, which is intended to maximize detectability, includes the identification of reference populations to facilitate the likelihood of field investigations occurring during the appropriate floristic period. In the absence of protocol-level surveys being performed, additional surveys may be necessary. Further, CDFW advises that a minimum no-disturbance buffer of at least 50 feet from the outer edge of the plant population(s) or specific habitat type(s) required by special status plant species be delineated around special status plant species. If buffers cannot be maintained, then consultation with CDFW is

10 CDFG, 2018. Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Natural Communities. California Department of Fish and Game, March 2018

advised to determine appropriate minimization and mitigation measures for impacts to special-status plant species. If a State- or federally listed plant species are identified during botanical surveys, then consultation with CDFW and/or the USFWS is recommended to determine the need for an Incidental Take Permit (issued by CDFW) or a Biological Opinion (issued by the USFWS).

Special-status plant populations identified during the field surveys should be mapped and documented as part of CEQA and NEPA process, as applicable.

Response 1-11

The comment relates to Burrowing Owl. See **Response 1-4**. Mitigation Measure **MM BIO-4** has been revised to include burrowing owl.

Response 1-12

The comment suggests the PEIR should evaluate potential impacts to other special status species that may be impacted by the RTP/SCS. See **Response 1-4**. The PEIR provides and appropriate program level analysis as sufficient detail for project specific analysis is not available at this time.

Response 1-13

The comment relates to nesting birds. See **Response 1-4**. The PEIR includes analysis of nesting birds under impact BIO-1 (see page 4.4-47 of the PEIR) and finds this impact to be significant and unavoidable. Mitigation Measure **MM BIO-12** has been revised to include additional information on nesting birds.

Response 1-14

The comment relates to the need for certain projects to require a Lake and Streambed Alteration Agreement. The 2022 RTP/SCS is a program level document and does not contain analysis of any one particular project. However, the PEIR recognizes these project-level requirements and in Mitigation Measure **MM BIO-6**, Kern COG, through its Environmental Review/Intergovernmental Review process, will facilitate and encourage implementing and local agencies to "[c]onsult with the CDFW pursuant to the provisions of Section 1600 of the State Fish and Game Code as they relate to Lakes and Streambeds."

Response 1-15

The commenter recommends consultation with the US Fish and Wildlife Service on potential impacts to federally listed species. The 2022 RTP/SCS is a program level document and does not contain analysis of any one particular project. However, the PEIR recognizes these project-level requirements and in Mitigation Measure **MM BIO-1** Kern COG commits to coordination with regulatory agencies to incorporate protection of sensitive natural communities and riparian habitats, designated open space or

protected wildlife habitat, local policies and tree preservation ordinances, applicable HCPs and NCCPs, or other related planning documents into Kern COG's ongoing regional planning efforts, consistent with the approach outlined in the California Wildlife Action Plan. Project-specific measures address consultation with USFWS (e.g., **MM BIO-2**, **MM BIO-4**, **MM BIO-6**, **MM BIO-8**, **MM BIO-9**, **MM BIO-11**, and **MM BIO-12**).

Response 1-16

The comment relates to the CNDDB database. Kern COG does not have any information to report to the CNDDB at this time and will share CDFW's request with its member jurisdictions.

Response 1-17

The comment relates to filing fees. Kern COG is aware of CDFW's filing fee assessment. The remainder of the comment is closing information and does not require a response.

San Joaquin Valley
AIR POLLUTION CONTROL DISTRICT

HEALTHY AIR LIVING

June 16, 2022

Becky Napier
Kern Council of Governments
1401 19th Street, Suite 300
Bakersfield, CA 93301

Project: Draft Program Environmental Impact Report for the Kern Council of Governments 2022 Regional Transportation Plan/ Sustainable Communities Strategy

District CEQA Reference No: 20220535

Dear Ms. Napier:

The San Joaquin Valley Air Pollution Control District (District) has reviewed the Draft Program Environmental Impact Report (DPEIR) for the 2022 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS) that was submitted by the Kern Council of Governments (Kern COG). Per the DPEIR, the purpose of the RTP/SCS is to develop a 24-year blueprint that establishes regional transportation goals, policies, and actions intended to guide development of the planned multimodal transportation systems in Kern County (Project). The Project area is located in Kern County which is located approximately 131 miles northeast of the City of Los Angeles. The Project lies within one of the communities in the state selected by the California Air Resources Board (CARB) for investment of additional air quality resources and attention under Assembly Bill (AB) 617 (Garcia) in an effort to reduce air pollution exposure in impacted disadvantaged communities. 1

The District offers the following comments regarding the Project:

1) **Assembly Bill 617**

AB 617 requires CARB and air districts to develop and implement Community Emission Reduction Programs (CERPs) in an effort to reduce air pollution exposure in impacted disadvantaged communities, like those in which the Project is located. The Shafter AB 617 community is one of the statewide communities selected by CARB for development and implementation of a CERP.

Samir Sheikh
Executive Director/Air Pollution Control Officer

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www.valleyair.org www.healthyairliving.com

Following extensive community engagement and collaboration with the Community Steering Committee, the CERP for the Shafter Community was adopted by the District's Governing Board in September 2019 and by CARB in February 2020.

During the development of the CERP, the Community Steering Committee expressed concerns regarding the proximity of emission sources to nearby sensitive receptors like schools, homes, day care centers, and hospitals, and the potential future industrial development within the community that may exacerbate the cumulative exposure burden for community residents. The Community Steering Committee also expressed the desire for more meaningful avenues of engagement surrounding the land-use decisions in the area. As these issues can most effectively be addressed through strong partnerships between community members and local land-use agencies. Furthermore, the District recommends future transportation projects assess the emission reductions measures and strategies included in the CERP, as appropriate, to align the Kern COG's work with the air pollution and exposure reduction strategies and measures outlined in the CERP. 1

For more information regarding the CERP approved for Shafter, please visit the District's website at:
http://community.valleyair.org/selected-communities/shafter/

2) Project Siting

The RTP/SCS is used to guide the development of the Regional Transportation Improvement Program in order to plan the construction of regional transportation projects that require State Department of Transportation (CalTrans), county transportation commissions, local transit agencies, and local governments (Cities and Counties) for approval. For future transportation projects, without appropriate mitigation and associated policy, future projects may contribute to negative impacts on air quality due to increased traffic and ongoing operational emissions. Appropriate project siting helps ensure there is adequate distance between differing land uses, which can prevent or reduce localized and cumulative air pollution impacts from business operations that are in close proximity to receptors (e.g., residences, schools, health care facilities, etc.). RTP/SCS siting-related goals, policies, and objectives should include measures and concepts outlined in the following resources: 2

- CARB's Air Quality and Land Use Handbook: A Community Health Perspective. The document includes tables with recommended buffer distances associated with various types of common sources (e.g., distribution centers, chrome platers, gasoline dispensing facilities, etc.), and can be found at: https://ww3.arb.ca.gov/ch/handbook.pdf

3) Project Related Emissions

The RTP/SCS is a program-level project where individual project-specific data may not be available at this time. As such, the District recommends that the DPEIR stipulate that future development projects within the RTP/SCS, which when implemented, characterize and compare project-level construction and operational air emissions to the District significance thresholds as identified in the District's Guidance for Assessing and Mitigating Air Quality Impacts: https://www.valleyair.org/transportation/GAMAQI.pdf.

The District also recommends that future individual development projects with air emissions above the aforementioned thresholds be mitigated to below the District significance thresholds or to the extent feasible. 3

3a) Construction Emissions

The District recommends, to reduce impacts from construction-related diesel exhaust emissions, that future individual development projects utilize the cleanest available off-road construction equipment, including the latest tier equipment.

3b) Operational Emissions

Operational (ongoing) air emissions from mobile sources and stationary sources should be analyzed separately for future individual development projects when more project-specific information is available. For reference, the District's significance thresholds are identified in the District's Guidance for Assessing and Mitigating Air Quality Impacts: https://www.valleyair.org/transportation/GAMAQI.pdf.

Recommended Mitigation Measure: At a minimum, project related impacts on air quality should be reduced to levels of significance through incorporation of measures that reduce Vehicle Miles Traveled (VMT). More information on transportation mitigation measures can be found at: http://www.valleyair.org/transportation/Mitigation-Measures.pdf.

4) Health Risk Screening/Assessment

Per Mitigation Measure AIR-4 in the DPEIR, future development projects within the RTP/SCS are required to be evaluated to determine potential health impacts on surrounding receptors (residences, businesses, hospitals, day-care facilities, health care facilities, etc.). 4

To determine potential health impacts on surrounding receptors a Prioritization and/or a Health Risk Assessment (HRA) should be performed for future

development projects. These health risk determinations should quantify and characterize potential Toxic Air Contaminants (TACs) identified by the Office of Environmental Health Hazard Assessment/California Air Resources Board (OEHHA/CARB) that pose a present or potential hazard to human health.

4

Health risk analyses should include all potential air emissions from the project, which include emissions from construction of the project, including multi-year construction, as well as ongoing operational activities of the project. Note, two common sources of TACs can be attributed to diesel exhaust emitted from heavy-duty off-road earth moving equipment during construction, and from ongoing operation of heavy-duty on-road trucks.

Prioritization (Screening Health Risk Assessment):
A "Prioritization" is the recommended method for a conservative screening-level health risk assessment. The Prioritization should be performed using the California Air Pollution Control Officers Association's (CAPCOA) methodology.

The District recommends that a more refined analysis, in the form of an HRA, be performed for any project resulting in a Prioritization score of 10 or greater. This is because the prioritization results are a conservative health risk representation, while the detailed HRA provides a more accurate health risk evaluation.

5

To assist land use agencies and project proponents with Prioritization analyses, the District has created a prioritization calculator based on the aforementioned CAPCOA guidelines, which can be found here:
http://www.valleyair.org/busind/pto/emission_factors/Criteria/Toxics/Utilities/PRIORITIZATION-CALCULATOR.xls

Health Risk Assessment:
Prior to performing an HRA, it is strongly recommended that land use agencies/ project proponents develop and submit for District review a health risk modeling protocol that outlines the sources and methodologies that will be used to perform the HRA. This step will ensure all components are addressed when performing the HRA.

6

A development project would be considered to have a potentially significant health risk if the HRA demonstrates that the project-related health impacts would exceed the District's significance threshold of 20 in a million for carcinogenic risk, or 1.0 for either the Acute or Chronic Hazard Indices.

A project with a significant health risk would trigger all feasible mitigation measures. The District strongly recommends that development projects that result in a significant health risk not be approved by the land use agency.

The District is available to review HRA protocols and analyses. For HRA submittals please provide the following information electronically to the District for review:

- HRA (AERMOD) modeling files
- HARP2 files
- Summary of emissions source locations, emissions rates, and emission factor calculations and methodologies.

6

For assistance, please contact the District's Technical Services Department by:

- E-Mailing inquiries to: hramodeler@valleyair.org
- Calling (559) 230-5900

5) Ambient Air Quality Analysis

An Ambient Air Quality Analysis (AAQA) uses air dispersion modeling to determine if emissions increases from a project will cause or contribute to a violation of State or National Ambient Air Quality Standards. The District recommends an AAQA be performed for any future individual development projects with emissions that exceed 100 pounds per day of any pollutant.

7

An acceptable analysis would include emissions from both project-specific permitted and non-permitted equipment and activities. The District recommends consultation with District staff to determine the appropriate model and input data to use in the analysis.

Specific information for assessing significance, including screening tools and modeling guidance, is available online at the District's website: www.valleyair.org/ceqa.

6) Recommended Emission Reduction Strategies to Reduce Emissions from Future Projects within the RTP/SCS

6a) Voluntary Emission Reduction Agreement

8

Future development projects within the RTP/SCS could have a significant impact on air quality. The District recommends the DPEIR include a feasibility discussion on implementing a Voluntary Emission Reduction Agreement (VERA) as a mitigation measure for future development projects that are determined to exceed the District's CEQA significance thresholds.

A VERA is a mitigation measure by which the project proponent provides pound-for-pound mitigation of emissions increases through a process that develops, funds, and implements emission reduction projects, with the District

serving a role of administrator of the emissions reduction projects and verifier of the successful mitigation effort. To implement a VERA, the project proponent and the District enter into a contractual agreement in which the project proponent agrees to mitigate project specific emissions by providing funds for the District's incentives programs. The funds are disbursed by the District in the form of grants for projects that achieve emission reductions. Thus, project-related impacts on air quality can be mitigated. Types of emission reduction projects that have been funded in the past include electrification of stationary internal combustion engines (such as agricultural irrigation pumps), replacing old heavy-duty trucks with new, cleaner, more efficient heavy-duty trucks, and replacement of old farm tractors. 8

In implementing a VERA, the District verifies the actual emission reductions that have been achieved as a result of completed grant contracts, monitors the emission reduction projects, and ensures the enforceability of achieved reductions. After the project is mitigated, the District certifies to the Lead Agency that the mitigation is completed, providing the Lead Agency with an enforceable mitigation measure demonstrating that project-related emissions have been mitigated. To assist the Lead Agency and project proponent in ensuring that the environmental document is compliant with CEQA, the District recommends the environmental document includes an assessment of the feasibility of implementing a VERA.

6b) Vegetative Barriers and Urban Greening

For future development projects within the Project area, the District suggests considering incorporating vegetative barriers and urban greening as a measure to further reduce air pollution exposure on sensitive receptors (e.g., residences, schools, healthcare facilities).

While various emission control techniques and programs exist to reduce air quality emissions from mobile and stationary sources, vegetative barriers have been shown to be an additional measure to potentially reduce a population's exposure to air pollution through the interception of airborne particles and the update of gaseous pollutants. Examples of vegetative barriers include, but are not limited to the following: trees, bushes, shrubs, or a mix of these. Generally, a higher and thicker vegetative barrier with full coverage will result in greater reductions in downwind pollutant concentrations. In the same manner, urban greening is also a way to help improve air quality and public health in addition to enhancing the overall beautification of a community with drought tolerant, low-maintenance greenery. 9

6c) District's Bikeway Incentive Program

Incorporating design elements (e.g., installing bikeways) that enhance walkability and connectivity can result in an overall reduction of VMT and improve air quality within the area. Since future development projects within the Project area may install bikeways, they may be eligible for funding through the District's Bikeway Incentive Program. The Bikeway Incentive Program provides funding for eligible Class 1 (Bicycle Path Construction), Class II (Bicycle Lane Striping), or Class III (Bicycle Route) projects. These incentives are designed to support the construction of new bikeway projects to promote clean air through the development of a widespread, interconnected network of bike paths, lanes, or routes and improving the general safety conditions for commuter bicyclists. Only municipalities, government agencies, or public educational institutions are eligible to apply. More information on the grant program can be found at:
http://valleyair.org/grants/bikepaths.htm

Guidelines and Project Eligibility for the grant program can be found at:
http://valleyair.org/grants/documents/bikepaths/2015_Bikeway_Guidelines.pdf

7) District Rules and Regulations

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The District issues permits for many types of air pollution sources, and regulates some activities that do not require permits. A project subject to District rules and regulations would reduce its impacts on air quality through compliance with the District's regulatory framework. In general, a regulation is a collection of individual rules, each of which deals with a specific topic. As an example, Regulation II (Permits) includes District Rule 2010 (Permits Required), Rule 2201 (New and Modified Stationary Source Review), Rule 2520 (Federally Mandated Operating Permits), and several other rules pertaining to District permitting requirements and processes.

The list of rules below is neither exhaustive nor exclusive. Current District rules can be found online at: www.valleyair.org/rules/1ruleslist.htm. To identify other District rules or regulations that apply to future development projects, or to obtain information about District permit requirements, the project proponents are strongly encouraged to contact the District's Small Business Assistance (SBA) Office at (661) 392-5665.

7a) District Rule 9510 - Indirect Source Review

The purpose of District Rule 9510 is to reduce the growth in both NOx and PM emissions associated with development and transportation projects from mobile and area sources; specifically, the emissions associated with the construction and subsequent operation of development projects. The Rule requires

developers to mitigate their NOx and PM emissions by incorporating clean air design elements into their projects. Should the proposed development project clean air design elements be insufficient to meet the required emission reductions, developers must pay a fee that ultimately funds incentive projects to achieve off-site emissions reductions.

