



Proponent’s Environmental Assessment for Southern California Edison Company’s Eldorado-Pisgah-Lugo 220 kV Project

April 2023

The Eldorado-Pisgah-Lugo 220 kV Project located in San Bernardino County, California and Clark County, Nevada, involves the installation of new inter-set structures, modification of hardware on existing structures, installation of new conductor and overhead groundwire, and modification of equipment at existing substations and a switchyard.

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

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Appendix B	Emissions Calculations
Appendix C	Biological Resources Technical Reports
Appendix D	Cultural Resources Studies
Appendix E	Detailed Tribal Consultation Report
Appendix F	Agency Consultation and Public Outreach Report and Records of Correspondence
Appendix G	Fire Prevention and Emergency Response Plan
Appendix H	Ambient Noise Survey
Appendix I	Visual Resources Technical Report
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Appendix K	Vehicle Miles Traveled Calculations
Appendix L	Weather Data
Appendix M	Hazardous Materials and Waste Management Plan
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Appendix S	Nesting Bird Management Plan
Appendix T	Habitat Restoration Plan
Appendix U	Invasive Plant Management Plan
Appendix V	FAA Notice and Criteria Tool Results
Appendix W	300' List

* Note: SCE has provided those appendices and supporting materials identified as 'Required' in the CPUC's *Guidelines for Energy Project Applications Requiring CEQA Compliance: Pre-filing and Proponent's Environmental Assessments*; these appendices are presented in this PEA in the same order as presented in the *Guidelines*. Appendices H through V to this PEA contain supporting materials as referenced in this PEA document.

6 Comparison of Alternatives

The EPL Project has been subjected to a multi-year engineering design process, during which SCE identified engineering solutions that could meet the EPL Project objective. These engineering solutions were subjected to an environmental screening process that allowed a comparative analysis of potential impacts under the discrete suite of CEQA impact criteria that are or may be typically impacted by a transmission line construction project.

The multi-year engineering design process has culminated in the proposed EPL Project. The location of the inter-set structures, and in some instances the orientation and configuration of construction work areas, have been selected to avoid sensitive resources and to avoid potential land use conflicts. Therefore, the EPL Project, as described in Chapter 3, represents the optimized design—it meets the primary objective, is feasible to construct, and presents the least-intensive scope of work and the smallest physical footprint of the solutions. As presented in Chapter 4, the evolutionary, optimized design of the proposed EPL Project avoids and/or minimizes potential environmental impacts: as presented in Chapter 5, the EPL Project would not result in a potentially significant impact under any CEQA criterion.

Of the alternatives addressed in Chapter 4, only the Partial Reconductor/Shorter Insulators Alternative would meet the EPL Project’s objectives.

6.1 Alternatives Comparison

6.1.1 Comparison of Ability of Each Alternative to Avoid or Reduce a Potentially Significant Impact

As presented in Chapter 5, the EPL Project would not result in a potentially significant impact under any CEQA criterion; therefore, none of the alternatives described in Chapter 4, including the Partial Reconductor/Shorter Insulators Alternative, could avoid or reduce a potentially significant impact.

A comparison of the potential environmental impacts associated with the EPL Project as described in Chapter 5—Environmental Impact Assessment Summary, and the potential impacts associated with the Partial Reconductor/Shorter Insulators Alternative, is provided in Table 6.1-1.

In summary and on balance, while impacts may differ, all impacts will be less than significant under either alternative, the Partial Reconductor/Shorter Insulators Alternative presents potential impacts that are greater than those for the EPL Project. This is due primarily to the larger scope associated with the Partial Reconductor/Shorter Insulators Alternative and the greater length, area, and time over which work would be performed.

A summary of the drivers behind the increased potential impacts under the Partial Reconductor/Shorter Insulators Alternative compared to the EPL Project, as shown in Table 6.1-1, is presented here by CEQA Resource Area. As discussed in the sections below, the EPL Project would result in impacts that are of a lower magnitude and that are less geographically distributed than the impacts that would be realized under the Partial Reconductor/Shorter Insulators Alternative.

- **Aesthetics.** Impacts to aesthetics, in sum, would be greater under the Partial Reconductor/Shorter Insulators Alternative as the Alternative includes the installation of new conductor and associated hardware on and between existing structures along greater lengths of the EPL Project alignment, and thus would be potentially visible to a greater number of individuals and would be visible from a greater number of locales.

- Agricultural and Forestry Resources. Like the EPL Project, the work under the Partial Reconductor/Shorter Insulators Alternative would result in no impacts to any criteria.
- Air Quality. Impacts to air quality would be greater under the Partial Reconductor/Shorter Insulators Alternative as the scope of work under the Alternative is greater than that under the EPL Project. An increased scope of work would equate to increased air emissions; however, all impacts would be expected to remain less than significant.
- Biological Resources. Impacts to biological resources, in sum, would be greater under the Partial Reconductor/Shorter Insulators Alternative because the Alternative includes a scope of work that would be performed across larger contiguous lengths of the EPL Project alignment. With this greater scope of work, the quantity and location of ground disturbance and construction activities would be increased, thus increasing the potential for impacts to biological resources.
- Cultural Resources. Potential impacts to cultural resources, in sum, would be greater under the Partial Reconductor/Shorter Insulators Alternative as the Alternative includes a greater scope of work that would be performed across a greater length of the EPL Project alignment. With this greater scope of work, the quantity and location of ground disturbance and construction activities would be increased, thus increasing the potential for impacts to cultural resources.
- Energy. The EPL Project would result in a less than significant impact under the Energy criteria. Due to the larger scope of the Partial Reconductor/Shorter Insulators Alternative, impacts would be greater but still less than significant.
- Geology and Soils. The EPL Project would result in no impacts or less than significant impacts under all criteria. Due to the greater length of the EPL Project alignment along which work would be performed, and that some work would occur in areas unique to the Partial Reconductor/Shorter Insulators Alternative, the Alternative would result in greater and more widespread impacts under some criterion, although all impacts would remain less than significant.
- Greenhouse Gases. Greenhouse gas emissions would be increased under the Partial Reconductor/Shorter Insulators Alternative compared to the EPL Project, due to the greater scope of work. However, impacts would remain less than significant.
- Hazards and Hazardous Materials. The EPL Project would result in no impacts or less than significant impacts under the Hazards and Hazardous Materials-related criteria. Due to the greater length of the EPL Project alignment along which work would be performed, and that some work would occur in areas unique to the Partial Reconductor/Shorter Insulators Alternative, the Alternative would result in greater, although still less than significant, impacts.
- Hydrology and Water Quality. Hydrology and Water Quality-related impacts would, on the whole, be equivalent under the EPL Project and the Partial Reconductor/Shorter Insulators Alternative. For some criteria, the impacts would be greater and more widely realized under the Partial Reconductor/Shorter Insulators Alternative due to the differing scope and location of work, while for other criteria the impacts would be reduced compared to the EPL Project. However, all impacts would be less than significant under both the EPL Project and the Partial Reconductor/Shorter Insulators Alternative.
- Land Use and Planning. The EPL Project would result in no impacts to any Land Use and Planning criterion. Because the Partial Reconductor/Shorter Insulators Alternative would be constructed along the same alignment as the EPL Project, and is of generally similar scope, no impacts would be realized under the Partial Reconductor/Shorter Insulators Alternative.

- Mineral Resources. The EPL Project would result in no impacts to any Mineral Resources criterion. Because the Partial Reconductor/Shorter Insulators Alternative would be constructed along the same alignment as the EPL Project, and is of generally similar scope, no impacts would be realized under Partial Reconductor/Shorter Insulators Alternative.
- Noise. Noise-related impacts would be increased under the Partial Reconductor/Shorter Insulators Alternative as a larger scope of work would be performed under the Partial Reconductor/Shorter Insulators Alternative nearer a greater number of potentially sensitive receptors. However, these impacts would remain less than significant.
- Population and Housing. The EPL Project would result in no impacts to any Population and Housing criterion. Because the Partial Reconductor/Shorter Insulators Alternative would be constructed along the same alignment as the EPL Project, and is of generally similar scope, no impacts would be realized under Partial Reconductor/Shorter Insulators Alternative.
- Public Services. The EPL Project would result in no impacts to the Public Services criterion. Because the Partial Reconductor/Shorter Insulators Alternative would be constructed along the same alignment as the EPL Project, and is of generally similar scope, no impacts would be realized under Partial Reconductor/Shorter Insulators Alternative.
- Recreation. The EPL Project would result in no impacts or less than significant impacts under the Recreation criteria. Due to the greater length of the EPL Project alignment along which work would be performed under the Partial Reconductor/Shorter Insulators Alternative, and thus the potential for dispersed recreationalists to encounter project construction activities, the Alternative would result in greater, although still less than significant, impacts.
- Transportation. The EPL Project would result in no or less than significant impacts under the Transportation-related criteria. Due to the greater length of the EPL Project alignment along which work would be performed under the Partial Reconductor/Shorter Insulators Alternative, and the additional transportation elements that could be affected, the Partial Reconductor/Shorter Insulators Alternative would result in greater, although still less than significant, impacts.
- Tribal Cultural Resources. Potential impacts to tribal cultural resources have not been determined for the EPL Project, and have not been determined for the Partial Reconductor/Shorter Insulators Alternative. .
- Utilities and Service Systems. The EPL Project would result in no impacts to the Utilities and Service Systems criteria. Similarly, the Partial Reconductor/Shorter Insulators Alternative would result in no impacts to the Utilities and Service Systems criteria.
- Wildfire. The EPL Project would result in no impacts or less than significant impacts under the Wildfire criteria. With a larger scope of work, construction activities would be increased, thus increasing the potential for Wildfire-related impacts, and therefore some wildfire-related impacts would be increased under the Partial Reconductor/Shorter Insulators Alternative. All impacts under all criteria would remain less than significant.

