

Proponent's Environmental Assessment for Southern California Edison Company's Cal City Substation 115 kV Upgrade Project

Volume 4

March 14, 2023 (PEA submittal date)

Upgrade and expansion of Cal City Substation, construction of new Kramer-Cal City and Cal City-Edwards-Holgate 115 kV subtransmission lines, installation of new telecommunications infrastructure along the proposed new lines, and associated improvements to two additional existing substations and a switchyard are proposed.

The Cal City Substation 115 kV Upgrade Project would be located in the City of California City, Kern County, and San Bernardino County.

Application A.23-XX-XX to the California Public Utilities Commission

Prepared by Rincon Consultants, Inc. 180 North Ashwood Avenue Ventura, California 93003 Lindsey Sarquilla, Project Manager (805) 869-1672 Isarquilla@rinconconsultants.com Prepared for Southern California Edison Company 2 Innovation Way, 3rd Floor Pomona, California 91768 David De Leon, Major Construction Project Manager (619) 894-1775 david.deleon@sce.com

Volume 4 - Table of Contents

Chapter 6	Com	parison	of Alternatives	6-1
	6.1	Alterna	tive Comparison	6-1
		6.1.1	Comparison of Ability of the Sequoia Boulevard Alternative to A	void or
			Reduce a Potentially Significant Impact	6-1
	6.2	Alterna	tives Ranking	6-14
Chapter 7	Cum	ulative I	mpacts and Other CEQA Considerations	7-1
	7.1	Cumula	ative Impacts	7-1
		7.1.1	List of Cumulative Projects	7-1
		7.1.2	Geographic Scope	7-5
		7.1.3	Cumulative Impact Analysis	7-5
	7.2	Growtł	n-Inducing Impacts	7-15
		7.2.1.	Would the Project either directly or indirectly, foster economic or growth or the construction of additional housing in the surroundir	
		7.2.2	Would the Project remove obstacles to population growth?	7-16
		7.2.3	Would the Project require the construction of new community fac could cause significant environmental effects?	
		7.2.4	Would the Project encourage or facilitate other activities that coul significantly affect the environment, either individually or cumula	
Chapter 8	List	of Prepa	rers	
_	8.1	List of	Preparers	8-1
Chapter 9	Refe	rences	-	9-1
_	9.1	Referen	nce List	9-1
		9.1.1	Description of Alternatives	9-1
		9.1.2	Aesthetics	9-1
		9.1.3	Agriculture and Forestry Resources	9-2
		9.1.4	Air Quality	9-3
		9.1.5	Biological Resources	9-4
		9.1.6	Cultural Resources	9-8
		9.1.7	Energy	9-11
		9.1.8	Geology, Soils, and Paleontological Resources	
		9.1.9	Greenhouse Gas Emissions	9-14
		9.1.10	Hazards and Hazardous Materials	
		9.1.11	Hydrology and Water Quality	9-16
		9.1.12	Land Use and Planning	
		9.1.13	Mineral Resources	
		9.1.14	Noise	9-20

	9.1.15	Population and Housing	
	9.1.16	Public Services	
	9.1.17	Recreation	
	9.1.18	Tribal Cultural Resources	
	9.1.19	Utilities and Service Systems	
	9.1.20	Wildfire	
	9.1.21	Cumulative and Other CEQA	
Volume 4 -	- List of Tal	bles	
Table 6-1	Alternative	s Ranking	
Table 7-1	Cumulative	Projects within Two Miles of Proposed Project	7-2
Volume 4 -	- List of Fig	ures	
	NODI		

Figure 6-1	KOP Locations	6-5
Figure 7-1	Cumulative Projects	7-4

Chapter 6 Comparison of Alternatives

This Chapter presents the results of a comparative analysis of the Cal City Substation 115 kV Upgrade Project (Proposed Project) and the Sequoia Boulevard Alternative in terms of potential environmental impacts. A description of the Sequoia Boulevard Alternative is provided in Chapter 4, Description of Alternatives.

6.1 Alternative Comparison

6.1.1 Comparison of Ability of the Sequoia Boulevard Alternative to Avoid or Reduce a Potentially Significant Impact

As presented in Chapter 5, Environmental Analysis, the Proposed Project would result in one impact that would be significant and unavoidable for the following CEQA impact criteria;

• Would the project, in nonurbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage point) If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?

As presented in Chapter 5, Environmental Analysis, the Proposed Project would result in impacts that would be less than significant with mitigation for the following CEQA impact criteria:

- Would the project result in a cumulatively considerable net increase of any criteria pollutant for which the region is non-attainment under an applicable federal or state ambient air quality standard?
- Would the project expose sensitive receptors to substantial pollutant concentrations?
- Would the project have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife (CDFW) or U.S. Fish and Wildlife Service (USFWS)?
- Would the project have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations, or by the CDFW or USFWS?
- Would the project have a substantial adverse effect on state or federally protected wetlands, (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?
- Would the project conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?
- Would the project disturb any human remains, including those interred outside of dedicated cemeteries?
- Would the project directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?
- Would the project create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?
- Would the project create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?

- Would the project emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?
- Would the project create a significant hazard to air traffic from the installation of new power lines and structures?
- Would the project expose people to a significant risk of injury or death involving unexploded ordinance?
- Would the project violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality?
- Would the project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would result in substantial erosion or siltation on-site or off-site; substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site; create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or impede or redirect flood flows?
- Would the project, in flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?
- Would the project conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?
- Would the project result in generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?
- Would the project reduce or prevent access to a designated recreation facility or area?

As presented in Chapter 4, one Alternative, the Sequoia Boulevard Alternative, has been identified to be potentially feasible, meet the underlying purpose of the Proposed Project, and meet the basic project objectives, though to a lesser extent than the Proposed Project. The Sequoia Boulevard Alternative is, thus, carried forward for analysis and comparison of alternatives to the Proposed Project.

The results of the Cultural Resources Technical Report (CRTR) are currently pending and no determination related to historical and archaeological resources can be made at this time. For the other impact areas, there is currently one potentially significant and unavoidable impact from the Proposed Project related to aesthetics. The Sequoia Boulevard Alternative would not avoid or reduce a potentially significant unavoidable impact. The sections below describe the relative effect of the Sequoia Boulevard Alternative as compared to the Proposed Project for each of the CEQA impact criteria identified above. Like the Proposed Project, all potentially significant impacts of the Sequoia Boulevard Alternative can be mitigated to a less-than-significant level with implementation of SCE's Applicant Proposed Measures (APMs) except for the significant and unavoidable impact related to aesthetics, which would remain significant and unavoidable even with implementation of APMs.

6.1.1.1 Would the project, in nonurbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage point) If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?

The Proposed Project would have an overall reduction of visual quality at key observation points (KOPs) 1 through 5 (see Figure 6-1 for KOP locations). As described in Chapter 5.1, Aesthetics, at KOP 1, KOP 2, and KOP 4, the potential impact is less than significant with mitigation. At KOP 3, the potential impact is significant and unavoidable, and at KOP 5, the impact is less than significant. Only KOPs 2 and 3 would change under the Sequoia Boulevard Alternative. Therefore, only impacts associated with these KOPs are discussed below.

KOP 2

For the Sequoia Boulevard Alternative, the Kramer-Cal City 115 kV Subtransmission Line would be relocated from Twenty Mule Team Parkway and Rudnick Boulevard to Sequoia Boulevard. Accordingly, the subtransmission line would no longer be visible from KOP 2 along Rudnick Boulevard but would instead be visible along Sequoia Boulevard. Both Rudnick Boulevard in the area of KOP 2 and most of Sequoia Boulevard are packed dirt roads with no existing overhead utility infrastructure. Both Rudnick Boulevard and Sequoia Boulevard would have viewers made up of off-highway vehicle (OHV) recreators. However, the Sequoia Boulevard Alternative is adjacent to existing residential properties near the intersection of Clay Mine Road and Sequoia Boulevard, adding a viewer group to the alternative that is not present for the Proposed Project. For both the Proposed Project and the Sequoia Boulevard Alternative, viewer sensitivity is high. It is anticipated that the Sequoia Boulevard Alternative would experience nearly the same decrease in visual character and quality as the Proposed Project, resulting in a less than significant impact with mitigation. Given the additional viewer group associated with the Sequoia Boulevard Alternative, the Sequoia Boulevard Alternative would have slightly greater impacts than the Proposed Project at KOP 2. Both the Proposed Project and the Seguoia Boulevard Alternative would implement APM AES-1 to reduce glare and color contrast associated with subtransmission facilities. This APM would reduce the impact of the Proposed Project or the Sequoia Boulevard Alternative at KOP 2 to a less than significant.

KOP 3

For the Sequoia Boulevard Alternative, the Kramer-Cal City 115 kV Subtransmission Line would no longer be visible in the distant view from KOP 3. Instead, the Kramer-Cal City 115 kV Subtransmission Line would be constructed in a parallel circuit configuration adjacent to the Cal City-Edwards-Holgate 115 kV Subtransmission Line. Consequently, both lines, including two sets of structures, would feature prominently in the foreground of the landscape at KOP 3, contributing to and potentially exacerbating the significant and unavoidable impact at this location. As described above for KOP 2, the addition of the Kramer-Cal City 115 kV Subtransmission Line to Sequoia Boulevard would also add a viewer group to the alternative that is not present for the Proposed Project. It is anticipated that the Sequoia Boulevard Alternative would experience nearly the same decrease in visual character and quality as the Proposed Project, resulting in a significant and unavoidable impact. Given the fact that the Kramer-Cal City 115 kV Subtransmission Line would be located closer to residential viewers in the vicinity of KOP 3 and the additional viewer group associated with the Sequoia Boulevard Alternative, the Sequoia Boulevard Alternative would have slightly greater impacts than the Proposed Project at KOP 3. Both the Proposed Project and the Sequoia Boulevard Alternative would implement APM AES-1 to reduce glare and color contrast associated with subtransmission facilities. While this APM would reduce impacts at KOP 3 under both the Proposed Project and the Sequoia Boulevard Alternative, it would not be sufficient to reduce the impact of the Proposed Project or the Sequoia Boulevard Alternative to less than significant.

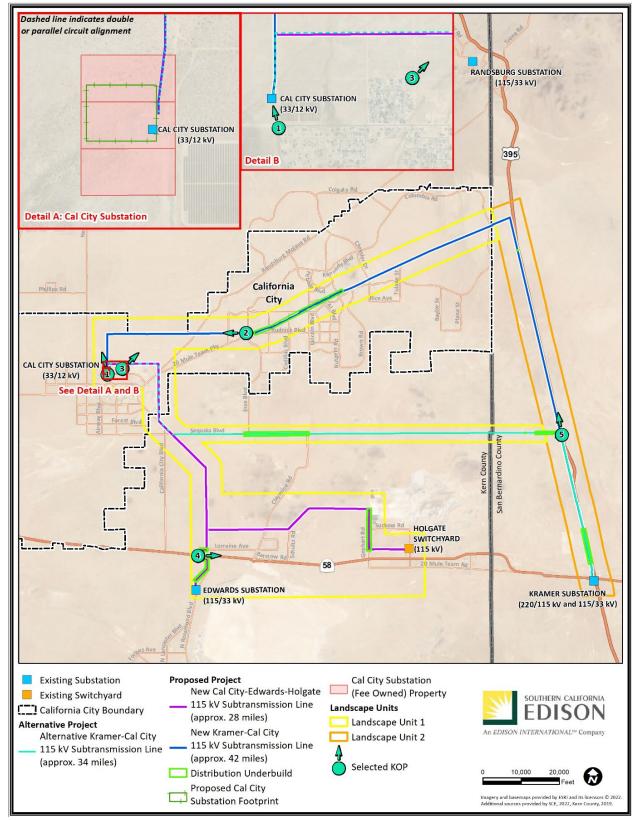


Figure 6-1 KOP Locations

6.1.1.2 Would the project result in a cumulatively considerable net increase of any criteria pollutant for which the project region is in non-attainment under an applicable federal or state ambient air quality standard?

Compared to the Proposed Project, the Sequoia Boulevard Alternative would likely result in similar particulate matter (PM) construction emissions. Although the Sequoia Boulevard Alternative would reduce the total subtransmission line construction by approximately 12 percent, the majority of the proposed Kramer-Cal City 115 kV Subtransmission Line alignment would be parallel to unimproved Sequoia Boulevard under the alternative. The majority of the Proposed Project's Kramer-Cal City 115 kV Subtransmission Line alignment is located in close proximity to existing paved or established dirt roadways. When compared to the Proposed Project, the typical terrain along Sequoia Boulevard is more severely sloped; therefore, this section of the Sequoia Boulevard Alternative would require substantial grading to establish a permanent access road and flat permanent structure maintenance pads in these severely sloped areas. Because of the potential for more substantial access improvements and site preparation, earth movement quantities for the Sequoia Boulevard Alternative are anticipated to be comparable to those estimated for the Proposed Project, despite the shorter alignment. For this reason, temporary PM emissions would likely also be similar during construction. Overall, both the Proposed Project and the Sequoia Boulevard Alternative would involve similar off-road construction equipment, on-road vehicle use, and helicopter use; therefore, the exhaust emissions would be similar. The Proposed Project and Sequoia Boulevard Alternative would be operated and maintained using similar equipment and at similar frequencies, resulting in a similar level of long-term emissions. Therefore, overall, short-term impacts of the Sequoia Boulevard Alternative would be similar to the Proposed Project and would be less than significant with mitigation incorporated, while long-term impacts of the Sequoia Boulevard Alternative would be equal to the Proposed Project and would be less than significant.

6.1.1.3 Would the project expose sensitive receptors to substantial pollutant concentrations?

Compared with the Proposed Project, emissions of criteria pollutants at sensitive receptors from the Sequoia Boulevard Alternative would likely be similar. The proposed Kramer-Cal City 115 kV Subtransmission Line alignment for the Proposed Project and Sequoia Boulevard Alternative would be located in proximity to a similar number of sensitive receptors and at similar distances to these receptors. The nearest sensitive receptor to the Proposed Project is a residence located approximately 140 feet from the proposed Kramer-Cal City 115 kV Subtransmission Line along Twenty Mule Team Parkway. The nearest sensitive receptor to the proposed Kramer-Cal City 115 kV Subtransmission Line associated with the Sequoia Boulevard Alternative is a residence located approximately 100 feet from the alignment near the intersection of Claymine Road and Sequoia Boulevard. Thus, the distance to the nearest sensitive receptor for both the Proposed Project and the Sequoia Boulevard Alternative are very similar. The remaining sensitive receptors are located near the Cal City Substation and along the proposed Cal City-Edwards-Holgate 115 kV Subtransmission Line. These two components would be identical for both the Proposed Project and the Sequoia Boulevard Alternative. Because similar construction techniques and equipment would be used in the vicinity of these sensitive receptors, their potential exposure to pollutants would be similar and less than significant with implementation of APMs AIR-1, AIR-2, and NOI-1, the same APMs that would be implemented under the Proposed Project. The Proposed Project and Sequoia Boulevard Alternative would be operated and maintained using similar equipment, at similar frequencies, and in similar proximity to sensitive receptors. As a result, sensitive receptors would experience similar long-term exposures to emissions, and long-term impacts would be less than significant.

6.1.1.4 Would the project have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status in local or regional plans, policies, or regulations, or by the CDFW or USFWS?

Compared with the Proposed Project, potential impacts under the Sequoia Boulevard Alternative to candidate, sensitive, or special-status species would likely be greater in the short-term; this is because although work occurring under the Sequoia Boulevard Alternative would be along a shorter linear distance, it would introduce new access roads, new subtransmission structures, and general disturbance into relatively less-disturbed (Sequoia Boulevard) – and in some portions, undisturbed (between Sequoia Boulevard and U.S. Route 395) – habitat. This would result in a greater impact to baseline (less-disturbed) conditions in the Sequoia Boulevard Alternative, compared to the Proposed Project, which is located along more established roads (Rudnick Boulevard, Twenty Mule Team Parkway, and U.S. Route 395) and developed areas.

Compared to the Proposed Project, which would add new poles to an approximately 9-mile length without existing electrical poles, work under the Sequoia Boulevard Alternative would include new poles within an approximately 3-mile length that is primarily roadless and without poles, and new poles in an additional approximately 8-mile length (total 11 miles) without existing poles. Additionally, compared to the new or heavily-improved access roads proposed along the Proposed Project, which would be located parallel to – and within approximately 250 feet of - existing developed roads, a new access road in the Sequoia Boulevard Alternative would occur along approximately 16 miles of a less developed road than those in the Proposed Project alignment, and along approximately 3 miles of a currently roadless area. Construction of new roads in roadless areas fragment and contribute to existing fragmentation of wildlife habitat, introduce new human disturbance, and result in avoidance of wide (over 1,000 feet) areas adjacent to the road by sensitive species, particularly the Mojave desert tortoise. Specifically, 26.65 acres of medium- to highquality habitat for Mojave desert tortoise, Mohave ground squirrel, American badger, burrowing owl, and desert kit fox, and 26.49 acres of medium- to high-quality habitat for California horned Lark were mapped along the primarily roadless area. By comparison, the proposed Kramer-Cal City 115 kV Subtransmission Line and associated access road improvements under the Proposed Project would parallel an existing utility corridor and/or existing paved and unpaved roads for the entirety of its alignment and, therefore, would avoid impacts to habitat within this largely undisturbed area. The construction of new access roads in currently undeveloped areas under the Sequoia Boulevard Alternative would therefore result in greater impacts as compared to the Proposed Project's construction of a new access road in closer proximity to existing developed roads.

New poles would introduce more new potential nesting and/or perching habitat for ravens, a primary predator of Mojave desert tortoise, and those new poles would be placed in less-disturbed habitat as compared to pole locations under the Proposed Project. Compared to the Proposed Project, the Sequoia Boulevard Alternative would require greater mitigation of impacts to habitat for desert tortoise and other regulated species, including restoring native vegetation and managing invasive plants, due to the greater extent of less disturbed/undisturbed areas in which poles would be constructed. Although new access roads and poles would result in reduced permanent removal of habitat in the Sequoia Boulevard Alternative compared to the Proposed Project due to its shorter length when the impact extent resulting from development of an undeveloped area is considered, overall impacts in the Sequoia Boulevard Alternative would be greater, while remaining less than significant with mitigation.

Compared with the Proposed Project, long-term/operational potential impacts of the Sequoia Boulevard Alternative to species identified as candidate, sensitive, or special-status would be greater, despite the shorter linear length along which operation and maintenance (O&M)-related activities would occur relative to the Proposed Project.

Overall impacts of the Sequoia Boulevard Alternative would be greater because work would occur in lessdisturbed areas than those in the Proposed Project, despite the shorter linear length. These impacts would include medium- to high-quality habitat for sensitive and special-status species.

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

Compared with the Proposed Project, potential impacts to sensitive natural communities under the Sequoia Boulevard Alternative would be equivalent in the short-term. The approximate acreage of temporary and permanent impacts to sensitive natural communities for the Sequoia Boulevard Alternative is lower than the Proposed Project (approximately 55 acres of temporary and 14 acres of permanent impacts compared to approximately 87 acres of temporary and 33 acres of permanent impacts in the Proposed Project). However, work under the Sequoia Boulevard Alternative would include impacts to sensitive communities in an approximately 3-mile length of roadless, relatively undisturbed vegetation (approximately 2 acres of temporary and 1 acre of permanent impacts to mapped sensitive communities). Impacts to relatively undisturbed natural communities are more disruptive than those in a human-impacted, disturbed area, offsetting the shorter length and reduced sensitive natural community acreage in the Sequoia Boulevard Alternative compared to the Proposed Project, where the majority of the sensitive natural communities occur in more indirectly disturbed areas along established roads, including U.S. Route 395. No riparian communities exist along the Proposed Project or Sequoia Boulevard Alternative alignments.

Compared with the Proposed Project, potential impacts to sensitive natural communities in the Sequoia Boulevard Alternative would also be equivalent in the long-term; this is due to the less-disturbed conditions offsetting the shorter linear length along which O&M-related activities would occur. In both the Proposed Project and the Sequoia Boulevard Alternative, any long-term impacts would be less than significant.

6.1.1.6 Would the project have a substantial adverse effect on state or federally protected wetlands, (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?

Compared with the Proposed Project, potential impacts under the Sequoia Boulevard Alternative to state jurisdictional waters would be equivalent in the short-term. This is because impacts from work being conducted along a shorter length in the Sequoia Boulevard Alternative would be offset by the fact that the alignment crosses a similar number of state jurisdictional features (207) as those in the Proposed Project alignment (237). Additionally, construction of the Sequoia Boulevard Alternative would introduce a new access road, new subtransmission structures, and general disturbance into areas where jurisdictional features are in relatively less-disturbed and in some cases undisturbed areas, compared to the Proposed Project, which is located along more established roads (Rudnick Boulevard, Twenty Mule Team Parkway, and U.S. Route 395).