Accordingly, any future transportation or transit development projects within the RTP/SCS may be subject to District Rule 9510 if upon full buildout, construction exhaust emissions equal or exceed two tons of NOx or two tons of PM.
In the case the individual transportation development project is subject to Rule 9510, per Section 5.0 of the rule, an Air Impact Assessment (AIA) application is required to be submitted no later than applying for project-level approval from a public agency. As of the date of this letter, the District has not received an AIA application for this Project. Please inform the project proponent to immediately submit an AIA application to the District to comply with District Rule 9510. It is preferable for the applicant to submit an AIA application as early as possible in the public agency's approval process so that proper mitigation and clean air design under District Rule 9510 can be incorporated into the public agency's analysis.

Information about how to comply with District Rule 9510 can be found online at: http://www.valleyair.org/ISR/ISRHome.htm. 10

The AIA application form can be found online at: http://www.valleyair.org/ISR/ISRFormsAndApplications.htm.

District staff is available to provide assistance with determining if future development projects will be subject to Rule 9510, and can be reached by phone at (559) 230-5900 or by email at ISR@valleyair.org.

7b) District Regulation VIII (Fugitive PM10 Prohibitions)

The project proponent may be required to submit a Construction Notification Form or submit and receive approval of a Dust Control Plan prior to commencing any earthmoving activities as described in Regulation VIII, specifically Rule 8021 – *Construction, Demolition, Excavation, Extraction, and Other Earthmoving Activities.*

Should the project result in at least 1-acre in size, the project proponent shall provide written notification to the District at least 48 hours prior to the project proponents intent to commence any earthmoving activities pursuant to District Rule 8021 (Construction, Demolition, Excavation, Extraction, and Other Earthmoving Activities). Also, should the project result in the disturbance of 5-acres or more, or will include moving, depositing, or relocating more than 2,500 cubic yards per day of bulk materials, the project proponent shall submit to the

District a Dust Control Plan pursuant to District Rule 8021 (Construction, Demolition, Excavation, Extraction, and Other Earthmoving Activities). For additional information regarding the written notification or Dust Control Plan requirements, please contact District Compliance staff at (559) 230-5950.

The application for both the Construction Notification and Dust Control Plan can be found online at:
https://www.valleyair.org/busind/comply/PM10/forms/DCP-Form.docx

Information about District Regulation VIII can be found online at:
http://www.valleyair.org/busind/comply/pm10/compliance_pm10.htm

7c) District Rule 4601 (Architectural Coatings)

Future development projects may be subject to District Rule 4601 if expected to utilize architectural coatings. Architectural coatings are paints, varnishes, sealers, or stains that are applied to structures, portable buildings, pavements or curbs. The purpose of this rule is to limit VOC emissions from architectural coatings. In addition, this rule specifies architectural coatings storage, cleanup and labeling requirements. Additional information on how to comply with District Rule 4601 requirements can be found online at:
http://www.valleyair.org/rules/currntrules/r4601.pdf

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7d) Other District Rules and Regulations

Future development projects may also be subject to the following District rules: Rule 4102 (Nuisance), and Rule 4641 (Cutback, Slow Cure, and Emulsified Asphalt, Paving and Maintenance Operations).

8) Future Development Projects / Land Use Agency Referral Documents

Future development projects may require an environmental review and air emissions mitigation. A project's referral documents and environmental review documents provided to the District for review should include a project summary, the land use designation, project size, air emissions quantifications and impacts, and proximity to sensitive receptors and existing emission sources, and air emissions mitigation measures. For reference and guidance, more information can be found in the District's Guidance for Assessing and Mitigating Air Quality Impacts at:
https://www.valleyair.org/transportation/GAMAQI.pdf

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Letter 2

If you have any questions or require further information, please contact Harout Sagherian by e-mail at Harout.Sagherian@valleyair.org or by phone at (559) 230-5860.

Sincerely,

Brian Clements
Director of Permit Services

For: Mark Montelongo
Program Manager

Letter 2 **San Joaquin Valley Air Pollution Control District**
Central Region
Brian Clements, Program Manager
1990 E. Gettysburg Avenue
Fresno, CA 93726

Response 2-1

The comment provides introductory information regarding the San Joaquin Valley Air Pollution Control District (District) and its programs, specifically its community Emission Reduction Program under Assembly Bill 617. The comments do not relate to CEQA, and no response is necessary.

Response 2-2

The comment suggests the use of California Air Resources Board's (CARB's) *Air Quality and Land Use Handbook* when siting projects. Kern COG provides broad land use goals and policies related to transportation and growth in the region. Kern COG does not specifically site projects but does encourage jurisdictions to consider factors such as air quality when planning for future growth and transportation. Chapter 4 of the RTP/SCS, the Sustainable Communities Strategy indicates that the 2022 RTP/SCS "seeks to guide the Kern region toward a stronger economy, healthier environment and improved quality of life for everyone, while ensuring each community's independence to determine the best path to that future." The SCS goes on to state that one of the goals of the SCS is to improve air quality (see page 4-3) and that one of the key components of the SCS is a sustainable regional forecasted development pattern that when integrated with the transportation network enables the region to accommodate future growth in a manner that reduces passenger vehicle emissions, enhances economic vitality, promotes housing affordability, and encourages resource land conservation while preserving private property rights and local land use decision making authority (see page 4-7). Kern COG encourages a land use pattern that reduces the potential for impacts on sensitive receptors; however, ultimately, local jurisdictions determine the location of housing, not Kern COG.

The PEIR analyzes the potential for the Plan to place more housing within 500 feet of roadways and finds this impact would be significant and unavoidable and includes Mitigation Measure AIR-3 (provided below) to reduce potential impacts.

MM AIR-3: Kern COG shall pursue the following activities in reducing the impact associated with health risk within 500 feet of freeways and high-traffic volume roadways:

- Participate in on-going statewide deliberations on health risks near freeways and high-traffic volume roadways. This involvement includes inputting to the statewide

process by providing available data and information such as the current and projected locations of sensitive receptors relative to transportation infrastructure;

- Work with air agencies including CARB and the air districts in the Kern COG region to support their work in monitoring the progress on reducing exposure to emissions of PM10 and PM2.5 for sensitive receptors, including schools and residents within 500 feet of high-traffic volume roadways;

- Encourage project sponsors to incorporate recommendations included in CARB's *Air Quality and Land Use Handbook* as appropriate.

- Work with stakeholders to identify planning and development practices that are effective in reducing health impacts to sensitive receptors; and

- Share information on all of the above efforts with stakeholders, member cities, counties and the public.

Response 2-3

The commenter suggests Kern COG stipulate future development undergo project level air quality review. Future projects will undergo environmental review, including air quality analysis, as required by either CEQA or the National Environmental Policy Act (NEPA). The PEIR includes several air quality related measures (AIR-1 through AIR-7) that will help reduce construction and operational emissions from future projects. These measures will assist in implementing cleaner construction equipment on construction sites and encouraging fleet turnover to cleaner cars. The SCS also includes strategies that will help reduce VMT overall in the region on a per capita level, and meets the targets set by CARB for emissions reductions.

Response 2-4

The comment provides additional recommendations for project-level Health Risk Assessments (HRA). As described in AIR-4 (page 4.3-55 of the PEIR), any HRA will be conducted using the California Air Resources Board and the Office of Environmental Health and Hazard Assessment requirements.

Response 2-5

The comment encourages use of California Air Pollution Control Officers Association (CAPCOA) methodology prior to preparation of an HRA as a screening tool at the project-level. Kern COG recommends an HRA be prepared using CARB and Office of Environmental Health Hazard Assessment [OEHHA] requirements and encourages project sponsors to use CAPCOA's HRA screening tool as appropriate.

Response 2-6

The commenter encourages project sponsors to coordinate with the District prior to performing an HRA. Kern COG concurs and encourages lead agencies and project sponsors to coordinate with the District to determine the appropriate methodology for an HRA.

Response 2-7

The comment provides information regarding the District's preferred approach to ambient air quality analysis. It does not raise an issue with the PEIR.

Response 2-8

The comment suggests implementation of a Voluntary Emission Reduction Agreement (VERA) as a mitigation measure. The 2022 RTP/SCS is a long-range planning document that does not includes specific projects. Kern COG is not the implementing agency for the projects included in the RTP/SCS and therefore is not the appropriate agency to enter into a mitigation agreement. Kern COG encourages project sponsors to enter into a VERA with the District as appropriate to reduce project emissions.

Response 2-9

The comment relates to vegetative barriers. Kern COG concurs that vegetative barriers can provide additional air quality reductions. Mitigation Measure **MM AIR-6** (page 4.3-55) encourages vegetive barriers:

MM AIR-6: Kern COG, through its Environmental Review Program/Intergovernmental Review process will facilitate and encourage implementing and local agencies, as applicable and feasible, to plant appropriate vegetation to reduce PM10/PM2.5 when constructing a sensitive receptor within 500 feet of freeways and high-traffic volume roadways generating substantial diesel particulate emissions.

Response 2-10

The comment provides information on the following District programs and rules: District's bikeway incentive program, District Rule 9510- Indirect Source Review, District Regulation VIII (Fugitive PM10 Prohibitions), District Rule 4601 (Architectural Coatings) and Rules 4102 (Nuisance), 4641 (cutback, Slow Cure, and Emulsified Asphalt, Paving and Maintenance Operations). District Regulation VIII (Fugitive PM10 Prohibitions) is included in the Regulatory Framework in Section 4.2 Air Quality. The additional rules have also been added to the PEIR.

The following text is added to page 4.3-29 of the PEIR:

District Rule 9510 – Indirect Source Review

The purpose of District Rule 9510 is to reduce the growth in both NOx and PM emissions associated with development and transportation projects from mobile and area sources. The rule requires developers to mitigate their NOx and PM emissions by incorporating clean air design elements into their projects. Should the clean air design elements be insufficient to meet the required emission reductions, developers must pay a fee that ultimate funds incentive projects to achieve off site emissions reductions.

District Rule 4601 (Architectural Coatings)

Architectural coatings are paints, varnishes, sealers, or stains that are applied to structures, portable buildings, pavements or curbs. The purpose of the rule is to limit VOC emissions from architectural coatings. In addition, this rule specifies architectural coatings storage, cleanup and labeling requirements.

Rule 4102 Nuisance

Rule 4102 prohibits the release of any air contaminants in quantities that may injure or cause nuisance to the public.

Rule 4641 Cutback, Slow Cure, and Emulsified Asphalt, Paving and Maintenance Operations

The purpose of this rule is to limit VOC emissions by restricting the application and manufacturing of certain types of asphalt for paving and maintenance operations. The rule applies to the manufacture and use of cutback asphalt, slow cure asphalt and emulsified asphalt for paving and maintenance operations.

As Kern COG is an MPO and not an implementing agency, it should be noted that these rules do not directly apply to Kern COG but will apply to individual project sponsors. With respect to Rule 9510 Indirect Source Review, Kern COG is not required to submit an Air Impact Assessment (AIA) application for the 2022 RTP/SCS.

Response 2-11

The comment provides guidance to future projects regarding their submittals to the District. The comment does not relate to the PEIR. No response is required.

3.0 MITIGATION MONITORING AND REPORTING PROGRAM

3.1 INTRODUCTION

The Mitigation Monitoring and Reporting Program (MMRP) has been prepared in conformance with Section 21081.6 of the California Environmental Quality Act (CEQA). It is the intent of this program to: (1) verify satisfaction of the required mitigation measures of the Program EIR (PEIR); (2) provide a methodology to document implementation of the required mitigation measures; (3) provide a record of the Monitoring Program; (4) identify monitoring responsibility; (5) establish administrative procedures for the clearance of mitigation measures; (6) establish the frequency and duration of monitoring; and (7) use existing review processes wherever feasible.

This MMRP describes the procedures that will be used to implement the mitigation measures adopted in connection with the approval of the project and the methods of monitoring such actions. It takes the form of a table identifying the responsible entity and timing for monitoring each mitigation measure.

The PEIR identifies programmatic mitigation measures to be implemented by Kern COG and identifies mitigation measures that Kern COG will encourage implementing and local agencies to implement as appropriate as part of project specific environmental review for those projects taking advantage of California Environmental Quality Act streamlining.

Kern COG has no authority to impose mitigation measures on individual projects for which it is not the lead agency. Mitigation measures in this the PEIR that include the language, "Kern COG through its Environmental Review Program/Intergovernmental Review process will facilitate and encourage implementing and local agencies to …" are intended to be used by projects seeking to use this PEIR for CEQA streamlining (e.g., under SB 375, SB 743, and SB 226) and tiering. For projects seeking to use CEQA streamlining and/or tier from the 2022 Regional Transportation Plan (RTP) PEIR, mitigation measures included in this PEIR (or equivalent) should be required by the lead agency as appropriate and applicable.

Many lead agencies have existing regulations, policies, and/or standard conditions of approval that address potential impacts. Nothing in the PEIR is intended to supersede existing regulations and policies of individual jurisdictions. Since Kern COG has no authority to impose mitigation measures, mitigation measures to be implemented by local jurisdictions are subject to a city or county's independent discretion as to whether measures are applicable to projects in their respective jurisdictions. Lead agencies may use, amend, or not use measures identified in this PEIR as appropriate to address project-specific conditions. The determination of significance and identification of appropriate mitigation is solely the responsibility of the lead agency.

Table 3.0-1
Mitigation Monitoring and Reporting Program Matrix

	Mitigation Measure	Mitigation Monitoring Timing	Responsible Monitoring Entity
Impact – Aesthetics			
AES-1:	Impacts to aesthetic resources shall be minimized through cooperation, information sharing regarding the locations of designated scenic vistas, and regional program development as part of Kern COG's ongoing regional planning efforts.	Ongoing over the life of the plan	Kern COG
AES-2:	Kern COG, through its Environmental Review Program/Intergovernmental Review process will facilitate and encourage implementing and local agencies to identify and protect panoramic views and significant landscape features or landforms and implement project-specific mitigation as applicable. If it is determined that a project would significantly obstruct scenic views, implementing and local agencies should consider alternative designs that seek to avoid and/or minimize obstruction of scenic views to ensure compliance with Caltrans regulations for scenic vistas and the goals and policies with county and city general plans as applicable and feasible. Project-specific design measures may include reduction in height of improvements or width of improvements to reduce obstruction of views, or relocation of improvements to reduce obstruction of views. Additional measures may include the following, or other comparable measures identified by the Lead Agency: • Use a palette of colors, textures, building materials that are graffiti-resistant, and/or plant materials that complement the surrounding landscape and development. • Use contour grading to better match surrounding terrain. Contour edges of major cut-and-fill to provide a more natural looking finished profile. • Use alternating facades to "break up" large facades and provide visual interest. • Design new corridor landscaping to respect existing natural and man-made features and to complement the dominant landscaping of the surrounding areas. • Replace and renew landscaping along corridors with road widenings, interchange projects, and related improvements. • Retain or replace trees bordering highways, so that clear-cutting is not evident. • Provide new corridor landscaping that respects and provides appropriate transition to existing natural and man-made features and is complementary to the dominant landscaping or native habitats of surrounding areas. • Implement design guidelines, local policies, and programs aimed at protecting views of scenic corridors and avoiding visual intrusions in design of projects to minimize contrasts in scale and massing between the project and surrounding natural forms and developments. Avoid, if possible, large cuts and fills when the visual environment (natural or urban) would be	Ongoing over the life of the plan	Implementing and local agencies as appropriate as part of CEQA streamlined project-specific environmental review. Kern COG to review as part of responsibility under IGR process.