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Table 6.1-1 Comparative Impact Analysis

CEQA Impact Criteria	PROPOSED EPL PROJECT	PARTIAL RECONDUCTOR/SHORTER INSULATORS ALTERNATIVE	
	Impact Class	Impact Analysis Compared to EPL Project	Impact Class
Impact AES-1: Have a substantial adverse effect on a scenic vista	III	Short-term impacts greater Long-term impacts greater Impacts more widespread	III
Impact AES-2: Substantially damage scenic resources within a State Scenic Highway, including, but not limited to: trees, rock outcroppings, and historic buildings	III	Short-term impacts greater Long-term impacts greater Impact more widespread	III
Impact AES-3: In non-urbanized 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)	III	Short-term impacts greater Long-term impacts greater Impacts more widespread	III
Impact AES-4: Create a new source of substantial light or glare that would adversely affect day or nighttime views in the area	III	Short-term impacts greater Long-term impacts greater Impacts more widespread	III
Impact AG-1: Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance, to nonagricultural use	NI	Equivalent Impact	NI
Impact AG-2: Conflict with existing zoning for agricultural use, or a Williamson Act contract	NI	Equivalent Impact	NI
Impact AG-3: Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))	NI	Equivalent Impact	NI
Impact AG-4: Result in the loss of forest land or conversion of forest land to non-forest use	NI	Equivalent Impact	NI
Impact AG-5: Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use	NI	Equivalent Impact	NI
Impact AIR-1: Conflict with or obstruct implementation of the applicable air quality plan	NI	Equivalent Impact	NI
Impact AIR-2: Result in a cumulatively considerable net increase of any criteria pollutant for which the Project region is nonattainment under an applicable federal or state ambient air quality standard	III	Short-term impacts greater Long-term impacts same Impact more widespread	III
Impact AIR-3: Expose sensitive receptors to substantial pollutant concentrations	III	Short-term impacts greater Long-term impacts same Impact more widespread	III

Table 6.1-1 Comparative Impact Analysis

CEQA Impact Criteria	PROPOSED EPL PROJECT	PARTIAL RECONDUCTOR/SHORTER INSULATORS ALTERNATIVE	
	Impact Class	Impact Analysis Compared to EPL Project	Impact Class
Impact AIR-4: Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people	III	Short-term impacts greater Long-term impacts same Impact more widespread	III
Impact BIO-1: 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	III	Short-term impacts greater Long-term impacts same Impact more widespread	III
Impact BIO-2: 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	III	Short-term impacts greater Long-term impacts same Impact more widespread	III
Impact BIO-3: Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, and coastal) through direct removal, filling, hydrological interruption, or other means	III	Short-term impacts greater Long-term impacts same Impact more widespread	III
Impact BIO-4: Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridor, or impede the use of native wildlife nursery sites	III	Short-term impacts greater Long-term impacts same Impact more widespread	III
Impact BIO-5: Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance	NI	Equivalent Impact	NI
Impact BIO-6: Conflict with the provisions of an adopted Habitat Conservation Plan (HCP), Natural Community Conservation Plan (NCCP), or other approved local, regional, or state habitat conservation plan.	NI	Equivalent Impact	NI
Impact BIO-7: Would the project create a substantial collision or electrocution risk for birds or bats?	III	Short-term impacts same Long-term impacts greater Impact more widespread	III
Impact CUL-1: Cause a substantial adverse change in the significance of a historical resource as defined in Section 15065.5	NI	Short-term impacts greater Long-term impacts same Impact more widespread	III
Impact CUL-2: Cause a substantial adverse change in the significance of an archeological resource pursuant to Section 15065.5; and/or	III	Short-term impacts greater Long-term impacts same Impact more widespread	III
Impact CUL-3: Disturb any human remains, including those interred outside of formal cemeteries	III	Short-term impacts greater Long-term impacts same Impact more widespread	III
Impact EN-1: Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during	III	Short-term impacts greater Long-term impacts same	III

Table 6.1-1 Comparative Impact Analysis

CEQA Impact Criteria	PROPOSED EPL PROJECT	PARTIAL RECONDUCTOR/SHORTER INSULATORS ALTERNATIVE	
	Impact Class	Impact Analysis Compared to EPL Project	Impact Class
project construction or operation		Impact more widespread	
Impact EN-2: Conflict with or obstruct a state or local plan for renewable energy or energy efficiency	NI	Equivalent Impact	NI
Impact EN-3: Add capacity for the purpose of serving a nonrenewable energy resource	NI	Equivalent Impact	NI
Impact GEO-1: Directly or indirectly cause potential substantial adverse effects, including the risk of loss, or injury, or death involving: rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault (Refer to Division of Mines and Geology Special Publication 42.); strong seismic ground shaking; seismic-related ground failure, including liquefaction; and landslides	III	Short-term impacts greater Long-term impacts same Impact more widespread	III
Impact GEO-2: Result in substantial soil erosion or the loss of topsoil	III	Short-term impacts greater Long-term impacts same Impact more widespread	III
Impact GEO-3: Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the Project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse	III	Short-term impacts greater Long-term impacts same Impact more widespread	III
Impact GEO-4: Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property	NI	Equivalent Impact	NI
Impact GEO-5: Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water	NI	Equivalent Impact	NI
Impact GEO-6: Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature	III	Short-term impacts greater Long-term impacts same Impact more widespread	III
Impact GHG-1: Generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment	III	Short-term impacts greater Long-term impacts same Impact more widespread	III
Impact GHG-2: Conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing GHG emissions	NI	Equivalent Impact	NI
Impact HAZ-1: Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials	III	Short-term impacts greater Long-term impacts same	III

Table 6.1-1 Comparative Impact Analysis

CEQA Impact Criteria	PROPOSED EPL PROJECT	PARTIAL RECONDUCTOR/SHORTER INSULATORS ALTERNATIVE	
	Impact Class	Impact Analysis Compared to EPL Project	Impact Class
		Impact more widespread	
Impact HAZ-2: 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	III	Short-term impacts greater Long-term impacts same Impact more widespread	III
Impact HAZ-3: Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within 0.25 mile of an existing or proposed school	NI	Short-term impacts greater Long-term impacts same Impact more localized	III
Impact HAZ-4: Be located on a site that is included on a list of hazardous material sites, compiled pursuant to Government Code Section 65962.5, and as a result would create a significant hazard to the public or the environment	NI	Equivalent Impact	NI
Impact HAZ-5: For a project located within an airport land use plan or, where such a plan has not been adopted, within 2 miles of a public airport or public use airport, the project would result in a safety hazard or excessive noise for people residing or working in the project area	NI	Equivalent Impact	NI
Impact HAZ-6: Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan	III	Short-term impacts same Long-term impacts same Impact more widespread	III
Impact HAZ-7: Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires	III	Short-term impacts greater Long-term impacts same Impact more widespread	III
Impact HAZ-8: Create a significant hazard to air traffic from the installation of new power lines and structures	NI	Short-term impacts same Long-term impacts same Impact more widespread	NI
Impact HAZ-9: Create a significant hazard to the public or environment through the transport of heavy materials using helicopters	NI	Short-term impacts same Long-term impacts same Impact more widespread	NI
Impact HAZ-10: Expose people to a significant risk of injury or death involving unexploded ordnance	NI	Short-term impacts greater Long-term impacts same Impact more widespread	III
Impact HAZ-11: Expose workers or the public to excessive shock hazards	NI	Short-term impacts same Long-term impacts same Impact more widespread	NI
Impact HYDR-1: Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water	III	Short-term impacts greater Long-term impacts same	III

Table 6.1-1 Comparative Impact Analysis

CEQA Impact Criteria	PROPOSED EPL PROJECT	PARTIAL RECONDUCTOR/SHORTER INSULATORS ALTERNATIVE	
	Impact Class	Impact Analysis Compared to EPL Project	Impact Class
quality		Impact more widespread	
Impact HYDR-2: Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the Project may impede sustainable groundwater management of the basin	III	Short-term impacts same Long-term impacts same Impact no more localized or widespread	III
Impact HYDR-3: 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 storm water drainage systems or provide substantial additional sources of polluted runoff; Impede or redirect flood flows	III	Short-term impacts less Long-term impacts less Impact more widespread	NI
Impact HYDR-4: In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation	III	Short-term impacts greater Long-term impacts same Impact more widespread	III
Impact HYDR-5: Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan	NI	Equivalent Impact	NI
Impact LU-1: Physically divide an established community	NI	Equivalent Impact	NI
Impact LU-2: Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect	NI	Equivalent Impact	NI
Impact MIN-1: Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state	NI	Equivalent Impact	NI
Impact MIN-2: Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan	NI	Equivalent Impact	NI
Impact NOI-1: 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	III	Short-term impacts greater Long-term impacts same Impact more widespread	III
Impact NOI-2: Generation of excessive groundborne vibration or groundborne noise levels	NI	Short-term impacts less Long-term impacts same Impact more widespread	NI

Table 6.1-1 Comparative Impact Analysis

CEQA Impact Criteria	PROPOSED EPL PROJECT	PARTIAL RECONDUCTOR/SHORTER INSULATORS ALTERNATIVE	
	Impact Class	Impact Analysis Compared to EPL Project	Impact Class
Impact NOI-3: Exposure of people residing or working in the Project area to excessive noise levels for a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within 2 miles of a public airport or public use airport	NI	Short-term impacts same Long-term impacts same Impact more widespread	NI
Impact POP-1: Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	NI	Equivalent Impact	NI
Impact POP-2: Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?	NI	Equivalent Impact	NI
Impact PUB-1: Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services: Fire protection; Police protection; Schools; Parks; Other public facilities?	NI	Equivalent Impact	NI
Impact REC-1: Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated	NI	Equivalent Impact	NI
Impact REC-2: Include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment	NI	Equivalent Impact	NI
Impact REC-3: Reduce or prevent access to a designated recreation facility or area	III	Short-term impacts greater Long-term impacts same Impact more widespread	III
Impact REC-4: Substantially change the character of a recreational area by reducing the scenic, biological, cultural, geologic, or other important characteristics that contribute to the value of recreational facilities or areas	NI	Short-term impacts same Long-term impacts same Impact more widespread	NI
Impact REC-5: Damage recreational trails or facilities	NI	Short-term impacts same Long-term impacts same Impact more widespread	NI
Impact TRA-1: Conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities	III	Short-term impacts same Long-term impacts same Impact more widespread	III

Table 6.1-1 Comparative Impact Analysis

CEQA Impact Criteria	PROPOSED EPL PROJECT	PARTIAL RECONDUCTOR/SHORTER INSULATORS ALTERNATIVE	
	Impact Class	Impact Analysis Compared to EPL Project	Impact Class
Impact TRA-2: Conflict or be inconsistent with CEQA Guidelines Section 15064.3(b) (vehicle miles traveled)	NI	Equivalent Impact	NI
Impact TRA-3: Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)	NI	Equivalent Impact	NI
Impact TRA-4: Result in inadequate emergency access.	III	Short-term impacts greater Long-term impacts same Impact more widespread	III
Impact TRA-5: Create potentially hazardous conditions for people walking, bicycling, or driving or for public transit operations	III	Short-term impacts greater Long-term impacts same Impact more widespread	III
Impact TRA-6: Interfere with walking or bicycling accessibility	III	Short-term impacts greater Long-term impacts same Impact more widespread	III
Impact TRA-7: Substantially delay public transit	NI	Short-term impacts greater Long-term impacts same Impact more widespread	III
Impact TCR-1: Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is: i) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k), or ii) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.	ND	ND	ND
Impact UTIL-1: Require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects	NI	Equivalent Impact	NI

Table 6.1-1 Comparative Impact Analysis

CEQA Impact Criteria	PROPOSED EPL PROJECT	PARTIAL RECONDUCTOR/SHORTER INSULATORS ALTERNATIVE	
	Impact Class	Impact Analysis Compared to EPL Project	Impact Class
Impact UTIL-2: Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years	NI	Equivalent Impact	NI
Impact UTIL-3: Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments	NI	Equivalent Impact	NI
Impact UTIL-4: Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals	NI	Equivalent Impact	NI
Impact UTIL-5: Comply with federal, state, and local management and reduction statutes and regulations related to solid waste	NI	Equivalent Impact	NI
Impact UTIL-6: Increase the rate of corrosion of adjacent utility lines as a result of alternating current impacts	NI	Equivalent Impact	NI
Impact WF-1: Substantially impair an adopted emergency response/evacuation plan.	III	Short-term impacts greater Long-term impacts same Impact more widespread	III
Impact WF-2: Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire	NI	Equivalent Impact	NI
Impact WF-3: Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment	NI	Equivalent Impact	NI
Impact WF-4: Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes	III	Short-term impacts same Long-term impacts same Impact more widespread	III

7 Cumulative and Other CEQA Considerations

This Chapter presents the results of a cumulative impacts analysis for the EPL Project, and an analysis of the potential growth-inducing impacts associated with the project.