Work under the Sequoia Boulevard Alternative would include an approximately 3-mile length of currently roadless area crossed by uninterrupted jurisdictional drainages, plus an additional approximately 11-mile length (total 14 miles) of road with only five culverted drainages. Sixteen similar drainages along the Proposed Project alignment have been culverted and several others are below road grade. Jurisdictional features along the Sequoia Boulevard Alternative would likely require more new culverts, and/or temporary

bridges, plating, or matting. As a result, more permit coordination with the RWQCB and CDFW could be required for the Sequoia Boulevard Alternative and could require more extensive mitigation actions.

Compared with the Proposed Project, potential impacts associated with the Sequoia Boulevard Alternative would be equivalent in the long-term due to the shorter length being offset by the presence of a similar number of jurisdictional waters/drainages along which O&M-related activities would occur. In both the Proposed Project and the Sequoia Boulevard Alternative, any long-term impacts would be less than significant.

6.1.1.7 Would the project conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?

The San Bernardino County Policy Plan, San Bernardino County Code of Ordinances, Kern County General Plan, and City of California City General Plan all contain policies intended to protect biological resources, including sensitive natural communities, special-status species, riparian habitat and wetlands, wildlife corridors, and to protect against the spread or introduction of noxious weed species. Like the Proposed Project, the Sequoia Boulevard Alternative has the potential to conflict with these policies if impacts to biological resources occur. However, implementation of SCE's proposed APMs will ensure the protection of the resources identified in the Plans and Code of Ordinances, or the minimization of impacts to said resources. Therefore, short- and long-term impacts for the Sequoia Boulevard Alternative would be the same as under the Proposed Project.

6.1.1.8 Would the project disturb any human remains, including those interred outside of dedicated cemeteries?

Compared with the Proposed Project, the Sequoia Boulevard Alternative's potential impacts to human remains would be greater in the short-term. As with the Proposed Project, it is possible that human remains could be uncovered during ground-disturbing activities for the Sequoia Boulevard Alternative. However, given the substantially less-disturbed nature of the Sequoia Boulevard Alternative alignment relative to the Proposed Project alignment, potential to encounter previously undiscovered human remains may be incrementally greater along the alternative, as remains are less likely to have been previously disturbed or displaced due to construction of existing infrastructure and development. As with the Proposed Project, impacts would be reduced to a less than significant level with incorporation of APMs CUL-1, CUL-2, CUL-3, CUL-4, and CUL-5.

Both the Proposed Project and Sequoia Boulevard Alternative are anticipated to require similar O&M activities, which are not anticipated to involve substantial ground-disturbance that would impact human remains. As such, long-term impacts to human remains under the Sequoia Boulevard Alternative would be equivalent to those under the Proposed Project.

6.1.1.9 Would the project directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?

Compared to the Proposed Project, the Sequoia Boulevard Alternative crosses the same geologic units of high paleontological sensitivity which include Quaternary old [Pleistocene] alluvium and Quaternary [Pleistocene] fanglomerate. The Proposed Project crosses geologic units of high paleontological sensitivity for approximately 19.5 miles whereas the Sequoia Boulevard Alternative crosses high sensitivity units for approximately 9.9 miles. However, given the substantially less-disturbed nature of the Sequoia Boulevard Alternative alignment relative to the Proposed Project alignment, potential to encounter intact

paleontological resources may be incrementally greater along portions of the alternative alignment, as resources are less likely to have been previously disturbed or displaced due to construction of existing infrastructure and development. Nonetheless, potential impacts under the Sequoia Boulevard Alternative to paleontological resources would be equivalent to the Proposed Project with implementation of SCE's proposed APMs PAL-1, PAL-2, and PAL-3.

6.1.1.10 Would the project create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?

Like the Proposed Project, the Sequoia Boulevard Alternative would involve the use of some hazardous materials during construction. However, with compliance with APM HAZ-1, construction workers would implement a Hazardous Materials Management Plan (HMMP) to ensure the proper procedures for handling, use, storage, and disposal of hazardous materials. In addition, like the Proposed Project, there is a potential for construction of the Sequoia Boulevard Alternative to create a hazard to the public or environment if excavation or other ground-disturbing activities encounter contaminated soil. However, APM HAZ-2 would require the preparation of a soil management plan which would guide the proper handling, management, and disposal of impacted soil if encountered. While the Sequoia Boulevard Alternative would result in a nominal increase in O&M activities, it would not result in a substantial increase in the transport, use, or disposal of hazardous materials. Hazardous materials would be transported, used, and disposed of in accordance with applicable rules, regulations, and SCE standard protocols designed to protect the environment, workers, and the public. Compared with the Proposed Project, potential short- and long-term impacts from the routine transport, use, or disposal of hazardous materials of the Sequoia Boulevard Alternative would be equivalent. Like the Proposed Project, with implementation of SCE's proposed APMs under the Sequoia Boulevard Alternative, impacts would be less than significant.

6.1.1.11 Would the project create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?

Like the Proposed Project, construction activities for the Sequoia Boulevard Alternative have the potential to involve the release of hazardous materials. However, implementation of APMs HAZ-1 and HAZ-2 would reduce impacts to less than significant. Therefore, compared with the Proposed Project, potential short- and long-term impacts from the potential for upset or accident conditions involving the release of hazardous materials would be equivalent with implementation of SCE's proposed APMs under the Sequoia Boulevard Alternative.

6.1.1.12 Would the project emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?

The California City High School (8567 Raven Way, City of California City) is located within 0.25 mile of the western-most portion of the Proposed Project alignment and proposed improvements at Cal City Substation. The Sequoia Boulevard Alternative would be at the same location as the Proposed Project in this area and would also be within 0.25 mile of the California City High School. Therefore, short- and long-term impacts associated with the use of hazardous materials within 0.25 mile of a school would be the same as under the Proposed Project and would be less than significant with implementation of APMs HAZ-1 and HAZ-2.

6.1.1.13 Would the project create a significant hazard to air traffic from the installation of new power lines and structures?

Like the Proposed Project, the Sequoia Boulevard Alternative may require the use of helicopters or cranes during construction. Also like the Proposed Project, prior to construction, SCE would submit the required Notice of Proposed Construction or Alteration to the Federal Aviation Administration (FAA) pursuant to Title 14 CFR, Section 77.9. In addition, implementation of APM HAZ-3 would require coordination with the FAA and local airports regarding construction helicopter flight plans. Thus, like the Proposed Project, the Sequoia Boulevard Alternative would not result in a safety hazard to air traffic with implementation of APM HAZ-3. Both the Proposed Project and Sequoia Boulevard Alternative include structures along the same proposed alignment within EAFB and include structures within approximately 2 miles of the California City Municipal Airport. As with the Proposed Project, SCE would coordinate with the FAA regarding structure design, height, marking, and lighting in the vicinity of airports and runways for the Sequoia Boulevard Alternative. Overall, short- and long-term impacts would be the same as under the Proposed Project.

6.1.1.14 Would the project expose people to a significant risk of injury or death involving unexploded ordinance?

As with the Proposed Project, there is the potential to encounter unexploded ordinance (UXO) during construction of the Sequoia Boulevard Alternative. However, with implementation of SCE's proposed APM HAZ-4, construction workers would be trained on the proper protocol for the identification, marking, and avoidance of UXO, as well notification procedures to arrange for treatment and proper disposal of UXO by a trained specialist should such items be encountered during construction. Therefore, with implementation of this APM, short-term impacts for the Sequoia Boulevard Alternative would be the same as under the Proposed Project. O&M activities for the Sequoia Boulevard Alternative would occur on existing or new rights-of-way in areas that have already been disturbed and are unlikely to encounter UXO. Therefore, long-term impacts of the Sequoia Boulevard Alternative would be less than significant with implementation of APM HAZ-4, the same as under the Proposed Project.

6.1.1.15 Would the project violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality?

Like the Proposed Project, construction activities under the Sequoia Boulevard Alternative would require preparation of project-specific Stormwater Pollution Prevention Plans (SWPPPs) and implementation of site-specific best management practices to reduce construction-related water quality impacts. Neither the Proposed Project nor the Sequoia Boulevard Alternative would contribute to degradation of water quality within a 303(d) listed waterbody, as neither alignment crosses a 303(d) listed waterbody. Furthermore, implementation of APMs HAZ-1 and WET-1 would include measures to manage hazardous materials and reduce the possibility of such materials entering waterbodies and affecting water quality during construction. Compared with the Proposed Project, potential short-term impacts from violation of any water quality standards or waste discharge requirements or degradation of surface or groundwater quality would be equivalent with implementation of APMs HAZ-1 and WET-1 under the Sequoia Boulevard Alternative. As with the Proposed Project, this impact would be less than significant with mitigation incorporated.

6.1.1.16 Would the project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would result in substantial erosion or siltation on-site or off-site; substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site; create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or impede or redirect flood flows?

Compared with the Proposed Project, potential impacts from installation and expansion of existing and new infrastructure and access roads and subsequent localized changes to the existing drainage patterns would be equivalent under the Sequoia Boulevard Alternative. While shorter in linear distance, the topography and less-disturbed nature of the Sequoia Boulevard Alternative alignment is anticipated to require more substantial access improvements, resulting in earth movement and alteration of drainage patterns comparable to the Proposed Project. Both the Proposed Project and Sequoia Boulevard Alternative would require preparation of project-specific SWPPPs and implementation of APMs HAZ-1 and WET-1 to reduce potential construction-related erosion, siltation, and water quality impacts. Furthermore, the Sequoia Boulevard Alternative would result in equivalent alteration to drainage patterns at Cal City Substation, which is located within a 100-year floodplain. Improvements at Cal City Substation would include construction of a diversion channel and detention and water quality basin to capture, detain, and treat runoff from the upgraded facility. As such, short-term and long-term impacts under the Sequoia Boulevard Alternative would be equivalent to those under the Proposed Project. As with the Proposed Project, this impact would be less than significant with incorporation of APMs HAZ-1 and WET-1.

6.1.1.17 Would the project, in flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?

Compared with the Proposed Project, potential impacts from upgrades at Holgate Switchyard and expansion of Cal City Substation—both of which are located in flood hazard zones—as well as construction of subtransmission infrastructure that would cross flood hazard zones at various portions of the proposed alignment would be equivalent with implementation of SCE's proposed APMs HAZ-1 and WET-1 under the Sequoia Boulevard Alternative. Because both the Proposed Project and Sequoia Boulevard Alternative would result in upgrades and expansion of facilities within flood hazard zones, both short-term and long-term impacts would be equivalent. As with the Proposed Project, this impact would be less than significant with implementation of APMs HAZ-1 and WET-1.

6.1.1.18 Would the project conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?

Compared with the Proposed Project, potential impacts associated with conflicts with or obstruction of a water quality control plan or sustainable groundwater management plan would be equivalent with implementation of SCE's proposed APMs HAZ-1 and WET-1 under the Sequoia Boulevard Alternative. The Lahontan RWQCB Water Quality Control Plan sets forth standards for the protection of water quality in the region. As with the Proposed Project, construction activities under the Sequoia Boulevard Alternative would have the potential to degrade water quality through erosion, sedimentation, or runoff of pollutants. However, like the Proposed Project, this impact would be reduced to a less than significant level with incorporation of APMs HAZ-1 and WET-1. As with the Proposed Project, construction of the Sequoia

Boulevard Alternative would require that SCE obtain a WDR from the Lahontan RWQCB. Receipt of this WDR and compliance with all permit conditions would ensure the Sequoia Boulevard Alternative does not conflict with the Lahontan RWQCB's Water Quality Control Plan. Furthermore, like the Proposed Project, the Sequoia Boulevard Alternative alignment does not cross any impaired waterbodies and, therefore, activities would not exacerbate any existing water quality impairments described in the RWQCB's Water Quality Control Plan. As discussed in Section 5.10, no Groundwater Sustainability Plans have been adopted for any of the groundwater basins underlying the Proposed Project or Sequoia Boulevard Alternative. As such, neither would conflict with or obstruct implementation of a sustainable groundwater management plan. Both short-term and long-term impacts would be equivalent, and less than significant with implementation of APMs HAZ-1 and WET-1.

6.1.1.19 Would the project result in generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?

Compared to the Proposed Project, potential impacts associated with the generation of temporary ambient noise levels during construction would be similar with the implementation of SCE's proposed APMs under the Sequoia Boulevard Alternative. Construction methods and equipment for both the Proposed Project and Sequoia Boulevard Alternative would be similar and, as described in Section 6.1.1.3, both would be conducted in similar proximity to sensitive receptors. Compared to the Proposed Project, potential impacts associated with the permanent increase in ambient noise levels would be the same under the Sequoia Boulevard Alternative. The Cal City Substation and new subtransmission lines would be the only new sources of permanent noise. The Cal City Substation expansion would be identical for both the Proposed Project and Sequoia Boulevard Alternative. The new subtransmission lines would generate minimal levels of corona noise during operation; however, these lines would be located similar distances from a similar number of sensitive receptors. As a result, the long-term increase in noise would be equivalent. For both the Sequoia Boulevard Alternative and the Proposed Project, this impact would be less than significant with incorporation of APM NOI-1.

6.1.1.20 Would the project reduce or prevent access to a designated recreation facility or area?

Compared to the Proposed Project, potential impacts associated with the reduction or prevention of access to recreation facilities or areas would likely be reduced under the Sequoia Boulevard Alternative. Parks and recreation areas affected by construction-related access restrictions would include the BLM OHVdesignated area north of Rudnick Boulevard, Borax Bill Station & Park north of Twenty Mule Team Parkway, Fremont Valley Ecological Reserve, and West Mojave Desert Ecological Reserve, all of which are directly adjacent to the Proposed Project alignment. In addition to OHV-designated parks, an extensive network of street legal roads, dirt OHV roads, and City of California City Designated trails are located adjacent to the Proposed Project in the vicinity of Twenty Mule Team Parkway and Rudnick Boulevard. The Sequoia Boulevard Alternative would eliminate construction activities in the vicinity of Twenty Mule Team Parkway, thus reducing the potential for access restrictions or closures of Twenty Mule Team Parkway and any roads or trails accessed there by recreationalists. The remaining components would be located in similar proximity to other recreational facilities and areas in the Proposed Project vicinity and potential impacts to these resources would be similar for the Proposed Project and Sequoia Boulevard Alternative. Long-term impacts to recreational facilities or areas are not anticipated and would be similar for both the Proposed Project and Sequoia Boulevard Alternative if such impacts were to occur. As with the Proposed Project, this impact would be less than significant with incorporation of APM REC-1.

6.2 Alternatives Ranking

Table 6-1 summarizes the comparison results discussed above and provides a comparison to show if impacts are reduced, increased, or equal to the Proposed Project. Because the Sequoia Boulevard Alternative would involve development in less-disturbed areas, some issue areas would have greater short- or long-term impacts such as impacts to sensitive species.

Table 6-1 Alternatives Ranking

			Sequoia Boulevard Alternative Compared to Proposed Project		
CEQA Impact Criterion	Proposed Project Impact Conclusion	Sequoia Boulevard Alternative Impact Conclusion	Short-Term Impacts Increased/Reduced	Long-Term Impacts Increased/Reduced	
Would the project, in nonurbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage point) If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?	Significant and Unavoidable	Significant and Unavoidable	Equal Impact	Increased Impact	
Would the project result in a cumulatively considerable net increase of any criteria pollutant for which the region is non- attainment under an applicable federal or state ambient air quality standard?	Mitigation	Less than Significant with Mitigation	Equal Impact	Equal Impact	
Would the project expose sensitive receptors to substantial pollutant concentrations?	Less than Significant with Mitigation	Less than Significant with Mitigation	Equal Impact	Equal Impact	
Would the project have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status in local or regional plans, policies, or regulations, or by the CDFW or USFWS?	Mitigation	Less than Significant with Mitigation	Increased Impact	Increased Impact	
Would the project have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations, or by the CDFW or USFWS?	Mitigation	Less than Significant with Mitigation	Equal Impact	Equal Impact	
Would the project have a substantial adverse effect on state or federally protected wetlands, (including, but not limited to,		Less than Significant with Mitigation	Equal Impact	Equal Impact	

			Sequoia Boulevard Alternative Compared to Proposed Project		
CEQA Impact Criterion	Proposed Project Impact Conclusion	Sequoia Boulevard Alternative Impact Conclusion	Short-Term Impacts Increased/Reduced	Long-Term Impacts Increased/Reduced	
marsh, vernal pool, and coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	Conclusion	Impact Conclusion		Increased Reduced	
Would the project conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	Less than Significant with Mitigation	Less than Significant with Mitigation	Equal Impact	Equal Impact	
Would the project disturb any human remains, including those interred outside of dedicated cemeteries?	Less than Significant with Mitigation	Less than Significant with Mitigation	Increased Impact	Equal Impact	
Would the project directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	Less than Significant with Mitigation	Less than Significant with Mitigation	Equal Impact	Equal Impact	
Would the project create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	Less than Significant with Mitigation	Less than Significant with Mitigation	Equal Impact	Equal Impact	
Would the project create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment	Less than Significant with Mitigation	Less than Significant with Mitigation	Equal Impact	Equal Impact	
Would the project emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one- quarter 0.25 mile of an existing or proposed school?	Less than Significant with Mitigation	Less than Significant with Mitigation	Equal Impact	Equal Impact	
Would the project create a significant hazard to air traffic from the installation of new power lines and structures?	Less than Significant with Mitigation	Less than Significant with Mitigation	Equal Impact	Equal Impact	
Would the project expose people to a significant risk of injury or death involving unexploded ordinance?	Less than Significant with Mitigation	Less than Significant with Mitigation	Equal Impact	Equal Impact	

			Sequoia Boulevard Alternative Compared to Proposed Project		
CEQA Impact Criterion	Proposed Project Impact Conclusion	Sequoia Boulevard Alternative Impact Conclusion	Short-Term Impacts Increased/Reduced	Long-Term Impacts Increased/Reduced	
Would the project violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality?	Mitigation	Less than Significant with Mitigation	Equal Impact	Equal Impact	
Would the project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would result in substantial erosion or siltation on-site or off-site; substantially increase the rate or amount of surface runoff in a manner which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or impede or redirect flood flows?	Mitigation	Less than Significant with Mitigation	Equal Impact	Equal Impact	
Would the project, in flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?		Less than Significant with Mitigation	Equal Impact	Equal Impact	
Would the project conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?	Mitigation	Less than Significant with Mitigation	Equal Impact	Equal Impact	
Would the project result in generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	Mitigation	Less than Significant with Mitigation	Equal Impact	Equal Impact	
Would the project reduce or prevent access to a designated recreation facility or area?	Less than Significant with Mitigation	Less than Significant with Mitigation	Reduced Impact	Equal Impact	

This page intentionally left blank.

Chapter 7 Cumulative Impacts and Other CEQA Considerations

This Chapter presents the results of a cumulative impacts analysis for the Cal City Substation 115 kV Upgrade Project (Proposed Project) and an analysis of the potential growth-inducing impacts associated with the Proposed Project.

7.1 Cumulative Impacts

This section analyzes the potential cumulative impacts related to the Proposed Project. The California Environmental Quality Act (CEQA) requires lead agencies to consider the cumulative impacts of proposals under their review. CEQA Guidelines section 15355 defines cumulative impacts as "two or more individual effects which, when considered together, are considerable or which compound or increase other environmental impacts." According to CEQA Guidelines section 15130(a)(1), "a cumulative impact consists of an impact which is created as a result of the combination of the project evaluated in the EIR together with other projects causing related impacts." The cumulative impacts analysis should "examine reasonable, feasible options for mitigating or avoiding the project's contribution to any significant cumulative effects" (section 15130(b)(5)).

CEQA Guidelines section 15130(a)(3) also states that an environmental document may determine that a project's contribution to a significant cumulative impact would be rendered less than cumulatively considerable, and thus not significant, if a project is required to implement or fund its fair share of mitigation measure(s) designed to alleviate the cumulative impact.

In conducting a cumulative impacts analysis, the proper frame of reference is the temporal span and spatial areas in which the project would cause impacts. In addition, a discussion of cumulative impacts must include either:

- A list of past, present, and probable future projects, including, if necessary, those outside the lead agency's control; or
- A summary of projections contained in an adopted general plan or related planning document, or in a
 previously certified EIR, which described or evaluated regional or area-wide conditions contributing to
 the cumulative impact, provided that such documents are referenced and made available for public
 inspection at a specified location (section 15130(b)(1)).

The following subsections discuss whether the Proposed Project could result in significant short-term or long-term environmental impacts when combined with past, present, planned, and probable future projects in the area. Short-term impacts are generally associated with construction of the Proposed Project and cumulative projects, while long-term impacts are those that result from operation and maintenance (O&M) of the Proposed Project features or O&M of the cumulative projects.

7.1.1 List of Cumulative Projects

Review of the Governor's Office of Planning & Research's State Clearinghouse CEQAnet database, and the Kern County Planning Division, San Bernardino County Planning Division, City of California City Planning Department, and Edwards Air Force Base (EAFB) websites revealed several past, present, or probable future projects located within 2 miles of the Proposed Project that would potentially be constructed within 1 year before or after the Proposed Project. In addition, SCE projects in the vicinity of the Proposed

Project were evaluated for inclusion in the analysis. A listing of projects meeting these criteria are listed in Table 7-1 along with an identification number, a brief description, the jurisdiction in which it is located, distance from the Proposed Project alignment, status, and anticipated construction schedule. These projects are shown on Figure 7-1.