	Mitigation Measure	Mitigation Monitoring Timing	Responsible Monitoring Entity
	substantially disrupted. Site or design of projects should minimize their intrusion into important viewsheds and use contour grading to better match surrounding terrain.		
AES-3:	Kern COG, through its Environmental Review Program/Intergovernmental Review process will facilitate and encourage implementing and local agencies to protect panoramic views and views of significant landscape features or landforms and implement project-specific mitigation as applicable. Kern COG will facilitate and encourage implementing and local agencies to consider taking the following (or equivalent) actions: • Require that the scale and massing of new development in higher-density areas provide appropriate transitions in building height and bulk that are sensitive to the physical and visual character of adjoining neighborhoods that have lower development intensities and building heights; ensure building heights stepped back from sensitive adjoining uses to maintain appropriate transitions in scale and to protect scenic views; • Avoid siting electric towers, solar power facilities, wind power facilities, communication transmission facilities and/or above ground lines along scenic roadways and routes, to the maximum feasible extent;	Ongoing over the life of the plan	Implementing and local agencies as appropriate as part of CEQA streamlined project-specific environmental review. Kern COG to review as part of responsibility under IGR process
AES-4:	Kern COG, through its Environmental Review Program/Intergovernmental Review process will facilitate and encourage implementing and local agencies to design projects to be visually compatible with surrounding areas that possess high aesthetic value. Implementing and local agencies should design projects to minimize contrasts in scale and massing between the project and surrounding natural forms and development. The design of projects should minimize intrusion into important viewsheds and use contour grading to better match surrounding terrain. To the extent feasible, landscaping should be designed to add significant natural elements and visual interest to soften hard edges. Projects should, to the extent feasible, avoid large cuts and fills when the visual environment (natural or urban) would be substantially disrupted.	Ongoing over the life of the plan	Implementing and local agencies as appropriate as part of CEQA streamlined project-specific environmental review. Kern COG to review as part of responsibility under IGR process
AES-5:	Kern COG, through its Environmental Review Program/Intergovernmental Review process will facilitate and encourage implementing and local agencies to establish development standards for visually sensitive areas. Prior to approval of individual projects, Kern COG will encourage and facilitate implementing and local agencies to apply such development standards to maintain compatibility with surrounding natural areas, including site coverage, building height and massing, building materials and color, landscaping, site grading, etc.	Ongoing over the life of the plan	Implementing and local agencies as appropriate as part of CEQA streamlined project-specific environmental review. Kern COG to review as part of responsibility under IGR process
AES-6:	Kern COG, through its Environmental Review Program/Intergovernmental Review process will facilitate and encourage implementing and local agencies to ensure that sites should be kept in a blight/nuisance-free condition. Any existing blight or nuisance should be abated within 60 to 90 days of approval, unless an earlier date is specified elsewhere.	Ongoing over the life of the plan	Implementing and local agencies as appropriate as part of CEQA streamlined project-specific environmental review. Kern COG to review as part of responsibility under IGR process

	Mitigation Measure	Mitigation Monitoring Timing	Responsible Monitoring Entity
AES-7:	Kern COG, through its Environmental Review Program/Intergovernmental Review process will facilitate and encourage implementing and local agencies to design measures to reduce glare, light, and shadow. As part of planning, design, and engineering for projects, implementing and local agencies should ensure that projects proposed near light-sensitive uses avoid substantial spillover lighting. Design measures could include the following: • Use lighting fixtures that are adequately shielded to a point below the light bulb and reflector and that prevent unnecessary glare onto adjacent properties. • Restrict the operation of outdoor lighting for construction and operation activities to the hours of 7:00 a.m. to 10:00 p.m. • Use high pressure sodium and/or cut-off fixtures instead of typical mercury-vapor fixtures for outdoor lighting. • Use unidirectional lighting to avoid light trespass onto adjacent properties. • Design exterior lighting to confine illumination to the project site, and/or to areas which do not include light-sensitive uses. • Provide structural and/or vegetative screening from light-sensitive uses. • Shield and direct all new street and pedestrian lighting away from light-sensitive off-site uses. • Use non-reflective glass or glass treated with a non-reflective coating for all exterior windows and glass used on building surfaces. • Architectural lighting shall be directed onto the building surfaces and have low reflectivity to minimize glare and limit light onto adjacent properties.	Ongoing over the life of the plan	Implementing and local agencies as appropriate as part of CEQA streamlined project-specific environmental review. Kern COG to review as part of responsibility under IGR process
Impact – Agricultural Resources			
AG-1:	Kern GOG shall facilitate minimizing future impacts to Important Farmland resources through cooperation, information sharing, and regional program development as part of Kern COG's ongoing regional planning efforts, such as web-based planning tools for local government and other GIS tools and data services. Lead Agencies, such as county and city planning departments, shall be consulted during this update process.	Ongoing over the life of the plan	Kern COG
AG-2:	Kern COG shall work with member agencies and the region's farmland interests to develop regional best practices information for buffering farmland from urban encroachment, resolving conflicts that prevent farming on hillsides and other designated areas, and closing loopholes that allow conversion of non-farm uses without a grading permit.	Ongoing over the life of the plan	Kern COG

	Mitigation Measure	Mitigation Monitoring Timing	Responsible Monitoring Entity
AG-3:	Kern COG, through its Environmental Review Program/Intergovernmental Review process will facilitate and encourage implementing and local agencies to establish preservation ratios to minimize loss of prime, unique, and statewide importance farmland, such as the preservation of 1 acre of unprotected agricultural land being permanently conserved for each acre of agricultural land developed on major projects affecting more than 100 acres of agricultural land, or as consistent with local agencies best practice.	Ongoing over the life of the plan	Implementing and local agencies as appropriate as part of CEQA streamlined project-specific environmental review. Kern COG to review as part of responsibility under IGR process
AG-4:	Kern COG, through its Environmental Review Program/Intergovernmental Review process will facilitate and encourage implementing and local agencies to encourage urban development, in place of development in rural and sensitive areas. Local jurisdictions should seek funding to prepare specific plans and related environmental documents to facilitate mixed-use development, and to allow these areas to serve as receiver sites for transfer of development rights away from environmentally sensitive lands and rural areas outside established spheres of influence and urban service district boundaries.	Ongoing over the life of the plan	Implementing and local agencies as appropriate as part of CEQA streamlined project-specific environmental review. Kern COG to review as part of responsibility under IGR process
AG-5:	Kern COG, through its Environmental Review Program/Intergovernmental Review process will facilitate and encourage implementing and local agencies to identify and minimize impacts to agricultural resources through project design. Prior to the design approval of RTP transportation projects, the implementing agency should assess the project area for agricultural resources and constraints. For federally funded projects, implementing and local agencies are required to follow the rules and regulations of Farmland Protection Policy Act including determining the impact by completing the Farmland Conversion Impact Rating form (AD-1006). For non-federally funded projects, implementing and local agencies should assess projects for the presence of important farmlands (prime farmland, unique farmland, farmland of statewide importance), and if present, perform a Land Assessment and Site Evaluation (LESA). If significant agricultural resources are identified within the limits of a project, implementing and local agencies should consider alternative designs that seek to avoid and/or minimize impacts to the agricultural resources. Design measures could include, but are not limited to, reducing the footprint of a roadway or development or relocating/realigning a project to avoid important and significant farmlands. If a project cannot be designed without complete avoidance of important or significant farmlands, implementing and local agencies should compensate for unavoidable conversion impacts in accordance with the Farmland Protection Policy Act and local and regional standards, which may include enrolling off-site agricultural lands under a Williamson Act contract or other conservation or agricultural easement, mitigation banks, or paying mitigation fees.	Ongoing over the life of the plan	Implementing and local agencies as appropriate as part of CEQA streamlined project-specific environmental review. Kern COG to review as part of responsibility under IGR process
AG-6:	Kern COG, through its Environmental Review Program/Intergovernmental Review process will facilitate and encourage implementing and local agencies to establish preservation ratios to minimize loss of forest land, and timberland, such as 1 acre of unprotected forest land and timber land to be permanently conserved for each acre of open space developed as a result of individual projects affecting more than 100 acres of forest land and timberland.	Ongoing over the life of the plan	Implementing and local agencies as appropriate as part of CEQA streamlined project-specific environmental review. Kern COG to review as part of responsibility under IGR process

Mitigation Measure	Mitigation Monitoring Timing	Responsible Monitoring Entity
AG-7: Kern COG, through its Environmental Review Program/Intergovernmental Review process will facilitate and encourage implementing and local agencies to implement design features in transportation projects to minimize impacts. Implementing agencies should consider corridor realignment, buffer zones and setbacks, and berms and fencing where feasible, to avoid forest lands and timberlands and to reduce conflicts between transportation uses and forest and timberlands.	Ongoing over the life of the plan	Implementing and local agencies as appropriate as part of CEQA streamlined project-specific environmental review. Kern COG to review as part of responsibility under IGR process
AG-8: Kern COG, through its Environmental Review Program/Intergovernmental Review process will facilitate and encourage implementing and local agencies to consider tree plantings at a minimum 1:1 ratio to mitigate impacts to forest lands.	Ongoing over the life of the plan	Implementing and local agencies as appropriate as part of CEQA streamlined project-specific environmental review. Kern COG to review as part of responsibility under IGR process
Impact – Air Quality		
AIR-1: Kern COG, through its Environmental Review Program/Intergovernmental Review process will facilitate and encourage implementing and local agencies to require contractors to assemble a comprehensive inventory list (i.e., make, model, engine year, horsepower, emission rates) of all heavy-duty off-road (portable and mobile) equipment (50 horsepower and greater) that could be used an aggregate of 40 or more hours for the construction project and apply the following: • Prepare a plan for approval by the applicable air district demonstrating that the heavy-duty (equal to or greater than 50 horsepower) off-road equipment to be used in the construction project, including owned, leased and subcontractor vehicles, will achieve a project wide fleet-average 20 percent NOx reduction and 45 percent particulate reduction compared to the most recent CARB fleet average at time of construction. A Construction Mitigation Calculator (MS Excel) may be downloaded from the Sacramento Metropolitan Air Quality Management District (SMAQMD) web site to perform the fleet average evaluation http://www.airquality.org/ceqa/index.shtml. Acceptable options for reducing emissions may include use of late model engines, low-emission diesel products, alternative fuels, engine retrofit technology (Carl Moyer Guidelines), after-treatment products, voluntary offsite mitigation projects, provide funds for air district off-site mitigation projects, and/or other options as they become available. The air district should be contacted to discuss alternative measures. • Ensure that all construction equipment is properly tuned and maintained. • Minimize idling time to 5 minutes – saves fuel and reduces emissions. • Provide an operational water truck on-site at all times. Apply water to control dust as needed to prevent dust impacts off-site. • Utilize existing power sources (e.g., power poles) or clean fuel generators rather than temporary power generators. • Develop a traffic plan to minimize traffic flow interference from construction activities. The plan may include advance public notice of routing, use of public transportation, and satellite parking areas with a shuttle service. Schedule operations affecting traffic for off-peak hours. Minimize obstruction of through-traffic lanes. Provide a flag person to guide traffic properly and ensure	Ongoing over the life of the plan	Implementing and local agencies as appropriate as part of CEQA streamlined project-specific environmental review. Kern COG to review as part of responsibility under IGR process

	Mitigation Measure	Mitigation Monitoring Timing	Responsible Monitoring Entity
	safety at construction sites. • As appropriate require that portable engines and portable engine-driven equipment units used at the project work site, with the exception of on-road and off-road motor vehicles, obtain California Air Resources Board (ARB) Portable Equipment Registration with the state or a local district permit. Arrange appropriate consultations with the ARB or the District to determine registration and permitting requirements prior to equipment operation at the site.		
AIR-2:	Kern COG, through its Environmental Review Program/Intergovernmental Review process will facilitate and encourage implementing and local agencies to implement measures adopted by ARB designed to attain federal air quality standards for PM2.5. ARB's strategy includes the following elements: • Set technology forcing new engine standards; • Reduce emissions from the in-use fleet; • Require clean fuels, and reduce petroleum dependency; • Work with USEPA to reduce emissions from federal and state sources; and • Pursue long-term advanced technology measures. • Proposed new transportation–related SIP measures include: **On-road Sources** – Improvements and Enhancements to California's Smog Check Program – Expanded Passenger Vehicle Retirement – Modifications to Reformulated Gasoline Program – Cleaner In-Use Heavy-Duty Trucks – Ship Auxiliary Engine Cold Ironing and Other Clean Technology – Cleaner Ship Main Engines and Fuel – Port Truck Modernization – Accelerated Introduction of Cleaner Line-Haul Locomotives – Clean Up Existing Commercial Harbor Craft **Off-road Sources** – Cleaner Construction and Other Equipment – Cleaner In-Use Off-Road Equipment – Agricultural Equipment Fleet Modernization – New Emission Standards for Recreational Boats – Off-Road Recreational Vehicle Expanded Emission Standards	Ongoing over the life of the plan	Implementing and local agencies as appropriate as part of CEQA streamlined project-specific environmental review. Kern COG to review as part of responsibility under IGR process

	Mitigation Measure	Mitigation Monitoring Timing	Responsible Monitoring Entity
AIR-3:	Kern COG shall pursue the following activities in reducing the impact associated with health risk within 500 feet of freeways and high-traffic volume roadways: • Participate in on-going statewide deliberations on health risks near freeways and high-traffic volume roadways. This involvement includes inputting to the statewide process by providing available data and information such as the current and projected locations of sensitive receptors relative to transportation infrastructure; • Work with air agencies including CARB and the air districts in the Kern COG region to support their work in monitoring the progress on reducing exposure to emissions of PM10 and PM2.5 for sensitive receptors, including schools and residents within 500 feet of high-traffic volume roadways; • Encourage project sponsors to incorporate recommendations included in CARB's *Air Quality and Land Use Handbook* as appropriate. • Work with stakeholders to identify planning and development practices that are effective in reducing health impacts to sensitive receptors; and • Share information on all of the above efforts with stakeholders, member cities, counties and the public.	Ongoing over the life of the plan	Kern COG
AIR-4:	Kern COG, through its Environmental Review Program/Intergovernmental Review process will facilitate and encourage implementing and local agencies to comply with the CARB recommendations to achieve an acceptable interior air quality level for sensitive receptors, project sponsors can and should identify appropriate measures, to be incorporated into project building design for residential, school and other sensitive uses located within 500 feet (or other appropriate distance as may be identified by CARB) of freeways, heavily travelled arterials, railways and other sources of Diesel particulate Matter and other known carcinogens. The measures should include one or more of the following methods as appropriate: a. The project sponsor should retain a qualified air quality consultant to prepare a health risk assessment (HRA) in accordance with the California Air Resources Board and the Office of Environmental Health and Hazard Assessment requirements to determine the exposure of project residents/occupants/users to stationary air quality polluters prior to issuance of a demolition, grading, or building permit. The HRA should be submitted to the Lead Agency for review and approval. The sponsor should implement the approved HRA recommendations, if any. If the HRA concludes that the air quality risks from nearby sources are at or below acceptable levels, then additional measures are not required. b. The project sponsor should implement the following features that have been found to reduce the air quality risk to sensitive receptors and should be included in the project construction plans. These should be submitted to the appropriate agency for review and approval prior to the issuance of a demolition, grading, or building permit and ongoing. i. Do not locate sensitive receptors near distribution center's entry and exit points.	Ongoing over the life of the plan	Implementing and local agencies as appropriate as part of CEQA streamlined project-specific environmental review. Kern COG to review as part of responsibility under IGR process