7.1 Cumulative Impacts

This section analyzes the potential cumulative impacts related to the EPL Project.

The CEQA requires lead agencies to consider the cumulative impacts of proposals under their review. Section 15355 of the CEQA Guidelines 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 Section 15130(a)(1), a cumulative impact “is the impact on the environment which results from the incremental impact of the action when added to other past, present and reasonably foreseeable future actions regardless of what agency or person undertakes such other actions.” The cumulative impacts analysis “would examine reasonable, feasible options for mitigating or avoiding the EPL Project’s contribution to any significant cumulative effects” (Section 15130(b)(3)).

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 term “probable future projects” includes: approved projects that have not yet been constructed; projects that are currently under construction; projects requiring an agency approval for an application that has been received at the time a Notice of Preparation (NOP) is released; and projects that have been budgeted, planned, or included as a later phase of a previously approved project (Section 15130(b)(1)(B)(2)). A listing of projects meeting these criteria within 2 miles of locations where work along the EPL Project alignment would occur are listed in Table 7.1-1, along with an identification number, a brief description, the jurisdiction in which it is located, distance from the nearest location along the EPL Project alignment where work would occur, status, and anticipated construction schedule.

The following subsections discuss whether—when combined with past, present, planned, and probable future projects in the area—the project could result in significant short-term or long-term environmental impacts. Short-term impacts are generally associated with construction of the project and cumulative projects, while long-term impacts are those that result from permanent project features or operation and maintenance of the cumulative projects. No material changes in operation and maintenance activities are

anticipated with implementation of the project, and therefore with the exception of aesthetics, there would be no cumulative long-term impacts generated by the EPL Project.

7.1.1 List of Cumulative Projects

Review of the Governor’s Office of Planning & Research’s CEQAnet database of the State Clearinghouse (SCH), the San Bernardino County Land Use Department’s Planning Division’s website, the City of Hesperia Planning Department website, the BLM’s National NEPA Register, the NPS’ Planning, Environment and Public Comment website, and Clark County and City of Boulder City sources resulted in the identification of past, present, or probable future projects that are located within two miles of locations along the EPL Project alignment where work would occur and that have the potential to contribute to a cumulative impact. The cumulative projects identified for the project are presented in Table 7.1-1.

Table 7.1-1. Cumulative Projects within 2 Miles

Project	Description	Location	Distance to EPL Work Location (miles)	Status	Anticipated Schedule
SBC-1	Clean Focus Apple Valley East	34.440951, -117.170659	1	NOI	Unknown
SBC-2	Cove Borrow Pit Project	34.475961, -116.981347	1.3	NOI	In Operation
SBC-3	Lewis Operating Corporation, Deep Creek Project (Apple Valley)	34.424195, -117.219070	1.4	Permitted	Unknown
SBC-4	Lucerne Valley Desert View Ranch	34.441346, -117.071576	1	NOI	Unknown
SBC-5	Maida Convenience Store and Gas Station	34.414133, -117.225444	1.7	NOI	Unknown
SBC-6	Ocotillo Borrow Pit	34.436895, -117.144820	1.1	In Operation	In Operation
BLM-1	Eldorado-Lugo-Mohave Series Capacitor Project	Linear	0	Under Construction	In Operation in 2023
BLM-2	Lugo-Victorville Remedial Action Scheme	Linear	0	Pre-construction	Construction planned to start Q4 2022

Source: San Bernardino County. 2022. Desert Region Environmental Documents. Available at <http://cms.sbcounty.gov/lus/Planning/Environmental/Desert.aspx>

The NOI for Project SBC-1 was issued in 2014; to SCE’s knowledge, no work has been performed to advance this project in the intervening eight years, and thus is taken to not be a “probable” project. Projects SBC-2 and SBC-6 are not addressed further here as they are, and have been, in operation, and thus are part of the baseline environment. The FEIR for Project SBC-3 was issued in 2011; to SCE’s knowledge, no work has been performed to advance this project in the intervening eleven years, and thus is taken to not be a “probable” project. The NOI for Project SBC-4 was issued in 2013; to SCE’s knowledge, no work has been performed to advance this project in the intervening nine years, and thus is taken to not be a “probable” project.

7.1.2 Geographic Scope

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

7.1.3 Cumulative Impact Analysis

7.1.3.1 Aesthetics

As discussed in Section 5.1, the EPL Project would have either no or less than significant impacts under all Aesthetics criteria. As presented in Section 5.1, the project would have no impacts on any scenic vista or on scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a State Scenic Highway.

The project would result in detectable incremental permanent visual changes in discrete areas around the inter-set structures; the project would not substantially alter or degrade the existing visual character in the area. Because the project would not substantially degrade the existing visual character or quality of public views, and because the change associated with the project would not be visible in the vicinity of the Cumulative Projects, the project would not contribute to a cumulatively considerable impact.

The EPL Project would not be a source of considerable glare or a new source of light; therefore the project would not contribute to a cumulatively considerable impact.

7.1.3.2 Agriculture and Forestry Resources

As presented in Section 5.2, the EPL Project would result in no impacts under all agriculture and forestry-related CEQA criteria; therefore, the EPL Project would not contribute to a cumulatively considerable impact.

7.1.3.3 Air Quality

As presented in Section 5.3, the EPL 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, PM₁₀, and PM_{2.5}. With the implementation of the project features presented in Section 3.13, the project's less than significant impacts would not result in a cumulatively considerable net increase of a criteria pollutant.

The project's less than significant impacts in terms of creating objectionable odors and exposing 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 be coincident with the EPL Project's construction work in time or space and in proximity to a potential receptor, the EPL Project would not contribute to any cumulative impact.

7.1.3.4 Biological Resources

The geographical area evaluated for cumulative impacts on 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, and 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 EPL Project would be less than significant. Because 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, and localized, and because few of the identified cumulative projects would overlap the EPL Project's construction work in time or space, and because the cumulative projects would be expected to adhere to federal and state regulations promulgated for the protection of sensitive species, no cumulatively considerable impact to sensitive species or their habitats would be anticipated.

The small area of sensitive natural communities that would be permanently impacted would not result in a significant contribution to any cumulatively considerable impact to these communities and would not reduce the overall availability of these habitats.

The EPL Project would not result in temporary or permanent impacts to wetlands and thus no cumulatively considerable impact to wetlands would result.

No component of the EPL 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 is planned. Therefore, no cumulatively considerable impact is anticipated.

EPL Project construction and operation would not conflict with any local policies or ordinances protecting biological resources, including trees. Cumulative projects would be expected to comply with local policies, ordinances, and the conditions of applicable permits. Therefore, the EPL Project's contribution to any cumulative impact would not be cumulatively considerable and would be less than significant.

No Habitat Conservation Plans; Natural Community Conservation Plans; or other approved local, regional, or state habitat conservation plans exist for the EPL Project area. Therefore, the EPL Project would not contribute to a 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. Work locations under the EPL Project alignment are coincident with work locations under BLM-1 and BLM-2. As SCE projects, these projects would employ the standard measures employed under the EPL Project, and thus would not result in any significant cultural resources-related impacts. Because both the EPL Project and projects BLM-1 and BLM-2 would comply with state and federal law relating to cultural resources and would implement similar measures, no cumulative impacts would be realized.

7.1.3.6 Energy

As presented in Section 5.6, the EPL Project would result in no or less than significant impacts under all energy-related CEQA criteria. Similar to the EPL Project, construction of the cumulative projects would consume energy resources during construction and the executors of the cumulative projects would not waste, unnecessarily use, or inefficiently consume energy resources. Therefore, the EPL 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. Work locations under the EPL Project alignment are coincident with work locations under BLM-1 and BLM-2. As SCE projects, these projects would employ the standard measures employed under the EPL Project,

and thus would not result in any significant geology and soils-related impacts. Further, the similarity of work performed in coincident locations (e.g., grading of an area) generally does not result in a cumulative impact, and therefore the EPL Project would not contribute to any cumulatively considerable impact.

7.1.3.8 Greenhouse Gas Emissions

As presented in Section 5.8, EPL Project construction would result in emissions of GHGs from on-site construction equipment and off-site worker trips. Over the entire construction period of the EPL Project, 1,743 MTCO_{2e} would be emitted. GHG construction emissions from the project amortized over 30 years is approximately 58 MTCO_{2e}. The 58 MTCO_{2e} emissions associated with EPL Project construction would be well below the thresholds of significance established by the MDAQMD. Therefore, the EPL Project would not generate, either directly or indirectly, GHG emissions that would have a significant impact on the environment. As a result, the EPL Project's contribution to any cumulative impacts would not be cumulatively considerable and would be less than significant.

As presented in Section 5.8, GHG emissions from construction of the EPL Project would fall well below the established numerical threshold of significance. Therefore, the project would not conflict with any applicable plan, policy, or regulation and would have a less than significant contribution to cumulative impacts resulting from any Cumulative Project's conflict with such plans, policies, or regulations.

7.1.3.9 Hazards and Hazardous Materials

The geographic scope for hazardous materials impacts includes areas near EPL 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 the area affected by the cumulative projects, 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.

EPL Project construction would result in less than significant impacts associated with the routine transport, use, disposal, or foreseeable upset of, or accidents involving, hazardous materials during construction with the implementation of the project features presented in Section 3.13. Project SBC-5 has also been determined to have less than significant impacts through compliance with applicable laws and regulations, and projects BLM-1 and BLM-2 would implement the same or similar project features as presented in Section 3.13 for the EPL Project. Because construction of the EPL Project and the cumulative projects will not be temporally coincident, there would be no cumulatively considerable impacts related to the transport, use, disposal, or upset involving hazardous materials.