Project	Description	Location	Distance	Status	Anticipated Construction Schedule
SBC-1: Kramer Junction Commercial Project	Multipurpose fueling and service station	San Bernardino County east of Proposed Kramer- Cal City 115 kV Subtransmission Line	0.05 mile	Planning	Unknown
SBC-2: Kramer Junction Beyond Food Mart Project	Multipurpose fueling and service station	San Bernardino County east of Proposed Kramer- Cal City 115 kV Subtransmission Line	0 mile	Planning	Unknown
SBC-3: Kramer South Solar Farm - 37BF 8me, LLC	Solar photovoltaic power generating facility	San Bernardino County southwest of Kramer Substation	0.3 mile	Planning	Unknown
SBC-4: Kramer North Solar Farm - 12AT 8ME, LLC	Solar photovoltaic power generating facility	San Bernardino County north of Kramer Substation	0.2 mile	Planning	Unknown
SCE-1: Ivanpah Control Project	Rebuilding of 358 miles of existing 115 kV subtransmission circuit	San Bernardino County within eastern portion of Proposed Project Area; Kern County within northeastern corner of Proposed Project Area	0 mile	Planning	2025
SCE-2: Kramer- Holgate-Edwards 115 kV Subtransmission Line Reconductor	Reconductoring of 11 miles of existing 115 kV subtransmission circuit between Kramer, Holgate, and Edwards Substations	San Bernardino and Kern Counties within southern portion of Proposed Project Area	0 mile	Planning	Unknown
CC-1: Canni Land Cannabis Project	Commercial cannabis distribution, cultivation, and manufacturing facility	Southeast of Randsburg Road and bisected by Twenty Mule Team Parkway, APN 350-140- 01	0.6 miles	Planning	Unknown
CC-2: Hannabis Cannabis Production Facility Project	Commercial cannabis cultivation and manufacturing facility	North of Mendiburu Blvd. and adjacent to and easterly of Yerba Blvd., APN 302-273-23	1.9 miles	Planning	Unknown
CC-3: Initial Study, EGH Holdings, LLC, APN 302-271-37	Cannabis growing facility	North of Lindbergh Boulevard and east of Yerba Boulevard, APN 302-271-37	1.7 miles	Planning	Unknown

Table 7-1	Cumulative Projects within Two Miles of Proposed Project

Project	Description	Location	Distance	Status	Anticipated Construction Schedule
CC-4: Parzych	Zone change from	North of Lindbergh	0.7 miles	Planning	Unknown
Family Trust	Open, Space	Boulevard and east of			
	Residential, or	Neuralia Road, APN 229-			
	Agriculture to M1-	010-13			
	Light Industrial				

Sources:

SBC-1: https://lus.sbcounty.gov/planning-home/applications-accepted/, accessed 16 May 2022

SBC-2: http://www.sbcounty.gov/uploads/lus/pc/SR_PROJ-2019-00052-Final.pdf, accessed 16 May 2022

- SBC-3: https://www.sbcounty.gov/uploads/LUS/Renewable/SolarProjectListSEP_2022.pdf, accessed 14 December 2022
- SBC-4: https://www.sbcounty.gov/uploads/LUS/Renewable/SolarProjectListSEP_2022.pdf, accessed 14 December 2022

SCE-1: SCE 2019

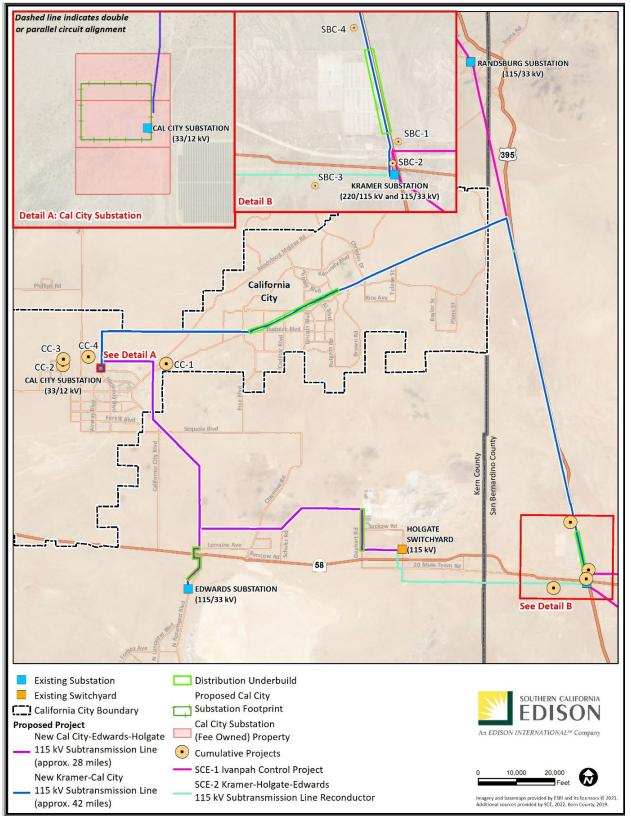
SCE-2: SCE 2022

CC-1: https://www.californiacity-ca.gov/CC/index.php/planning/initial-studies-for-review, accessed 14 December 2022

CC-2: https://www.californiacity-ca.gov/CC/index.php/planning/initial-studies-for-review, accessed 14 December 2022

CC-3: https://www.californiacity-ca.gov/CC/index.php/planning/initial-studies-for-review, accessed 14 December 2022 CC-4: https://www.californiacity-ca.gov/CC/index.php/planning/initial-studies-for-review, accessed 14 December 2022

Figure 7-1 Cumulative Projects



7.1.2 Geographic Scope

The geographic scope of analysis for each resource topic is constrained to those areas where work under the Proposed Project would be performed or, for aesthetics, those areas where work under the Proposed Project would be visible.

7.1.3 Cumulative Impact Analysis

7.1.3.1 Aesthetics

The Proposed Project area and vicinity (2-mile radius) in which Cumulative Projects are located contains vast, uninterrupted desert views with the majority of development centered around California City, Kramer Junction, and the communities of Boron, Desert Lake, and North Edwards. A large, existing overhead utility corridor parallels U.S. 395, and the Burlington Northern Santa Fe railroad generally parallels Twenty Mule Team Road to the south.

The Cumulative Project Area does not contain any designated scenic vistas or state scenic highways. Similar to the Proposed Project, while there are locations throughout the Cumulative Project vicinity where new development may impede a given view, the new development would be minor when taken as a whole within the vast landscape. Cumulative Projects would not prevent public views of areas that are valued for their scenic quality. Therefore, Cumulative Projects are anticipated to have less than significant impacts to scenic vistas and scenic resources within a state scenic highway.

Implementation of the Proposed Project would alter the visual character and quality in the Proposed Project vicinity. Similarly, the Cumulative Projects listed in Table 7-1 would potentially alter the visual character and view quality in the 2-mile vicinity around the Proposed Project. Development of projects such as large cannabis manufacturing and grow facilities and additional utility infrastructure would broaden the footprint of development within the greater expansive, natural desert setting around the outskirts of existing development near Cal City Substation and Kramer Junction.

At KOP 1, Proposed Project impacts related to visual character and quality would be less than significant with implementation of Applicant Proposed Measures (APMs) AES-1 and AES-2. The nearest Cumulative Project would be the zoning change located at CC-4, approximately 1 mile northwest of KOP 1. Due to intervening features at Cal City Substation, CC-4 would not be visible from KOP 1, and no significant cumulative impacts would occur. Therefore, the Proposed Project would not contribute to a cumulatively considerable aesthetics impact in this area.

At KOP 2, Proposed Project impacts related to visual character and quality would be less than significant with implementation of APM AES-1. The nearest Cumulative Project would be the commercial cannabis distribution, cultivation, and manufacturing facility located at CC-1, approximately 4.5 miles southwest of KOP 2. Due to the distance and low structural profile of the cannabis facility, CC-1 would not be highly visible from KOP 2, and no significant cumulative impacts would occur. Therefore, the Proposed Project would not contribute to a cumulatively considerable aesthetics impact in this area.

At KOP 3, Proposed Project impacts related to visual character and quality would be significant and unavoidable due to the proposed human-made infrastructure within the otherwise intact, unified natural setting. The nearest Cumulative Project would be the commercial cannabis distribution, cultivation, and manufacturing facility located at CC-1, approximately 2 miles east of KOP 3. Due to the distance and low structural profile of the cannabis facility, CC-1 would not be highly visible from KOP 3, and no significant

cumulative impacts would occur. Therefore, the Proposed Project would not contribute to a cumulatively considerable aesthetics impact in this area.

At KOP 4, Proposed Project impacts related to visual character and quality would be less than significant with implementation of APM AES-1. There are no Cumulative Projects within the vicinity of KOP 4; therefore, no significant cumulative impacts would occur. Therefore, the Proposed Project would not contribute to a cumulatively considerable aesthetics impact in this area.

At KOP 5, Proposed Project impacts related to visual character and quality would be less than significant with implementation of APM AES-1. The nearest Cumulative Project would be the solar photovoltaic power generating facility located at SBC-4, approximately 5 miles south of KOP 5. Due to the distance, topography, and intervening utility features along U.S. 395, SBC-4 would not be visible from KOP 5, and no significant cumulative impacts would occur. Therefore, the Proposed Project would not contribute to a cumulatively considerable aesthetics impact in this area.

As discussed in Section 5.1, the Proposed Project would not be a source of considerable light or glare. Cumulative Projects SBC-3 and SBC-4, which are solar photovoltaic power generating facilities, would be anticipated to result in new sources of glare, but because the Proposed Project would not be a new source of glare, it would not contribute to a cumulatively considerable impact. Cumulative Projects SBC-1 and SBC-2 (both multipurpose fueling and service stations) as well as CC-1, CC-2, and CC-3 (cannabis projects) would also be new sources of light, but because the Proposed Project would not be a new source of light, it would not contribute to a cumulatively considerable impact.

7.1.3.2 Agriculture and Forestry Resources

As discussed in Section 5.2, the Proposed Project would result in no impacts for all agriculture-related CEQA criteria; therefore, the Proposed Project would not contribute to any cumulatively considerable agriculture-related impact. The Proposed Project area and vicinity (2-mile radius) in which Cumulative Projects are located do not contain any forestry resources or uses; and Cumulative Projects are anticipated to have no forestry-related impacts. Therefore, the Proposed Project would not contribute to a cumulatively considerable impact to forestry resources.

7.1.3.3 Air Quality

As presented in Section 5.3, the Proposed Project would have no impact in terms of conflicting with or obstructing implementation of an applicable air quality plan, and thus would not contribute to any cumulatively considerable impact.

Emissions during the construction phase would include criteria air pollutants that could contribute to existing or projected violations of the ambient air quality standards for ozone and PM10. However, all of the Cumulative Projects would need to implement measures to control pollutant emissions, similar to the APMs that would be implemented for the Proposed Project. As a result, a cumulatively considerable net increase of a criteria pollutant is not anticipated.

The Proposed Project's less-than-significant impacts related to objectionable odors and exposure of sensitive receptors to substantial pollutant concentrations would not contribute to a cumulative impact because the odors and pollutant concentrations disperse rapidly with distance, and because few (if any) of the identified Cumulative Projects would overlap the Proposed Project's construction work space in proximity to a potential receptor. As a result, the Proposed Project would not contribute to any cumulatively considerable impact.

7.1.3.4 Biological Resources

The geographical area evaluated for cumulative impacts to biological resources includes areas directly affected by construction as well as adjacent habitat potentially affected by construction activities. The geographical extent of the cumulative impact analysis also includes federal and state-regulated jurisdictional wetlands and other waters of the U.S.

Construction could affect plant, amphibian, reptilian, avian, and mammalian species identified as candidate, sensitive, or special-status species; Cumulative Projects listed in Table 7.1-1 would have the potential for similar effects where those projects' activities occur in the presence or habitat of these species. As discussed in Section 5.4, all impacts associated with the Proposed Project would be reduced to a less than significant level with the implementation of APMs. Impacts to sensitive species and habitats during construction would be temporary and intermittent in nature (lasting only as long as construction work at a given site) and would be limited in their potential geographic scope. Construction work areas included under the Proposed Project may spatially overlap areas where work would occur under two of the Cumulative Projects, SCE-1: Ivanpah Control Project and SCE-2: Kramer-Holgate-Edwards 115 kV Subtransmission Line Reconductor. Each of the Cumulative Project proponents would be expected to comply with federal and state regulations promulgated for the protection of sensitive species. Therefore, no cumulatively considerable impacts to sensitive species or their habitats would be anticipated.

As stated in Section 5.4, five sensitive natural communities were observed within the study area for the Proposed Project. Temporary impacts to sensitive vegetation communities as a result of construction activities are anticipated to total approximately 87 acres, while permanent impacts to sensitive vegetation communities are anticipated to total approximately 33 acres. These areas of sensitive natural communities that would be impacted would not result in a significant contribution to any cumulative impact to these communities with the implementation of APMs and would not reduce the overall availability of these habitats.

The Proposed Project would result in both temporary and permanent impacts to state jurisdictional waters. Prior to construction, SCE would obtain all necessary permits and authorizations, including those from the Regional Water Quality Control Board (RWQCB) and California Department of Fish and Wildlife (CDFW), and would comply with all conditions of approval identified in permits and authorizations. These actions would ensure that state jurisdictional waters impacts are less than significant. Further, SCE would develop and implement one or more Project-specific Stormwater Pollution Prevention Plan(s) (SWPPPs) that would include best management practices (BMPs) to prevent erosion and sedimentation into state jurisdictional waters and would protect water quality during construction. Compliance with such typical conditions is reflected in the measures contained in APMs. Cumulative Projects would similarly be required to obtain all applicable permits for impacts to jurisdictional waters and wetlands, including restoration and mitigation conditions to reduce adverse impacts to these features. Due to compliance with applicable regulations protecting state and federally protected wetlands and waters, and SCE's implementation of APMs, no cumulatively considerable impact to state jurisdictional waters is anticipated.

No component of the Proposed Project would result in permanent interference to the movement of any species. Construction activities would be temporary, transient, and would affect only small, geographically dispersed areas at any one time; these construction activities would not interfere substantially with the movement of any migratory wildlife species, although construction activities may interfere with the movement of individual animals. The Cumulative Projects also would have localized footprints and would not be expected to affect species movement within the region. For example, no new highways, levees, or other major infrastructure that would substantially inhibit passage by fish or wildlife species is planned.

Therefore, no cumulatively considerable impact to fish or wildlife movement or wildlife corridors is anticipated.

Construction and operation of the Proposed Project would not conflict with any local policies or ordinances protecting biological resources, including trees, with the implementation of general biological resources and species-specific APMs. Cumulative Projects would similarly be expected to comply with local policies, ordinances, and the conditions of applicable permits. Therefore, no cumulatively considerable impacts due to conflicts with local policies or ordinances protecting biological resources are anticipated.

There are no Habitat Conservation Plans; Natural Community Conservation Plans; or other approved local, regional, or state habitat conservation plans that apply to the Proposed Project. Therefore, the Proposed Project would not contribute to any cumulative impact involving conflicts with adopted natural resource plans.

7.1.3.5 Cultural Resources

Impacts to cultural resources are generally site- and resource-specific, and therefore potential cumulative impacts may be realized if two or more projects occur in the same location. The geographic scope of potential cumulative cultural resource impacts is limited to the immediate vicinity of ground-disturbing activities that would occur during construction. Construction work areas included under the Proposed Project may spatially overlap areas where work would occur under two of the Cumulative Projects, including potentially SCE-1: Ivanpah Control Project and SCE-2: Kramer-Holgate-Edwards 115 kV Subtransmission Line Reconductor. The Cumulative Project proponents would be expected to comply with state law relating to cultural resources. The results of the Cultural Resources Technical Report (CRTR) and Historic-Era Built Environment Report (HBER) are pending and currently under review by the BLM. Therefore, it cannot be determined at this time if significant historical or archaeological resources are present and would be affected by Proposed Project construction. As a result, no determination with respect to cumulative impacts has been made. Once the CRTR and HBER have been reviewed and approved by BLM they will be provided to the CPUC.

7.1.3.6 Energy

As presented in Section 5.6, the Proposed Project would result in no or less than significant impacts under all energy-related CEQA criteria. Construction of the Cumulative Projects would, like the Proposed Project, consume energy resources during construction; the proponents of the Cumulative Projects are anticipated, like SCE, not to waste, unnecessarily use, or inefficiently consume energy resources. Furthermore, the Proposed Project would result in no impact with respect to conflicts with or obstruction of a state or local plan for renewable energy or energy efficiency. Therefore, the Proposed Project would not contribute to any cumulatively considerable impact.

7.1.3.7 Geology and Soils

Geological hazards are generally site-specific and depend on localized geologic and soil conditions. The Proposed Project would result in less than significant impacts related to fault rupture, seismic ground shaking, seismic ground failure, erosion and loss of topsoil, geologic instability, expansive soils, and soils capable of supporting septic systems. SCE would comply with applicable laws, regulations, ordinances, and permits pertaining to structural design, geotechnical analysis, and erosion control and would implement BMPs, SWPPPs, and APMs where applicable. It is expected that those engaged in the construction of all Cumulative Projects would similarly comply with applicable regulations relevant to geologic and soil

resources and risks. Therefore, the Proposed Project would not contribute to any cumulatively considerable impact.

As presented in Section 5.7, the Proposed Project would not result in indirect impacts on paleontological resources during construction since it would not increase public access. The geographic scope of potential cumulative paleontological resource impacts is limited to the immediate vicinity of ground-disturbing activities that would occur during construction. Each of the Cumulative Projects would be required to undergo the appropriate level of project-specific environmental review, and proponents would be expected to comply with state and federal laws relating to paleontological resources. With implementation of APMs, the Proposed Project's contribution to any cumulative impacts would be less than significant and would not be cumulatively considerable.

7.1.3.8 Greenhouse Gas Emissions

As presented in Section 5.8, construction and operation of the Proposed Project would result in emissions of GHGs from on-site construction equipment and worker trips. Over the entire construction period of the Proposed Project, approximately 9,517 metric tons of carbon dioxide (CO₂) equivalents (MTCO₂e) would be emitted. Approximately 78 MTCO₂e would be emitted during annual O&M activities. When construction and operation emissions are combined and amortized over a 30-year period, GHG emissions would be approximately 395 MTCO₂e annually. These emissions would fall well below the Eastern Kern Air Pollution Control District and the Mojave Desert Air Quality Management District numerical thresholds of significance. Therefore, the Proposed Project would not generate, either directly or indirectly, GHG emissions that would have a significant impact on the environment. As a result, the Proposed Project's contribution to any cumulative impacts would not be cumulatively considerable and would be less than significant.

GHG emissions from construction of the Proposed Project would fall well below the established numerical threshold of significance. Therefore, the Proposed Project would not conflict with any applicable plan, policy, or regulation and would not contribute to a cumulative impact resulting from any Cumulative Project's conflicts with such plans, policies, or regulations.

7.1.3.9 Hazards and Hazardous Materials

The geographic scope for hazardous materials impacts includes areas near Proposed Project sites that could be affected by a release of hazardous materials, including schools within 0.25 miles. Impacts from such releases are usually site-specific and localized. The geographic scope also includes areas affected by the Cumulative Projects listed in Table 7-1, including downgradient air, water bodies, groundwater, and areas subject to wildland fire hazards. Materials delivery routes are also included to account for the potential impacts from a traffic accident-related spill.

Construction of the Proposed Project would result in less than significant impacts associated with the transport, use, disposal, or foreseeable upset of, or accidents involving, hazardous materials during construction with implementation of APMs. Although construction work areas included under the Proposed Project may spatially overlap areas where work would occur under some of the Cumulative Projects (including potentially SCE-1: Ivanpah Control Project and SCE-2: Kramer-Holgate-Edwards 115 kV Subtransmission Line Reconductor), Cumulative Projects would be expected to adhere to all applicable laws and regulations to reduce the potential impacts from use of hazardous materials from those projects to less than significant level. Therefore, there would be no cumulatively considerable impacts related to the transport, use, disposal or upset involving hazardous materials.

The Proposed Project would not create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment with implementation of APMs. Although construction work areas included under the Proposed Project may spatially overlap areas where work would occur under some of the Cumulative Projects (including potentially SCE-1: Ivanpah Control Project and SCE-2: Kramer-Holgate-Edwards 115 kV Subtransmission Line Reconductor), it is anticipated that Cumulative Projects would comply with applicable laws and regulations to reduce impacts from accidental release of hazardous materials. Therefore, the Proposed Project would not contribute to a cumulative impact from the release of hazardous materials.

The California City High School (8567 Raven Way, City of California City) is located within 0.25 mile of the western-most portion of the Proposed Project alignment and proposed improvements at Cal City Substation. However, there are no Cumulative Projects located within 0.25 miles of this school. Therefore, no cumulative impact to schools within 0.25 mile of the Proposed Project would occur.