	Mitigation Measure	Mitigation Monitoring Timing	Responsible Monitoring Entity
	ii. Do not locate sensitive receptors in the same building as a perchloroleythene dry cleaning facility. iii. Maintain a 50-foot buffer from a typical gas dispensing facility (under 3.6 million gallons of gas per year). iv. Install, operate and maintain in good working order a central heating and ventilation (HV) system or other air take system in the building, or in each individual residential unit, that meets the efficiency standard of the MERV 13. The HV system should include the following features: Installation of a high efficiency filter and/or carbon filter-to-filter particulates and other chemical matter from entering the building. Either HEPA filters or ASHRAE 85 percent supply filters should be used. v. Retain a qualified HV consultant or HERS rater during the design phase of the project to locate the HV system based on exposure modeling from the mobile and/or stationary pollutant sources. vi. Maintain positive pressure within the building. vii. Achieve a performance standard of at least one air exchange per hour of fresh outside filtered air. viii. Achieve a performance standard of at least 4 air exchanges per hour of recirculation ix. Achieve a performance standard of 0.25 air exchanges per hour of in unfiltered infiltration if the building is not positively pressurized. c. Project sponsor should maintain, repair and/or replace HV system or prepare an Operation and Maintenance Manual for the HV system and the filter. The manual should include the operating instructions and maintenance and replacement schedule. This manual should be included in the CC&R's for residential projects and distributed to the building maintenance staff. In addition, the sponsor should prepare a separate Homeowners Manual. The manual should contain the operating instructions and maintenance and replacement schedule for the HV system and the filters. It should also include a disclosure to the buyers of the air quality analysis findings. d. To the maximum extent practicable the Lead Agency can and should ensure that private (individual and common) exterior open space, including playgrounds, patios, and decks, should either be shielded from stationary sources of air pollution by buildings or otherwise buffered to further reduce air pollution exposure for project occupants.		
AIR-5:	Kern COG, through its Environmental Review Program/Intergovernmental Review process will facilitate and encourage implementing and local agencies, as applicable and feasible, to investigate (using for example procedures and guidelines for PM hotspot analysis consistent with USEPA (2010) PM guidance) the relationship between 1) any increases in PM10 and PM2.5 within 500 feet of freeways in their jurisdiction, and 2) existing sensitive receptors in that area that do not have adequate air filtration to reduce such impacts to a less than significant level. To the extent that existing sensitive receptors are identified that do not have adequate air filtration, local jurisdictions may establish a program by which project sponsors can mitigate significant increases in PM10 and PM2.5 (e.g., by	Ongoing over the life of the plan	Implementing and local agencies as appropriate as part of CEQA streamlined project-specific environmental review. Kern COG to review as part of responsibility under IGR process

	Mitigation Measure	Mitigation Monitoring Timing	Responsible Monitoring Entity
	providing a retrofit program for older higher emitting vehicles, anti-idling requirements or policies, controlling fugitive dust, routing traffic away from populated zones, replacing older buses with cleaner buses, and paying in to a fund established to retrofit sensitive receptors with HEPA filters when sensitive receptors are located within 500 feet of freeways and high-traffic volume roadways that generate substantial diesel particulate emissions).		
AIR-6:	Kern COG, through its Environmental Review Program/Intergovernmental Review process will facilitate and encourage implementing and local agencies, as applicable and feasible, to plant appropriate vegetation to reduce PM10/PM2.5 when constructing a sensitive receptor within 500 feet of freeways and high-traffic volume roadways generating substantial diesel particulate emissions.	Ongoing over the life of the plan	Implementing and local agencies as appropriate as part of CEQA streamlined project-specific environmental review. Kern COG to review as part of responsibility under IGR process
AIR-7:	Kern COG, through its Environmental Review Program/Intergovernmental Review process will facilitate and encourage implementing and local agencies for major transportation projects (especially those that generate substantial diesel particulate emissions) in the region, if health risks are shown to increase significantly at sensitive receptors within 500 feet of a transportation facility, to consider applicable mitigation. Examples include planting appropriate vegetation and retrofitting existing sensitive uses with air filtration to reduce potential health risk impacts to a less than significant level.	Ongoing over the life of the plan	Implementing and local agencies as appropriate as part of CEQA streamlined project-specific environmental review. Kern COG to review as part of responsibility under IGR process
Impact – Biological Resources			
BIO-1:	Kern COG shall facilitate reducing future impacts to species identified as candidate, sensitive, or special status species and associated habitats through cooperation, information sharing, and program development. Kern COG shall consult with the resource agencies, such as the USFWS, NMFS, USACOE, USFS, BLM, and CDFW, as well as local jurisdictions including cities and counties, to incorporate designated critical habitat, federally protected wetlands, the protection of sensitive natural communities and riparian habitats, designated open space or protected wildlife habitat, local policies and tree preservation ordinances, applicable HCPs and NCCPs, or other related planning documents into Kern COG's ongoing regional planning efforts. Planning efforts shall be consistent with the approach outlined in the California Wildlife Action Plan.	Ongoing over the life of the plan	Kern COG
BIO-2:	Kern COG, through its Environmental Review Program/Intergovernmental Review process will facilitate and encourage implementing and local agencies to document Special-Status Plant Populations as follows: Retain a qualified botanist to document the presence or absence of special-status plants before project implementation. Implement the following steps to document special- status plants: • **Review Existing Information.** The botanist shall review the most current existing information to develop a list of special-status plants that have a potential to occur in the specific project area. Sources of information consulted shall include CDFW's CNDDB, previously prepared environmental documents, city and county general plans, HCPs and NCCPs, and the CNPS electronic inventory. • **Coordinate with Agencies.** The botanist shall coordinate with the appropriate agencies (CDFW,	Ongoing over the life of the plan	Implementing and local agencies as appropriate as part of CEQA streamlined project-specific environmental review. Kern COG to review as part of responsibility under IGR process

Mitigation Measure	Mitigation Monitoring Timing	Responsible Monitoring Entity
USFWS, Caltrans) to discuss botanical resource issues and determine the appropriate level of surveys necessary to document special-status plants. • **Conduct Field Studies.** The botanist shall evaluate existing habitat conditions for each project and determine what level of botanical surveys may be required. The type of botanical survey shall depend on species richness, habitat type and quality, and the probability of special-status species occurring in a particular habitat type. Depending on these factors and the proposed construction activity, one or a combination of the following levels of survey may be required: • **Habitat Assessment.** A habitat assessment will be conducted to determine whether suitable habitat is present. This type of assessment can be conducted at any time of year and is used to assess and characterize habitat conditions and determine whether return surveys are necessary. If no suitable habitat is present, no additional surveys shall be required. • **Species-Focused Surveys.** Species-focused surveys (or target species surveys) shall be conducted if suitable habitat is present for special-status plants. The surveys shall focus on special-status plants that could grow in the region, and would be conducted during a period when the target species are evident and identifiable. • **Floristic Protocol-Level Surveys.** Floristic surveys that follow the CNPS Botanical Survey Guidelines shall be conducted in areas that are relatively undisturbed and/or have a moderate to high potential to support special-status plants. The CNPS Botanical Survey Guidelines require that all species be identified to the level necessary to determine whether they qualify as special-status plants, or are plant species with unusual or significant range extensions. The guidelines also require that field surveys be conducted when special-status plants that could occur in the area are evident and identifiable. To account for different special-status plant identification periods, one or more series of field surveys may be required in spring and summer months. • **CDFW Protocols for Special Status Plant Species.** CDFW advises following the Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Natural Communities.[1] This protocol, which is intended to maximize detectability, includes the identification of reference populations to facilitate the likelihood of field investigations occurring during the appropriate floristic period. In the absence of protocol-level surveys being performed, additional surveys may be necessary. Further, CDFW advises that a minimum no-disturbance buffer of at least 50 feet from the outer edge of the plant population(s) or specific habitat type(s) required by special status plant species be delineated around special status plant species. If buffers cannot be maintained, then consultation with CDFW is advised to determine appropriate minimization and mitigation measures for impacts to special-status plant species. If a State- or federally listed plant species are identified during botanical surveys, then consultation with		

1 CDFG, 2018. Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Natural Communities. California Department of Fish and Game, March 2018

	Mitigation Measure	Mitigation Monitoring Timing	Responsible Monitoring Entity
	CDFW and/or the USFWS is recommended to determine the need for an Incidental Take Permit (issued by CDFW) or a Biological Opinion (issued by the USFWS). Special-status plant populations identified during the field surveys shall be mapped and documented as part of CEQA and NEPA process, as applicable**.**		
BIO-3:	Kern COG, through its Environmental Review Program/Intergovernmental Review process will facilitate and encourage implementing and local agencies to avoid or minimize impacts on Special-Status Plant Populations by redesigning the Project, protecting special-status plant populations, and developing a transplantation plan (If necessary and approved by resource agencies) If special-status plants are identified in their project area, the proponents of specific projects included in the proposed RTP shall implement the following measures, as appropriate, to avoid and minimize impacts on special-status plants: • Redesign or modify their project to avoid direct and indirect impacts on special status plants, if feasible. • Protect special-status plants near their project site by installing environmentally sensitive area fencing (orange construction barrier fencing) around special-status plant populations. The environmentally sensitive area fencing shall be installed at least 20 feet from the edge of the population. The location of the fencing shall be marked in the field with stakes and flagging and shown on the construction drawings. The construction specifications shall contain clear language that prohibits construction-related activities, vehicle operation, material and equipment storage, and other surface-disturbing activities within the fenced environmentally sensitive area. • Coordinate with the appropriate resource agencies and local experts to determine whether transplantation is feasible. If the agencies concur that transplantation is a feasible mitigation measure, the botanist shall develop and implement a transplantation plan through coordination with the appropriate agencies. The special-status plant transplantation plan shall involve identifying a suitable transplant site; moving the plant material and seed bank to the transplant site; collecting seed material and propagating it in a nursery; and monitoring the transplant sites to document recruitment and survival rates.	Ongoing over the life of the plan	Implementing and local agencies as appropriate as part of CEQA streamlined project-specific environmental review. Kern COG to review as part of responsibility under IGR process
BIO-4:	Kern COG, through its Environmental Review Program/Intergovernmental Review process will facilitate and encourage implementing and local agencies to document special-status wildlife species and their habitats as follows: Retain a qualified wildlife biologist to document the presence or absence of suitable habitat for special-status wildlife in the project study area. Special attention shall be paid to the following species: San Joaquin Kit Fox, Swainson's Hawk, Tricolored Blackbird, Desert Tortoise, Mojave Ground Squirrel, Tipton Kangaroo Rat, Giant Kangaroo Rat and other kangaroo rat, San Joaquin Antelope Squirrel, California Tiger Salamander, Burrowing Owl, special status plant species and nesting birds. The following steps shall be implemented to document special-status wildlife and their habitats for each project:	Ongoing over the life of the plan	Implementing and local agencies as appropriate as part of CEQA streamlined project-specific environmental review. Kern COG to review as part of responsibility under IGR process

Mitigation Measure	Mitigation Monitoring Timing	Responsible Monitoring Entity
• **Review Existing Information.** The wildlife biologist shall review existing information to develop a list of special-status wildlife species that could occur in the project area. The following information shall be reviewed as part of this process: the USFWS special-status species list for the project region, CDFW's CNDDB, previously prepared environmental documents, city and county general plans, HCPs and NCCPs (if applicable), and USFWS issued biological opinions for previous projects. • **Coordinate with State and Federal Agencies.** The wildlife biologist shall coordinate with the appropriate agencies (CDFW, USFWS, and Caltrans) to discuss wildlife resource issues in the project region and determine the appropriate level of surveys necessary to document special-status wildlife and their habitats. • **Conduct Field Studies.** The wildlife biologist shall evaluate existing habitat conditions and determine what level of biological surveys may be required. The type of survey required shall depend on species richness, habitat type and quality, and the probability of special-status species occurring in a particular habitat type. For species listed above, CDFW should be consulted regarding appropriate survey protocols. Depending on the existing conditions in the project area and the proposed construction activity, one or a combination of the following levels of survey may be required: – **Habitat Assessment.** A habitat assessment determines whether suitable habitat is present. This type of assessment can be conducted at any time of year and is used to assess and characterize habitat conditions and to determine whether return surveys are necessary. If no suitable habitat is present, no additional surveys shall be required. – **Species-Focused Surveys.** Species-focused surveys (or target species surveys) shall be conducted if suitable habitat is present for special-status wildlife and if it is necessary to determine the presence or absence of the species in the project area. The surveys shall focus on special-status wildlife species that have the potential to occur in the region. The surveys shall be conducted during a period when the target species are present and/or active. – **Protocol-Level Wildlife Surveys.** The project proponent shall comply with protocols and guidelines issued by responsible agencies for certain special-status species. USFWS and CDFW have issued survey protocols and guidelines for several special-status wildlife species that could occur in the project region, including (but not limited to) the California red-legged frog, blunt-nosed leopard lizard, desert tortoise and San Joaquin kit fox. The protocols and guidelines may require that surveys be conducted during a particular time of year and/or time of day when the species is present and active. Many survey protocols require that only a USFWS permitted or CDFW-approved biologist perform the surveys. The project proponent shall coordinate with the appropriate state or federal agency biologist before the initiation of protocol-level surveys to ensure that the survey results would be valid. Because some species can be difficult to detect or observe, multiple field techniques may be used during a survey period and additional surveys may be required in subsequent seasons or years as outlined in the protocol or guidelines for each species.		

	Mitigation Measure	Mitigation Monitoring Timing	Responsible Monitoring Entity
	Special-status wildlife or suitable habitat identified during the field surveys shall be mapped and documented as part of the CEQA and NEPA documentation, as applicable.		
BIO-5:	Kern COG, through its Environmental Review Program/Intergovernmental Review process will facilitate and encourage implementing and local agencies to avoid and minimize impacts on Special-Status Wildlife Species by redesigning the project, protecting special-status wildlife habitat, and developing a mitigation monitoring plan (if necessary) This mitigation measure focuses on avoiding and minimizing all direct and indirect effects on special-status wildlife. Implement the following measures to avoid and minimize impacts on special-status wildlife and their habitats: • Redesign or modify the project to avoid direct and indirect impacts on special-status wildlife or their habitats, if feasible. • Protect special-status wildlife and their habitat near the project site by installing environmentally sensitive area fencing around habitat features, such as seasonal wetlands, burrows, and nest trees. The environmentally sensitive area fencing or staking shall be installed at a distance from the edge of the resource determined through coordination with state and federal agency biologists (USFWS and CDFW). The location of the fencing shall be marked in the field with stakes and flagging and shown on the construction drawings. The construction specifications shall contain clear language that prohibits construction-related activities, vehicle operation, material and equipment storage, and other surface-disturbing activities within the fenced environmentally sensitive area. • Restrict construction-related activities to the non-breeding season for special-status wildlife species that could occur in the project area. Timing restrictions may vary depending on the species and could occur during any time of the year. Coordinate with the appropriate resource agencies to determine whether a monitoring plan for special-status wildlife is necessary as part of all highway projects. If a monitoring plan is required, it shall be developed and implemented in coordination with appropriate agencies and shall include o a description of each of the protected wildlife species and any suitable habitat for special-status species that could occur at the project site; o the locations of known occurrences of special-status wildlife species within 1.0 mile of the project site; o the location and size of no-disturbance zones in and adjacent to environmentally sensitive areas for wildlife; o directions on the handling and relocating of special-status wildlife species found on the project site that are in immediate danger of being destroyed; and o notification and reporting requirements for special-status species that are identified on the project site.	Ongoing over the life of the plan	Implementing and local agencies as appropriate as part of CEQA streamlined project-specific environmental review. Kern COG to review as part of responsibility under IGR process

Mitigation Measure	Mitigation Monitoring Timing	Responsible Monitoring Entity
BIO-6: Kern COG, through its Environmental Review Program/Intergovernmental Review process will facilitate and encourage implementing and local agencies to identify and document riparian habitat as follows: • Retain a qualified biologist to document the location, type, extent, and habitat functions and values for riparian communities that occur in the site-specific project area and could be affected by their project. This information should be mapped and documented as part of CEQA and NEPA documentation, as applicable. • Consult with the USFWS and NMFS where such state-designated sensitive or riparian habitats provide potential or occupied habitat for federally listed rare, threatened, and endangered species afforded protection pursuant to the federal Endangered Species Act. • Consult with the USFS where such state-designated sensitive or riparian habitats provide potential or occupied habitat for federally listed rare, threatened, and endangered species afforded protection pursuant to the federal Endangered Species Act and any additional species afforded protection by an adopted Forest Land Management Plan or Resource Management Plan. • Consult with the CDFW where such state-designated sensitive or riparian habitats provide potential or occupied habitat for state-listed rare, threatened, and endangered species afforded protection pursuant to the California Endangered Species Act, or Fully-Protected Species afforded protection pursuant to the State Fish and Game Code. • Consult with the CDFW pursuant to the provisions of Section 1600 of the State Fish and Game Code as they relate to Lakes and Streambeds. • Consult with the USFWS, USFS, CDFW, and counties and cities in the Kern COG region, where state-designated sensitive or riparian habitats are occupied by birds afforded protection pursuant to the Migratory Bird Treaty Act during the breeding season. • Consult with the CDFW for state-designated sensitive or riparian habitats where fur-bearing mammals, afforded protection pursuant to the provisions of the State Fish and Game Code for fur-beaming mammals, are actively using the areas in conjunction with breeding activities.	Ongoing over the life of the plan	Implementing and local agencies as appropriate as part of CEQA streamlined project-specific environmental review. Kern COG to review as part of responsibility under IGR process
BIO-7:Kern COG, through its Environmental Review Program/Intergovernmental Review process will facilitate and encourage implementing and local agencies to avoid and minimize disturbance of riparian communities as follows: If riparian communities are present in the project area, avoid or minimize impacts on riparian communities by implementing the following measures: • Redesign or modify the project to avoid direct and indirect impacts on riparian communities, if feasible. • Protect riparian communities near the project site by installing environmentally sensitive area fencing at least 20 feet from the edge of the riparian vegetation. Depending on site-specific conditions, this buffer may be narrower or wider than 20 feet. The location of the fencing should	Ongoing over the life of the plan	Implementing and local agencies as appropriate as part of CEQA streamlined project-specific environmental review. Kern COG to review as part of responsibility under IGR process