The EPL 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. It is anticipated that construction of the EPL Project and cumulative projects would not be temporally coincident; therefore, there would be no cumulative impact.

No work under the EPL Project would occur within one-quarter mile of an existing or proposed school, and thus would not contribute to any cumulative impact related to this criterion.

The EPL Project would not be constructed on a site listed as a hazardous materials site pursuant to Section 65962.5; and thus would not contribute to any cumulative or significant hazard to the public or the environment from construction on such a site.

Project SBC-5 and BLM-2 are not located within the same airport land use plan as the EPL Project. Cumulative project BLM-1 is located within the same airport land use plan as the EPL Project. Neither

project has been determined to present a safety hazard or excessive noise for people residing or working in the project area, and therefore, there would be no cumulative impact related to this criterion.

The EPL Project presents less than significant impacts related to impairing the implementation of or physically interfering with an adopted emergency response plan or emergency evacuation plan; as SCE projects, BLM-1 and BLM-2 would present similar less than significant impacts, and Project SBC-5 has been evaluated to have no impact under this criterion. Further, it is anticipated that the EPL Project and construction of the cumulative projects will not be temporally coincident; therefore, there would be no cumulative impact to the implementation or physical interference with such plans.

The EPL Project would not create a significant hazard to air traffic from the installation of new power lines and structures, and thus would not contribute to any cumulative impact related to this criterion.

The EPL Project would not create a significant hazard to the public or environment through the transport of heavy materials using helicopters, and thus would not contribute to any cumulative impact related to this criterion.

The EPL Project would not expose people to a significant risk of injury or death involving unexploded ordnance, and thus would not contribute to any cumulative impact related to this criterion.

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

The potential for igniting vegetation during construction of the EPL Project would be minimized through the measures presented in Section 5.9; cumulative projects BLM-1 and BLM-2 would implement similar measures. Project SBC-5 has been analyzed to have 'No Impact' under this criterion. Therefore, the EPL Project would not contribute to any 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; the cumulative projects and portions of the EPL Project alignment are located in the same watersheds and groundwater basins.

No water quality standards or waste discharge requirements would be violated during construction or operation of the EPL Project, and none would be violated during construction of BLM-1 and BLM-2. The EPL Project, and cumulative projects, would each result in less than significant impacts related to the degradation of surface and ground water quality. Because the EPL Project and Project SBC-5 are not geographically coincident, and because the EPL Project and BLM-1 and BLM-2 would not be constructed temporally coincidently, there would be no cumulatively considerable impact related to surface water quality. No ground water quality impacts are anticipated from the EPL Project, and therefore the EPL Project would not contribute to a cumulatively considerable impact.

The EPL Project would not substantially decrease groundwater supplies or interfere substantially with groundwater recharge and therefore would not contribute to a cumulatively considerable impact.

The EPL Project would not substantially alter the existing drainage pattern of the site or area. BLM-1 and BLM-2 would be expected to also not substantially alter the existing drainage pattern of the site or area. Project SBC-5 and the EPL Project are not geographically coincident. Therefore, there would not be a cumulatively considerable impact.

SCE would implement measures as described in Section 3.5.11 to ensure no substantial erosion or siltation occurs on- or off-site; as SCE projects, BLM-1 and BLM-2 would implement similar measures.

The EPL Project and Project SBC-5 are not geographically coincident. Therefore there would be no cumulative impact.

SCE would implement measures as described in Section 3.5.11 to ensure no substantial increase in the rate or amount of surface runoff occur; as SCE projects, BLM-1 and BLM-2 would implement similar measures. The EPL Project and Project SBC-5 are not geographically coincident. Therefore, there would be no cumulative impact.

The EPL Project would not create or contribute runoff water which would exceed the capacity of existing or planned storm water drainage systems or provide substantial additional sources of polluted runoff; therefore, no cumulatively considerable impact would occur.

No cumulative project is located in a tsunami or seiche zone or in a flood hazard zone; therefore, there would be no cumulative impact under this criterion.

7.1.3.11 Land Use and Planning

As presented in Section 5.11, the EPL Project would result in no impacts under the land use and planning-related CEQA criteria; therefore, the project would not contribute to any cumulative impact.

7.1.3.12 Mineral Resources

As presented in Section 5.12, the EPL Project would result in no impacts under all mineral resources-related CEQA criteria; therefore, the project would not contribute to a cumulative impact.

7.1.3.13 Noise

Work associated with the EPL Project would occur no nearer than approximately 8,900 feet from the location of Project SBC-5. Given the scope of work at the nearest location and the distance between the projects, no cumulative impact would occur. The EPL Project and BLM-1 and BLM-2 would not be constructed temporally coincidentally, and therefore no cumulative impact would occur.

7.1.3.14 Population and Housing

As presented in Section 5.14, the EPL Project would result in no impacts under the population and housing-related CEQA criteria; therefore, the project would not contribute to any cumulatively considerable impact.

7.1.3.15 Public Services

As presented in Section 5.15, the EPL Project would result in no impacts; therefore, the EPL Project would not contribute to a cumulative impact.

7.1.3.16 Recreation

As presented in Section 5.16, the EPL Project would result in no impacts under all recreation-related CEQA criteria except with respect to access to recreational facilities. Under that CEQA criterion, the project would present less than significant impacts. Project SBC-5 would not impact access to any recreational facilities, and the EPL Project, BLM-1, and BLM-2 would not be constructed temporally coincidentally. Therefore, there would be no cumulative impact.

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 EPL Project or that could otherwise be impacted by construction of the EPL 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 implementation of the traffic control measures included in the Project Description and as described in Section 3.5.10, the EPL 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 EPL Project would not conflict or be inconsistent with CEQA Guidelines Section 15065.3, subdivision (b), and therefore would not contribute to any cumulatively considerable VMT-related impact.

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

In combination with the fact that construction activities nearest to Project SBC-5 would be of short duration and performed along the transmission line ROW (and not on or adjacent to public roadways), implementation of traffic control measures would ensure that the project does not result in inadequate emergency access. As SCE projects, BLM-1 and BLM-2 would implement similar measures. Therefore there would be no cumulative impact.

None of the cumulative projects propose to construct any improvements that will interfere with bicycle or pedestrian use. There is no public transit service adjacent to the locations where cumulative projects and the EPL Project are geographically coincident. Work under the EPL Project located nearest to the cumulative projects will occur along existing transmission line access roads, and not adjacent to pedestrian or bicycle facilities, or along public roadways, and therefore there would be no cumulative impact.

The EPL Project is not proposing to construct any improvements that will interfere with bicycle or pedestrian use. Therefore, there would be no cumulative impact.

The EPL Project would have no impacts related to the delay of public transit, and therefore there would be no cumulative impact.

7.1.3.18 Tribal Cultural Resources

The CPUC will consult with eligible tribes under PRC Section 21080.3.1 once the Application is complete. Impacts on TCRs are not addressed in this PEA because under AB 52, the CPUC must identify these resources during consultation. Therefore, no determination can be made at this time.

7.1.3.19 Utilities and Service Systems

As presented in Section 5.19, the EPL Project would result in no impacts under all utilities and service systems-related CEQA criteria; therefore, the EPL Project would not contribute to any cumulatively considerable impact.

7.1.3.20 Wildfire

As presented in Section 5.20, the EPL Project would result in no or less than significant impacts under all wildfire-related CEQA criteria.

The EPL Project presents less than significant impacts related to impairing the implementation of or physically interfering with an adopted emergency response plan or emergency evacuation plan. It is anticipated that the project and all cumulative projects will not overlap temporally or spatially; therefore, there would be no cumulative impact to the implementation or physical interference with such plans.

Where the EPL Project and cumulative projects are geographically coincident, the topographical relief is generally low and there are few people or structures located immediately downstream or downslope, and thus the less than significant impacts of the EPL Project associated with downstream flooding or landslides as a result of runoff, post-fire slope stability, or drainage changes would not contribute to a cumulatively considerable impact.

7.2 Growth-Inducing Impacts

7.2.1 Growth-Inducing Impacts

Section 15126.2(e) of the CEQA Guidelines states that environmental documents should “[d]iscuss the ways in which the proposed project could foster economic or population growth, or the construction of additional housing, either directly or indirectly in the surrounding environment.”

A project could be considered to have growth-inducing effects if it:

- Either directly or indirectly fosters economic or population growth or the construction of additional housing in the surrounding area
- Removes obstacles to population growth
- Requires the construction of new community facilities that could cause significant environmental effects
- Encourages and facilitates other activities that could significantly affect the environment, either individually or cumulatively

An EIR must describe any growth-inducing impacts of a proposed project including “the ways in which the proposed project could foster economic or population growth, or the construction of additional housing, either directly or indirectly, in the surrounding environment” (Pub. Res. Code § 21100(b)(5); 14 CCR §§ 15126(d), 15126.2(d)). Examples of projects that are growth-inducing are the expansion of urban services into a previously unserved or under-served area, the creation or extension of transportation links, and the removal of major obstacles to growth. It is important to note that these direct forms of growth have secondary effects including expanding the size of local markets and attracting additional economic activity to the area.

Typically, the growth-inducing potential of a project will be considered significant if it fosters growth or a concentration of population above what is assumed in local and regional land use plans, or in projections made by regional planning authorities. Significant growth-inducing impacts could also occur if a project provides infrastructure or service capacity to accommodate growth levels beyond those permitted by local or regional plans and policies.

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

No Impact. As presented in Chapter 2, the fundamental objective of the EPL Project is to remediate identified discrepancies. The EPL Project would not provide electrical service to any new areas; further, the EPL Project would not provide electrical service to any areas that are underserved. Therefore, the EPL Project would not induce economic growth. In addition, the EPL Project does not include any new infrastructure such as publicly accessible roads that could either directly or indirectly foster economic or population growth.

As presented in Section 5.14, Population and Housing, the EPL Project would not foster, either directly or indirectly, population growth in the area. SCE expects to utilize up to approximately 72 workers per day. The labor demands of the project would be met by existing SCE employees or by hiring specialty

electrical transmission contractors, none of whom would be expected to permanently relocate to the area around the project solely as a result of construction activities. Given the small number of positions required for construction of the project and the short term of the construction period, no population growth would be fostered, either directly or indirectly, by the rebuilding of the transmission lines.

As further presented in Section 5.14, the project would not displace any existing housing or people, and thus would not foster, either directly or indirectly, the construction of additional housing. Therefore, no impacts would occur under this criterion.