The Proposed Project would not be constructed on a site listed as a hazardous materials site pursuant to California Government Code section 65962.5 and would, thus, not contribute to any cumulative or significant hazard to the public or the environment from construction on such a site.

One public airport, California City Municipal Airport (22636 Airport Way, City of California City), is located approximately 2 miles west of the Proposed Project alignment and the Cal City Substation, but the Proposed Project is not located within the planning boundary of this airport. Further, none of the Cumulative Projects are within 2 miles of this airport. Therefore, no cumulative impact related to safety hazards at airports would occur.

The Proposed Project would result in less than significant impacts related to impairing the implementation of or physically interfering with an adopted emergency response plan or emergency evacuation plan with implementation of existing regulations. It is anticipated Cumulative Projects would also implement requirements to ensure emergency access and response is not hindered. Therefore, there would be no cumulative impact to the implementation or physical interference with such plans.

The Proposed Project and Cumulative Projects are located in a moderate Fire Hazard Severity Zone which is an area not prone to wildfires. Therefore, it is not anticipated that a cumulative impact with respect to risk of loss, injury, or death involving wildland fires would occur. Therefore, the Proposed Project would not contribute to a cumulative impact.

With implementation of APMs, the Proposed Project would not create a significant hazard to air traffic from the installation of new power lines and structures. One Cumulative Project, SCE-1: Ivanpah Control Project, involves rebuilding power lines and structures. It is assumed that this project would adhere to safety regulations and implement BMPs to reduce such hazards. Therefore, the two projects combined would not result in cumulatively considerable impact related air traffic hazards and the Proposed Project would not contribute to a cumulatively considerable impact related to this criterion.

The Proposed Project would not create a significant hazard to the public or environment through the transport of heavy materials using helicopters. It is anticipated that Cumulative Projects that may involve the use of helicopters, such as SCE-1, would follow the same regulations regarding helicopter transport. Therefore, no cumulatively considerable impact would occur.

With implementation of APMs, the Proposed Project would not expose people to a significant risk of injury or death involving unexploded ordnance (UXO). None of the Cumulative Projects are located in the vicinity

of the documented UXO site at Lorraine Avenue and 160th Street in North Edwards. One Cumulative Project, SCE-2: Kramer-Holgate-Edwards 115 kV Subtransmission Line Reconductor Project, is located on EAFB. However, this project involves reconductoring of an existing subtransmission circuit and would not be subject to UXO hazards. Therefore, no cumulative impact would occur.

The Proposed Project would not expose workers or the public to excessive shock hazards, and thus would not contribute to a cumulative impact related to this criterion.

7.1.3.10 Hydrology and Water Quality

The geographic context for the cumulative impacts associated with hydrology and water quality consists of the watersheds and groundwater basins presented in Section 5.10. All Cumulative Projects are located within the same watersheds and groundwater basins as the Proposed Project.

No water quality standards or waste discharge requirements would be violated during construction of the Proposed Project with implementation of APMs and adherence to federal and state permits and agreements in coordination with resource agencies; Proposed Project construction would result in a less than significant impact with mitigation incorporated. Operation of the Proposed Project would result in a less than significant impact to water quality, as the Proposed Project design includes stormwater BMPs to treat runoff from the expanded Cal City Substation. Cumulative Projects would be subject to similar regulatory requirements, including preparation of Project-specific SWPPPs during construction and operational stormwater runoff and treatment BMPs in accordance with RWQCB permit requirements. Therefore, cumulative impacts related to water quality or waste discharge would not be anticipated to be cumulatively considerable.

The Proposed Project would not substantially decrease groundwater supplies nor impede long-term sustainable management of the groundwater basins within the Proposed Project area. Construction of the Proposed Project would require water use for dust control and equipment maintenance, which would be obtained from existing water purveyors in the vicinity. Many of these purveyors obtain a substantial portion of their supply from imported surface water purchased through State Water Project (SWP) contractors. Other purveyors demonstrate adequate groundwater supplies to serve the temporary construction and nominal operational demand anticipated for the Proposed Project. Therefore, the Proposed Project construction and operational activities would result in a less than significant impact. Furthermore, as discussed in Section 5.10, water purveyors in the Proposed Project vicinity demonstrate sufficient supplies to serve anticipated future development and growth in their respective service areas during normal, single dry, and multiple dry year scenarios. Therefore, the Proposed Project would not have a cumulatively considerable impact on groundwater supply or recharge.

The Proposed Project alignment crosses several ephemeral drainages and Cache Creek. Implementation of APMs and site-specific BMPs would reduce the risk of stormwater runoff or an unintended release of sediments or other materials into jurisdictional waters during construction activities and ensure that the Proposed Project would have a less than significant impact with mitigation incorporated. Expansion of Cal City Substation would alter drainage patterns at the facility but would include construction of a diversion channel and detention basin to reduce potential for on- and off-site flooding, capture and treat stormwater flows, and avoid exceedance of the stormwater system capacity. Other Cumulative Projects would implement stormwater capture and treatment BMPs as necessary in accordance with applicable permit requirements. Therefore, the Proposed Project and Cumulative Projects would not result in a cumulatively considerable impact on the existing drainage pattern in the Proposed Project area.

The Proposed Project alignment is not located within a tsunami or seiche zone. Portions of the Proposed Project alignment are located in a floodplain associated with Cache Creek and various unnamed ephemeral drainages. Cumulative Projects are also located in these same flood hazard zones. As described in Section 5.10, the Proposed Project would comply with all applicable regulations pertaining to temporary and permanent storage of materials, including secondary containment of chemicals and site-specific SWPPP measures. Cumulative Projects would be subject to similar regulations to limit the risk of pollutant release in the event of inundation during construction and operation. Furthermore, the Proposed Project would implement APMs, further reducing the risk of pollutant release in the event of flood inundation. Therefore, a cumulatively considerable impact associated with flood inundation is not anticipated.

As described in Section 5.10, the Proposed Project would not conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan. The Proposed Project does not cross any impaired waterbodies and there are no impaired waterbodies within 2 miles of the Proposed Project; therefore, neither the Proposed Project nor Cumulative Projects would exacerbate any existing water quality impairments described in the RWQCB's Water Quality Control Plan. Furthermore, there are no Groundwater Sustainability Agencies with jurisdiction over the groundwater basins underlying the Proposed Project alignment and nearby Cumulative Projects, and no Groundwater Sustainability Plans pursuant to the Sustainable Groundwater Management Act have been adopted for underlying basins in the Proposed Project vicinity. As such, cumulative impacts related to conflicts with or obstruction of water quality control plans or sustainable groundwater management plans would not occur.

7.1.3.11 Land Use and Planning

As discussed in Section 5.11, the Proposed Project would result in no impacts under all land use and planning-related CEQA criteria since construction activities and operation would not divide an established community and the Proposed Project would be consistent with applicable land use policies and plans throughout the Proposed Project alignment and newly established rights-of way (ROWs). Therefore, the Proposed Project would not contribute to a cumulatively considerable impact to land use and planning.

7.1.3.12 Mineral Resources

As discussed in Section 5.12, the Proposed Project would result in no impacts under all mineral resourcesrelated CEQA criteria during construction activities or operation since the Proposed Project alignment would not be located within or in proximity to a mineral resource zone or resource recovery site, and the Proposed Project would not encroach on the adjacent, existing Rio Tinto Borax Mine. Therefore, the Proposed Project would not contribute to a cumulatively considerable impact to mineral resources.

7.1.3.13 Noise

As presented in Section 5.13, the Proposed Project is not located within the vicinity of a private airstrip or an airport land use plan and is located outside of the 65 A-weighted decibel (dBA) Community Noise Equivalent Level (CNEL) contour for the California City Municipal Airport. Therefore, the Proposed Project would have no impact related to this impact criterion and would not contribute to a cumulative impact.

The Proposed Project would have a less than significant impact related to the generation of a substantial temporary increase in ambient noise levels. In addition, the Proposed Project would result in less than significant impacts regarding the generation of excessive groundborne vibration or groundborne noise levels. None of the Cumulative Projects with known construction schedules would overlap with

construction of the Proposed Project; therefore, the Proposed Project would not contribute to a cumulative impact related to excessive groundborne vibration or substantial temporary increase in ambient noise levels.

7.1.3.14 Population and Housing

As discussed in Section 5.14, the Proposed Project would result in no impacts under all population and housing-related CEQA criteria during construction activities or operation since the Proposed Project would not induce substantial population growth or displace residents or housing. Construction activities would be temporary and the workforce would be relatively small; therefore, no permanent or long-term population growth in the City of California City area would occur due to Proposed Project construction. Likewise, the Proposed Project would add load-serving capacity in the electrical needs area (ENA) to serve current and long-term forecast electrical demand, which is consistent with the first objective outlined in Chapter 2, Introduction. Furthermore, consistent with Section 7.2, Growth-Inducing Impacts, the Proposed Project would be built to accommodate existing and forecasted demand and electrical needs of the ENA and to ensure reliability of the system; therefore, the Proposed Project would not induce population growth in the area either directly or indirectly. The Proposed Project facilities and temporary construction areas would be sited to avoid existing housing, and no residential uses are included as part of the Proposed Project. Therefore, the Proposed Project would not contribute to a cumulatively considerable impact to population and housing.

7.1.3.15 Public Services

As discussed in Section 5.15, the Proposed Project would result in no impacts to all public services-related CEQA criteria during construction activities or operation. The Proposed Project would add load-serving capacity in the ENA to serve current and long-term forecast electrical demand, which is consistent with the first objective outlined in Chapter 2, Introduction. Furthermore, consistent with Section 7.2, Growth-Inducing Impacts, the Proposed Project would be built to accommodate existing and forecasted demand and electrical needs of the ENA and to ensure reliability of the system. The Proposed Project would not require the expansion of public facilities such as parks, hospitals, or libraries. Fire, emergency, and police services currently serve and would continue to serve the areas in and around the Proposed Project alignment. Therefore, the Proposed Project would not contribute to a cumulatively considerable impact to population and housing.

7.1.3.16 Recreation

As discussed in Section 5.16, the Proposed Project would have no impact on neighborhood and regional parks or recreational facilities and no new recreational facilities would need to be built or expanded as a result of Proposed Project construction activities or operations. The Proposed Project would add load-serving capacity in the ENA to serve current and long-term forecast electrical demand, which is consistent with the first objective outlined in Chapter 2, Introduction. Furthermore, consistent with Section 7.2, Growth-Inducing Impacts, the Proposed Project would be built to accommodate existing and forecasted demand and electrical needs of the ENA and to ensure reliability of the system. Therefore, the Proposed Project would not contribute to a cumulatively considerable impact to the use of neighborhood and regional parks or recreational facilities.

The Proposed Project would require temporary access restriction and/or road closures during construction activities, which would affect access to parks and recreation areas; however, none of the Cumulative Projects with known construction schedules would overlap with construction of the Proposed Project; therefore, the Proposed Project would not contribute to a cumulative impact related to access restrictions to

these recreation areas. O&M activities for the Proposed Project may require temporary access restrictions and/or road closures; however, such restrictions and/or closures would be temporary and unlikely to overlap with closures related to operation of other Cumulative Projects given the spatial distribution of the projects. Therefore, the Proposed Project would not contribute to a cumulatively considerable impact to the use of neighborhood and regional parks or recreational facilities.

The Proposed Project would be constructed parallel to Rudnick Boulevard, which is an existing City of California City designated trail, and several other roads used for off-highway vehicle (OHV) activities in the vicinity of Twenty Mule Team Parkway. As shown in Figure 7-1, no other Cumulative Projects would be located in the vicinity of Rudnick Boulevard or Twenty Mule Team Parkway. In addition, impacted trails and facilities would be restored to pre-construction conditions to ensure Proposed Project impacts are less than significant. Therefore, the Proposed Project would not contribute to a cumulatively considerable impact to recreational areas, trails, or facilities.

7.1.3.17 Transportation

The geographic scope for cumulative transportation impacts includes the regional and local roadways that may be used to access the Proposed Project or that could otherwise be impacted by construction of the Proposed Project. The geographic scope also includes the bus routes and pedestrian and bike paths in the area.

Based on the number of daily vehicle trips generated during construction and the fact that the Cumulative Projects are not expected to produce substantial traffic that overlaps the construction phase of the Proposed Project and traffic or road closures associated with construction would be temporary, the Proposed Project would not create any inconsistency or conflict with an applicable plan, ordinance or policy that establishes measures of effectiveness, and therefore would not contribute to a cumulatively considerable impact in this regard.

The Proposed Project would not conflict or be inconsistent with CEQA Guidelines section 15065.3, subdivision (b), and therefore would not contribute to any cumulatively considerable vehicle miles traveled (VMT)-related impact.

The Proposed Project would not introduce incompatible uses or design features such as changes to public roads. Therefore, the Proposed Project would not contribute to any cumulatively considerable impact involving hazards due to a design feature or incompatible uses.

Proposed Project construction activities would occur in remote and largely uninhabited areas; implementation of traffic control measures would ensure that the Proposed Project would not result in inadequate emergency access. Therefore, the Proposed Project would have no contribution to cumulatively considerable impacts related to people walking, biking, driving, or taking public transit, walking or biking accessibility, or public transit delay.

7.1.3.18 Tribal Cultural Resources

The California Public Utilities Commission (CPUC) would consult with eligible tribes under Public Resources Code section 21080.3.1 once SCE's permit to construct (PTC) Application is complete. Impacts on tribal cultural resources (TCRs) are not addressed in this Proponent's Environmental Assessment (PEA) because under Assembly Bill 52, the CPUC must identify these resources during consultation. Therefore, no determination regarding cumulative impacts to tribal cultural resources can be made at this time.

7.1.3.19 Utilities and Service Systems

The geographic scope for cumulative analysis of utility and service system impacts is the service areas of utilities serving the Proposed Project vicinity.

As presented in Section 5.19, Utilities and Service Systems, the Proposed Project would include expansion or relocation of stormwater, electrical, and telecommunications infrastructure, the environmental impacts of which are disclosed throughout this document, but is not anticipated to include expansion or relocation of water or wastewater infrastructure. As described throughout this PEA, mitigation has been incorporated to reduce potentially significant impacts identified at this time to a less than significant level. The Cumulative Projects identified in Table 7-1 consist of solar generating facilities, electrical subtransmission line reconductoring and substation upgrades, a fueling and service station, and cannabis projects, none of which would induce population growth or are otherwise anticipated to require relocation or construction of new or expanded utility service systems that would result in significant environmental effects. As such, the Proposed Project is not anticipated to contribute to a cumulatively considerable impact related to the relocation or construction of water, wastewater treatment, stormwater drainage, electrical power, natural gas, or telecommunications facilities.

The Proposed Project is designed to accommodate existing and forecasting electrical demand and would not induce growth such that it would impact the availability of sufficient water supplies to serve the Proposed Project and reasonably foreseeable future development during normal, dry, and multiple dry years; adequate capacity of the wastewater treatment provider; and compliance with federal, state, and local management and reduction statutes and regulations related to solid waste. Therefore, the Proposed Project would not contribute to any potential cumulative impacts to under these thresholds.

As described in Section 5.19, solid waste disposal facilities report substantial remaining capacity to serve the Proposed Project and Cumulative Projects. Cumulative Projects would be subject to applicable construction and operational solid waste diversion regulations. Therefore, the Proposed Project would not result in a cumulatively considerable impact related to generation of solid waste in excess of state or local standards or the capacity of local infrastructure.

7.1.3.20 Wildfire

As presented in Section 5.20, the Proposed Project would result in no impacts under all wildfire-related CEQA criteria since the Proposed Project is not located in or near a state-responsibility area or on land classified as a very high fire hazard zone. Therefore, the Proposed Project would not contribute to a cumulatively considerable impact.

7.2 Growth-Inducing Impacts

7.2.1. Would the Project either directly or indirectly, foster economic or population growth or the construction of additional housing in the surrounding area?

As discussed in Chapter 2, Introduction, the purpose of the Proposed Project is to serve an existing and forecasted need for electricity reliability and capacity within the Proposed Project study area. As discussed in Chapter 3, Proposed Project Description, and Section 5.14, Population and Housing, the construction and operation of the Proposed Project would not substantially affect employment in the area. Construction would be performed by either SCE construction crews or contractors, and construction workers would generally be drawn from the local labor pool. Following construction of the Proposed Project, no permanent

jobs are expected to be created in the vicinity of the Proposed Project. SCE anticipates that all routine O&M needs could be met by existing staff, and that no new personnel would be brought to the area in association with the Proposed Project.

As further presented in Section 5.14, Population and Housing, because the Proposed Project has been designed to address the forecasted demand for electricity in the ENA, it would not impact population, housing, employment, or other aspects that could either directly or indirectly foster economic or population growth or the construction of additional housing in the surrounding area. Therefore, no impacts would occur under this criterion.

7.2.2 Would the Project remove obstacles to population growth?

The Proposed Project would not remove land use restrictions or other obstacles to population growth. The Proposed Project has been proposed to accommodate the existing and forecasted electrical needs and demands within the City of California City and surrounding portions of unincorporated Kern County and EAFB. Although the Proposed Project would increase electric subtransmission infrastructure and capacity in the surrounding area, Proposed Project has been designed to meet forecasted demand is not intended to encourage and facilitate other activities that could significantly affect the environment, either individually or cumulatively.

Obstacles to population growth in the region served by the Proposed Project are primarily due to feasibility of development, economic constraints, permitting, and other development restrictions and regulations administered by local agencies. The Proposed Project would not affect the feasibility of development in the area, remove an obstacle to growth, or affect development of restrictions administered by local agencies. Therefore, no impacts would occur under this criterion.

7.2.3 Would the Project require the construction of new community facilities that could cause significant environmental effects?

As discussed in Section 5.14, Population and Housing, the Proposed Project would not include the construction of housing, nor would it include residential or community facility components. The Proposed Project has been designed to meet forecasted electrical demand and would not trigger population growth that could result in the construction of any new or upgraded community facilities such as parks or libraries. In addition, the Proposed Project would not build public roads that would provide new access to undeveloped or underdeveloped areas or extend the need for public services to new areas. Although the Proposed Project would require the construction of new access roads for construction and ongoing maintenance within newly established SCE ROWs, the new access roads would only be used to access SCE structures and would not extend public services to an area not presently served by electricity. Therefore, no impacts would occur under this criterion.

7.2.4 Would the Project encourage or facilitate other activities that could significantly affect the environment, either individually or cumulatively?

As discussed in Section 7.1, Cumulative Impacts, the Proposed Project would not encourage and facilitate other activities that could significantly affect the environment, either individually or cumulatively. The Proposed Project is the result of existing and forecasted electrical need and demand in the area, rather than a precursor to development in the area. Although the Proposed Project would increase the reliability and capacity with which electricity is made available, the Proposed Project would not provide a new source of

electricity that would encourage and facilitate other activities that could significantly affect the environment either individually or cumulatively. Therefore, no impacts would occur under this criterion.

This page intentionally left blank.

Chapter 8 List of Preparers

8.1 List of Preparers

SOUTHERN CALIFORNIA EDISON

David De Leon, Major Projects Organization (MPO), Project Manager Rey Gonzales, Environmental Services, Senior Environmental Project Manager Jonathan Samson, MPO, Project Engineer Fabiola Guerra, Senior Right-of-Way Agent, Government Lands Lori Charpentier, Regulatory Affairs Strategy & Policy Development, Senior Advisor Ruben Mazzei, PE, QSD, QISP; DEWM Substation and Transmission Civil Engineering Cristina Ayad, Distribution Planning, Engineer 2 Haroun Idris, Integrated System Analysis, Power Systems Planner Sheridan Mascarenhas, Integrated System Analysis, Senior Advisor Paul McCabe, Transmission & Distribution Integrated System Analysis, Senior Advisor Genevieve Cross, Environmental Affairs and Compliance, Senior Advisor Calvin Rossi, Government Relations, Advisor Alexander Podruski, MPO, Construction Advisor Arthur Vindiola, MPO, Construction Advisor Stephanie Tsai, Real Estate & Facilities, Advisor Karen Bjurman, Government Lands, Real Estate & Facilities, Senior Specialist Antonio Coronado, Grid Operations, Station Chief Robert Atkinson, Capital Integration, Power System Operations Specialist 4 Myat Thura, Telecom, Senior Engineer Kurt Hayward, Substation Construction & Maintenance, Construction Project Manager Vince McIntosh, Substation Construction & Maintenance, Planner Bruce Garcia, Substation Engineering, Engineer Senica Camello, Substation Engineering, Senior Engineer Joel Bondoc, Transmission, Project Manager Britton Miller, Transmission Engineering, Engineering Manager Yigit Dedemen, Transmission Engineering, Engineer 3

Chad Packard, Transmission, Planning Advisor

Fred Moreno, Telecom, Planning Advisor

Elizabeth Zelaya, Real Estate & Facilities, Manager

Kirk Riehl, Construction Planning

Setal Prabhu, Strategy and Regulatory Affairs, Senior Advisor

RINCON CONSULTANTS, INC.