	Mitigation Measure	Mitigation Monitoring Timing	Responsible Monitoring Entity
	be marked in the field with stakes and flagging and shown on the construction drawings. The construction specifications should contain clear language that prohibits construction-related activities, vehicle operation, material and equipment storage, and other surface-disturbing activities within the fenced environmentally sensitive area. • Minimize the potential for long-term loss of riparian vegetation by trimming vegetation rather than removing the entire shrub. Shrub vegetation should be cut at least 1 foot above ground level to leave the root systems intact and allow for more rapid regeneration of the species. Cutting should be limited to a minimum area necessary within the construction zone. This type of removal should be allowed only for shrub species (all trees should be avoided) in areas that do not provide habitat for sensitive species (e.g., willow flycatcher). To protect migratory birds, no woody riparian vegetation should not be removed beginning March 15 through September 15, as required under the Migratory Bird Treaty Act.		
BIO-8:	Kern COG, through its Environmental Review Program/Intergovernmental Review process will facilitate and encourage implementing and local agencies to compensate for the Loss of Riparian Community as follows: If riparian vegetation is removed as part of their project, compensate for the loss of riparian vegetation to ensure no net loss of habitat functions and values. Compensation ratios should be based on site-specific information and determined through coordination with state and federal agencies (including CDFW, USFWS, USACE, and National Marine Fisheries Service [NMFS]). Compensation should be provided at a minimum 1:1 ratio (1 acre restored or created for every 1 acre removed) and may be a combination of on-site restoration/creation, off-site restoration, or mitigation credits. Develop a restoration and monitoring plan that describes how riparian habitat should be enhanced or recreated and monitored over a minimum period of time, as determined by the appropriate state and federal agencies. Implement the restoration and monitoring plan.	Ongoing over the life of the plan	Implementing and local agencies as appropriate as part of CEQA streamlined project-specific environmental review. Kern COG to review as part of responsibility under IGR process
BIO-9:	Kern COG, through its Environmental Review Program/Intergovernmental Review process will facilitate and encourage implementing and local agencies to identify and Delineate Waters of the United States (including jurisdictional and isolated wetlands) Wetlands should be identified using both the USACE and USFWS/CDFW definitions of wetlands. USACE jurisdictional wetlands should be delineated using the methods outlined in the USACE 1987 Wetlands Delineation Manual and the Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region (Version 2.0), September 2008l. The jurisdictional boundary for other waters of the United States should be identified based on: • The shore established by the fluctuations of water and indicated by physical characteristics such as clear, natural line impressed on the bank, shelving, changes in the character of soil, destruction of terrestrial vegetation, the presence of litter and debris, or other appropriate means that consider the characteristics of the surrounding area (33 CFR 328.3[e]). This information should be mapped and documented as part of the CEQA and NEPA documentation,	Ongoing over the life of the plan	Implementing and local agencies as appropriate as part of CEQA streamlined project-specific environmental review. Kern COG to review as part of responsibility under IGR process

Mitigation Measure	Mitigation Monitoring Timing	Responsible Monitoring Entity
as applicable, and in wetland delineation reports.		
BIO-10: Kern COG, through its Environmental Review Program/Intergovernmental Review process will facilitate and encourage implementing and local agencies to avoid and minimize disturbance of waters of the United States, including wetland communities. Avoid and minimize impacts on wetlands and other waters of the United States (creeks, steams, and rivers) by implementing the following measures: • Redesign or modify the project to avoid direct and indirect impacts on wetland habitats. • Protect wetland habitats that occur near the project site by installing environmentally sensitive area fencing at least 20 feet from the edge of the wetland. Depending on site-specific conditions and permit requirements, this buffer may be wider than 20 feet (e.g., 250 feet for seasonal wetlands that are considered special-status shrimp habitat). The location of the fencing shall be marked in the field with stakes and flagging and shown on the construction drawings. The construction specifications shall contain clear language that prohibits construction-related activities, vehicle operation, material and equipment storage, and other surface-disturbing activities within the fenced environmentally sensitive area. • Avoid installation activities in saturated or ponded wetlands during the wet season (spring and winter) to the maximum extent possible. Where such activities are unavoidable, protective practices, such as use of padding or vehicles with balloon tires, shall be used. • Where determined necessary by resource specialists, use geotextile cushions and other materials (e.g., timber pads, prefabricated equipment pads, or geotextile fabric) in saturated conditions to minimize damage to the substrate and vegetation. • Stabilize exposed slopes and stream banks immediately on completion of installation activities. Other waters of the United States shall be restored in a manner that encourages vegetation to reestablish to its pre-project condition and reduces the effects of erosion on the drainage system. • In highly erodible stream systems, stabilize banks using a non-vegetative material that will bind the soil initially and break down within a few years. If the project engineers determine that more aggressive erosion control treatments are needed, use geotextile mats, excelsior blankets, or other soil stabilization products. • During construction, remove trees, shrubs, debris, or soils that are inadvertently deposited below the ordinary high-water mark of drainages in a manner that minimizes disturbance of the drainage bed and bank. These measures should be incorporated into contract specifications and implemented by the construction contractor. In addition, the project proponent should ensure that the contractor incorporates all state and federal permit conditions into construction specifications.	Ongoing over the life of the plan	Implementing and local agencies as appropriate as part of CEQA streamlined project-specific environmental review. Kern COG to review as part of responsibility under IGR process

	Mitigation Measure	Mitigation Monitoring Timing	Responsible Monitoring Entity
BIO-11:	Kern COG, through its Environmental Review Program/Intergovernmental Review process will facilitate and encourage implementing and local agencies to compensate for the loss of wetland habitat as follows: If wetlands are filled or disturbed as part of the highway project, compensate for the loss of wetland habitat to ensure no net loss of habitat functions and values. Compensation ratios shall be based on site-specific information and determined through coordination with state and federal agencies (including CDFW, USFWS, and USACE). The compensation shall be at a minimum 1:1 ratio (1 acre restored or created for every 1 acre filled) and may be a combination of on-site restoration/creation, off-site restoration, or mitigation credits. A restoration and monitoring plan shall be developed and implemented if on-site or off-site restoration or creation is chosen. The plan shall describe how wetlands shall be created and monitored over a minimum of five years (or as required by the regulatory agencies).	Ongoing over the life of the plan	Implementing and local agencies as appropriate as part of CEQA streamlined project-specific environmental review. Kern COG to review as part of responsibility under IGR process
BIO-12:	Kern COG, through its Environmental Review Program/Intergovernmental Review process will facilitate and encourage implementing and local agencies to incorporate Design Measures to Allow Animal Movement as follows: Prior to design approval of individual projects that contain movement habitat, the implementing agency shall incorporate economically viable design measures, as applicable and necessary, to allow wildlife or fish to move through the transportation corridor, both during construction activities and post construction. Such measures may include appropriately spaced breaks in a center barrier, or other measures that are designed to allow wildlife to move through the transportation corridor. If the project cannot be designed with these design measures due to traffic safety, etc., the implementing agency can and should consider mitigation measures to minimize impacts on biological resources, including coordinating with the appropriate regulatory agency (i.e., USFWS, NMFS, CDFW) to obtain regulatory permits and implement alternative project-specific mitigation prior to any construction activities Such measures include, but are not limited to, the following: • Consult with the USFWS, USFS, CDFW, and local agencies, where impacts to birds afforded protection pursuant to the Migratory Bird Treaty Act during the breeding season may occur. • Consult with local jurisdictions and other local organizations when impacts may occur to open space areas that have been designated as important for wildlife movement. • Prohibit construction activities within 500 feet of occupied breeding areas for wildlife afforded protection pursuant to Title 14 § 460 of the California Code of Regulations protecting fur-bearing mammals, during the breeding season. • Conduct a survey to identify active raptor and other migratory nongame bird nests by a qualified biologist at least two weeks before the start of construction at project sites from February 1 through August 31. A qualified wildlife biologist should be retained to determine of suitable habitat is present for Swainson's Hawk. If suitable habitat is present, a qualified wildlife biology should conduct surveys following the survey methods developed by the Swain's Hawk Technical	Ongoing over the life of the plan	Implementing and local agencies as appropriate as part of CEQA streamlined project-specific environmental review. Kern COG to review as part of responsibility under IGR process

Mitigation Measure	Mitigation Monitoring Timing	Responsible Monitoring Entity
Advisory Committee be conducted by a qualified wildlife biologist prior to project implementation. If active nests are detected, CDFW recommends a minimum no-disturbance buffer of 0.5-mile be delineated around them until the breeding season has ended or until a qualified biologist has determined that the birds have fledged and are no longer reliant upon the nest or parental care for survival. If an active SWHA nest is detected during surveys and a 0.5-mile buffer is not feasible, consultation with CDFW is warranted to discuss how to implement the project and avoid take. If take cannot be avoided, take authorization through the acquisition of an Incidental Take Permit, pursuant to Fish and Game Code section 2081 subdivision (b) is necessary to comply with CESA. For Tricolored Blackbird, CDFW recommends implementation of a minimum 300-foot no-disturbance buffer around the colony in accordance with CDFW's "Staff Guidance Regarding Avoidance of Impacts to Tricolored Blackbird Breeding Colonies on Agricultural Fields in 2015" (CDFW 2015). CDFW advises that this buffer remain in place until the breeding season has ended or until a qualified biologist has determined that nesting has ceased, the birds have fledged, and are no longer reliant upon the colony or parental care for survival. It is important to note that TRBL colonies can expand over time. For this reason, CDFW recommends conducting additional pre-activity surveys within 10 days prior of project initiation to reassess the colony's areal extent. If a TRBL nesting colony is detected during surveys, consultation with CDFW is warranted to discuss how to implement the project and avoid take, or if avoidance is not feasible, to acquire an ITP, pursuant to Fish and Game Code section 2081 subdivision (b), prior to any ground-disturbing activities. • Prohibit construction activities with 250 feet of occupied nest of birds afforded protection pursuant to the Migratory Bird Treaty Act, during the breeding season. • Ensure that suitable nesting sites for migratory nongame native bird species protected under the Migratory Bird Treaty Act and/or trees with unoccupied raptor nests should only be removed prior to February 1, or following the nesting season. • Pursue mitigation banking to preserve habitat linkages and corridors (opportunities to purchase, maintain, and/or restore offsite habitat). • Install wildlife fencing where appropriate to minimize the probability of wildlife injury due to direct interaction between wildlife and roads or construction. Where exclusion fencing it used, such fencing should be raised seven to eight inches above the ground for the length of the fencing with the bottom fencing material knuckled back to maintain movement and habitat connectivity for desert tortoise and Mohave ground squirrel. • where avoidance is determined to be infeasible, design sufficient conservation measures through coordination with local agencies and the regulatory agency (i.e., USFWS or CDFW) and in accordance with the respective counties and cities general plans to establish plans to mitigate for the loss of fish and wildlife movement corridors and/or wildlife nursery sites. The consideration of conservation measures may include the following measures where applicable: o Wildlife movement buffer zones		

	Mitigation Measure	Mitigation Monitoring Timing	Responsible Monitoring Entity
	o Corridor realignment o Appropriately spaced breaks in center barriers o Stream rerouting o Culverts o Creation of artificial movement corridors such as freeway under- or overpasses o Other comparable measures Where the Lead Agency has identified that a RTP project, or other regionally significant project, has the potential to impact other open space or nursery site areas, seek comparable coverage for these areas in consultation with the USFWS, CDFW, NMFS, or other local jurisdictions		
BIO-13:	Kern COG, through its Environmental Review Program/Intergovernmental Review process will facilitate and encourage implementing and local agencies to review Local City and County Policies, Ordinances, and Conservation Plans. Review of these documents and compliance with their requirements should be demonstrated in project-level environmental documentation. Where lead agencies have determined a significant impact would occur, lead agencies can and should consider mitigation measures to minimize impacts. Such measures include, but are not limited to, the following: Design projects to avoid conflicts with local policies and ordinances protecting biological resources. Where avoidance is determined to be infeasible, sufficient conservation measures to fulfill the requirements of the applicable policy or ordinance shall be developed, such as to support issuance of a tree removal permit. The consideration of conservation measures may include: • Avoidance strategies • Contribution of in-lieu fees • Planting of replacement trees at a minimum ratio of 2:1 • Re-landscaping areas with native vegetation post-construction • Other comparable measures.	Ongoing over the life of the plan	Implementing and local agencies as appropriate as part of CEQA streamlined project-specific environmental review. Kern COG to review as part of responsibility under IGR process
BIO-14:	Kern COG, through its Environmental Review Program/Intergovernmental Review process will facilitate and encourage implementing and local agencies to review Local City and County Policies, Ordinances, and Conservation Plans. Review of these documents and compliance with their requirements should be demonstrated in project-level environmental documentation. Where lead agencies have determined a significant impact would occur, lead agencies can and should consider mitigation measures to minimize impacts. Such measures include, but are not limited to, the following: • Consult with the appropriate federal, state, and/or local agency responsible for the administration of HCPs or NCCPs. • Wherever practicable and feasible, the project shall be designed to avoid through project design lands preserved under the conditions of an HCP or NCCP. Where avoidance is determined to be infeasible, sufficient conservation measures to fulfill the	Ongoing over the life of the plan	Implementing and local agencies as appropriate as part of CEQA streamlined project-specific environmental review. Kern COG to review as part of responsibility under IGR process

	Mitigation Measure	Mitigation Monitoring Timing	Responsible Monitoring Entity
	requirements of the HCP and/or NCCP, which would include but not be limited to applicable authorization for incidental take pursuant to Section 7 or 10(a) of the federal Endangered Species Act or Section 2081 of the California Endangered Species Act, shall be developed to support issuance of an Incidental take permit or any other permissions required for development within the HCP/NCCP boundaries.		
Impact – Cultural Resources			
CR-1:	Kern COG, through its Environmental Review Program/Intergovernmental Review process will facilitate and encourage implementing and local agencies to require historical resource studies and to identify and implement project-specific mitigation. As part of planning, design, and engineering for projects, implementing and local agencies should ensure that historic resources are treated in accordance with applicable federal, state, and local laws and regulations. When a project has been identified as potentially affecting a historical resource, a historical resources inventory should be conducted by a qualified architectural historian. The study should comply with *State CEQA Guidelines* section 15064.5(b), and, if federal funding or permits are required, with section 106 of the National Historic Preservation Act (NHPA) of 1966 (16 USC Sec. 470 et seq.). As applicable, the study should consist of the following elements: • a records search at the Southern San Joaquin Valley Information Center (California State University, Bakersfield); • contact with local historical societies, museums, or other interested parties as appropriate to help determine locations of known significant historical resources; • necessary background, archival and historic research; • a survey of built environment/architectural resources that are 50 years old or older that may be directly or indirectly impacted by project activities; and • recordation and evaluation of built environment/architectural resources that are 50 years old or older that may be directly or indirectly impacted by project activities; • buildings should be evaluated under CRHR and/or NRHP Criteria as appropriate and recorded on California Department of Parks and Recreation 523 forms. These elements should be compiled into a Historical Survey Report that should be submitted to the Southern San Joaquin Valley Information Center (California State University, Bakersfield) and should also be used for SHPO consultation if the project is subject to NHPA section 106. If architectural resources are deemed as potentially eligible for the California Register of Historic Resources or the National Register of Historic Places, implementing and local agencies should consider avoidance through project redesign as feasible and appropriate. If avoidance is not feasible, implementing or local agencies should ensure that historical resources are formally documented through the use of large-format photography, measured drawings, written architectural descriptions, and historical narratives. The documentation should be entered into the Library of Congress and	Ongoing over the life of the plan	Implementing and local agencies as appropriate as part of CEQA streamlined project-specific environmental review. Kern COG to review as part of responsibility under IGR process