7.2.1.2 Would the Project remove obstacles to population growth?

No Impact. Growth in San Bernardino County, Clark County, and the cities of Hesperia and Boulder City is planned and regulated by applicable local general plans and planning and zoning ordinances. The provision of electricity is generally not considered an obstacle to growth nor does the availability of electrical capacity by itself normally ensure or encourage growth. Other factors such as economic conditions, land availability, population trends, availability of water supply or sewer services, and local planning policies have a more direct effect on growth. The EPL Project, which is proposed to remediate discrepancies on existing circuits, not to provide new electrical service, will not remove obstacles to population growth. Therefore, no impacts would occur under this criterion as a result of the project.

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

No Impact. As discussed in Section 5.14, Population and Housing, the EPL Project would not include the construction of housing, 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 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. Therefore, the project would not require the construction of new community facilities that could cause significant environmental effects.

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

No Impact. As discussed herein, the EPL Project would not encourage or facilitate other activities that could significantly affect the environment, either individually or cumulatively.

The EPL Project would not build new permanent access roads that would provide new access to undeveloped or underdeveloped areas.

Although the EPL Project would increase the reliability of electric transmission by replacing aging infrastructure with new infrastructure (which is likely less prone to failure), the EPL Project would not provide a new source of electricity that would encourage or facilitate other activities that could significantly affect the environment, either individually or cumulatively.

Further, as presented in Chapter 2, resolving identified discrepancies to ensure compliance with standards contained in GO 95 and Section 23 of the NESC is the driver for the Purpose and Need for the project, not future generation interconnections. As stated in Section 3.2.2.2, the project would not change the existing capacity of the system, and thus would not facilitate any potential growth and growth-related environmental effects.

In addition, other factors, most notably public policy and federal land management policies, would seem to be more likely to influence whether additional activities would result in interconnections to any facility associated with the project.

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9 References

9.1 Reference List

9.1.1 Aesthetics

Benchmark Maps. 2017. California Road and Recreation Atlas. Santa Barbara, California.

California Department of Transportation. 2022. California Scenic Highway Program. Available at http://www.dot.ca.gov/hq/LandArch/16_livability/scenic_highways/index.htm

California Public Utilities Commission (CPUC). 1995. Public Utilities Commission of the State of California, General Order No. 131-D. Adopted August 11, 1995. Decision 95-08-038.

California State Parks. Office of Historic Preservation. California Landmarks and Points of Historic Interest. Available at http://ohp.parks.ca.gov/?page_id=21387

City of Boulder City. 2015. Boulder City Master Plan. Available at <https://www.bcnv.org/176/Planning-Maps-and-Publications>

City of Hesperia. 2010. City of Hesperia General Plan 2010. Available at <https://www.cityofhesperia.us/DocumentCenter/View/15728/General-Plan-Update-August-2019>

Clark County. 2017. Clark County Comprehensive Master Plan. Available at https://www.clarkcountynv.gov/government/departments/comprehensive_planning_department/library/comprehensive_master_plan.php

San Bernardino County. 2007. 2007 General Plan. Available at <http://www.sbcounty.gov/Uploads/lus/GeneralPlan/FINALGP.pdf>

U.S. Department of the Interior. Bureau of Land Management. 1984 Manual 8400 - Visual Resource Management. Available at <https://www.blm.gov/download/file/fid/20548>

U.S. Department of the Interior. Bureau of Land Management. 1986 Manual H-8410-1 - Visual Resource Inventory. Available at <http://www.blm.gov/nstc/VRM/8410.html>

U.S. Department of the Interior. Bureau of Land Management. 1986. Manual 8431 - Visual Resource Contrast Rating. Available at <http://www.blm.gov/nstc/VRM/8431.html>

U.S. Department of the Interior. Bureau of Land Management. 1988. Las Vegas Resource Management Plan/Final Environmental Impact Statement (May 1988)

U.S. Department of the Interior. Bureau of Land Management. 2005. Land Use Planning Handbook. Available at https://www.ntc.blm.gov/krc/uploads/360/4_BLM_Planning_Handbook_H-1601-1.pdf

U. S. Department of the Interior. 2013. Best Management Practices for Reducing Visual Impacts of Renewable Energy Facilities on BLM-Administered Lands. Available at http://blmwyomingvisual.anl.gov/docs/BLM_RenewableEnergyVisualBMPs_LowRes.pdf

U.S. Department of the Interior. Bureau of Land Management. California Desert District. 2015a. California Historic Route 66 Needles to Barstow Corridor Management Plan. Final Draft May 2015. Available at <http://route66ca.org/corridor-management-plan/>

U.S. Department of the Interior. Bureau of Land Management. 2015b. Desert Renewable Energy Conservation Plan Proposed Land Use Plan Amendment and Final Environmental Impact Statement. Volume III: Environmental Setting/Affected Environment. October 2015.

U.S. Department of the Interior. Bureau of Land Management. 2016. Desert Renewable Energy Conservation Plan. Proposed Land Use Plan Amendment and Final Environmental Impact Statement. Available at <https://www.drecp.org/finaldrecp/>

U.S. Department of the Interior. Bureau of Land Management. 2016. Desert Renewable Energy Conservation Plan (DRECP) Record of Decision. Available at <https://www.drecp.org/finaldrecp/>

U.S. Department of the Interior. Bureau of Land Management. 2017. Mojave Trails National Monument. Website. Available at: <https://www.blm.gov/programs/national-conservation-lands/california/mojave-trails-national-monument>

U.S. Department of the Interior. National Park Service. 2002. Mojave National Preserve General Management Plan. Available at <https://www.nps.gov/moja/learn/management/gmp.htm>

U.S. Department of the Interior. National Park Service. 2016. Enjoy the View – Visual Resources Inventory Report, Mojave National Preserve. NPS/MOJA/NRR-2016/1322

U.S. Department of the Interior. National Park Service. 2017. National Trails System Website. Available at <https://www.nps.gov/nts/>

U.S. Department of the Interior. National Park Service. 2017. Old Spanish National Historic Trail Website. Available at <https://www.nps.gov/olsp/index.htm>

U.S. Department of Transportation. 2015. Visual Impact Assessment for Highway Projects Available at http://www.environment.fhwa.dot.gov/guidebook/documents/VIA_Guidelines_for_Highway_Projects.asp#f

U.S. Department of Transportation. Federal Aviation Administration. 2016. Advisory Circular AC70/7460-1L CHG1 – Obstruction Marking and Lighting. Available at https://www.faa.gov/documentLibrary/media/Advisory_Circular/AC_70_7460-1L_Change_1_Obstruction_Marking_and_Lighting_10062016.pdf

9.1.2 Agriculture and Forestry Resources

California Department of Forestry and Fire Protection (CALFIRE). 2015. FVEG database. Available from http://frap.fire.ca.gov/data/statewide/fveg15_1.zip

California Department of Conservation. 2017. San Bernardino County Important Farmland GIS Data. Farmland Mapping and Monitoring Program. [Online Resource]. Located at <http://www.conservation.ca.gov/dlrp/fmmp/Pages/Sanbernardino.aspx>

City of Hesperia. 2020. Zoning Map. Available at <https://www.cityofhesperia.us/DocumentCenter/View/15727/General-Plan-Zoning-Map?bidId=>

City of Hesperia. 2010. City of Hesperia General Plan 2010. Available at <https://www.cityofhesperia.us/DocumentCenter/View/15728/General-Plan-Update-August-2019>

County of San Bernardino. 2020. Countywide Plan: County Policy Plan. Available at <http://www.sbcounty.gov/Uploads/LUS/GeneralPlan/Policy%20Plan%20and%20Policy%20Maps.pdf>

County of San Bernardino. 2014. Development Code. Available at <http://www.sbcounty.gov/Uploads/lus/DevelopmentCode/DCWebsite.pdf>

9.1.3 Air Quality

California Air Resources Board (CARB). 2016. Ambient Air Quality Standards. May. Located at <http://www.arb.ca.gov/research/aaqs/aaqs2.pdf>

CARB. 2022. iADAM: Air Quality Data Statistics. Located at <http://www.arb.ca.gov/adam/>

Clark County DAQ (2018). Clark County, NV National Ambient Air Quality Standards (NAAQS). Located at https://www.clarkcountynv.gov/government/departments/environment_and_sustainability/division_of_air_quality/planning/criteria_pollutants.php.

California Air Pollution Control Officers Association (CAPCOA). 2017. California Emissions Estimator Model (CalEEMod). <http://www.caleemod.com>

MDAQMD. 2016. California Environmental Quality Act (CEQA) and Federal Conformity Guidelines. Located at <https://www.mdaqmd.ca.gov/home/showpublisheddocument/192/636305688064730000>

MDAQMD. 2017. MDAQMD Attainment Status. Located at <https://www.mdaqmd.ca.gov/air-quality/mdaqmd-attainment-status>

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

9.1.4 Biological Resources

Arcadis.2020a. TLRR Sensitive Species and Habitat Report: Eldorado – Pisgah – Lugo 220 kV Subtransmission Line. Prepared for SCE. April.

Arcadis. 2020b. Wetlands and Other Waters Jurisdictional Delineation Report: Eldorado – Pisgah - Lugo 220kV Subtransmission Line. Prepared for SCE. March.

Avian Power Line Interaction Committee (APLIC). 2006. Suggested Practices for Avian Protection on Power Lines: The State of the Art in 2006. Edison Electric Institute, APLIC, and the California Energy Commission. Washington, D.C. and Sacramento, CA.

APLIC. 2012. Suggested Practices for Avian Protection on Power Lines: The State of the Art in 2006. Edison Electric Institute, APLIC, and the California Energy Commission. Washington, D.C. and Sacramento, CA.

Brown C., and R. Fisher. 2001. Survey results for the Arroyo Toad (*Bufo californicus*) in the San Bernardino National Forest, 2001. Prepared for U.S. Department of Agriculture, U.S. Forest Service, Steve Loe. USGS Western Ecological Research Center. pp. 53.

California Department of Fish and Wildlife (CDFW). 2022. Vegetation Classification and Mapping Program – Natural Communities. http://wildlife.ca.gov/Data/VegCAMP/Natural-Communities#sensitive_natural_communities. July 5.

California Natural Diversity Database (CNDDB). California Natural Diversity Database. RareFind Version 5. Sacramento, California.

Consortium of California Herbaria (CCH). 2022. Gateway to California vascular plant specimens. <http://ucjeps.berkeley.edu/consortium>.

Cornell Lab of Ornithology and National Audubon Society, Inc. (Cornell). 2022. eBird. <http://ebird.org/content/ebird>.

Fisher RN, Brehme CS, Hathaway SA, Hovey TE, Warburton ML, Stokes DC. 2018. Longevity and population age structure of the arroyo southwestern toad (*Anaxyrus californicus*) with drought implications. *Ecol Evol*. 2018;8:6124–6132. <https://doi.org/10.1002/ece3.4158>. Leitner, P. 2015. Current status of the Mohave ground squirrel (*Xerospermophilus mohavensis*): A five-year update (2008–2012). Endangered Species Recovery Program, California State University, Stanislaus, One University Circle, Turlock, California 95382. Published in *Western Wildlife* 2:9–22.