Brenda Eells, Director, Environmental Planning – Renewable Energy Infrastructure, Master of Planning, University of Wyoming

Christopher Duran, Registered Professional Archaeologist, Principal Archaeologist, MA, Northern Arizona University

Shannon Carmack, Cultural Resources Principal, Senior Architectural Historian, BA, California State University Long Beach

David Daitch Ph.D., Vice President, Natural Resources, Ph.D., Ecology and Evolutionary Biology, University of Colorado, Boulder; MS, Geology, University of Colorado, Boulder

Amber Bruno, Director of Natural Resources, BS Botany and Plant Science, University of California, Riverside

Nichole Jordan, Cultural Resources Principal, MA Applied Anthropology, California State University East Bay

Lindsey Sarquilla, Supervising Environmental Planner, Master of Environmental Science and Management (MESM), University of California, Santa Barbara

John Sisser, Senior Environmental Planner, MESM, University of California, Santa Barbara

Karly Kaufman, Supervising Environmental Planner, MESM, University of California, Santa Barbara

Virginia Dussell, Associate Environmental Planner, BS Environmental Management and Protection, California State Polytechnic University San Luis Obispo

Megan Knight, Associate Environmental Planner, BA Landscape Architecture, California State Polytechnic University San Luis Obispo

Destiny Brenneisen, Associate Environmental Planner, BA Biology and BS Environmental Science, University of Redlands, Redlands

Rachel Irvine, Associate Environmental Planner, BS Environmental Science, University of Redlands, Redlands

Jessie Quinn, Supervising Biologist, Ph.D., University of California, Davis

Sarah Toback, Biologist, MSc Conservation Biology, Macquarie University

Andrew Sandahl, Biologist/Technical Writer, MS Biological Sciences – Ecology and Evolution, University of Amsterdam, Netherlands

Amy Leigh Trost, Biologist, BS Wildlife, Humboldt State University

Matthew Gonzalez, Senior Archaeologist/Project Manager, BA, University of California, Santa Barbara

Samantha Murray, MA, California State University, Los Angeles

Jennifer DiCenzo, Paleontological Program Manager – BA Anthropology, San Diego State University, San Diego

Andrew McGrath, Paleontologist/Assistant Project Manager, Ph.D. Earth Science, University of California, Santa Barbara

Charleen Rode, Biologist, BS Biology and Zoology, Humboldt State University

Christina Sulzman, Senior Biologist, BS Biology and Geography, Valparaiso University, Valparaiso, Indiana

Carolyn Welch, Biologist, BS Environmental Studies, University of California, Santa Barbara

Savanna Vrevich, Environmental Scientist, BS Environmental Studies, University of California, Santa Barbara

Annette Tran, Senior GIS Analyst, MESM, University of California, Santa Barbara

Max Antono, GIS Analyst, BS Environmental Business, University of Redlands, Redlands

Gina Gerlich, GIS Analyst, MSc Geographic Information Science, California State University, Northridge

Erik Holtz, GIS Analyst, BS Environmental Management & Protection, California State Polytechnic University San Luis Obispo

Yaritza Ramirez, Publishing Specialist, BA, California State University Channel Islands

INSIGNIA ENVIRONMENTAL

Anne Marie McGraw, President, MS Engineering, California Polytechnic State University, San Luis Obispo; Master of City and Regional Planning, California Polytechnic State University, San Luis Obispo; BS Environmental Policy Analysis and Planning, University of California, Davis

Robert Curley, Chief Technical Officer, MBA, Santa Clara University; BS Mechanical Engineering, University of California, Santa Barbara

Lily Matlof, Associate Planner, BS Earth and Environmental Science, University of Michigan, Ann Arbor

Margaret Caligaris, Associate Environmental Specialist, Qualified SWPPP Practitioner (QSP) and Qualified SWPPP Developer, Certified Professional in Erosion and Sediment Control, BS Environmental Earth and Soil Sciences, California Polytechnic State University, San Luis Obispo

Bradley Jacobsen, Senior GIS Specialist, BA Geography, Sonoma State University, Rohnert Park

This page intentionally left blank.

Chapter 9 References

9.1 Reference List

9.1.1 Description of Alternatives

Urbana Preservation & Planning, LLC. 2020. Historic-Era Built Environment Survey Report Proposed Transmission Line Rating and Remediation Program, Ivanpah – Control Project, Inyo, Kern, and San Bernardino Counties, CA.

9.1.2 Aesthetics

- Bureau of Land Management (BLM). 2005. Land Use Planning Handbook. Available at: https://www.ntc.blm.gov/krc/uploads/360/4_BLM%20Planning%20Handbook%20H-1601-1.pdf. Accessed June 2022.
 - 2013. Best Management Practices for Reducing Visual Impacts of Renewable Energy Facilities on BLM-Administered Lands. Available at: https://blmwyomingvisual.anl.gov/docs/BLM_RenewableEnergyVisualBMPs_LowRes.pdf. Accessed July 2022.
 - . 2021a. BLM California Interactive Map, California State Office. Available online at: https://www.blm.gov/site-page/services-geospatial-gis-data-california. Accessed May 2022.

. 2022a. BLM National Data, Visual Resource Inventory Classes. Available at: https://blmegis.maps.arcgis.com/apps/webappviewer/index.html?id=6f0da4c7931440a8a80bfe20eddd7550. Accessed May 2022.

- __. 2022b. BLM Visual Resources Glossary. Available at: https://blmwyomingvisual.anl.gov/glossary/?init=L. Accessed July 2022.
- California Department of Transportation (Caltrans). 2015. Vista Points Webmap. Available at: https://www.arcgis.com/apps/mapviewer/index.html?webmap=5f82ccb700874868bf07f8cfa2a43 a1f. Accessed May 2022.

 2018. California State Scenic Highway System Webmap. Available at: https://caltrans.maps.arcgis.com/apps/webappviewer/index.html?id=465dfd3d807c46cc8e805711 6f1aacaa. Accessed May 2022.

- City of California City. 2009. City of California City Final General Plan. Available at: https://www.californiacity-ca.gov/CC/index.php/planning/planning-publications. Accessed May 2022.
- Eastern Kern Air Pollution Control District (EKAPCD). 2022. CEQA Guidelines. Available online at: http://www.kernair.org/Main_Pages/Subpages/Rules_Sub/CEQA_Guidelines.html. Accessed June 2022.
- Kern County. 2009. Kern County General Plan. Available at: https://psbweb.co.kern.ca.us/planning/pdfs/kcgp/KCGP_Complete.pdf. Accessed May 2022. Accessed May 2022.
 - . 2011. "Dark Skies Ordinance", An Informational Guide. Available at: https://psbweb.co.kern.ca.us/planning/pdfs/FORM%20728%20-%20Dark%20Skies%20Ordinance.pdf. Accessed May 2022.

- San Bernardino County. 2007. County of San Bernardino General Plan Final Environmental Impact Report and Appendices. Available at: http://www.sbcounty.gov/Uploads/lus/GeneralPlan/FinalEIR2007.pdf. Accessed May 2022.
 - . 2019. San Bernardino Countywide Plan Draft Environmental Impact Report. Available at: https://countywideplan.com/wp-content/uploads/sites/68/2021/01/Ch_05-01-AE.pdf. Accessed May 2022.

____. 2020. San Bernardino Countywide Policy Plan. October 2020. Available at: https://countywideplan.com/wpcontent/uploads/sites/68/2021/01/CWP_PolicyPlan_HardCopy_MainText_Tables_20201027_ado pted.pdf. Accessed May 2022.

United States Geological Survey (USGS). 2022. The National Map (TNM) Elevation Webmap. Available at: https://apps.nationalmap.gov/elevation/. Accessed May 2022.

9.1.3 Agriculture and Forestry Resources

- California Department of Conservation (DOC). 2016. California Important Farmland Finder Interactive Webmap. Available online: https://maps.conservation.ca.gov/DLRP/CIFF/. Accessed December 2021.
- California Department of Forestry and Fire Protection (CAL FIRE). 2015. Fire and Resource Assessment Program (FRAP) FVeg Database. Available online: https://apps.wildlife.ca.gov/bios/?al=ds1327. Accessed December 2021.

. 2018. California's Forests and Rangelands: 2017 Assessment. Available online: https://frap.fire.ca.gov/media/3180/assessment2017.pdf. Accessed December 2021.

- City of California City. 2022. City of California City Code of Ordinances. Available online: https://library.municode.com/ca/california_city/codes/code_of_ordinances?nodeId=CD_ORD_TI T9LAUSDE_CH2ZO_ART1GE_S9-2.102SC. Accessed January 2022.
- . 2009. City of California City Final General Plan. Available online: https://www.californiacityca.gov/CC/index.php/planning/planning-publications. Accessed January 2022.
- Kern County Graphic Information Systems (GIS) Open Data. 2021. Kern County Williamson Act Active. Interactive Webmap. Available online: https://geodatkernco.opendata.arcgis.com/datasets/6a024c96e7804dcf8b2ffc0f2412154b_0/explore?location=3 5.235590%2C-117.677442%2C10.72. Accessed January 2022.
- Kern County. 2010. Kern County Williamson Act Parcels and Non-Renewals Interactive Webmap. Available online: https://databasin.org/maps/new/#datasets=b4b2b8e824114b32b1005c74663237fd. Accessed December 2021.
- . 2009. Kern County General Plan. Available online: https://psbweb.co.kern.ca.us/planning/pdfs/kcgp/KCGP_Complete.pdf. Accessed December 2021.

_. 2021. Kern County Zoning Ordinance – April 2021. Available online: https://psbweb.co.kern.ca.us/planning/pdfs/KCZOApr2021.pdf. Accessed December 2021.

San Bernardino County. 2020. Countywide Policy Plan. Available online: https://countywideplan.com/policy-plan/. Accessed December 2021.

9.1.4 Air Quality

- California Air Pollution Control Officers Association (CAPCOA). 2022. CalEEMod. Available online at: http://www.caleemod.com. Accessed June 2022.
- California Air Resources Board (CARB). 2022a. Ambient Air Quality Standards. Available online at: https://ww2.arb.ca.gov/resources/background-air-quality-standards. Accessed June 2022.
 - . 2022b. EMFAC. Available online at: https://arb.ca.gov/emfac/. Accessed June 2022.
- . 2022c. iADAM: Air Quality Data Statistics. Available online at: http://www.arb.ca.gov/adam/. Accessed June 2022.
- . 2022d. Maps of State and Federal Area Designations. Available online at: https://ww2.arb.ca.gov/resources/documents/maps-state-and-federal-area-designations. Accessed June 2022.
- Eastern Kern Air Pollution Control District (EKAPCD). 2022a. 400 Series Rules. Available online at: http://www.kernair.org/Main_Pages/Subpages/Rules_Sub/400_Rules.html. Accessed June 2022.

_____. 2022b. CEQA Guidelines. Available online at: http://www.kernair.org/Main_Pages/Subpages/Rules_Sub/CEQA_Guidelines.html. Accessed June 2022.

- Mojave Desert Air Quality Management District (MDAQMD). 1994. Reasonable Further Progress Rateof-Progress Plan. Available online at: https://www.mdaqmd.ca.gov/home/showpublisheddocument/186/636305687989730000. Accessed June 2022.
- . 2017. Federal 75 ppb Ozone Attainment Plan (Western Mojave Desert Nonattainment Area). Available online at:

https://ww3.arb.ca.gov/planning/sip/planarea/wmdaqmp/2016sip_mdplan.pdf. Accessed June 2022.

____. 2020. California Environmental Quality Act (CEQA) and Federal Conformity Guidelines. Available online at:

https://www.mdaqmd.ca.gov/home/showpublisheddocument/8510/637406182097070000. Accessed June 2022.

. 2022. Regulation IV – Prohibitions. Available online at: https://www.mdaqmd.ca.gov/rules/rule-book/regulation-iv-prohibitions. Accessed June 2022.

- Office of Environmental Health Hazard Assessment (OEHHA). 2015. Risk Assessment Guidelines: Guidance Manual for Preparation of Health Risk Assessments. Available online at: https://oehha.ca.gov/media/downloads/crnr/2015guidancemanual.pdf. Accessed June 2022.
- Swiss Federal Office of Civil Aviation (FOCA). 2015. Guidance on the Determination of Helicopter Emissions. Edition 2. December.
- United States Environmental Protection Agency (USEPA). 2022. AP-42: Compilation of Air Emissions Factors. Available online at: https://www.epa.gov/air-emissions-factors-and-quantification/ap-42compilation-air-emissions-factors. Accessed June 2022.

9.1.5 Biological Resources

- American Ornithologists' Union (AOU). 1957. The AOU checklist of North American birds, 5th edition. Port City Press, Inc., Baltimore, MD. 691 pp.
- _____. 1983. The AOU checklist of North American birds, 6th edition. Allen Press, Inc. Lawrence, Kansas. 877 pp.
- Arcadis U.S., Inc. 2019. TLRR Sensitive Species and Habitat Report, Ivanpah-Coolwater-Kramer-Inyokern 115 kV Subtransmission Project. Prepared for SCE. February 2019.
- Aspen Environmental Group (Aspen). 2006. Antelope Transmission Project, Segments 2 & 3. Available at: https://ia.cpuc.ca.gov/Environment/info/aspen/atp2-3/EIR/Section%20C/C7-Hydrology.pdf. December 2006.
- Avian Power Line Interaction Committee. 2006. Suggested Practices for Avian Protection on Power Lines: The State of the Art in 2006. Available online at: https://www.nrc.gov/docs/ML1224/ML12243A391.pdf. Accessed March 14, 2022.
- . 2012. Reducing Avian Collisions with Power Lines: The State of Art in 2012. Available online at: https://www.aplic.org/uploads/files/15518/Reducing_Avian_Collisions_2012watermarkLR.pdf. Accessed March 14, 2022.
- Baldwin, B.G., D.H. Goldman, D.J. Keil, R. Patterson, T.J. Rosatti, and D.H. Wilken, editors. 2012. The Jepson Manual: Vascular Plants of California, Second Edition. University of California Press, Berkeley.
- Beason, R.C. 1995. Horned Lark (Eremophila alpestris). In: The Birds of North America, No. 195 (A Poole and F. Gill, editors) The Academy of Natural Sciences, Philadelphia, and the American Ornithologists' Union, Washington, D.C. 24 pp.
- Bureau of Land Management (BLM). 2013. Draft DRECP and EIR/EIS Appendix L, Bureau of Land Management Worksheets. Barstow Woolly Sunflower. May 29, 2013.
- Bureau of Land Management (BLM), U.S. Fish and Wildlife Service (USFWS), California Energy Commission (CEC), and California Department of Fish and Wildlife (CDFW). 2016. Desert Renewable Energy Conservation Plan Land Use Plan Amendment to the California Desert Conservation Area Plan, Bishop Resource Management Plan, and Bakersfield Resource Management Plan. September.
- California Burrowing Owl Consortium (CBOC). 1993. Burrowing Owl Survey Protocol and Mitigation Guidelines. Available at: https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=83842
- California Department of Fish and Wildlife (CDFW). 2012. Staff Report on Burrowing Owl Mitigation. March 7.
 - . 2021a. RareFind5: California Natural Diversity Database (CNDDB). Accessed September 2021.
 - ____. 2021b. Special Animals List. California Natural Diversity Database. Periodic publication, 120 pp. Accessed September 2021.
 - . 2021c. Special Vascular Plants, Bryophytes, and Lichens List. Biogeographic Data Branch, California Natural Diversity Database.

- ____. 2021d. Sensitive Natural Communities. Available at: https://wildlife.ca.gov/Data/VegCAMP/Natural-Communities#sensitive%20natural%20communities. Accessed December 2021.
- _____. 2021e. Biogeographic and Information System. Available at: Http://www.wildlife.ca.gov/data/BIOS. Accessed November 2021.

 2022a. Sensitive Natural Communities. Available at: https://wildlife.ca.gov/Data/VegCAMP/Natural-Communities#sensitive%20natural%20communities. Accessed December 2022.California Fish and Game Commission. (CFGC) 2019. Mammal Hunting Regulations. § 460. Fisher, Marten, River Otter, Desert Kit Fox, and Red Fox. August 9, 2019.

- California Invasive Plant Council (Cal-IPC). 2021. California Invasive Plant Inventory. Available at: https://www.cal-ipc.org/plants/inventory/. Accessed December 2021.
- California Native Plant Society (CNPS). 2006. The California Rare Plant Ranking System. Available online at http://www.cnps.org/cnps/rareplants/ranking.php.
- . 2021a. Inventory of Rare and Endangered Plants of California. Online edition, v8-03 0.39. Available at: http://www.rareplants.cnps.org/. Accessed November 2021.
- . 2021b. A Manual of California Vegetation, Online Edition. Available at: http://www.cnps.org/cnps/vegetation/. Accessed December 2021.
- . 2022a. Inventory of Rare and Endangered Plants of California. Online edition, v9-01 1.5. Available at: http://www.rareplants.cnps.org/. Accessed December 2022.

. 2022b. *A Manual of California Vegetation*, Online Edition. Available at: http://www.cnps.org/cnps/vegetation/. Accessed December 2022. California Wildlife Habitat Relationships (CWHR). 2000. Mohave Desert Tortoise – updated March 2000. Life history account and range map. Updated from Zeiner, D.C. et al 1988-1990. CWHR Program, CDFG, Sacramento, CA. Accessed via: https://wildlife.ca.gov/Data/CWHR/Life-History-and-Range

- Charlton, D. 1993. Characterization study of desert cymopterus populations, Edwards Air Force Base, California. Prepared by Computer Sciences Corp. for the Air Force Flight Test Center, Environmental Management Office, Edwards Air Force Base, Calif. 9 pp. + appen.
- City of California City. 2009. City of California City Final General Plan. Available online: https://www.californiacity-ca.gov/CC/index.php/planning/planning-publications. Accessed March 2022.
- Cole, K.L., Ironside, K., Eischeid, J., Garfin, G., Duffy, P.B. and Toney, C., 2011. Past and ongoing shifts in Joshua tree distribution support future modeled range contraction. Ecological Applications, 21(1), pp.137-149.
- Cornell Lab of Ornithology. 2019. LeConte's Thrasher. All About Birds. Cornell Lab of Ornithology, Ithaca, New York. https://www.allaboutbirds.org/guide/LeContes_Thrasher/lifehistory. Accessed in May 2022.
- eBird. 2021. eBird: An online database of bird distribution and abundance [web application]. eBird, Cornell Lab of Ornithology, Ithaca, New York. Available online at: http://www.ebird.org. Accessed December 2021.

Environmental Laboratory. 1987. Corps of Engineers Wetland Delineation Manual.

- Flora of North America. 2022. Androstephium breviflorum S. Watson, Amer. Naturalist. 7: 303. 1873. FNA Vol. 26 Page 329, 333. Accessed via: http://www.efloras.org/flora_page.aspx?flora_id=1. Accessed February 2022.
- Garrett, K., and J. Dunn. 1981. Birds of southern California. Los Angeles Audubon Society, Los Angeles, CA.
- Google Earth Pro 2021. Google Earth Pro. 7.3.3.7786 (64-bit). Aerial Imagery. Accessed December 2021.
- Great Basin Bird Observatory (GBBO). 2010. Nevada Comprehensive Bird Conservation Plan, ver. 1.0. Great Basin Bird Observatory, Reno, NV. Available at: http://www.gbboinfo.org/secure/Whole%20Document%20PDF/NV_Bird_Conservation_Plan_ver1.0_Dec2010.pdfh
- Jepson Flora Project (editors). 2021. Jepson eFlora. Available at: http://ucjeps.berkeley.edu/eflora/. Accessed December 2021.
- . 2022. Jepson eFlora. Available at: http://ucjeps.berkeley.edu/eflora/. Accessed December 2022.Kadaba, Dipia, Ileene Anderson, Curt Bradley and Shaye Wolf. 2013. A Petition to List the Desert Kit Fox (Vulpes macrotis arsipus) as Threatened under the California Endangered Species Act Submitted to the California Department of Fish and Wildlife. March 2013.
- Kaiser, T.J. 1986. Behavior and energetics of Prairie Falcons (Falco mexicanus) breeding in the western Mojave Desert. PhD Dissertation, University of California, Los Angeles. 160 pp.
- Kennedy, P.L. 1980. Prey size selection patterns of nesting male and female Cooper's hawks. University of Idaho, Idaho. M.S. Thesis.
- Kern County. 2009. Kern County General Plan. Available online: https://psbweb.co.kern.ca.us/planning/pdfs/kcgp/KCGP_Complete.pdf. Accessed June 2022.
- Klute, D. S., A. W. Ayers, M. T. Green, W. H. Howe, S. L Jones, J. A. Shaffer, S. R. Sheffield, and T. S. Zimmerman. 2003. Status assessment and conservation plan for the western burrowing owl in the United States. U.S. Department of the Interior, Fish and Wildlife Service, Biological Technical Publication FWS/BTP-R6001-2003, Washington, D.C, USA.
- Koechert, M.N., K. Steenhof, C.L. McIntyre, and E.H. Craig. 2002. Golden Eagle (Aquila chrysaetos) in The Birds of North America, No. 684. The Birds of North America, Inc. Philadelphia, PA.
- Leitner, P. 2008. Current Status of the Mohave Ground Squirrel. Transactions of the Western Section of the Wildlife Society 44: 11-29. 2008.
- Lichvar, R.W. and S.M. McColley 2018. The National Wetland Plant List: 2018 Wetland Ratings.
- National Oceanic and Atmospheric Administration (NOAA). 2021. Climate Data Online Search. Available at: https://www.ncdc.noaa.gov/cdo-web/search. Accessed November 2021.
- NatureServe. 2012. NatureServe Conservation Status Assessments: Methodology for Assigning Ranks. Revised June 2012.
- _____. 2021. NatureServe Explorer [web application]. Arlington, Virginia. Available at: http://explorer.natureserve.org. Accessed December 2021.
- San Bernardino County. 2020. Countywide Policy Plan. Available online: http://www.sbcounty.gov/Uploads/LUS/GeneralPlan/Policy%20Plan%20and%20Policy%20Map s.pdf. Accessed June 2022.