	Mitigation Measure	Mitigation Monitoring Timing	Responsible Monitoring Entity
	archived in the California Historical Resources Information System. In the event of building relocation, implementing and local agencies should ensure that any alterations to significant buildings or structures conform to the Secretary of the Interior's Standards for Rehabilitation and Guidelines for Rehabilitating Historic Buildings.		
CR-2:	Kern COG, through its Environmental Review Program/Intergovernmental Review process will facilitate and encourage implementing and local agencies to require consultation, surveys, and monitoring for archaeological resources. During environmental review of projects, implementing and local agencies should: • Consult with the Native American Heritage Commission to determine whether known sacred sites are in the project area and identify the Native American(s) to contact to obtain information about the project area. • Conduct a records search at the Southern San Joaquin Valley Information Center (California State University, Bakersfield) to determine whether the project area has been previously surveyed and whether resources were identified. In the event the records indicate that no previous survey has been conducted, the Southern San Joaquin Valley Information Center (California State University, Bakersfield) will make a recommendation on whether a survey is warranted based on the archaeological sensitivity of the project area. If recommended, a qualified archaeologist should be retained to conduct archaeological surveys. The significance of any resources that are determined to be in the project area should be assessed according to the applicable local, state, and federal significance criteria. Implementing and local agencies should devise treatment measures to ameliorate "substantial adverse changes" to significant archaeological resources, in consultation with qualified archaeologists and other concerned parties. Such treatment measures may include avoidance through project redesign, data recovery excavation, and public interpretation of the resource. Implementing and local agencies and the contractors performing the improvements should adhere to the following requirements: • If a project is located in an area rich with cultural materials, implementing and local agencies should retain a qualified archaeologist to monitor any subsurface operations, including but not limited to grading, excavation, trenching, or removal of existing features of the subject property. • If, during the course of construction cultural resources (i.e., prehistoric sites, historic sites, and isolated artifacts and features) are discovered work should be halted immediately within 50 meters (165 feet) of the discovery, implementing and local agencies should be notified, and a qualified archaeologist that meets the Secretary of the Interior's Professional Qualifications Standards in prehistoric or historical archaeology should be retained to determine the significance of the discovery. • Implementing and local agencies should consider mitigation recommendations presented by a professional archaeologist that meets the Secretary of the Interior's Professional Qualifications	Ongoing over the life of the plan	Implementing and local agencies as appropriate as part of CEQA streamlined project-specific environmental review. Kern COG to review as part of responsibility under IGR process

	Mitigation Measure	Mitigation Monitoring Timing	Responsible Monitoring Entity
	Standards in prehistoric or historical archaeology for any unanticipated discoveries and should carry out the measures deemed feasible and appropriate. Such measures may include avoidance, preservation in place, excavation, documentation, curation, data recovery, or other appropriate measures. The project proponent should be required to implement any mitigation necessary for the protection of cultural resources.		
CR-3:	Kern COG, through its Environmental Review Program/Intergovernmental Review process will facilitate and encourage implementing and local agencies to implement Stop-Work and Consultation Procedures Mandated by Public Resources Code 5097. In the event of discovery or recognition of any human remains during construction or excavation activities implementing and local agencies should cease further excavation or disturbance of the site or any nearby area reasonably suspected to overlie adjacent human remains until the following steps are taken: • The Kern County Coroner has been informed and has determined that no investigation of the cause of death is required. • If the remains are of Native American origin, either of the following steps will be taken: o The coroner should contact the Native American Heritage Commission in order to ascertain the proper descendants from the deceased individual. The coroner should make a recommendation to the landowner or the person responsible for the excavation work, for means of treating or disposing of, with appropriate dignity, the human remains and any associated grave goods, which may include obtaining a qualified archaeologist or team of archaeologists to properly excavate the human remains. o Implementing or local agencies or authorized representatives should retain a Native American monitor, and an archaeologist, if recommended by the Native American monitor, and rebury the Native American human remains and any associated grave goods, with appropriate dignity, on the property and in a location that is not subject to further subsurface disturbance when any of the following conditions occurs: – The Native American Heritage Commission is unable to identify a descendent. – The descendant identified fails to make a recommendation. – The implementing agency or its authorized representative rejects the recommendation of the descendant, and the mediation by the Native American Heritage Commission fails to provide measures acceptable to the landowner.	Ongoing over the life of the plan	Implementing and local agencies as appropriate as part of CEQA streamlined project-specific environmental review. Kern COG to review as part of responsibility under IGR process
TCR-1:	Kern COG through its Environmental Review Program/Intergovernmental Review process will facilitate and encourage implementing and local agencies to consult with the Native American Heritage Commission, as well as Native American tribes, to identify opportunities for early and effective consultation to identify tribal cultural resources to avoid such resources wherever practicable and feasible and reduce or mitigate for conflicts in compatible land use to the maximum extent practicable.	Ongoing over the life of the plan	Implementing and local agencies as appropriate as part of CEQA streamlined project-specific environmental review. Kern COG to review as part of responsibility under IGR process

	Mitigation Measure	Mitigation Monitoring Timing	Responsible Monitoring Entity
Impact - Energy			
EN-1:	Kern COG, through its Environmental Review Program/Intergovernmental Review process will facilitate and encourage implementing and local agencies to implement energy saving policies and projects that 1) reduce wasteful, inefficient and unnecessary consumption of energy during construction, operation, and maintenance; 2) consider siting, orientation, and design to minimize energy consumption, including transportation energy; 3) consider options for reducing peak energy demand; 4) consider recycling efforts to reduce energy demand; and 5) incorporate renewable and alternative energy to the maximum extent feasible.	Ongoing over the life of the plan	Implementing and local agencies as appropriate as part of CEQA streamlined project-specific environmental review. Kern COG to review as part of responsibility under IGR process
EN-2:	Kern COG, through its Environmental Review Program/Intergovernmental Review process will facilitate and encourage implementing and local agencies to streamline permitting and provide public information to facilitate accelerated construction of geothermal, solar and wind power generation facilities and transmission line improvements.	Ongoing over the life of the plan	Implementing and local agencies as appropriate as part of CEQA streamlined project-specific environmental review. Kern COG to review as part of responsibility under IGR process
EN-3:	Kern COG, through its Environmental Review Program/Intergovernmental Review process will facilitate and encourage utilities to increase capacity of existing transmission lines to meet forecast demand that supports sustainable growth, where feasible and appropriate in coordination with local planning agencies.	Ongoing over the life of the plan	Implementing and local agencies as appropriate as part of CEQA streamlined project-specific environmental review. Kern COG to review as part of responsibility under IGR process
EN-4:	Kern COG shall continue to consider energy uncertainty impacts prior to the development of the next RTP. Topics that shall be considered include: • How the price and availability of transportation fuels affects revenues and demand; • How increases in fuel efficiency could affect revenues and emissions; • How the cost of commuting and personal travel affects mode choice and growth patterns; • How the cost of goods movement affects international trade and employment; or • How the escalation of fuel prices affects the cost of infrastructure construction, maintenance and operation.	Ongoing over the life of the plan	Kern COG
Impact – Geology and Soils			
GEO-1:	Kern COG, through its Environmental Review Program/Intergovernmental Review process will facilitate and encourage implementing and local agencies to require the development and implementation of detailed erosion control measures, consistent with the CBC and UBC regulations and guidelines and/or local NPDES, to address erosion control specific to the project site; revegetate sites to minimize soil loss and prevent significant soil erosion; avoid construction on unstable slopes and other areas subject to soil erosion where possible; require management techniques that minimize soil loss and erosion; manage grading to maximize the capture and retention of water runoff through ditches, trenches, siltation ponds, or similar measures; and minimize erosion through adopted protocols and standards in the industry. The implementing and local agencies should also require land	Ongoing over the life of the plan	Implementing and local agencies as appropriate as part of CEQA streamlined project-specific environmental review. Kern COG to review as part of responsibility under IGR process

	Mitigation Measure	Mitigation Monitoring Timing	Responsible Monitoring Entity
	use and transportation projects to comply with locally adopted grading, erosion, and/or sediment control ordinances beginning when any preconstruction or construction-related grading or soil storage first occurs, until all final improvements are completed.		
GEO-2:	Kern COG, through its Environmental Review Program/Intergovernmental Review process will facilitate and encourage implementing and local agencies to conduct site-specific, design level geotechnical investigation for individual projects. Investigations should include an analysis of expected ground motions from known active faults. The analyses should be in accordance with applicable regulations and consistent with the most recent version of the California Building Code, which requires structural design that can accommodate ground accelerations expected from known active faults. In addition, investigations should determine final design parameters for walls, foundations, foundation slabs, and surrounding related improvements (utilities, roadways, parking lots and sidewalks). Investigations should be reviewed and approved by a registered geotechnical engineer. All recommendations by project engineers and geotechnical engineers should be included in final designs. Final seismic considerations should be submitted to and approved by the appropriate local jurisdiction prior to the commencement of a project.	Ongoing over the life of the plan	Implementing and local agencies as appropriate as part of CEQA streamlined project-specific environmental review. Kern COG to review as part of responsibility under IGR process
GEO-3:	Kern COG shall consult with resource agencies such as the National Park Service, United States Forest Service, and Bureau of Land Management to identify opportunities for early and effective consultation to identify unique paleontological resources and unique geological features to avoid such resources wherever practicable and feasible and reduce or mitigation for conflicts in compatible land use to the maximum extent practicable.	Ongoing over the life of the plan	Kern COG
GEO-4:	Kern COG, through its Environmental Review Program/Intergovernmental Review process will facilitate and encourage implementing to ensure compliance with the Paleontological Resources Preservation Act, the Federal Land Policy and Management Act, the Antiquities Act, Section 5097.5 of the Public Resources Code (PRC), adopted county and city general plans, and other federal, state and local regulations, as applicable and feasible, by adhering to and incorporating the performance standards and practices from the 2010 Society for Vertebrate Paleontology (SVP) standard procedures for the assessment and mitigation of adverse impacts to paleontological resources.	Ongoing over the life of the plan	Implementing and local agencies as appropriate as part of CEQA streamlined project-specific environmental review. Kern COG to review as part of responsibility under IGR process
Impact – Greenhouse Gas Emissions			
GHG-1:	Kern COG shall update future Regional Transportation Plans (including Sustainable Community Strategies) to incorporate policies and measures that build upon successful GHG reduction strategies from the 2018 RTP and lead to further reduced GHG emissions. Such policies and measures may be derived from the General Plans, local jurisdictions' Climate Action Plans (CAPs), and other adopted policies and plans of its member agencies that include GHG mitigation and adaptation measures or other sources.	Ongoing over the life of the plan	Kern COG
GHG-2:	Kern COG shall, through its ongoing outreach and technical assistance programs, work with and encourage local governments to adopt policies and develop practices that lead to GHG emission reductions. These activities should include, but are not limited to, providing technical assistance and	Ongoing over the life of the plan	Kern COG

	Mitigation Measure	Mitigation Monitoring Timing	Responsible Monitoring Entity
	information sharing on developing local Climate Action Plans.		
GHG-3:	Kern COG shall continue the Regional Energy Action Planning, as funding allows, and assist member agencies in adopting regional energy action plans and community climate action plans to advance regional climate strategies. These plans should assess the cost effectiveness of local jurisdictions' GHG reduction measures and prioritize strategies that have greatest overall benefit to the economy.	Ongoing over the life of the plan	Kern COG
GHG-4:	Consistent with the CMP, Kern COG shall encourage and work with local governments to develop multimodal performance standards to determine how much traffic, during peak hours, is acceptable on state freeways, highways, and major streets within Kern County. Local jurisdictions should incorporate multimodal level of service standards in their circulation plans consistent with AB 1358 California Complete Streets Act of 2008 and as appropriate for each community facility type, place type, and corridor type, as recommended in the latest Highway Capacity Manual update. In addition, Kern COG will work with local agencies to identify frequency and routing of transit service, in order to assist in coordinating transit service provided by separate operators throughout Kern County.	Ongoing over the life of the plan	Kern COG
GHG-5:	Kern COG will continue to promote GHG and criteria pollutant emission reductions through the VMT Reduction Progress Tracking & Assistance Program by providing local jurisdictions with regular progress reports on changes in observed VMT, and providing planning assistance and resources to make progress toward reduction goals. Other resources being provided to local planners include the San Joaquin Valley Planners Toolkit.	Ongoing over the life of the plan as funding allows.	Kern COG
GHG-6:	Kern COG, through its Environmental Review Program/Intergovernmental Review process will facilitate and encourage implementing and local agencies to build on the work done for the Kern County GHG inventory. Implementing agencies and local agencies should also adopt and implement Climate Action Plans (CAPs, also known as Plans for the Reduction of Greenhouse Gas Emissions as described in *CEQA Guidelines* Section 15183.5 Tiering and Streamlining the Analysis of Greenhouse Gas Emissions) that do the following: a) Quantify GHG emissions, both existing and projected over a specified period, resulting from activities within each agency's jurisdiction; b) Establish a level, based on substantial evidence, below which the contribution to GHG emissions from activities covered by the plan would not be cumulatively considerable; c) Identify and analyze the GHG emissions resulting for specific actions or categories of actions anticipated within their respective jurisdictions; d) Specify measures or a group of measures, including performance standards, that substantial evidence demonstrates, if implemented on a project-by-project basis, would collectively achieve the specified emissions level; e) Establish a mechanism to monitor the plan's progress toward achieving that level and to require amendment if the plan is not achieving specified levels; and f) Be adopted in a public process following environmental review.	Ongoing over the life of the plan	Implementing and local agencies as appropriate as part of CEQA streamlined project-specific environmental review. Kern COG to review as part of responsibility under IGR process

Mitigation Measure	Mitigation Monitoring Timing	Responsible Monitoring Entity
GHG-7: In accordance with provisions of sections 15091(a)(2) and 15126.4(a)(1)(B) of the *State CEQA Guidelines*, a Lead Agency for a project can and should consider mitigation measures to reduce substantial adverse effects related to greenhouse gas emissions. Such measures may include the following or other comparable measures identified by the Lead Agency: a) Integrate green building measures consistent with CALGreen (California Building Code Title 24), local building codes and other applicable laws, into project design including: i. Use energy efficient materials in building design, construction, rehabilitation, and retrofit. ii. Install energy-efficient lighting, heating, and cooling systems (cogeneration); water heaters; appliances; equipment; and control systems. iii. Reduce lighting, heating, and cooling needs by taking advantage of light-colored roofs, trees for shade, and sunlight. iv. Incorporate passive environmental control systems that account for the characteristics of the natural environment. v. Use high-efficiency lighting and cooking devices. vi. Incorporate passive solar design. vii. Use high-reflectivity building materials and multiple glazing. viii. Prohibit gas-powered landscape maintenance equipment. ix. Install electric vehicle charging stations. x. Reduce wood burning stoves or fireplaces. xi. Provide bike lanes accessibility and parking at residential developments. b) Reduce emissions resulting from projects through implementation of project features, project design, or other measures, such as those described in Appendix F of the *State CEQA Guidelines*. c) Include off-site measures to mitigate a project's emissions. d) Measures that consider incorporation of Best Available Control Technology (BACT) during design, construction and operation of projects to minimize GHG emissions, including but not limited to: i. Use energy and fuel-efficient vehicles and equipment; ii. Deployment of zero- and/or near zero emission technologies; iii. Use lighting systems that are energy efficient, such as LED technology; iv. Use the minimum feasible amount of GHG-emitting construction materials; v. Use cement blended with the maximum feasible amount of flash or other materials that reduce GHG emissions from cement production; vi. Incorporate design measures to reduce GHG emissions from solid waste management through encouraging solid waste recycling and reuse; vii. Incorporate design measures to reduce energy consumption and increase use of renewable energy; viii. Incorporate design measures to reduce water consumption; ix. Use lighter-colored pavement where feasible; x. Recycle construction debris to maximum extent feasible;	Ongoing over the life of the plan	Implementing and local agencies as appropriate as part of CEQA streamlined project-specific environmental review. Kern COG to review as part of responsibility under IGR process