Nevada Division of Natural Heritage (NDNH). 2022. Species Info. https://heritage.nv.gov/species_info
Nevada Administrative Code (NAC) Chapter 527 Protection and Preservation of Timbered Lands, Trees and Flora. Section 10. <https://www.leg.state.nv.us/NAC/NAC-527.html#NAC527Sec010>.

Nevada Department of Wildlife (NDOW). 2013. Nevada Wildlife Action Plan. Developed by Wildlife Action Plan Team, Reno, NV. March.

Nevada Natural Heritage Program (NNHP). 2022. State of Nevada, Department of Conservation and Natural Resources. Sensitive Species Data. <http://heritage.nv.gov>. Carson City, Nevada.

Sawyer, J.O., T. Keeler-Wolf, and J. Evens. 2009. *Manual of California Vegetation*. Second Edition. California Native Plant Society. Sacramento, California. 1,300 pp.

United States Fish and Wildlife Service (USFWS). 2000. Recovery Plan for Bighorn Sheep in the Peninsular Ranges, California. Portland, Oregon: U.S. Fish and Wildlife Service. xv+251 pp.

USFWS. 2009. Mohave tui chub (*Gila bicolor mohavensis* = *Siphaletes bicolor mohavensis*) 5-Year Review: Summary and Evaluation. USFWS, Ventura, California. 29 pp.

USFWS. 2011. Endangered and Threatened Wildlife and Plants; Revised Critical Habitat for the Arroyo Toad; Final Rule. 76 FR 7245 7467. February 9, 2011

USFSW. 2014. Arroyo Toad (*Anaxyrus californicus*) Species Report. Ventura Fish and Wildlife Office, Ventura California. March 24, 2014.

United States Geological Survey (USGS). 2020. Evaluating Potential Refugia for the Endangered Mohave Tui Chub. USGS Nevada Water Science Center. https://www.usgs.gov/centers/nv-water/science/evaluating-potential-refugia-endangered-mohave-tui-chub?qt-science_center_objects=0#qt-science_center_objects.

Unitt, Phillip, Scott Tremor, Lori Hargrove, Drew Stokes. 2017. Grinnell Resurveys in the Mojave Desert: San Diego Natural History Museum Field Report #3. July 22, 2017

9.1.5 Cultural Resources

Aikens, C. M. 1978. Archaeology of the Great Basin. *Annual Review of Anthropology* 7:71–87.

Aikens, C. Melvin, Thomas J. Connolly, and Dennis L. Jenkins. 2011. *Oregon Archaeology*. Oregon State University Press, Corvallis.

- Allen, M. W. 1986. The Effects of Bow and Arrow Technology on Lithic Production and Exchange Systems: A Test Case Using Debitage Analysis. Unpublished Master's thesis, Department of Anthropology, University of California, Los Angeles.
- Allison, James R. 2008. Shinarump Red Ware and Other Red Ware Pottery: North and West of the Colorado River. In *Pottery Southwest* 27(1):21–34.
- Altschul, Jeffrey H., Richard Ciolek-Torello, and Jerome Schaefer. 1989. Research Design: Cultural Resources Inventory Program for the Marine Corps Air Ground Combat Center, Twentynine Palms, California. SRI Technical Research Series 17.
- Arnold, Jeanne E., Michael R. Walsh, and Sandra E. Hollimon. 2004. The Archaeology of California. In *Journal of Archaeological Research*, Vol. 12, No. 1, March.
- Bailey, R.G., Avers, P.E., King, T., and McNab, W.H., eds., 1994. Ecoregions and subregions of the United States (map) (supplementary table of map unit descriptions compiled and edited by McNab, W.H., and Bailey, R.G.): Washington, D.C., U.S. Department of Agriculture–Forest Service.
- _____. 1886. History of California, Volume 3, 1825-1840. History Company Publishers, San Francisco, California.
- Baldwin, Gordon C. 1950. The Pottery of the Southern Paiute. *American Antiquity* 16:50–56.
- Bark, Richard Gerard. 2017. Investigation into The Suspected Late Holocene Decline in Obsidian Use at Sites on Edwards Air Force Base. Unpublished Master's thesis, Department of Anthropology, California State University, San Bernardino.
- Basgall, M. E. 1989. Obsidian Acquisition and Use in Prehistoric Central-Eastern California: A Preliminary Assessment. In *Current Directions in California Obsidian Studies*, edited by R. E. Hughes, pp. 111–126. Contributions of the University of California Archaeological Research Facility 48. Berkeley.
- _____. 1991. Hydration Dating of Coso Obsidian: Problems and Prospects. Paper presented at the 24th meeting of the Society for California Archaeology, Foster City.
- _____. 2000. The Structure of Archaeological Landscapes in the North-Central Mojave Desert. In *Archaeological Passages*, edited by J. S. Schneider, R. M. Yohe II, and J. K. Gardner, pp. 123–138. Western Center for Archaeology.
- _____. 2007a. *Another Look at the Ancient Californians: Resurvey of the Emma Lou Davis Stake Areas and Reassessment of Collections, Naval Air Weapons Station, China Lake, Kern County, California*. Report on file, Naval Air Weapons Station, China Lake, California.
- _____. 2007b. *Prehistoric People in an Evolving Landscape: A Sample Survey of the China Lake Basin and its Implications for Paleoindian Land Use*. Report on file, Naval Air Weapons Station, China Lake, California.
- Basgall, M. E., and M. A. Giambastiani. 1995. Prehistoric Use of a Marginal Environment: Continuity and Change in Occupation of the Volcanic Tablelands, Mono and Inyo Counties, California. Center for Archaeological Research at Davis, Publication 12.
- Basgall, M. E., M. G. Delacorte, and M. C. Hall. 1995. Fish Slough Side-notched Projectile Points: An Early Holocene Time Marker in the Western Great Basin. *Current Research in the Pleistocene* 12:1–4.

- Basgall, M. E., and M. C. Hall. 1992. Fort Irwin Archaeology: Emerging Perspectives on Mojave Desert Prehistory. *Society for California Archaeology Newsletter* 26(5).
- _____. 1994. *Archaeological Investigations at Goldstone (CA-SBR-2348): A Middle Holocene Occupation Complex in the North-central Mojave Desert, California*. Report submitted to the Department of the Army, National Training Center, Fort Irwin.
- Basgall, M. E., and K. R. McGuire. 1988. The Archaeology of CA-INY-30: Prehistoric Culture Change in the Southern Owens Valley, California. Report submitted to California Department of Transportation, Sacramento.
- Bean, Walton, and James J. Rawls. 2003. *California: An Interpretive History*. McGraw-Hill Publishing, Boston, Massachusetts.
- Bean, Lowell J., and Charles R. Smith. 1978. Serrano. In *California*, edited by Robert 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 Brakke Vane. 1994. Chemehuevi. In *Native America in the Twentieth Century: An Encyclopedia*, edited by Mary B. Davis, pp. 94–95. Garland Publishing Inc., New York.
- _____. 2002. The Native American Ethnography and Ethnohistory of Joshua Tree National Park: An Overview and Assessment Study: Section IV. The Serrano. Available at http://www.nps.gov/history/history/online_books/jotr/index.htm. Accessed July 29, 2008.
- Beattie, George (translator). 1955. Appendix II: Diario De Un Exped' Tera Adentro Del P. Jose' M' A. De Zalvidea, Desde El 19 De Julio Hasta El 14 De Agosto De 1806. In Preliminary Report of the Archaeological Survey of the Deep Creek Site on the Upper Mojave River by Gerald A Smith. San Bernardino County Museum Association Quarterly Vol. 2, No. 2, Redlands, California.
- Beck, Charlotte, G. T. Jones, and Amanda K. Taylor. 2019. What's not Clovis? An Examination of Fluted Points in the Far West. *PaleoAmerica* 5(2):109–120.
- Beck, Charlotte, and G. T. Jones. 1997. The Terminal Pleistocene/Early Holocene Archaeology of the Great Basin. *Journal of World Prehistory* 11:161–236
- Benson, L.V. 2004. Western Lakes. In: *The Quaternary Period in the United States*. Gillespie, A.R., Porter, S.C., Atwater, B.F. (Eds.), Elsevier, Boston, MA, pp. 185–204.
- Berry, M. S. 1974. The Evans Mound: Cultural Adaption in Southwestern Utah. Unpublished Master's thesis, Department of Anthropology, University of Utah, Salt Lake City.
- Bettinger, R. L. 1976. The Development of Pinyon Exploitation in Central Eastern California. *Journal of California Anthropology* 3(1):81–95.
- _____. 1991. Native Land Use: Archaeology and Anthropology. In *Natural History of the White-Inyo Range, Eastern California*, edited by C. A. Hall, Jr., pp. 463–486. University of California Press, Berkeley.
- Bettinger, R. L., and R. E. Taylor. 1974. Suggested Revisions in Archaeological Sequences of the Great Basin and Interior Southern California. Nevada Archaeological Survey Research Paper 5:1–26.