- Sawyer, J.O., T. Keeler-Wolf, and J. Evens. 2009. A Manual of California Vegetation, Second Edition. California Native Plant Society Press.
- Shuford, W. D., and Gardali, T., editors. 2008. California Bird Species of Special Concern: A ranked assessment of species, subspecies, and distinct populations of birds of immediate conservation concern in California. Studies of Western Birds 1. Western Field Ornithologists, Camarillo, California, and California Department of Fish and Game, Sacramento.
- State Water Resources Control Board (SWRCB). 2021. State Wetland Definition and Procedures for Discharges of Dredged or Fill Materials to Waters of the State. Adopted April 2, 2019. Revised April 6, 2021. https://www.waterboards.ca.gov/water_issues/programs/cwa401/docs/2021/procedures.pdf
- United States Army Corps of Engineers (USACE). 2004. Review of Ordinary High Water Mark Indicators for Delineating Arid Streams in the Southwestern United States. Available at: https://erdc-library.erdc.dren.mil/jspui/handle/11681/8556. January 2004.
 - . 2006. Distribution of Ordinary High Water Mark (OHWM) Indicators and Their Reliability in Identifying the Limits of "Waters of the United States" in Arid Southwestern Channels. Technical Report ERDC/CRREL TR-06-5. February 2006.
- . 2008a. Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region (Version 2.0). Technical Report ERDC/EL TR-08-28. U.S. Army Engineer Research and Development Center. Vicksburg, Mississippi.
 - 2008b. A Field Guide to the Identification of the Ordinary High Water mark (OHWM) in the Arid West Region of the Western United States. Technical Report ERDC/CRREL TR-08-12.
 U.S. Army Engineer Research and Development Center, Cold Regions Research and Engineering Laboratory. Hanover, New Hampshire.
- United States Climate Data. 2021. Available at: https://www.usclimatedata.com/. Accessed November 2021.
- United States Department of Agriculture, Natural Resources Conservation Service (USDA, NRCS). 2021a. Web Soil Survey. Available at: https://websoilsurvey.nrcs.usda.gov/app/WebSoilSurvey.aspx. Accessed September 2021.
 - . 2021b. Lists of Hydric Soils National Hydric Soils List by State: California. National Cooperative Soil Survey, United States Department of Agriculture. Accessed via: https://www.nrcs.usda.gov/wps/portal/nrcs/main/soils/use/hydric. Accessed July 2021.
- United States Geological Survey (USGS). 2021. National Hydrography Dataset (NHD) NHD Flowlines and Watershed Boundary Dataset (WBD) for Kern and San Bernardino Counties, California. Available at: https://apps.nationalmap.gov/downloader/#/. Accessed September 2021.
 - . 2011. 7.5-Minute Topographic Quadrangle Maps.
- United States Fish and Wildlife Service (USFWS). 1994a. Endangered and Threatened Wildlife and Plants; Determination of Critical Habitat for the Mojave Population of the Desert Tortoise. Federal Register 59(26): 5820–5866.
- . 1994b. The Desert Tortoise (Mojave Population) Recovery Plan. U.S. Fish and Wildlife Service, Region 1 – Lead Region, Portland, Oregon. 73 pp. + appendices.
- . 2021a. Critical Habitat Portal. Available at: http://criticalhabitat.fws.gov/. Accessed September 2021.

- ____. 2021b. Information for Planning and Consultation (IPaC) website. Available at: https://ecos.fws.gov/IPaC/. Accessed September 2021.
- . 2021c. National Wetlands Inventory (NWI). Available at: http://wetlands.fws.gov. Accessed September 2021.
 - . 2021d. Environmental Conservation Online System. Available at: https://ecos.fws.gov/ecp/. Accessed December 2021.
- Wessman, E.V. 1977. The distribution and habitat preferences of the Mohave ground squirrel in the southeastern portion of its range. CDFG, Wildlife Management Br. Admin. Report 77-5. 15 pp.
- Western Bat Working Group (WBWG). 2017. Western Bat Species Regional Priority Matrix. Available at: http://wbwg.org/matrices/species-matrix/.
- Western Regional Climate Center (WRCC). 2021. Mojave, California (0457566) Precipitation Monthly Totals. Available at: https://wrcc.dri.edu/cgi-bin/cliMAIN.pl?ca5756. Accessed November 2021.
- Zeiner, D.C., W.F. Laudenslayer, Jr., K.E. Mayer, and M. White, eds. 1988-1990. California Wildlife Habitat Relationships (CWHR) System. California's Wildlife. Vol. I-III. California Depart. of Fish and Game, Sacramento, California.

9.1.6 Cultural Resources

- Aikens, C. M. 1978. Archaeology of the Great Basin. Annual Review of Anthropology 7: 71-87.
- Amoroso, L. and Miller, D.M. 2012. Surficial Geologic Map of the Cuddeback Lake 30' x 60' Quadrangle, San Bernardino and Kern Counties, California. U.S. Geological Survey, Scientific Investigations Map 3107, scale 1:100,000.
- Anton, Mike. 2010. "A desert city that didn't fan out." Los Angeles Times. https://www.latimes.com/archives/la-xpm-2010-aug-14-la-me-cal-city-20100814-story.html, (accessed March 3, 2022)
- Bean, Walton. 1968. California: An Interpretive History. McGraw-Hill Book Company, New York.
- Bean, Lowell J., and Charles R. Smith. 1978. Serrano. In California, edited by R. F. Heizer, pp. 570–574. Handbook of North American Indians, Vol. 8, William G. Sturtevant, general editor, Smithsonian Institution, Washington, D.C.
- Bean, Lowell J., and Sylvia B. Vane. 2002. The Native American Ethnography and Ethnohistory of Joshua Tree National Park: An Overview and Assessment Study: Section IV. The Serrano. https://www.nps.gov/parkhistory/online_books/jotr/history4.htm. Accessed March 3, 2022.
- Blackburn, Thomas C., and Lowell J. Bean. 1978. Kitanemuk. In California, edited by R. F. Heizer, pp. 564–569. Handbook of North American Indians, Vol. 8, William G. Sturtevant, general editor, Smithsonian Institution, Washington, D.C.
- Campbell, E. W., and W. H. Campbell. 1935. The Pinto Basin Site: An Ancient Aboriginal Camping Ground in the California Desert. Southwest Museum Papers No. 9, Los Angeles.
- Campbell, E. W., and W.H. Campbell. 1937. The Archaeology of Pleistocene Lake Mohave. Southwest Museum Paper No. 11, Highland Park.
- Cleland, J. H., and W.G. Spaulding. 1992. An Alternative Perspective on Mojave Desert Prehistory. Society for California Archaeology Newsletter 26(6): 1–6.

Crow Canyon Archaeological Center. 2022. Archaeological Dating. https://www.crowcanyon.org/education/learn-about-archaeology/archaeological-dating/ Accessed May 2022.

- Davis, L. G., D. B. Madsen, L. Becarra-Valdivia, T. Higham, D. A. Sisson, S. M. Skinner, D. Stueber, A. J. Nyers, A. Keen-Zebert, C. Neudorf, M. Cheyney, M. Izuho, F. Iizuka, S. R. Burns, C. W. Epps, S. C. Willis, and I. Buvit. 2019. Late Upper Paleolithic Occupation at Cooper's Ferry, Idaho, USA, ~16,000 years ago. Science 365:891-897.
- Dibblee, T.W. and Minch, J.A. 2008a. Geologic Map of the Rosamond & Rogers Lake 15 minute Quadrangles, Kern & Los Angeles Counties, California. Dibblee Geological Foundation, Dibblee Foundation Map DF-384, scale 1:62,500.
- . 2008b. Geologic Map of the Kramer and Hawes 15 minute Quadrangles, Kern, San Bernardino & Los Angeles Counties, California. Dibblee Geological Foundation, Dibblee Foundation Map DF-385, scale 1:62,500.
 - . 2008c. Geologic Map of the Mojave and Castle Butte 15 minute Quadrangles, Kern County, California. Dibblee Geological Foundation, Dibblee Foundation Map DF-401, scale 1:62,500.
- . 2008d. Geologic Map of the Boron and Fremont Peak 15 minute Quadrangles, Kern & San Bernardino Counties, California. Dibblee Geological Foundation, Dibblee Foundation Map DF-402, scale 1:62,500.
- . 2008e. Geologic Map of the Randsburg 15 minute Quadrangle, Kern & San Bernardino Counties, California. Dibblee Geological Foundation, Dibblee Foundation Map DF-400, scale 1:62,500.
- Dietler, J., H. Gibson, and J.M. Potter. 2015. Abundant Harvests: The Archaeology of Industry and Agriculture at San Gabriel Mission.
- Earle, David D. 2011. The Mojave River and the Central Mojave Desert: Native Settlement, Travel, and Exchange in the Eighteenth and Nineteenth Centuries. Prepared by Earle and Associates, Journal of California and Great Basin Anthropology, UC Merced Library, UC Merced
- Edwards Air Force Base. 2009. Edwards' History. https://www.edwards.af.mil/About/Fact-Sheets/Display/Article/393907/edwards-history/. Accessed March 3, 2022.
- Engelhardt, Zephyrin, O.F.M. 1927. San Gabriel Mission and the Beginning of Los Angeles. Mission San Gabriel, San Gabriel, California.
- Four Directions Institute. 2007. Four Directions Institute, Kitanemuk. http://www.kumeyaay.info/california_native_research.html. Accessed March 3, 2022. Four Winds Press.
- Frémont, J. C. 1845. Report of the Exploring Expedition to the Rocky Mountains in the Year 1842, and to Oregon and North California in the Years 1843–44. Gales and Seaton, Washington, D.C.

Grayson, D. K. 2011. The Great Basin: A Natural Prehistory. University of California Press, Berkeley.

. 2016. Giant Sloths and Sabertooth Cats. University of Utah Press, Salt Lake City.

Gumprecht, Blake. 1999. The Los Angeles River: Its Life, Death, and Possible Rebirth. Johns Hopkins University Press, Baltimore.Hoover, Mildred B., Hero E. Rensch, Ethel G. Rensch, and William N. Abeloe

- Hudson, Travis. 1982. "The Alliklik-Tataviam Problem". Journal of California and Great Basin Anthropology 4: 222-232.
- History. 2021. California Gold Rushhttps://www.history.com/topics/westward-expansion/gold-rush-of-1849. Accessed May 2022.
- Jenkins, D. L. 1991. Site Structure and Chronology of 36 Lake Mohave and Pinto Assemblages from Two Large Multicomponent Sites in the Central Mojave Desert, Southern California. Ph.D. Dissertation, Department of Anthropology, University of Oregon.
- Jenkins, D. L., L. G. Davis, T. W. Stafford, Jr., P. F. Campos, B. Hockett, G. T. Jones, L. S. Cummings, C. Yost, T. J. Connolly, R. M. Yohe II, S. C. Gibbons, M. Raghavan, M. Rasmussen, J. L. A. Paijmans, M. Hofreiter, B. M. Kemp, J. L. Barta, C. Monroe, M. T. P. Gilbert, and E. Willerslev . 2012. Clovis Age Western Stemmed Projectile Points and Human Coprolites at the Paisley Caves. Science 337: 223-228.
- Jones, T. L., and K. A. Klar. 2007. California Prehistory: Colonization, Culture, and Complexity. AltaMira Press, New York.
- Justice, N. D. 2002. Stone Age Spear and Arrow Points: of California and the Great Basin. Indiana University Press, Bloomington.
- Kern County, 2009. Kern County General Plan. Electronic document at https://kernplanning.com/planning/planning-documents/general-plans-elements/. Accessed March 3, 2022.
- King, Chester, and Thomas C. Blackburn. 1978. Tataviam in California. Volume 8: Handbook of North American Indians. Robert F. Heizer, ed. and William C. Sturtevant, general ed. Pp. 535-537. Washington D.C.: Smithsonian Institution Scholarly Press.
- Kroeber, Alfred L. 1925. Handbook of the Indians of California. Bulletin 78, Bureau of American Ethnology, Smithsonian Institution. Government Printing Office, Washington, D.C. Reprinted 1976 by Dover Publications, Inc., New York.
- McCawley, William. 1996. The First Angelinos: The Gabrielino Indians of Los Angeles. Malki Museum/Ballena Press Cooperative Publication, Banning or Novato, California.
- Mithun, Marianne. 2001. The Languages of Native North America. Reprinted. Originally published 1999. Cambridge University Press, New York.
- Moratto, M. J. 2004. California Archaeology. Coyote Press, Salinas, California.
- Morgan, Wallace M. 1914. History of Kern County, California. https://openlibrary.org/books/OL17945807M/History_of_Kern_County_California. Accessed March 2022.
- National Park Service. 1983. Archaeology and Historic Preservation: Secretary of the Interior's Standards and Guidelines. Electronic document. https://www.nps.gov/subjects/historicpreservation/upload/standards-guidelines-archeologyhistoric-preservation.pdf. Accessed March 2022.
 - . 2020. Mojave: Plants. Electronic document. https://www.nps.gov/moja/learn/nature/plants.htm, Accessed March 2022.
- Pratt, B. J. 2009. Around Boron. United States: Arcadia Publishing Incorporated.

- Reaux, D. J. 2020. An Examination of Western Stemmed Tradition Settlement-Subsistence, Territoriality, and Lithic Technological Organization in the Northwestern Great Basin. Ph.D. Dissertation, Department of Anthropology, University of Nevada, Reno.
- Rolle, Andrew. 2003. California: A History. Revised and expanded sixth edition. Harlan Davidson, Inc., Wheeling, Illinois.
- Rosencrance, R. L. II. 2019. Assessing the Chronological Variation within Western Stemmed Tradition Projectile Points. Master's Thesis, Department of Anthropology, University of Nevada, Reno.
- San Bernardino County. 2020. Cultural Resources Element of the Countywide General Plan. Electronic document at https://countywideplan.com/policy-plan/cultural-resources/. Accessed March 2022.
- Shumway, Gary L., Larry M. Vredenburgh Russell D. Hartill. 1980. Desert Fever An Overview of Mining History of the California Desert Conservation Area. https://archive.org/details/desertfeveroverv00shum/page/n1.
- Smith, G. M., D. Duke, D. L. Jenkins, T. Goebel, L. G. Davis, P. O'Grady, D. Stueber, J. E. Pratt, and H. L. Smith . 2020. The Western Stemmed Tradition: Problems and Prospects in Paleoindian Archaeology in the Intermountain West. PaleoAmerica 6(1): 23-42.
- Stine, S. 1994. Extreme and Persistent Drought in California and Patagonia during Medieval Times. Nature 369 (6481): 546–549
- Sutton, M.Q. 1980. Some Aspects of Kitanemuk Prehistory. Journal of California and Great Basin Anthropology, 2(2).
- Sutton, M.Q. 1988. An Introduction to the Archaeology of the Western Mojave Desert, California. Coyote Press Archives of California Prehistory 14. Coyote Press, Salinas, California.
- . 1996. The Current Status of Archaeological Research in the Mojave Desert. Journal of California and Great Basin Anthropology 18(2):221–257.
- Sutton, M. Q., M. E. Basgall, J. K. Gardner, and M. W. Allen. 2007. Advances in Understanding Mojave Desert Prehistory. In California Prehistory: Colonization, Culture, and Complexity, edited by T. L. Jones and K. A. Klar, pp. 229–245. AltaMira Press, New York.
- Visit Mojave. 2022. Mojave History. https://www.visitmojave.com/mojave-history.html. Accessed March 2022.
- Warren, C. N. 1984. The Desert Region. In California Archaeology, edited by M. J. Moratto, pp. 339– 430. Academic Press, Orlando, Florida.
- Yohe, R. M. 1998. The Introduction of the Bow and Arrow and Lithic Resource Use at Rose Spring (CA-INY-372). Journal of California and Great Basin Anthropology 20: 26-52.

9.1.7 Energy

- California Air Resources Control Board (CARB). 2019. Truck and Bus Regulation Compliance Requirement Overview. Available online at: https://ww2.arb.ca.gov/our-work/programs/truckand-bus-regulation. Accessed May 2022.
- California Department of Tax and Fee Administration (CDTFA). 2022. Fuel Taxes Statistics and Reports. Available online at: https://www.cdtfa.ca.gov/taxes-and-fees/spftrpts.htm. Accessed May 2022.

California Energy Commission (CEC). 2022a. California Energy Consumption Database. Available online at: https://ecdms.energy.ca.gov/. Accessed May 2022.

. 2022b. California Gasoline Data, Facts, and Statistics. Available online at: https://www.energy.ca.gov/data-reports/energy-almanac/transportation-energy/californiagasoline-data-facts-and-statistics. Accessed May 2022.

. 2022c. Diesel Fuel Data, Facts, and Statistics. Available online at: https://www.energy.ca.gov/data-reports/energy-almanac/transportation-energy/diesel-fuel-data-facts-and-statistics. Accessed May 2020.

- City of California City. 2009. City of California City Final General Plan. Available online at: https://www.californiacity-ca.gov/CC/index.php/planning/final-general-plan-2009-2028/download. Accessed May 2022.
- Kern County. 2009. General Plan. Available online at: https://psbweb.co.kern.ca.us/planning/pdfs/kcgp/KCGP_Complete.pdf. Accessed May 2022.
- San Bernardino County. 2020. Countywide Plan County Policy Plan. Available online at: https://countywideplan.com/policy-plan/. Accessed May 2022.
- San Bernardino County. 2020. Countywide Policy Plan. Available online at: http://countywideplan.com/wpcontent/uploads/2021/01/CWP_PolicyPlan_HardCopy_MainText_Tables_20201027_adopted.pdf . Accessed May 2022.
- Southern California Edison (SCE). 2022. About Us. Available online at: https://www.sce.com/about-us. Accessed May 2022.
- Swiss Federal Office of Civil Aviation (FOCA). 2015. Guidance on the Determination of Helicopter Emissions. Edition 2. December.
- United States Environmental Protection Agency (USEPA). 2021. Exhaust and Crankcase Emission Factors for Nonroad Compression-Ignition Engines in MOVES3.0.2. Available online at: https://nepis.epa.gov/Exe/ZyPURL.cgi?Dockey=P1013KWQ.txt. Accessed June 2022

9.1.8 Geology, Soils, and Paleontological Resources

- Bell, A. 2021. Collections search of the Natural History Museum of Los Angeles County for the Kramer-Edwards-Cal City Project (#21-11379), dated July 31, 2021.
- California Department of Conservation (DOC). 2016. Earthquake Shaking Potential for California. https://www.conservation.ca.gov/cgs/Documents/Publications/Map-Sheets/MS_048.pdf. Accessed April 2022.
 - . 2022a. Fault Activity Map of California. https://maps.conservation.ca.gov/cgs/fam/ Accessed March 2022.

__. 2022b. Reported California Landslides. https://cadoc.maps.arcgis.com/apps/webappviewer/index.html?id=bc48ad40e3504134a1fc8f3909 659041. Accessed March 2022.

California Geological Survey (CGS). 2002. Note 36 California Geomorphic Provinces. https://www.conservation.ca.gov/cgs/Documents/Publications/CGS-Notes/CGS-Note-36.pdf. Accessed March 2022.