Mitigation Measure	Mitigation Monitoring Timing	Responsible Monitoring Entity
xi. Plant shade trees in or near construction projects where feasible; and xii. Solicit bids that include concepts listed above. e) Measures that encourage transit use, carpooling, bike-share and car-share programs, active transportation, and parking strategies, including, but not limited to the following: i. Promote transit-active transportation coordinated strategies; ii. Increase bicycle carrying capacity on transit and rail vehicles; iii. Improve or increase access to transit; iv. Increase access to common goods and services, such as groceries, schools, and day care; v. Incorporate affordable housing into the project; vi. Incorporate the neighborhood electric vehicle network; vii. Orient the project toward transit, bicycle and pedestrian facilities; viii. Improve pedestrian or bicycle networks, or transit service; ix. Provide traffic calming measures; x. Provide bicycle parking; xi. Limit or eliminate park supply; xii. Unbundle parking costs; xiii. Provide parking cash-out programs; xiv. Implement or provide access to commute reduction program; f) Incorporate bicycle and pedestrian facilities into project designs, maintaining these facilities, and providing amenities incentivizing their use; and planning for and building local bicycle projects that connect with the regional network; g) Improving transit access to rail and bus routes by incentives for construction of transit facilities within developments, and/or providing dedicated shuttle service to transit stations; and h) Adopting employer trip reduction measures to reduce employee trips such as vanpool and carpool programs, providing end-of-trip facilities, and telecommuting programs including but not limited to measures that: i. Provide car-sharing, bike sharing, and ride-sharing programs; ii. Provide transit passes; iii. Shift single occupancy vehicle trips to carpooling or vanpooling, for example providing ride-matching services; iv. Provide incentives or subsidies that increase that use of modes other than single-occupancy vehicle; v. Provide on-site amenities at places of work, such as priority parking for carpools and vanpools, secure bike parking, and showers and locker rooms; vi. Provide employee transportation coordinators at employment sites; vii. Provide a guaranteed ride home service to users of non-auto modes. i) Designate a percentage of parking spaces for ride-sharing vehicles or high-occupancy vehicles, and provide adequate passenger loading and unloading for those vehicles j) Land use siting and design measures that reduce GHG emissions, including:		

	Mitigation Measure	Mitigation Monitoring Timing	Responsible Monitoring Entity
	i. Developing on infill and brownfields sites; ii. Building compact and mixed-use developments near transit; iii. Retaining on-site mature trees and vegetation, and planting new canopy trees; iv. Measures that increase vehicle efficiency, encourage use of zero and low emissions vehicles, or reduce the carbon content of fuels, including constructing or encouraging construction of electric vehicle charging stations or neighborhood electric vehicle networks, or charging for electric bicycles; and v. Measures to reduce GHG emissions from solid waste management through encouraging solid waste recycling and reuse.		
Impact – Hazards and Hazardous Materials			
HAZ-1:	Kern COG, through its Environmental Review Program/Intergovernmental Review process will facilitate and encourage implementing and local agencies to determine whether specific project sites are listed on government lists of hazardous materials and/or waste sites compiled pursuant to Government Code Section 65962.5. Implementing and local agencies should require preparation of a Phase I Environmental Site assessment (Phase I ESA) for any listed sites or sites with the potential for residual hazardous materials and/or waste as a result of location and/or prior uses. Implementing and local agencies should require that recommendations of the Phase I ESA be fully implemented. If a Phase I ESA indicates the presence or likely presence of contamination, the implementing agency should require a Phase II ESA, and recommendations of the Phase II ESA should be fully implemented.	Ongoing over the life of the plan	Implementing and local agencies as appropriate as part of CEQA streamlined project-specific environmental review. Kern COG to review as part of responsibility under IGR process
Impact – Hydrology and Water Quality			
W-1:	Kern COG, through its Environmental Review Program/Intergovernmental Review process will facilitate and encourage implementing and local agencies to undergo individual project review and comply with NPDES requirements and all applicable storm water regulations. Such measures include, but are not limited to: • Complete, and have approved, a Stormwater Pollution Prevention Plan (SWPPP) prior to initiation of construction. • Implement Best Management Practices to reduce the peak stormwater runoff from the project site to the maximum extent practicable. • Comply with the Caltrans storm water discharge permit as applicable and implement Best Management Practices can and should be identified and implemented to manage site erosion, wash water runoff, and spill control. • Complete, and have approved, a Standard Urban Stormwater Management Plan, prior to occupancy of residential or commercial structures. • Ensure adequate capacity of the surrounding stormwater system to support stormwater runoff from new or rehabilitated structures or buildings. • Prior to construction within the vicinity of a watercourse, the project sponsor can and should obtain all required permit approvals and certifications for construction within the vicinity of a watercourse:	Ongoing over the life of the plan	Implementing and local agencies as appropriate as part of CEQA streamlined project-specific environmental review. Kern COG to review as part of responsibility under IGR process

Mitigation Measure	Mitigation Monitoring Timing	Responsible Monitoring Entity
• U.S. Army Corps of Engineers (Corps): Section 404. Permit approval from the Corps should be obtained for the placement of dredge or fill material in Waters of the U.S., if any, within the interior of the project site, pursuant to Section 404 of the federal Clean Water Act. • Regional Walter Quality Control Board (RWQCB): Section 401 Water Quality Certification. Certification that the project will not violate state water quality standards is required before the Corps can issue a 404 permit, above. • California Department of Fish and Wildlife (CDFW): Section 1602 Lake and Streambed Alteration Agreement. Work that will alter the bed or bank of a stream requires authorization from CDFW. • Where feasible, restore or expand riparian areas such that there is no net loss of impervious surface as a result of the project. • New facilities should install structural water quality control features such as drainage channels, detention basins, oil and grease traps, filter systems, and vegetated buffers to prevent pollution of adjacent water resources by polluted runoff where required by applicable urban storm water runoff discharge permits. • Structural storm water runoff treatment should be provided according to the applicable urban storm water runoff permit where facilities will be operated by a permitted municipality or county. Where Caltrans is the operator, the statewide permit applies. • Comply with applicable municipal separate storm sewer system discharge permits as well as Caltrans' storm water discharge permit including long-term sediment control and drainage of roadway runoff. • Incorporate as appropriate treatment and control features such as detention basins, infiltration strips, and porous paving, other features to control surface runoff and facilitate groundwater recharge into the design of new transportation projects early on in the process to ensure that adequate acreage and elevation contours are provided during the right-of-way acquisition process. • Design projects to maintain volume of runoff, where any downstream receiving water body has not been designed and maintained to accommodate the increase in flow velocity, rate, and volume without impacting the water's beneficial uses. Pre-project flow velocities, rates, and volumes must not be exceeded. This applies not only to increases in storm water runoff from the project site, but also to hydrologic changes induced by flood plain encroachment. Projects should not cause or contribute to conditions that degrade the physical integrity or ecological function of any downstream receiving waters. • Provide culverts and facilities that do not increase the flow velocity, rate, or volume and/or acquiring sufficient storm drain easements that accommodate an appropriately vegetated earthen drainage channel. • Upgrade stormwater drainage facilities to accommodate any increased runoff volumes. These upgrades may include the construction of detention basins or structures that will delay peak flows and reduce flow velocities, including expansion and restoration of wetlands and riparian buffer areas. System designs should be completed to eliminate increases in peak flow rates from		

	Mitigation Measure	Mitigation Monitoring Timing	Responsible Monitoring Entity
	current levels. • Encourage Low Impact Development (LID) and incorporation of natural spaces that reduce, treat, infiltrate and manage stormwater runoff flows in all new developments, where practical and feasible. • For sites that are less than one acre, project drawings submitted for a building permit (or other construction-related permit) shall contain a final site plan to be reviewed and approved by the appropriate local agency. The final site plan should incorporate appropriate site design measures to manage stormwater runoff and minimize impacts to water quality after the construction of the project.		
W-2:	Kern COG, through its Environmental Review Program/Intergovernmental Review process will facilitate and encourage implementing and local agencies to ensure that projects requiring continual dewatering facilities implement monitoring systems and long-term administrative procedures to prevent degrading of surface water and minimize, to the greatest extent possible, adverse impacts on groundwater for the life of the project. Construction designs should comply with appropriate building codes and standard practices including the Uniform Building Code.	Ongoing over the life of the plan	Implementing and local agencies as appropriate as part of CEQA streamlined project-specific environmental review. Kern COG to review as part of responsibility under IGR process
W-3:	Kern COG, through its Environmental Review Program/Intergovernmental Review process will facilitate and encourage implementing and local agencies to maximize, where practical and feasible, permeable surface area in existing urbanized areas to protect water quality, reduce flooding, allow for groundwater recharge, and preserve wildlife habitat. New impervious surfaces should be minimized to the greatest extent possible, including the use of in-lieu fees and off-site mitigation.	Ongoing over the life of the plan	Implementing and local agencies as appropriate as part of CEQA streamlined project-specific environmental review. Kern COG to review as part of responsibility under IGR process
W-4:	Kern COG, through its Environmental Review Program/Intergovernmental Review process will facilitate and encourage implementing and local agencies to avoid development in groundwater recharge areas. Where feasible, transportation facilities should not be sited in groundwater recharge areas, to prevent conversion of those areas to impervious surface.	Ongoing over the life of the plan	Implementing and local agencies as appropriate as part of CEQA streamlined project-specific environmental review. Kern COG to review as part of responsibility under IGR process
W-5:	Kern COG, through its Environmental Review Program/Intergovernmental Review process will facilitate and encourage implementing and local agencies to reduce hardscape to the extent feasible to facilitate groundwater recharge as appropriate.	Ongoing over the life of the plan	Implementing and local agencies as appropriate as part of CEQA streamlined project-specific environmental review. Kern COG to review as part of responsibility under IGR process
W-6:	Kern COG, through its Environmental Review Program/Intergovernmental Review process will facilitate and encourage implementing and local agencies to conduct or require project-specific hydrology studies for projects proposed to be constructed within floodplains to demonstrate compliance with applicable federal, state, and local agency flood-control regulations. These studies should identify project design features or mitigation measures that reduce impacts to either floodplains or flood flows such that the project is consistent with federal, state, and local regulations and laws related to development in the floodplain.	Ongoing over the life of the plan	Implementing and local agencies as appropriate as part of CEQA streamlined project-specific environmental review. Kern COG to review as part of responsibility under IGR process

	Mitigation Measure	Mitigation Monitoring Timing	Responsible Monitoring Entity
W-7:	Kern COG, through its Environmental Review Program/Intergovernmental Review process will facilitate and encourage implementing and local agencies to, the extent feasible and appropriate, to prevent development in flood hazard areas that do not have appropriate protection.	Ongoing over the life of the plan	Implementing and local agencies as appropriate as part of CEQA streamlined project-specific environmental review. Kern COG to review as part of responsibility under IGR process
W-8:	Kern COG will facilitate minimizing future impacts to water supply through cooperation, information sharing, and program development as part of the Kern COG's ongoing regional planning efforts, in-coordination with regional water agencies, and other stakeholders.	Ongoing over the life of the plan	KernCOG
W-9:	Kern COG, in coordination with regional water agencies and other stakeholders, shall encourage regional coordination throughout California to develop and support sustainable policies in accommodating growth.	Ongoing over the life of the plan	Implementing and local agencies as appropriate as part of CEQA streamlined project-specific environmental review. Kern COG to review as part of responsibility under IGR process
W-10:	Kern COG, through its Environmental Review Program/Intergovernmental Review process will facilitate and encourage regional water agencies to consider, to the extent feasible, potential climate change hydrology and attendant impacts on available water supplies and reliability in the process of creating or modifying systems to manage water resources for both year-round use and ecosystem health. As the methodology and base data for such decisions is still developing, agencies should use the best currently available science in decision-making.	Ongoing over the life of the plan	Implementing and local agencies as appropriate as part of CEQA streamlined project-specific environmental review. Kern COG to review as part of responsibility under IGR process
W-11:	Kern COG, through its Environmental Review Program/Intergovernmental Review process will facilitate and encourage implementing and local agencies to reduce exterior uses of water in public areas, and promote reductions in private homes and businesses by shifting to drought-tolerant native landscape plantings, using weather-based irrigation systems, educating other public agencies about water use, and installing related water pricing incentives. Kern COG will also encourage local jurisdictions to work with local water retailers to promote the availability of drought resistant landscaping options and provide information on where these can be purchased. Use of reclaimed water especially in median landscaping and hillside landscaping should be implemented where feasible.	Ongoing over the life of the plan	Implementing and local agencies as appropriate as part of CEQA streamlined project-specific environmental review. Kern COG to review as part of responsibility under IGR process
W-12:	Kern COG, through its Environmental Review Program/Intergovernmental Review process will facilitate and encourage implementing and local agencies to coordinate with the local water provider to ensure that existing and/or planned water supply and water conveyance facilities are capable of meeting water demand/pressure requirements. In accordance with state law, a Water Supply Assessment should be required for projects that meet the size requirements specified in the regulations. In coordination with the local water provider, each project sponsor should identify specific on- and off-site improvements needed to ensure that impacts related to water supply and conveyance demand/pressure requirements are addressed prior to issuance of a certificate of occupancy. Water supply and conveyance demand/pressure clearance from the local water provider will be required at the time that a water connection permit application is submitted.	Ongoing over the life of the plan	Implementing and local agencies as appropriate as part of CEQA streamlined project-specific environmental review. Kern COG to review as part of responsibility under IGR process

	Mitigation Measure	Mitigation Monitoring Timing	Responsible Monitoring Entity
W-13:	Kern COG, through its Environmental Review Program/Intergovernmental Review process will facilitate and encourage implementing and local agencies to implement water conservation measures in new development that should include but not be limited to the following: • High efficiency toilets • Restroom faucets with automatic shut-off • High efficiency clothes washers • High efficiency dishwashers • Use of reclaimed water for appropriate uses • Water saving irrigation measures including: weather-based irrigation controller with rain shut-off.	Ongoing over the life of the plan	Implementing and local agencies as appropriate as part of CEQA streamlined project-specific environmental review. Kern COG to review as part of responsibility under IGR process
W-14:	Kern COG, through its Environmental Review Program/Intergovernmental Review process will facilitate and encourage implementing and local agencies to consult with the local water provider to identify feasible and reasonable measures to reduce water consumption, including, but not limited to, systems to use reclaimed water for landscaping, drip irrigation, re-circulating hot water systems, water conserving landscape techniques (such as mulching, installation of drip irrigation systems, landscape design to group plants of similar water demand, soil moisture sensors, automatic irrigation systems, clustered landscaped areas to maximize the efficiency of the irrigation system), water conserving kitchen and bathroom fixtures and appliances, thermostatically controlled mixing valves for baths and showers, and insulated hot water lines.	Ongoing over the life of the plan	Implementing and local agencies as appropriate as part of CEQA streamlined project-specific environmental review. Kern COG to review as part of responsibility under IGR process
W-15:	Kern COG, through its Environmental Review Program/Intergovernmental Review process will facilitate and encourage implementing and local agencies to comply with local drought measures as appropriate including prohibiting hose watering of driveways and associated walkways; requiring decorative fountains to use recycled water and repairing water leaks in a timely manner.	Ongoing over the life of the plan	Implementing and local agencies as appropriate as part of CEQA streamlined project-specific environmental review. Kern COG to review as part of responsibility under IGR process
W-16:	Kern COG, through its Environmental Review Program/Intergovernmental Review process will facilitate and encourage implementing and local agencies to adopt and implement a comprehensive strategy to increase water conservation and the use of recycled water that includes similar measures to the following: • **Water Consumption Reduction Target:** Regional water agencies should work together to set a target for to reduce per capita water consumption by 2020. • **Water Conservation Plan:** Regional water agencies should establish a water conservation plan that may include such policies and actions as: – Tiered rate structures for water use; – Restrictions on time of use for landscape watering, and other demand management strategies; – Performance standards for irrigation equipment and water fixtures; – Requirements that increased demand from new construction are offset with reductions so	Ongoing over the life of the plan	Implementing and local agencies as appropriate as part of CEQA streamlined project-specific environmental review. Kern COG to review as part of responsibility under IGR process