- Bettinger, Robert L., and Martin A. Baumhoff. 1982. The Numic Spread: Great Basin Cultures in Competition. *American Antiquity* 46(3):485–503.
- Blair, Lynda M. 1985. Virgin Anasazi Turquoise Extraction and Trade. Paper presented at the 1985 Arizona-Nevada Academy of Sciences, Las Vegas, Nevada. Manuscript on file with author.
- Blair, Lynda M., and Diane L. Winslow. 2004. *Kern River 2003 Expansion Project, California - Volume I: Prehistoric Turquoise Mining in the Mojave Desert - Data from the Dr. Albert Mohr Collection Kern River 2003 Expansion Project California* Volume. Harry Reid Center for Environmental Studies, University of Nevada, Las Vegas. Prepared for Kern River Gas Transmission.
- Bouey, P. D., and P. J. Mikkelsen. 1989. Survey and Test Excavations of the China Lake-Fort Irwin Joint Land Use Area, San Bernardino County, California. Report submitted to the United States Army Corps of Engineers, Los Angeles.
- Brindley, Lewis. 2009. *New Ceramic Dating Process Unearthed*. Available at: <https://www.chemistryworld.com/news/new-ceramic-dating-process-unearthed/3002800.article>.
- Budinger, Fred Emil. 1992. Targeting Early Man Sites in the Western United States: An Assessment of the Manix Type Site, Central Mojave Desert, California. Unpublished Master's Thesis, California State University, San Bernardino.
- Bunte, Pamela A., and Robert J. Franklin. 1994. Southern Paiute. In *Native America in the Twentieth Century: An Encyclopedia*, edited by Mary B. Davis, pp. 428–432. Garland Publishing, Inc., New York and London.
- Bureau of Land Management (BLM). 2009. California BLM Guidelines for a Cultural Resources Inventory. Available at <https://www.blm.gov/ca/dir/pdfs/2009/im/CAIM2009-010ATT1.pdf>. Accessed November 16, 2018.
- Byerly, R. M. 2018. *Ethnographic Literature Review Related to the Hydrostatic Testing of Lines 300 A/B by Pacific Gas and Electric Company, San Bernardino County, California*. Report submitted to Bureau of Land Management, California Desert District Office, on behalf of Pacific Gas and Electric Company, by Far Western Anthropological Research Group, Inc., Davis, California.
- Byerly, R. M., and J. C. Roberson. 2015. Late Pleistocene to Middle Holocene Archaeology in the Mojave Desert: Recent Discoveries in Twentynine Palms, California. *PaleoAmerica* 1(2):197–201.
- Byers, D. A., and J. M. Broughton. 2004. Holocene Environmental Change, Artiodactyl Abundances, and Human Hunting Strategies in the Great Basin. *American Antiquity* 69(2):235–255.
- Byrd, Brian F., D. Craig Young, and Kelly R. McGuire. 2009. Pavement Quarries, Gypsum Period Residential Stability, and Trans-Holocene Settlement Systems of the Mojave Desert: A Case Study at Fort Irwin. *Journal of California and Great Basin Anthropology* 29(2):121-143.
- California Energy Commission (CEC). 2008. Final Staff Assessment (FSA) for the Victorville 2 Hybrid Power Project, San Bernardino County, California. Prepared by CEC staff (AFC 07-AFC-1).
- _____. 2013. Kern County California Historical Landmarks, No. 130, Willow Springs. Available at http://ohp.parks.ca.gov/?page_id=21423. Accessed February 25, 2015.

California Department of Transportation (Caltrans). 2016. *A Historical Context and Methodology for Evaluating Trails, Roads, and Highways in California*. Prepared by The California Department of Transportation, Division of Environmental Analysis. Sacramento, California.

Campbell, Elizabeth W. Crozier, and William H. Campbell. 1935. The Pinto Basin Site. *Southwest Museum Papers* No. 9.

Campbell, Elizabeth W. Crozier, William H. Campbell, Ernst Antevz, Charles Amsden, Joseph A. Barbieri, and Francis D. Bode. 1937. *The Archaeology of Pleistocene Lake Mohave: A Symposium*. Southwest Museum Papers No. 11. Los Angeles, California.

Cleland, J. H., and W.G. Spaulding. 1992. An Alternative Perspective on Mojave Desert Prehistory. *Society for California Archaeology Newsletter* 26(6):1–6.

Cleland, Robert Glass. 1941. *The Cattle on a Thousand Hills: Southern California, 1850-80*. The Huntington Library, San Marino, California. Cline, G. 1963. *Exploring the Great Basin*. University of Oklahoma Press, Norman.

Colton, Harold S. 1938. Names of the Four Culture Roots in the Southwest. *Science* 87(2268):551–552.

_____. 1939. An Archaeological Survey of Northwestern Arizona Including the Descriptions of Fifteen New Pottery Types. *Museum of Northern Arizona Bulletin* No. 16. Northern Arizona Society of Science and Art, Flagstaff.

_____. 1945. The Patayan Problem in the Colorado River Valley. *Southwestern Journal of Anthropology* 1:114–121.

_____. 1952. Pottery Types of the Arizona Strip and Adjacent Areas in Utah and Nevada. *Museum of Northern Arizona Ceramic Series* No. 1, Flagstaff.

_____. 1956. Pottery Types of the Southwest. *Museum of Northern Arizona Ceramic Series* No. 3C, Flagstaff.

_____. 1958. Pottery Types of the Southwest. *Museum of Northern Arizona Ceramic Series* No. 3D, Flagstaff.

Colton, Harold S., and Lyndon Lane Hargrave. 1937. *Handbook of Northern Arizona Pottery Wares*. *Museum of Northern Arizona Bulletin* No. 11, Flagstaff.

Cook, Edward R., Jan Esper, and Rosanne D. D'Arrigo. 2004. Extra-tropical Northern Hemisphere Land Temperature Variability over the Past 1000 Years. *Quaternary Science Reviews* 23(20–22):2063–2074.

Coues, Elliott. 1900. *On the Trail of a Spanish Pioneer: The Dairy and Itinerary of Francisco Garcés (Missionary Priest) in his Travels through Sonora, Arizona, and California, 1775–1776*. Volumes 1 and 2. Francis P. Harper, New York.

Davis, C. Alan, and Gerald A. Smith. 1981. *Newberry Cave*. San Bernardino County Museum Association, Redlands, California.

Davis, Emma Lou.

_____. 1967. Man and Antiquity at Pleistocene Lake Mohave. *American Antiquity* 32(3):345-353.

- _____. 1969. The Western Lithic Co-Tradition. In *The Western Lithic Co-Tradition*, edited by E. L. Davis, C. W. Brott, and D. L. Weide, pp.11–78. San Diego Museum Papers 6.
- _____. 1974. Paleo-Indian Land Use Patterns at China Lake, California. *Pacific Coast Archaeological Society Quarterly* 10(2): 1-16.
- _____. 1978. The Ancient Californians: Rancholabrean Hunters of the Mohave Lakes County. Natural History Museum of Los Angeles County, Science Series No. 29.
- Davis, J. T. 1961. Trade Routes and Economic Exchange among the Indians of California. University of California Archaeological Survey Reports 54. Ramona, CA.
- Delacorte, M. G. 1990. The Prehistory of Deep Springs Valley, Eastern California: Adaptive Variation in the Western Great Basin. Unpublished Ph.D. dissertation, Department of Anthropology, University of California, Davis.
- Delacorte, M. G., M. C. Hall, and M. E. Basgall. 1995. Final Report on the Evaluation of Twelve Archaeological Sites in the Southern Owens Valley, Inyo County, California. Report submitted to California Department of Transportation, Bishop.
- Dillehay, T.D. and M.B. Collins. 1988. Early Cultural Evidence from Monte Verde in Chile. *Nature* 332:150-152.
- _____. 1997 *Monte Verde: A Late Pleistocene Settlement in Chile. The Archaeological Context, Vol. II*. Smithsonian Institution, Washington.
- Dillehay, T. D., C. Ramirez, M. Pino, M. B. Collins, J. Rossen, and J. D. Pino-Navarros. 2008. Monte Verde: Seaweed, Food, Medicine, and the Peopling of the South America. *Science* 320:784–786.
- Dillon, B. D. 1988. Southern Sierra Nevada Obsidian Hydration: Kern County’s Isabella Basin. In *Obsidian Dates IV: A Compendium of the Obsidian Hydration Determinations Made at the Obsidian Hydration Laboratory*, edited by C. W. Meighan and J. L. Scalise, pp. 64–69. University of California, Los Angeles.
- _____. 2002. California Paleoindians: Lack of Evidence, or Evidence of Lack? In *Essays in California Archaeology: A Memorial to Franklin Fenega*, edited by W. J. Wallace and F. A. Riddell, pp. 110–128. Contributions of the University of California Archaeological Research Facility No. 60.
- Dillon, Brian Dervin, and Matthew A. Bost (guest editors). 2011a. Ceramic Traditions I. *Pacific Coast Archaeological Society Quarterly* 47(1&2).
- _____. 2011b. Ceramic Traditions II. *Pacific Coast Archaeological Society Quarterly* 47(3&4).
- _____. 2012. Ceramic Traditions III. *Pacific Coast Archaeological Society Quarterly* 48(1&2).
- Douglas, G. A., D. L. Jenkins, and C. N. Warren 1988. Spatial and Temporal Variability in Faunal Remains from Four Lake Mohave-Pinto Period Sites in the Mohave Desert. In *Early Human Occupation in Far Western North America: The Clovis-Archaic Interface*, edited by J. A. Willig, C. M. Aikens, and J.L. Fagan, pp. 131–151. Nevada State Museum Anthropological Papers 21. Carson City.
- Drover, C. E. 1979. The Late Prehistoric Human Ecology of the Northern Mohave Sink, San Bernardino County, California. Ph.D. dissertation, Department of Anthropology, University of California, Riverside.
- Drylie, Gary. 2010. “Old Town Griz.” *Images of America: Hesperia*. Charleston: Arcadia Publishing.

- Dumke, Glenn S. 1944. *The Boom of the Eighties in Southern California*. Huntington Library Publications, San Marino, California.
- Duvall, J.T. and W.T. Venner. 1979. A Statistical Analysis of the Lithics from the Calico Site (SBCM-1500A), California. *Journal of Field Archaeology* 6:455-462.
- Eerkens, J.W. and C.P. Lipo. 2014. A tale of two technologies: Prehistoric diffusion of pottery innovations among hunter-gatherers. *Journal of Anthropological Archaeology* 35: 23-31.
- Eerkens, Jelmer W., Hector Neff, and Michael D. Glasscock. 1999. Early Pottery from Sunga'va and Implications for the Development of Ceramic Technology in Owens Valley, California. In *Journal of California and Great Basin Anthropology* 21(2):225–285.
- Eerkens, A. M., and J. W. Spurling. 2008. Obsidian Acquisition and Exchange Networks: A diachronic Perspective on Households in the Owens Valley. *Journal of California and Great Basin Anthropology* 28(2): 111-126.
- Eerkens, A. M. 2011. Pot Conveyance, Design Characteristics, and Precontact Adaptations to Arid Environments. In *Perspectives on Prehistoric Trade and Exchange*, edited by R. E. Hughes, pp. 135–147. The University of Utah Press, Salt Lake City.
- Eerkens, A. M., J. S. Rosenthal, D. C. Young, and J. King 2007. Early Holocene Landscape Archaeology in the Coso Basin, Northwestern Mojave Desert, California. *North American Archaeologist* 28(2):87-112.
- Elston, R. G., and E. E. Budy. 1986. Prehistory of the Western Area. In *Handbook of North American Indians, Great Basin*, Volume 11, edited by W. L. D'Azevedo, pp 135-148. Smithsonian Institute, Washington D.C.
- Engstrand, Iris H. W., and Mary F. Ward. 1995. Rancho Guajome: An Architectural Legacy Preserved. *The Journal of San Diego History* 41:4.
- Ezzo, Joseph A. 1996. A Class I Cultural Resource Survey of the Moapa and Virgin Valleys, Clark County, Nevada. Technical Series No. 8. Statistical Research, Inc., Tucson, Arizona.
- Fowler Don D., and C. S. Fowler. 1990. A History of Wetlands Anthropology in the Great Basin. In *Wetland Adaptations in the Great Basin*. Museum of Peoples and Cultures; Occasional Paper No. 1. Brigham Young University, Provo, Utah.
- Fowler, Don D., and David B. Madsen. 1986. Prehistory of the Southeastern Area. In *Great Basin*, edited by W. L. d'Azevedo, pp. 173–182. *Handbook of North American Indians*, Vol. 11, William C. Sturtevant, general editor. Smithsonian Institution, Washington, D.C.
- 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.
- Gardner, J. K. 2006. The Potential Impact of the Medieval Climatic Anomaly on Human Populations in the Western Mojave Desert. Ph.D. dissertation, University of Nevada, Las Vegas.
- Garfinkel, A. P. 1980. *An Initial Archaeological Evaluation of CA-INY-2146, Inyo County, California*. California Department of Transportation Environmental Studies Branch Archaeological Reports.
- Gehr, E. A. 1981. Obsidian Hydration Data from Various Tulare County Sites: Tule River Indian Reservation. In *Obsidian Dates III: A Compendium of the Obsidian Hydration Determinations Made at*

the UCLA Obsidian Hydration Laboratory, edited by C. W. Meighan and G. S. Russell, p. 35. University of California, Los Angeles.