- City of California City. 2009. General Plan. https://www.californiacityca.gov/CC/index.php/planning/planning-publications. Accessed January 2022.
 - . 2014. City of California City Water and Sewer Rate Study. November 2014. Available online: https://www.californiacity-ca.gov/CC/images/California-City-Water-and-Sewer-Rate-Study-11-20-2014.pdf-Final.pdf. Accessed June 2022.
- Dibblee, T.W. and Minch, J.A. 2008a. Geologic Map of the Rosamond & Rogers Lake 15 minute Quadrangles, Kern & Los Angeles Counties, California. [map]. Dibblee Geological Foundation, Dibblee Foundation Map DF-384, scale 1:62,500.
- . 2008b. Geologic Map of the Kramer and Hawes 15 minute Quadrangles, Kern, San Bernardino & Los Angeles Counties, California. [map]. Dibblee Geological Foundation, Dibblee Foundation Map DF-385, scale 1:62,500.
- . 2008c. Geologic Map of the Mojave and Castle Butte 15 minute Quadrangles, Kern County, California. [map]. Dibblee Geological Foundation, Dibblee Foundation Map DF-401, scale 1:62,500.
- . 2008d. Geologic Map of the Boron and Fremont Peak 15 minute Quadrangles, Kern & San Bernardino Counties, California. [map]. Dibblee Geological Foundation, Dibblee Foundation Map DF-402, scale 1:62,500.
- . 2008e. Geologic Map of the Randsburg 15 minute Quadrangle, Kern & San Bernardino Counties, California. [map]. Dibblee Geological Foundation, Dibblee Foundation Map DF-400, scale 1:62,500.
- Federal Emergency Management Agency (FEMA). 2021. The National Earthquake Hazards Reduction Program (NEHRP) Overview. https://www.fema.gov/sites/default/files/documents/fema_nehrpoverview-factsheet_05-13-21.pdf. Accessed May 2022.
- Geotechnical Solution Inc. 2022. Geotechnical Investigation Report. Kern County. 2009. General Plan. https://psbweb.co.kern.ca.us/planning/pdfs/kcgp/KCGP_Complete.pdf. Accessed January 2022.
- Natural Resources Conservation Service (NRCS). 2017. SSURGO Database. https://www.arcgis.com/home/item.html?id=ac1bc7c30bd4455e85f01fc51055e586#:~:text=Soil %20erodibility%20factor%2C%20also%20known,detachment%20and%20movement%20by%20 water. Accessed April 2022.
- San Bernardino County. 2020. Countywide Policy Plan. Available online: https://countywideplan.com/policy-plan/. Accessed March 2022.
- Society of Vertebrate Paleontology (SVP). 2010. Standard Procedures for the Assessment and Mitigation of Adverse Impacts to Paleontological Resources. Society of Vertebrate Paleontology Impact Mitigation Guidelines Revision Committee. https://vertpaleo.org/wpcontent/uploads/2021/01/SVP_Impact_Mitigation_Guidelines-1.pdf.
- Southern California Earthquake Data Center (SCEDC). Earthquake Information. https://scedc.caltech.edu/earthquake/lockhart.html. Accessed March 2022.
- State Water Resource Control Board (SWRCB). 2017. Rusle K Values. https://www.waterboards.ca.gov/water_issues/programs/stormwater/docs/constpermits/guidance/ k_factor_map.pdf. Accessed April 2022.
- United States Bureau of Reclamation (USBR). 1992. Characteristics and problems of Collapsible Soil. https://www.usbr.gov/tsc/techreferences/rec/R9202.pdf. Accessed March 2022.

- United States Department of Agriculture (USDA). 2002. WIND ERODIBILITY GROUPS (I). https://efotg.sc.egov.usda.gov/references/Agency/SD/Archived_winderos_100415.pdf. Accessed April 2022.
 - _____. 2004. Understanding Soil Risks and Hazards Using Soil Survey to Identify Areas with Risks and Hazards to Human Life and Property.

https://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs142p2_053170.pdf. Accessed March 2022.

- . 2022a. Web Soil Survey. https://websoilsurvey.sc.egov.usda.gov/App/WebSoilSurvey.aspx. Accessed March 2022.
 - _____. 2022b. Soil Survey of Kern County, Northeastern Part, and Southeastern Part of Tulare County, California.

https://www.nrcs.usda.gov/Internet/FSE_MANUSCRIPTS/california/CA668/0/Kern_CA.pdf. Accessed April 2022.

United States Geological Survey (USGS). 2008. Modeling Soil Moisture in the Mojave Desert. https://pubs.usgs.gov/of/2008/1100/of2008-1100.pdf. Accessed January 2022.

.2022a. U.S. Quaternary Faults (online map).

https://usgs.maps.arcgis.com/apps/webappviewer/index.html?id=5a6038b3a1684561a9b0aadf884 12fcf. Accessed March 2022.

_. 2022b. What Is a Fault and What are the Different Types. https://www.usgs.gov/faqs/what-faultand-what-are-different-types. Accessed April 2022.

9.1.9 Greenhouse Gas Emissions

- Association for Environmental Professionals (AEP). 2016. Field Guide to New CEQA Greenhouse Gas Thresholds and Climate Action Plan Targets for California. Available online at: https://califaep.org/docs/AEP-2016_Final_White_Paper.pdf. Accessed June 2022.
- California Air Pollution Control Officers Association. 2022. CalEEMod. Available online at: http://www.caleemod.com. Accessed June 2022.
- California Air Resources Control Board (CARB). 2018. Safeguarding California Plan: 2018 Update California's Climate Adaptation Strategy. Available online at: https://files.resources.ca.gov/climate/safeguarding/. Accessed June 2022.
- Eastern Kern Air Pollution Control District (EKAPCD). 2012. Addendum to CEQA Guidelines Addressing GHG Emission Impacts for Station Source Projects when Serving as the Lead CEQA Agency. Available online at: http://www.kernair.org/Documents/CEQA/EKAPCD%20CEQA%20GHG%20Policy%20Adopte d%203-8-12.pdf. Accessed June 2022.
- Intergovernmental Panel on Climate Change (IPCC). 2007. Climate Change 2007: Synthesis Report. A Report of the Intergovernmental Panel on Climate Change. Available at https://www.ipcc.ch/site/assets/uploads/2018/02/ar4_syr_full_report.pdf. Accessed June 2022.
- Mojave Desert Air Quality Management District (MDAQMD). 2020. California Environmental Quality Act (CEQA) and Federal Conformity Guidelines. Available online at: https://www.mdaqmd.ca.gov/home/showpublisheddocument/8510/637406182097070000. Accessed June 2022.

Swiss Federal Office of Civil Aviation (FOCA). 2015. Guidance on the Determination of Helicopter Emissions. Edition 2. December.

9.1.10 Hazards and Hazardous Materials

- California Department of Conservation Geologic Energy Management Division (CalGEM). 2021. Well Finder. https://www.conservation.ca.gov/calgem/Pages/WellFinder.aspx. Accessed October 2021.
- California Department of Forestry and Fire Protection (CAL FIRE). 2022. Fire Hazard Severity Zone Viewer [interactive map]. https://egis.fire.ca.gov/FHSZ/. Accessed March 2022.
- California Governor's Office of Emergency Services (Cal OES). 2020a. Cal OES GIS Data Hub: Natural Gas Pipelines [GIS map]. https://gis-calema.opendata.arcgis.com/datasets/CalEMA::natural-gas-pipelines/explore?location=35.026219%2C-117.799847%2C12.68. Accessed March 2022.

. 2020b. Cal OES GIS Data Hub: Oil and Natural Gas Wells [interactive map]. https://giscalema.opendata.arcgis.com/datasets/CalEMA::oil-and-natural-gaswells/explore?location=35.097266%2C-117.756201%2C11.77. Accessed March 2022.

- California Public Utilities Commission (CPUC). 2022. CPUC High Fire Threat District (HFTD) [interactive map]. https://www.arcgis.com/apps/webappviewer/index.html?id=5bdb921d747a46929d9f00dbdb6d0fa 2. Accessed March 2022.
- City of California City. 2021. "Welcome to the California City Airport." https://www.californiacityca.gov/CC/index.php/departments-1/airport. Accessed October 2021.
- Eastern Kern Air Pollution Control District (EKAPCD). 2022. "Asbestos." http://www.kernair.org/Main_Pages/Subpages/Info_Sub/Asbestos.html Accessed June 2022.
- Edwards Air Force Base (EAFB). 2021. "About Us." https://www.edwards.af.mil/About/. Accessed October 2021.
- Environmental Data Resources, Inc. (EDR) 2021. EDR Area/Corridor Report, Cal City Project. City of California City, California. October 15.
- Kern County. 2012. Airport Land Use Compatibility Plan. https://www.mdaqmd.ca.gov/permitting/asbestos-information. Accessed June 2022.
- . 2021. County of Kern Multi-Jurisdictional Hazard Mitigation Plan. https://www.dropbox.com/s/qkzvw49poktpgb0/Kern-MJHMP-VOL-1.pdf?dl=0. Accessed June 2022.
- Mojave Desert Air Quality Management District (AQMD). 2022. "Asbestos." https://www.mdaqmd.ca.gov/permitting/asbestos-information Accessed June 2022.
- North American Wood Pole Council. 2022. "Wood Pole Preservatives." Last modified: 2022. https://woodpoles.org/Why-Wood-Poles/Preservatives Accessed January 21, 2022.
- San Bernardino County. 2017. San Bernardino County Multi-Jurisdictional Hazard Mitigation Plan. https://www.sbcounty.gov/uploads/SBCFire/documents/EmergencyServices/Hazard-Mitigation-Plan.pdf. Accessed June 2022.
- United States Department of Transportation (USDOT). 2021. National Pipeline Mapping System (NPMS) Public Map Viewer [interactive map]. https://www.npms.phmsa.dot.gov/PublicViewer/. Accessed October 2021.

9.1.11 Hydrology and Water Quality

Antelope Valley - East Kern Water Agency (AVEK). 2021. 2020 Urban Water Management Plan. Available online: https://www.avek.org/files/2a8e325f5/AVEK+2020+UWMP_Public+Draft_210525.pdf.

https://www.avek.org/files/2a8e325f5/AVEK+2020+UWMP_Public+Draft_210525.pdf Accessed April 2022.

- California Department of Fish and Wildlife (CDFW). 2020. BIOS viewer 5.108.39. Available online: https://apps.wildlife.ca.gov/bios/?al=ds2725. Accessed March 2022.
- California Department of Water Resources. 2022. Well Completion Report Map Application. Available online:

https://dwr.maps.arcgis.com/apps/webappviewer/index.html?id=181078580a214c0986e2da28f86 23b37. Accessed May 2022.

- . 2004a. Fremont Valley Groundwater Basin Bulletin 118. Available online: https://water.ca.gov/-/media/DWR-Website/Web-Pages/Programs/Groundwater-Management/Bulletin-118/Files/2003-Basin-Descriptions/6_046_FremontValley.pdf. Accessed May 2022.
- . 2004b. Harper Valley Groundwater Basin Bulletin 118. Available online: https://water.ca.gov/-/media/DWR-Website/Web-Pages/Programs/Groundwater-Management/Bulletin-118/Files/2003-Basin-Descriptions/6_047_KernRiverValley.pdf. Accessed May 2022.
- . 2004c. Antelope Valley Groundwater Basin Bulletin 118. Available online: https://water.ca.gov/-/media/DWR-Website/Web-Pages/Programs/Groundwater-Management/Bulletin-118/Files/2003-Basin-Descriptions/6_044_AntelopeValley.pdf. Accessed May 2022.
- City of California City. 2009. City of California City Final General Plan. Available online: https://www.californiacity-ca.gov/CC/index.php/planning/planning-publications. Accessed March 2022.
 - . 2017. City of California City Urban Water Management Plan 2015 Update. Available online: https://www.californiacity-ca.gov/CC/images/stories/Cal-City-2015-UWMP20170424Final.pdf. Accessed May 2022.
- Kern County. 2009. Kern County General Plan. Available online: https://psbweb.co.kern.ca.us/planning/pdfs/kcgp/KCGP_Complete.pdf. Accessed March 2022.
- National Oceanic and Atmospheric Administration (NOAA). 2015. Climate Summary. Available online: https://www.ncei.noaa.gov/. Accessed May 2022.
- Regional Water Management Group of the Fremont Basin Integrated Regional Water Management Region. 2018. Fremont Valley Basin Groundwater Management Plan. Available online: https://www.californiacity-ca.gov/CC/images/Appendix-B_Final-FVB-GWMP_wAppx.pdf. Accessed April 2022.
- San Bernardino County. 2020. Countywide Policy Plan. Available online: http://www.sbcounty.gov/Uploads/LUS/GeneralPlan/Policy%20Plan%20and%20Policy%20Map s.pdf. Accessed March 2022.
- State Water Resources Control Board (SWRCB). 2021. Present and Potential Beneficial Uses. Available online:

https://www.waterboards.ca.gov/lahontan/water_issues/programs/basin_plan/docs/2022/ch2-bu.pdf. Accessed March 2022.

. 2022. 2020-2022 California Integrated Report (Clean Water Act Section 303(d) List and 305(b) Report). Available online:

https://www.waterboards.ca.gov/water_issues/programs/water_quality_assessment/2020_2022_in tegrated_report.html. Accessed June 2022.

9.1.12 Land Use and Planning

American Legal Publishing. 2022a. San Bernardino County, California Code of Ordinances - Exemptions from Planning Permit Requirements. Available online at: https://codelibrary.amlegal.com/codes/sanbernardino/latest/sanberncty_ca/0-0-0-167886#JD 82.02.040. Accessed January 2022.

. 2022b. San Bernardino Development Code. Available online at: https://codelibrary.amlegal.com/codes/sanbernardino/latest/sanberncty_ca/0-0-0-167795#JD_82.01.020. Accessed January 2022.

. 2022c. San Bernardino Development Code Authority and Applicability. Available online at: https://codelibrary.amlegal.com/codes/sanbernardino/latest/sanberncty_ca/0-0-0-167666#JD_Chapter81.01. Accessed June 2022.

Bureau of Land Management (BLM). 2021a. BLM California Interactive Map, California State Office. Available online at: https://www.blm.gov/site-page/services-geospatial-gis-data-california. Accessed September 2021.

. 2021b. National Conservation Lands of the California Desert. Available online at: https://www.blm.gov/programs/national-conservation-lands/national-conservation-lands-of-thecalifornia-desert. Accessed December 2021.

. 2021c. Desert Renewable Energy Conservation Plan. Available online at: https://www.blm.gov/programs/planning-and-nepa/plans-in-development/california/desertrenewable-energy-conservation-plan. Accessed December 2021.

. 2021d. BLM National NEPA register – Desert Renewable Energy Conservation Plan. Available online at: https://eplanning.blm.gov/eplanning-ui/project/66459/510. Accessed December 2021.

____. 2022. Areas of Critical Environmental Concern. Available online at: https://www.blm.gov/programs/planning-and-nepa/planning-101/special-planningdesignations/acec. Accessed February 2022.

- Center for Biological Diversity. 2021. California Desert Conservation Area. Available online at: https://www.biologicaldiversity.org/programs/public_lands/deserts/california_desert_conservatio n_area/index.html. Accessed December 2021.
- City of California City. 2022. City of California City Code of Ordinances. Available online at: https://library.municode.com/ca/california_city/codes/code_of_ordinances. Accessed June 8, 2022.
- Edwards Air Force Base (EAFB). 2015. Finding of No Significant Impact for the Integrated Natural Resources Management Plan for Edwards Air Force Base, California.

Kern County. 2009. General Plan. Available online at:
https://psbweb.co.kern.ca.us/planning/pdfs/kcgp/KCGP_Complete.pdf. Accessed December 2021.
. 2021a. Kern County GIS. Available online at: https://maps.kerncounty.com/H5/index.html?viewer=KCPublic. Accessed January 3, 2022.
. 2021b. Title 19 -Zoning, Kern County Zoning Ordinance. Available online at: https://psbweb.co.kern.ca.us/planning/pdfs/KCZOApr2021.pdf. Accessed January 24, 2022.
. 2022a. Interactive Map, Zoning CalCity Layer. Available online at: https://maps.kerncounty.com/H5/index.html?viewer=KCPublic&layerTheme=0&scale=72223.81 9286&basemap=¢er=13131779.013153259%2C4180132.5753794527&layers=110OAY2Cq deP30t9TS0hIT511UWjnc0%2FT0250ljJPi3nAqYM1yQ6z417mHXf008MfM2Bcvw21Ht8Ap31 wnb90%2Fkaab2JQIC10yAd0N0%2B1ygA2yOYN7. Accessed January 2022.
. 2022b. Generalized Land Use Zoning Guide. Available online at: https://www.bid4assets.com/mvc/info/sfid406/Zoning.pdf. Accessed January 26, 2022.
San Bernardino County. 2009. San Bernardino County Code- Title 8- Development Code: Table 82-1 Land Use Zoning Districts. Available online at: https://www.sbcounty.gov/Uploads/LUS/zoning/Land%20use%20zoning%20districts.pdf. Accessed January 2022.
. 2020a. Countywide Plan – County Policy Plan. Available online at: https://countywideplan.com/policy-plan/. Accessed June 2022.
. 2020b. Adopted County Policy Plan Land Use Element (policy maps). Available online at: https://countywideplan.com/policy-plan/land- use/#:~:text=The%20Land%20Use%20Element%3A,by%20policies%20in%20other%20element s Accessed December 2021.
2021. San Bernardino County ArcGIS. Available online at: https://www.arcgis.com/home/user.html?user=County_Of_San_Bernardino. Accessed January2022.
U.S. Department of the Interior. 1999. The California Desert Conservation Area Plan 1980 as Amended. Available online at: https://eplanning.blm.gov/public_projects/lup/66949/82080/96344/CDCA_Plan.pdf. Accessed December 2021.
Woods, Dale. 2021. GIS Specialist, Kern County. City of California City Information Technology Services.
9.1.13 Mineral Resources
20 Mule Team Borax. 2021. U.S. Borax: Pioneering the Elements of Modern Living. Available online at: https://www.borax.com/. Accessed December 2021.

California Department of Conservation (DOC). 2015. California Geological Survey – Mines and Minerals Resource Program: Mineral Resource Zones for Kern County. Available online at: https://databasin.org/datasets/26c92d3ecbe541ec81451f9de4e1e0e4/. Accessed December2021.

- 2020. Mine Reclamation Statutes and Regulations. Available online at: https://www.conservation.ca.gov/index/Documents/DMR-SR-1%20Web%20Copy.pdf. Accessed December 2021.
- . 2021a. Mines Online. Available online at: https://maps.conservation.ca.gov/mol/index.html. Accessed December 2021.

. 2021b. Mining in California. Available online at: https://www.arcgis.com/apps/Cascade/index.html?appid=00b3e73e2a11459588a6cd7a55524a9d. Accessed December 2021.

- California Department of Conservation (DOC) Geologic Energy Management Division. 2021. CalGEM Well Finder. Available online at: https://maps.conservation.ca.gov/doggr/wellfinder/#openModal/-117.56917/35.08498/12. Accessed January 2022.
- California Geological Survey (CGS). 2002. Note 36 California Geomorphic Provinces. Available online at: https://www.coastal.ca.gov/coastalvoices/resources/California_Geomorphic_Provinces.pdf. Accessed December 2021.

. 2021. CGS Information Warehouse: Mineral Land Classification. Available online at: https://maps.conservation.ca.gov/cgs/informationwarehouse/mlc/. Accessed December 2021.

- City of California City. 2009. City of California City Final General Plan. Available online at: https://www.californiacity-ca.gov/CC/index.php/planning/final-general-plan-2009-2028/download. Accessed January 2022.
- Google. Google Earth Pro 7.3.4.8248. Software. Program used December 2021.
- Kern County. September 2009. Kern County General Plan. Available online at: https://psbweb.co.kern.ca.us/planning/pdfs/kcgp/KCGP_Complete.pdf. Accessed December 2021.
 - . 2021. Kern County GIS. Available online at: https://maps.kerncounty.com/H5/index.html?viewer=KCPublic. Accessed December 2021.
- Koordinates. 2021. California Geomorphic Provinces. Available online at: https://koordinates.com/layer/97118-california-geomorphic-provinces/. Accessed December2021.
- Rio Tinto. 2021. Boron. Available online at: https://www.riotinto.com/Operations/us/boron. Accessed December 2021.
- San Bernardino County. Countywide Policy Plan. October 2020. Available online at: http://www.sbcounty.gov/Uploads/LUS/GeneralPlan/Policy%20Plan%20and%20Policy%20Map s.pdf. Accessed December 2021.
- State Mining and Geology Board, California (SMGB). 1988. Guidelines for Classification and Designation of Mineral Lands. Available online at: https://www.conservation.ca.gov/smgb/Guidelines/Documents/ClassDesig.pdf. Accessed February 2022.
 - . 1993. Mineral Land Classification of the Kerens, Flynn, and Colton Well 15-Minute Quadrangles, San Bernardino County, California – Special Report 168. Available online at: https://ia800606.us.archive.org/4/items/minerallandclass168loyd/minerallandclass168loyd.pdf. Accessed February 22, 2022.

United States Geological Survey (USGS). 2003. Active Mines and Mineral Plants in the U.S. Available online at https://mrdata.usgs.gov/mineplant/. Accessed December 2021.

. 2007. Geology and Mineral resources of the East Mojave National Scenic Area, San Bernardino County, California. Available online at: https://pubs.usgs.gov/bul/b2160/pdf/B2160v9.pdf. Accessed December 2021.

. 2021a. Mineral Resources Data System. Available online at: http://mrdata.usgs.gov/mineral-resources/mrds-us.html. Accessed December 2021.

. 2021b. MRDS Commodity Codes. Available online at: https://mrdata.usgs.gov/mrds/commoditycodes.html. Accessed December 2021.

. 2021c. Mineral Resources Online Spatial Data. Available online at: https://mrdata.usgs.gov/general/map-us.html. Accessed December 2021.