	Mitigation Measure	Mitigation Monitoring Timing	Responsible Monitoring Entity
	that there is no net increase in water use. • **Recycled Water Use:** Local jurisdictions and regional water agencies should establish programs and policies to increase the use of recycled water, including: – Create an inventory of non-potable water uses within the jurisdiction that could be served with recycled water; – Produce and promote the use of recycled water for agricultural, industrial, and irrigation purposes, including grey water systems for residential irrigation; – Produce and promote the use of treated, recycled water for potable uses where greenhouse gas emissions from producing such water are lower than from other potable sources. • **Water Conservation Outreach:** Local jurisdictions and regional water agencies should implement a public education and outreach campaign to promote water conservation, and highlights specific water-wasting activities to discourage, such as the watering of non-vegetated surfaces and using water to clean sidewalks and driveways.		
W-17:	Kern COG, through its Environmental Review Program/Intergovernmental Review process will facilitate and encourage implementing and local agencies to establish building design guidelines and criteria to promote water-efficient building design, including minimizing the amount of non-roof impervious surfaces around the building(s) and menus and check-lists for developers and contractors to ensure water-efficient infrastructure and technology are used in new construction, including low-flow toilets and shower heads, moisture-sensing irrigation, and other such advances.	Ongoing over the life of the plan	Implementing and local agencies as appropriate as part of CEQA streamlined project-specific environmental review. Kern COG to review as part of responsibility under IGR process
W-18:	Kern COG, through its Environmental Review Program/Intergovernmental Review process will facilitate and encourage implementing and local agencies to establish criteria and standards to permit the safe and effective use of gray water (on-site water recycling), and review and appropriately revise, without compromising health and safety, other building code requirements that might prevent the use of such systems.	Ongoing over the life of the plan	Implementing and local agencies as appropriate as part of CEQA streamlined project-specific environmental review. Kern COG to review as part of responsibility under IGR process
W-19:	Kern COG, through its Environmental Review Program/Intergovernmental Review process will facilitate and encourage implementing and local agencies to establish best practices for encouraging efficient use of water.	Ongoing over the life of the plan	Implementing and local agencies as appropriate as part of CEQA streamlined project-specific environmental review. Kern COG to review as part of responsibility under IGR process
Impact – Land Use and Planning			
LU-1:	Kern COG shall work with its member cities and counties to ensure that transportation projects and growth are consistent with the RTP and general plans.	Ongoing over the life of the plan	Kern COG
LU-2:	Kern COG shall provide technical assistance and regional leadership to implement the RTP goals and strategies, integrate growth and land use planning with the existing and planned transportation network, and in determining consistency with the SCS.	Ongoing over the life of the plan	Kern COG

	Mitigation Measure	Mitigation Monitoring Timing	Responsible Monitoring Entity
LU-3:	Kern COG, through its Environmental Review Program/Intergovernmental Review process will facilitate and encourage implementing and local agencies to reflect RTP policies and strategies in their general plan updates. Kern COG will work to build consensus on how to address inconsistencies between general plans and RTP policies.	Ongoing over the life of the plan	Kern COG
Impact – Mineral Resources			
MIN-1:	Kern COG through its intergovernmental review process, shall coordinate with the Department of Conservation, California Geological Survey to ensure that transportation projects avoid MRZs and areas identified through the General Plan to contain natural resources, and access to recoverable mineral and fuel resources is sustained through construction, operation and maintenance of projects. Efforts will be made to maintain portions of MRZ-2 areas in open space or other general plan land use categories and zoning that allow for mining of mineral resources. Where avoidance is infeasible, design transportation network improvements in a manner that does not preclude adjacent or nearby extraction of known mineral and aggregate resources following completion of the improvement and during long-term operations, such as buffer zones or screening. maintaining portions of MRZ-2 areas in open space or other general plan land use categories and zoning that allow for mining of mineral resources.	Ongoing over the life of the plan	Implementing and local agencies as appropriate as part of CEQA streamlined project-specific environmental review. Kern COG to review as part of responsibility under IGR process
Impact - Noise			
NOISE-1:	Kern COG, through its Environmental Review Program/Intergovernmental Review process will facilitate and encourage implementing and local agencies to assess and mitigate to the extent feasible short- and long-term noise impacts in accordance with applicable regulations and to implement site-specific noise reduction measures, including the following as applicable: • Equipment and trucks used for project construction can and should use the best available noise control techniques (e.g., improved mufflers, equipment redesign, use of intake silencers, ducts, engine enclosures, and acoustically attenuating shields or shrouds, wherever feasible). • Tools (e.g., jack hammers, pavement breakers, and rock drills) used for project construction can and should be hydraulically or electrically powered to avoid noise associated with compressed air exhaust from pneumatically powered tools. However, where use of pneumatic tools is unavoidable, an exhaust muffler on the compressed air exhaust should be used; this muffler can lower noise levels from the exhaust by up to about 10 dB(A). External jackets on the tools themselves should be used, if such jackets are commercially available and this could achieve a reduction of 5 dB(A). Quieter procedures should be used, such as drills rather than impact equipment, whenever such procedures are available and consistent with construction procedures. • Stationary noise sources can and should be located as far from adjacent sensitive receptors as possible and they should be muffled and enclosed within temporary sheds, incorporate insulation barriers, or use other measures as determined by the Lead Agency (or other appropriate government agency) to provide equivalent noise reduction. • A procedure and phone numbers for notifying the Lead Agency staff and local Police Department; (during regular construction hours and off-hours).	Ongoing over the life of the plan	Implementing and local agencies as appropriate as part of CEQA streamlined project-specific environmental review. Kern COG to review as part of responsibility under IGR process

Mitigation Measure	Mitigation Monitoring Timing	Responsible Monitoring Entity
• A sign posted on-site pertaining with permitted construction days and hours and complaint procedures and who to notify in the event of a problem. The sign should also include a listing of both the Lead Agency and construction contractor's telephone numbers (during regular construction hours and off-hours). • The designation of an on-site construction complaint and enforcement manager for the project. • Notification of neighbors and occupants within 300 feet of the project construction area at least 30 days in advance of extreme noise generating activities about the estimated duration of the activity. • A preconstruction meeting can and should be held with the job inspectors and the general contractor/on-site project manager to confirm that noise measures and practices (including construction hours, neighborhood notification, posted signs, etc.) are completed. • Use of portable barriers in the vicinity of sensitive receptors during construction. • Projects that require pile driving or other construction noise above 90 dB(A) in proximity to sensitive receptors, should reduce potential pier drilling, pile driving and/or other extreme noise generating construction impacts greater than 90 dB(A), a set of site-specific noise attenuation measures should be completed under the supervision of a qualified acoustical consultant. • Implement noise control at the receivers by temporarily improving the noise reduction capability of adjacent buildings (for instance by the use of sound blankets), and implement if such measures are feasible and would noticeably reduce noise impacts. • Monitor the effectiveness of noise attenuation measures by taking noise measurements. • Maximize the distance between noise-sensitive land uses and new roadway lanes, roadways, rail lines, transit centers, park-and-ride lots, and other new noise-generating facilities. • Construct sound reducing barriers between noise sources and noise-sensitive land uses.		
NOISE-2: Kern COG, through its Environmental Review Program/Intergovernmental Review process will facilitate and encourage implementing and local agencies to assess and mitigate to the extent feasible short- and long-term noise impacts in accordance with applicable regulations and to implement site-specific noise reduction measures, including the following as applicable: Such measures include, but are not limited to, the following: • Stationary noise sources can and should be located as far from adjacent sensitive receptors as possible and they should be muffled and enclosed within temporary sheds, incorporate insulation barriers, or use other measures as determined by the Lead Agency (or other appropriate government agency) to provide equivalent noise reduction. • Implement, to the extent feasible and practicable, speed limits and limits on hours of operation of rail and transit systems, where such limits may reduce noise impacts. • Use techniques such as grade separation, buffer zones, landscaped berms, dense plantings, sound walls, reduced-noise paving materials, and traffic calming measures. • Maximize the distance of new route alignments from sensitive receptors. • Locate transit-related passenger stations, central maintenance facilities, decentralized	Ongoing over the life of the plan	Implementing and local agencies as appropriate as part of CEQA streamlined project-specific environmental review. Kern COG to review as part of responsibility under IGR process

	Mitigation Measure	Mitigation Monitoring Timing	Responsible Monitoring Entity
	maintenance facilities, and electric substations away from sensitive receptors to the maximum extent feasible. • Use land use measures such as zoning, site design, and buffers to ensure that future development is noise compatible with adjacent transportation facilities and land uses.		
Impact Population, Housing, and Employment			
POP-1:	Kern COG, will work with its member agencies to implement growth strategies to create an urban form designed to focus development in TPAs in accordance with the policies, strategies and investments contained in the 2018 RTP, enhancing mobility and reducing land consumption, providing urban infrastructure to support growth and ensuring a jobs-housing balance that supports decreases in greenhouse gas emissions.	Ongoing over the life of the plan	Kern COG
POP-2:	Kern COG, through its Environmental Review Program/Intergovernmental Review process will facilitate and encourage implementing and local agencies to evaluate alternate route alignments and transportation facilities that minimize the displacement of homes and businesses. An iterative design and impact analysis would help where impacts to homes or businesses are involved. Potential impacts should be minimized to the extent feasible. If possible, existing rights-of-way should be used.	Ongoing over the life of the plan	Implementing and local agencies as appropriate as part of CEQA streamlined project-specific environmental review. Kern COG to review as part of responsibility under IGR process
POP-3:	Kern COG, through its Environmental Review Program/Intergovernmental Review process will facilitate and encourage implementing and local agencies to mitigate impacts to affordable housing as feasible through construction of affordable units (deed restricted to remain affordable for an appropriate period of time) or payment of any fee established to address loss of affordable housing.	Ongoing over the life of the plan	Implementing and local agencies as appropriate as part of CEQA streamlined project-specific environmental review. Kern COG to review as part of responsibility under IGR process
Impact – Recreation			
REC-1:	Kern COG shall facilitate reducing future impacts as a result of increased use of existing neighborhood and regional parks or other facilities from population growth through cooperation with member agencies, information sharing, and program development in order to ensure consistency with planning for expansion of new neighborhood parks within or in nearby accessible locations to TPAs in funding opportunities and programs administered by Kern COG.	Ongoing over the life of the plan	Kern COG
REC-2:	Kern COG, through its Environmental Review Program/Intergovernmental Review process shall encourage member jurisdictions to explore multiple use spaces and redevelopment in areas where it will provide more opportunities for recreational uses and access to natural areas close to the urban core.	Ongoing over the life of the plan	Implementing and local agencies as appropriate as part of CEQA streamlined project-specific environmental review. Kern COG to review as part of responsibility under IGR process
REC-3:	Kern COG, through its Environmental Review Program/Intergovernmental Review process shall encourage member jurisdictions to work as partners to address regional outdoor recreation needs and to acquire the necessary funding for the implementation of their plans and programs. This should be done, in part, by consulting with agencies and organizations that have active open space work plans.	Ongoing over the life of the plan	Implementing and local agencies as appropriate as part of CEQA streamlined project-specific environmental review. Kern COG to review as part of responsibility under IGR process

	Mitigation Measure	Mitigation Monitoring Timing	Responsible Monitoring Entity
Impact - Transportation			
TR-1:	Consistent with the CMP, Kern COG shall encourage and work with local governments to develop multimodal performance standards to determine how much traffic, during peak hours, is acceptable on state freeways, highways, and major streets within Kern County. Local jurisdictions should incorporate multimodal level of service standards in their circulation plans consistent with AB 1358 California Complete Streets Act of 2008 and as appropriate for each community facility type, place type and corridor type as recommended in the latest Highway Capacity Manual update. In addition, Kern COG will work with local agencies to identify frequency and routing of transit service, in order to assist in coordinating transit service provided by separate operators throughout Kern County.	Ongoing over the life of the plan	Kern COG
TR-2:	In addition to the current Tier 1 and Tier 2 RTP projects, Kern COG shall continue to explore potential measures to reduce vehicular travel. Such measures as land-use strategies, car-sharing programs, additional car- and vanpool programs, additional bicycle programs, and implementation of a universal transit booking and fare collection smart phone application should be considered.	Ongoing over the life of the plan	Kern COG
TR-3:	Kern COG will continue to encourage and facilitate transportation projects that maximize efficiency of the transportation system and include VMT reduction.	Ongoing over the life of the plan	Kern COG
TR-4:	Kern COG, through its Environmental Review Program/Intergovernmental Review process will facilitate and encourage implementing and local agencies to evaluate VMT as part of project specific review and identify and implement measures that reduce VMT including mixed use, alternative transportation facilities (bike racks, transit stops, and pedestrian amenities) as appropriate for each local agency.	Ongoing over the life of the plan	Implementing and local agencies as appropriate as part of CEQA streamlined project-specific environmental review. Kern COG to review as part of responsibility under IGR process
Impact – Utilities			
SW-1:	Kern COG through its Environmental Review Program/Intergovernmental Review process will facilitate and encourage diversion of solid waste such as recycling and composting programs.	Ongoing over the life of the plan	Implementing and local agencies as appropriate as part of CEQA streamlined project-specific environmental review. Kern COG to review as part of responsibility under IGR process
SW-2:	Kern COG through its Environmental Review Program/Intergovernmental Review process will facilitate and encourage local jurisdictions to require project sponsors to integrate green building measures consistent with CALGreen (California Building Code Title 24) into project designwhich could include the following: • Reuse and minimization of construction and demolition (C&D) debris and diversion of C&D waste from landfills to recycling facilities. • The inclusion of a waste management plan that promotes maximum C&D diversion. • Source reduction through (1) use of materials that are more durable and easier to repair and maintain, (2) design to generate less scrap material through dimensional planning, (3) increased recycled content, (4) use of reclaimed materials, and (5) use of structural materials in a dual role as	Ongoing over the life of the plan	Implementing and local agencies as appropriate as part of CEQA streamlined project-specific environmental review. Kern COG to review as part of responsibility under IGR process

	Mitigation Measure	Mitigation Monitoring Timing	Responsible Monitoring Entity
	finish material (e.g., stained concrete flooring, unfinished ceilings, etc.). • Reuse of existing structure and shell in renovation projects. • Design for deconstruction without compromising safety. • Design for flexibility through the use of moveable walls, raised floors, modular furniture, moveable task lighting, and other reusable building components. • Development of indoor recycling program and space.		
SW-3:	Kern COG through its Environmental Review Program/Intergovernmental Review process will facilitate and encourage local jurisdictions and waste management agencies to discourage the siting of new landfills unless all other waste reduction and prevention actions have been fully explored. If landfill siting or expansion is necessary, landfills should be sited with an adequate landfill-owned, undeveloped land buffer to minimize the potential adverse impacts of the landfill in neighboring communities.	Ongoing over the life of the plan	Implementing and local agencies as appropriate as part of CEQA streamlined project-specific environmental review. Kern COG to review as part of responsibility under IGR process
Impact – Wildfire			
WF-1:	Kern COG, through its Environmental Review Program/Intergovernmental Review process will facilitate and encourage implementing and local agencies to avoid siting new development in wildfire zones.	Ongoing over the life of the plan	Implementing and local agencies as appropriate as part of CEQA streamlined project-specific environmental review. Kern COG to review as part of responsibility under IGR process
WF-2:	Kern COG, through its Environmental Review Program/Intergovernmental Review process will facilitate and encourage implementing and local agencies to ensure that in the event that new development occurs in wildfire zones, the projects comply with safety measures as specified by CAL FIRE.	Ongoing over the life of the plan	Implementing and local agencies as appropriate as part of CEQA streamlined project-specific environmental review. Kern COG to review as part of responsibility under IGR process