. 2021d. Major Mineral Deposits. Available online at: https://mrdata.usgs.gov/majordeposits/map-us.html#home. Accessed December 2021

______. 2022. Database Fields in Category Site Characteristics. Available online at: https://mrdata.usgs.gov/mrds/compact/dd.php?group=Site+characteristics. Accessed January 2022.

9.1.14 Noise

- California Department of Transportation (Caltrans). 2013. Transportation and Construction Vibration Guidance Manual. Available online at http://www.cccounty.us/DocumentCenter/Home/View/34120. Accessed June 2022.
- City of California City. 2009. City of California City Final General Plan. Available online at: https://www.californiacity-ca.gov/CC/index.php/planning/final-general-plan-2009-2028/download. Accessed June 2022.

__. 2022. Municipal Code. Available online at: https://library.municode.com/ca/california_city/codes/code_of_ordinances. Accessed June 2022.

- California Public Utilities Commission (CPUC). 2015. Proponent's Environmental Assessment, Alberhill System Project, Application A.09-09-022. Available online at: http://www.cpuc.ca.gov/Environment/info/ene/alberhill/Alberhill.html. Accessed June 2022.
- Federal Highway Administration (FHWA). 2006. Construction Noise Handbook. Available online at: https://www.fhwa.dot.gov/environment/noise/construction_noise/handbook/. Accessed June 2022.
- Federal Transit Administration (FTA). 2018. Transit Noise and Vibration Impact Assessment Manual. Available online at: https://www.transit.dot.gov/sites/fta.dot.gov/files/docs/researchinnovation/118131/transit-noise-and-vibration-impact-assessment-manual-fta-report-no-0123_0.pdf. Accessed June 2022.

Kern County. 2009. Kern County General Plan Noise Element. Available online at: https://kernplanning.com/planning/planning-documents/general-plans-elements/. Accessed June 2022.

- Kern County. 2012. Airport Land Use Compatibility Plan. Available online at: https://psbweb.co.kern.ca.us/planning/pdfs/ALUCP2012.pdf. Accessed June 2022.
 - ____. 2022. Code of Ordinances. Available online at: https://library.municode.com/ca/kern_county. Accessed June 2022.
- San Bernardino County. 2020a. Code of Ordinances. Available online at: http://sbcountyca.elaws.us/code/coor. Accessed June 2022.
 - _____. 2020b. San Bernardino Countywide Policy Plan. Available online at: https://countywideplan.com/policy-plan/. Accessed June 2022.
- United States Environmental Protection Agency (USEPA). 1974. Information on Levels of Environmental Noise Requisite to Protect Public Health and Welfare with an Adequate Margin of Safety. Available online at: https://nepis.epa.gov/Exe/ZyPURL.cgi?Dockey=2000L3LN.TXT. Accessed June 2022.
- United States Forest Service (USFS). 2022. Sound Measurements of Helicopters during Logging Operations at Southwestern Oregon Timber Sales. Available online at: https://www.fs.fed.us/eng/techdev/IM/sound_measure/helo_index.shtml. Accessed June 2022.

9.1.15 **Population and Housing**

- California Department of Finance. 2020. Demographics Projections. Available online at: http://www.dof.ca.gov/Forecasting/Demographics/Projections/. Accessed December 2021.
- City of California City. 2015. 2015-2023 Housing Plan. Available online at: https://www.californiacityca.gov/CC/index.php/planning/planning-publications. Accessed December 10, 2021.
- Kern County. 2015. Kern County General Plan Housing Element 2015-2023. Available online at: https://kernplanning.com/planning/planning-documents/general-plans-elements/. Accessed December 2021.
- San Bernardino County. 2013. County of San Bernardino 2013-2021 General Plan Housing Element. Available online at: http://www.sbcounty.gov/uploads/lus/GeneralPlan/Adopted_5th_Cycle_Housing_Element_Count y_of_San_Bernardino2013-2021.pdf. Accessed December 2021.
- United States Census Bureau. 2020. 2020 Census: Redistricting File (Public Law 94-171) Dataset. Available online at: https://data.census.gov/cedsci/. Accessed December 2021.

9.1.16 Public Services

- 412th Medical Group. 2021. About Us. Available online at: https://edwards.tricare.mil/About-Us. Accessed December 2021.
- California City Fire Department. 2019. 2019 Annual Fire Department Report. Available online at: https://www.calcityfire.us/. Accessed December 2021.
- California City Police Department. 2021. About the California City Police Department. Available online at: https://www.californiacity-ca.gov/CC/index.php/about. Accessed December 12, 2021.
- California Department of Health Care Services. 2021. Medi-Cal Managed Care. Available online at: https://www.dhcs.ca.gov/services/Pages/Medi-CalManagedCare.aspx. Accessed December 2021.

- California Highway Patrol. 2021. Find an Office. Available online at: https://www.chp.ca.gov/find-an-office. Accessed December 2021.
- California Inter-Utility Coordinating Committee. 2018. Available online at: https://www.fontana.org/DocumentCenter/View/25527/California-Temporary-Traffic-Control-Handbook-CATTCH-2018. Accessed January 2022.
- East Kern Health Care District. 2021. Services. Available online at: https://www.ekhcd.org/services. Accessed December 2021.
- Kern County Fire Department. 2021. Fire Stations. Available online at: https://kerncountyfire.org/aboutkcfd/fire-stations/. Accessed December 2021.
- Kern County Sheriff's Office. 2021. Law Enforcement Bureau. Available online at: https://www.kernsheriff.org/Law Enforcement. Accessed December 2021.
- Mojave Unified School District. 2021. Mojave Unified School District. Available online at: https://www.mojave.k12.ca.us/##. Accessed December 2021.
- Muroc Joint Unified School District. 2021. Welcome to the Muroc Joint Unified School District. Available online at: https://muroc.k12.ca.us/. Accessed December 2021.
- San Bernardino County. 2020. San Bernardino Countywide Policy Plan. Personal and Property Protection Element. Available online at: https://countywideplan.com/policy-plan/personal-propertyprotection/. Accessed January 2022.
- San Bernardino County Fire Protection District. 2021. Fire Stations. Available online at: https://sbcfire.org/firestations/. Accessed December 2021.
- San Bernardino County Sheriff's Department. 2021. Patrol Stations. Available online at: https://wp.sbcounty.gov/sheriff/patrol-stations/. Accessed December 2021.
- Edwards Air Force Base. 2008. Newcomers Emergency Services. Available online at: https://www.edwards.af.mil/About/Fact-Sheets/Display/Article/393912/newcomers-emergencyservices/. Accessed December 2021.

9.1.17 Recreation

- Bureau of Land Management (BLM). 1980. CDCA Plan. Available online at: https://eplanning.blm.gov/public_projects/lup/66949/82080/96344/CDCA_Plan.pdf. Accessed December 2021.
 - _____. 2005. BLM Land Use Planning Handbook. Available online at: https://www.blm.gov/sites/blm.gov/files/uploads/Media_Library_BLM_Policy_Handbook_h1601 -1.pdf. Accessed December 2021.
- California Inter-Utility Coordinating Committee. 2018. Available online at: https://www.fontana.org/DocumentCenter/View/25527/California-Temporary-Traffic-Control-Handbook-CATTCH-2018. Accessed January 2022.
- California Department of Fish and Wildlife (CDFW). 2021a. Fremont Valley Ecological Reserve. Available online at: https://wildlife.ca.gov/Lands/Places-to-Visit/Fremont-Valley-ER. Accessed December 2021.

_. 2021b. West Mojave Desert Ecological Reserve. Available online at: https://www.wildlife.ca.gov/Lands/Places-to-Visit/West-Mojave-Desert-ER. Accessed December 2021.

- California Protected Areas Database. 2021. Parks for All Californians. Available online at: www.calands.org. Accessed December 2021.
- City of California City. 2009. City of California City Final General Plan. Available online at: https://www.californiacity-ca.gov/CC/index.php/planning. Accessed December 2021.
- _____. 2018. Available online at: https://www.californiacityca.gov/CC/images/OHV_Department/FINAL_CalCityOHV_ed4_20181029.png. Accessed January 2022.
- Data Basin. 2015. Special Recreation Management Area/Extensive Recreation Management Area (SRMA/ERMA) Designations, DRECP Proposed LUPA and Final EIS, Preferred Alternative. Available online at: https://databasin.org/datasets/a3a2288f21234b1e844fcac0e8c4c915/. Accessed January 2022.
- Desert Renewable Energy Conservation Plan. 2016. Land Use Plan Amendment. Appendix C: Special Recreation Management Area and Extensive Recreation Management Area – Special Unit Management Plans. Available online at: https://eplanning.blm.gov/eplanningui/project/66459/570. Accessed December 2021.
- Kern County. 2015. Kern County General Plan. Land Use, Open Space, and Conservation Element. Available online at: https://kernplanning.com/planning/planning-documents/general-planselements/. Accessed December 2021.
- San Bernardino County. 2020. County of San Bernardino Countywide Policy Plan. Natural Resources Element. Available online at: https://countywideplan.com/policy-plan/natural-resources/. Accessed December 2021.Transportation
- California Inter-Utility Coordinating Committee. 2018. California Temporary Traffic Control Handbook. Available online at: https://workzonesafety.org/publication/california-joint-utility-traffic-controlmanual/. Accessed June 2022.
- California Department of Transportation (Caltrans). 2002. Guide for the Preparation of Traffic Impact Studies. Available online at: https://nacto.org/docs/usdg/guide_preparation_traffic_impact_studies_caltrans.pdf. Accessed June 2022.
 - . 2020a. 2020 Traffic Volumes. Available online at: https://dot.ca.gov/-/media/dotmedia/programs/traffic-operations/documents/census/aadt/2020-traffic-volumes.xlsx. Accessed June 2022.
 - ____. 2020b. Highway Performance Monitoring System (HPMS) Data 2020 Road Data. Available online at: https://dot.ca.gov/programs/research-innovation-system-information/highway-performance-monitoring-system. Accessed June 2022.
- City of California City. 2009. City of California City Final General Plan. Available online at: https://www.californiacity-ca.gov/CC/index.php/planning/final-general-plan-2009-2028/download. Accessed June 2022.
- Kern Council of Governments (COG). 2018. Regional Transportation Plan. Available online at: https://www.kerncog.org/category/docs/rtp/. Accessed June 2022.

- Kern County. 2009. Kern County General Plan Circulation Element. Available online at: https://kernplanning.com/planning/planning-documents/general-plans-elements/. Accessed June 2022.
 - . 2012. Airport Land Use Compatibility Plan. Available online at: https://psbweb.co.kern.ca.us/planning/pdfs/ALUCP2012.pdf. Accessed June 2022.
- Kern Transit. 2022. Routes & Schedules. Available online at: https://kerntransit.org/routes-and-schedules/. Accessed June 2022.
- OmniTrans. 2022. View Omnitrans Bus Routes, Maps, and Schedules. Available online at: https://omnitrans.org/plan-a-trip/routes-schedules/. Accessed June 2022.
- San Bernardino Associated Governments (SANBAG). 2016. Congestion Management Plan. Available online at: https://www.gosbcta.com/wp-content/uploads/2019/10/2016-Congestion-Management-Plan-.pdf. Accessed June 2022.
- San Bernardino County. 2020b. San Bernardino Countywide Policy Plan. Available online at: https://countywideplan.com/policy-plan/. Accessed June 2022.

9.1.18 Tribal Cultural Resources

- Bean, Lowell J., and Charles R. Smith. 1978. Serrano. In California, edited by R. F. Heizer, pp. 570–574. Handbook of North American Indians, Vol. 8, William G. Sturtevant, general editor, Smithsonian Institution, Washington, D.C.
- Blackburn, Thomas C., and Lowell J. Bean. 1978. Kitanemuk. In California, edited by R. F. Heizer, pp. 564–569. Handbook of North American Indians, Vol. 8, William G. Sturtevant, general editor, Smithsonian Institution, Washington, D.C.
- Gatto, M. 2014. California Assembly Bill No. 52, Chapter 532. Approved by Governor September 25, 2014; filed with secretary of State September 25, 2014.
- Grayson, D. K. 2011. The Great Basin: A Natural Prehistory. University of California Press, Berkeley.
- Jones, T. L., and K. A. Klar. 2007. California Prehistory: Colonization, Culture, and Complexity. AltaMira Press, New York.
- Kroeber, Alfred L. 1925. Handbook of the Indians of California. Bulletin 78, Bureau of American Ethnology, Smithsonian Institution. Government Printing Office, Washington, D.C. Reprinted 1976 by Dover Publications, Inc., New York.
- Moratto, M. J. 2004. California Archaeology. Coyote Press, Salinas, California.
- Rosencrance, R. L. II. 2019. Assessing the Chronological Variation within Western Stemmed Tradition Projectile Points. Master's Thesis, Department of Anthropology, University of Nevada, Reno.
- Smith, G. M., D. Duke, D. L. Jenkins, T. Goebel, L. G. Davis, P. O'Grady, D. Stueber, J. E. Pratt, and H. L. Smith. 2020. The Western Stemmed Tradition: Problems and Prospects in Paleoindian Archaeology in the Intermountain West. PaleoAmerica 6(1):23-42.
- Sutton, M.Q. 1988. An Introduction to the Archaeology of the Western Mojave Desert, California. Coyote Press Archives of California Prehistory 14. Coyote Press, Salinas, California.

Sutton, M. O., M. E. Basgall, J. K. Gardner, and M. W. Allen. 2007. Advances in Understanding Mojave Desert Prehistory. In California Prehistory: Colonization, Culture, and Complexity, edited by T. L. Jones and K. A. Klar, pp. 229–245. AltaMira Press, New York.

9.1.19 **Utilities and Service Systems**

Antelope Valley - East Kern Water Agency (AVEK). 2021. 2020 Urban Water Management Plan. Available online:

https://www.avek.org/files/2a8e325f5/AVEK+2020+UWMP Public+Draft 210525.pdf. Accessed April 2022.

- California Department of Resources Recycling and Recovery (CalRecycle). 2019. SWIS Facility/Site Search. Available online: https://www2.calrecycle.ca.gov/SolidWaste/Site/Search. Accessed April 2022.
- City of California City. 2022. Wastewater Treatment Plant. Available online: https://www.californiacityca.gov/CC/index.php/work-orders-3. Accessed June 2022.
- . 2017a. City of California City Local Agency Management Program For Onsite Wastewater Treatment System California City, California. Available online: https://www.waterboards.ca.gov/lahontan/water issues/programs/owts/docs/lamp tracking/calcit vfinallamp.pdf. Accessed May 2022.
- . 2017b. City of California City Urban Water Management Plan 2015 Update. Available online: https://www.californiacity-ca.gov/CC/images/stories/Cal-City-2015-UWMP20170424Final.pdf. Accessed May 2022.
- Kern County. 2022. Disposal Sites. Kern County Public Works Department. Available online: https://kernpublicworks.com/waste-management/disposal-sites/. Accessed June 2022.
- . 2015. Kern County Integrated Waste Management Plan. Source Reduction and Recycling Element. 2015 Amendment. Available online: https://hfh-consultants.com/wpcontent/uploads/2019/07/CIWMP-Source-Reduction-and-Recycling-Element 2015-Amendment.pdf. Accessed June 2022.
 - . 2009. Kern County General Plan. Kern County Planning Department. September 22, 2009. Available online: https://psbweb.co.kern.ca.us/planning/pdfs/kcgp/KCGP Complete.pdf. Accessed May 2022.
- Mojave Water Agency. 2021. 2020 Urban Water Management Plan. Available online: https://www.mojavewater.org/wp-content/uploads/2022/06/MWA2020UWMPFinal061621.pdf. Accessed April 2022.
- Regional Water Quality Control Board (RWQCB). 2022. Revised Waste Discharge Requirements for the Los Angeles County Sanitation Districts, Lancaster Water Reclamation Plant, Los Angeles County. Available online: https://www.waterboards.ca.gov/lahontan/board info/agenda/2022/jun/item5.pdf. Accessed

January 2023.

San Bernardino County. 2020. Countywide Policy Plan. Available online:

http://www.sbcounty.gov/Uploads/LUS/GeneralPlan/Policy%20Plan%20and%20Policy%20Map s.pdf. Accessed March 2022.

. 2018. Countywide Integrated Waste Management Plan. Revised April 2018. Available online: https://www.sbcounty.gov/uploads/DPW/docs/Countywide-Summary-Plan.pdf. Accessed June 2022.

9.1.20 Wildfire

California Department of Forestry and Fire Protection (CAL FIRE). 2022a. California Fire Perimeters (all). https://calfireforestry maps arcgis com/apps/mapyiewer/index html?layers=e3802d2abf8741e187e73e9db49d

forestry.maps.arcgis.com/apps/mapviewer/index.html?layers=e3802d2abf8741a187e73a9db49d6 8fe. Accessed March 2022.

. 2022b. Fire Hazard Severity Zone Viewer. https://egis.fire.ca.gov/FHSZ/. Accessed March 2022.

. 2019. 2019 Strategic Plan. https://www.fire.ca.gov/media/bo2fdzfs/strategicplan2019-final.pdf. Accessed March 2022.

_____. 2021. California Power Line Fire Prevention Field Guide. https://osfm.fire.ca.gov/media/3vqj2sft/2021-power-line-fire-prevention-field-guide-adafinal_jf_20210125.pdf. Accessed March 2022.

- California Public Utilities Commission (CPUC). 2022. CPUC High Fire Threat District. https://www.arcgis.com/apps/webappviewer/index.html?id=5bdb921d747a46929d9f00dbdb6d0fa 2. Accessed March 2022.
- Kern County Public Works. 2022. Residential Hazardous Waste. https://kernpublicworks.com/hazardouswaste/. Accessed March 2022.
- Kern County. 2009a. Evacuation zones, estimated evacuees and clearance time. https://kerncountyfire.org/jsp-uploads/Evacuation-Zones-Routes.pdf. Accessed March 2022.

__. 2009b. Kern County General Plan. Available online: https://psbweb.co.kern.ca.us/planning/pdfs/kcgp/KCGP_Complete.pdf. Accessed March 2022

- San Bernardino County Fire Protection. 2022. San Bernardino County Certified Unified Program Agency (CUPA) Hazardous Materials. https://sbcfire.org/hazmatcupa/. Accessed March 2022.
- San Bernardino County. 2020. Countywide Plan. Available online: http://www.sbcounty.gov/Uploads/LUS/GeneralPlan/Policy%20Plan%20and%20Policy%20Map s.pdf. Accessed March 2022.
- _____. 2017a. Policy Map PP-2 Evacuation Routes. https://countywideplan.com/wpcontent/uploads/sites/68/2021/02/PP-2-Evacuation-Routes-201027.pdf. Accessed March 2022.

 2017b. Multi-Jurisdiction Hazard Mitigation Plan.
 https://www.sbcounty.gov/uploads/SBCFire/documents/EmergencyServices/Hazard-Mitigation-Plan.pdf. Accessed March 2022.

- United States Department of Agriculture, Forest Service, Missoula Fire Sciences Laboratory (USDA) 2012a. Information from LANDFIRE on fire regimes of creosotebush shrubland communities. In: Fire Effects Information System, [Online]. U.S. Department of Agriculture, Forest Service, Rocky Mountain Research Station, Missoula Fire Sciences Laboratory (Producer). Available: www.fs.fed.us/database/feis/fire_regimes/Creosotebush_shrub/all.html. Accessed April 2022.
 - . 2012b. Information from LANDFIRE on fire regimes of blackbrush shrubland communities. In: Fire Effects Information System, [Online]. U.S. Department of Agriculture, Forest Service, Rocky Mountain Research Station, Missoula Fire Sciences Laboratory (Producer). Available: www.fs.fed.us/database/feis/fire_regimes/Blackbrush_shrub/all.html. Accessed April 2022.
- . 2022. Fire Effects Information System (FEIS). https://www.fs.usda.gov/rmrs/tools/fire-effectsinformation-systemfeis#:~:text=The%20Fire%20Effects%20Information%20System,science%20to%20land%20man agement%20decisions. Accessed May 2022.

9.1.21 Cumulative and Other CEQA

- City of California City. 2022. Planning Department website. https://www.californiacityca.gov/CC/index.php/planning/initial-studies-for-review. Accessed December 2022.
- San Bernardino County. 2019. Land Use Services Department Planning Commission Staff Report. http://www.sbcounty.gov/uploads/lus/pc/SR_PROJ-2019-00052-Final.pdf. Accessed May 2022.
 - . 2022a. Applications Accepted. https://lus.sbcounty.gov/planning-home/applications-accepted/. Accessed May 2022.
- _____.2022b. Renewable Energy Projects as of September 13, 2022. https://www.sbcounty.gov/uploads/LUS/Renewable/SolarProjectListSEP_2022.pdf. Accessed December 2022.
- Southern California Edison (SCE). 2019. Ivanpah Control Project Proponent's Environmental Assessment. https://ia.cpuc.ca.gov/environment/info/aspen/ivanpah-control/pea2/pea_chs_1-3.pdf. Accessed May 2022.

This page intentionally left blank.