_____. 1988. Mean Temperature Scaling of Source Specific Hydration Rates. In *Obsidian Dates IV: A Compendium of the Obsidian Hydration Determinations Made at the Obsidian Hydration Laboratory*, edited by C. W. Meighan and J. L. Scalise, pp. 19–26. University of California, Los Angeles.

Giambastiani, M. A. 2004. Prehistoric Obsidian Use on the Volcanic Tableland and its Implications for Settlement and Technological Change in the Western Great Basin. Unpublished Ph.D. dissertation, University of California, Davis.

_____. 2005. Archaeological Survey of 18,830 Acres for the Western and Southern Expansion, MAGTFTC, Twentynine Palms, California. Report on file, San Bernardino Museum Archaeological Information Center, Redlands, California. Prehistoric Use of the Coso Volcanic Field—Vol. I: Research Issues and Reports. Report on file, Naval Air Weapons Station, China Lake, California.

Giambastiani, M. A., and A. Berg. 2008. Archaeological Excavations at Nine Prehistoric Sites in the Emerson Lake Basin, Marine Air Ground Task Force Training Command, Marine Corps Air Ground Combat Center, Twentynine Palms, California. Report submitted to NREA, MAGTFTC, MCAGCC, Twentynine Palms, California.

Gilbert, M., P. Thomas, D. L. Jenkins, A. Gotherstrom, N. Naveran, J. J. Sanchez, M. Hofreiter, P. F. Thomsen, J. Binladen, T. F. G. Higham, R. M. Yohe II, R. Parr, L. S. Cummings, and E. Willerslev. 2008. DNA from Pre-Clovis Human Coprolites in Oregon, North America. *Science* 320(5877):786–789.

Gilreath, A. J., and W. R. Hildebrandt. 1997. Prehistoric Use of the Coso Volcanic Field. *Contributions of the University of California No. 56*. University of California, Berkeley.

_____. 2011. Current Perspectives on the Production and Conveyance of Coso Obsidian. In *Perspectives on Prehistoric Trade and Exchange in California and the Great Basin*, edited by Richard E. Hughes, pp. 171–188. University of Utah Press, Salt Lake City.

Graf, Kelly E., Caroline V. Ketron, and Michael R. Waters (editors). 2014. *Paleoamerican Odyssey*. Texas A&M University Press, College Station.

Grayson, D. K. 1993. *The Desert's Past: A Natural Prehistory of the Great Basin*. Smithsonian Institution Press, Washington, D.C.

Griset, Suzanne. 1990. Historic Transformations of Tizon Brown Ware in Southern California. In *Hunter-Gatherer Pottery in the Far West*, Great Basin Conference, Park City, Utah. *Anthropological Papers 23*, Nevada State Museum, Carson City.

Guerrero, Vladimir. 2006. *The Anza Trail and the Settling of California*. Santa Clara University, Santa Clara, California.

Halford, F. Kirk. 2008. The Coleville and Bodie Hills NRCS Soil Inventory, Walker and Bridgeport, California: A Reevaluation of the Bodie Hills Obsidian Source (CA-MNO-4527) and its Spatial and Chronological Use. U.S. Department of Interior, Bureau of Land Management, Bishop Field Office Report on file at the BLM, Bishop Field Office, California.

- _____. 1955. Mohave Pottery: A Description for the Archaeologist. In *Mojave Pottery*, by A. L. Kroeber and Michael J. Harner, pp. 15–30. *Archaeological Records* 16(1). University of California, Berkeley.
- Harrington, Mark Raymond. 1927. Some Lake Bed Camp Sites in Nevada. *Museum of the American Indian, Heye Foundation, Indian Notes* 4(1):40–47.
- Hayden, Julian. 1994. The Sierra Piniccate, the Legacy of Malcolm Rogers, and the Archaeology of the Lower Colorado River. In *Recent Research along the Lower Colorado River – Proceedings from a Symposium Presented at the LIXth Annual Meeting of the Society for American Archaeology, Anaheim, California, April 1994*, edited by Joseph A. Ezzo. Technical Series No. 51. Statistical Research, Tucson, Arizona.
- Haynes, G. 2015. The Millennium before Clovis. *PaleoAmerica* 1(2):134–162.
- Hayes, Le. 2005. *Pilgrims in the Desert: The Early History of the East Mojave Desert and Baker, California Area* (Barstow, CA: Mojave River Valley Historical Association, 2005).
- Haynes, C.V. 1969. The earliest Americans. *Science* 166:709-715.
- _____. 1973. The Calico Site: Artifacts or Geofacts? *Science* 181:305-310.
- Hays-Gilpin, Kelley, and Margaret M. Lyneis. 2008. Prehistoric Pueblo Pottery North and West of the Colorado River: Museum of Northern Arizona Ceramic Conference. In *Pottery Southwest* 26(4):12–20.
- Heizer, R. F. (editor). 1941. Aboriginal Trade between the Southwest and California. *Masterkey* 15(5): 185–88.
- _____. 1978. California. Handbook of North American Indians, Vol. 8, William G. Sturtevant, general editor, Smithsonian Institution, Washington, D.C. Hoover, Mildred B., Hero E. Rensch, Ethel G. Rensch, and William N. Abeloe. 2002. *Historic Spots in California*. 5th ed. Revised by Douglas E. Kyle. Stanford University Press, Stanford, California.
- Heizer, Robert F., and A. E. Treganza. 1944. Mines and Quarries of the Indians of California. *California Journal of Mines and Geology* 40:291–359.
- Hewett, D.F. 1954. “History of Discovery at Mountain Pass, California” in J. C. Olson, D. R. Shawe, L. C. Pray, and W. N. Sharp, *Rare-Earth Mineral Deposits of the Mountain Pass District San Bernardino County California, US Geological Survey Professional Paper 261* (Washington, DC: United States Government Printing Office, 1954).
- Hildebrandt, W. R., and D. A. Jones. 1997. The JSOW Archaeological Survey, Site Evaluation, and Data Recovery Project, NAWS, China Lake, Inyo County, California. Report on file, Naval Air Weapons Station, China Lake, California.
- Hildebrandt, W. R., and K. R. McGuire. 2002. The Ascendance of Hunting during the California Middle Archaic: An Evolutionary Perspective. *American Antiquity* 67(2):231–256.
- _____. 2012. A Land of Prestige. In *Contemporary Issues in California Archaeology*, edited by T.L. Jones and J. E. Perry, pp. 133-152. Routledge, New York.

- Hildebrandt, W. R., K. R. McGuire, and J. King. 2016. *Historic Properties Treatment Plan for the Olancho-Cartago Four-Lane Project, Inyo County, California*. Report prepared for California Department of Transportation District 9. Far Western Anthropological Research Group, Inc.
- Hoover, Mildred B., Hero E. Rensch, Ethel G. Rensch, and William N. Abeloe. 2002. *Historic Spots in California*. 5th ed. Revised by Douglas E. Kyle. Stanford University Press, Stanford, California.
- Hoover, Mildred Brooke, Hero Eugene Rensch, Ethel Grace Rensch, William N. Abeloe, and Douglas E. Kyle. 1990. *Historic Spots in California*. Stanford University Press, Stanford, California.
- Hughes, Richard E., and James A. Bennyhoff. 1986. Early Trade. In *Great Basin*, edited by W. L. d’Azevedo, pp. 238–255. *Handbook of North American Indians*, Vol. 11, W. C. Sturtevant, general editor. Smithsonian Institution, Washington, D.C.
- James, S. R. 1986. What Mean These Sherds? A Functional Approach to Fremont Ceramics in the Western Periphery. In *Pottery of the Great Basin and Adjacent Areas*, edited by S. Griset, pp. 107–118. Anthropological Papers 111. University of Utah, Salt Lake City.
- Jenkins, Dennis L., L. G. Davis, T. W. Stafford Jr, P. F. Campos, T. J. Connolly, L. S. Cummings, M. Hofreiter, B. Hockett, K. McDonough, I. Luthe, P. W. O’Grady, K. J. Reinhard, M. E. Swisher, F. White, B. Yates, R. M. Yohe II, C. Yost, and E. Willerslev. 2014. Geochronology, Archaeological Context, and DNA at the Paisley Caves. In *Paleoamerican Odyssey*, edited by K. E. Graf, C. V. Ketron, and M. R. Waters, pp. 485–510. Texas A&M University Press, College Station.
- Jenkins, D.L., L.G. Davis, T.W. Stafford, [P.F. Campos](#), B. Hockett, G.T. Jones, L.S. Cummings, C. Yost, T.J. Connolly, R.M. Yohe II, S.C. Gibbins, 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 (6091): 223-228.
- Jenkins, D.L., L. G. Davis, T. W. Stafford Jr, T. J. Connolly, G. T. Jones, M. Rondeau, L. S. Cummings, B. Hockett, K. McDonough, P. W. O’Grady, and K. J. Reinhard. 2016. Younger Dryas Archaeology and Human Experience at the Paisley Caves in the Northern Great Basin. In *Stones, Bones, and Profiles: Exploring Archaeological Context, Early American Hunter-Gatherers, and Bison*, pp. 127–205. University Press of Colorado, Boulder.
- Jenkins, Dennis L., and Jon M. Erlandson. 1996. Olivella Grooved Rectangle Beads from a Middle Holocene Site in the Fort Rock Valley, Northern Great Basin. *Journal of California and Great Basin Anthropology* 18(2):296–302.
- Jones, George, C. Beck, E. E. Jones, and R. Hughes. 2003. Lithic Source Use and Paleoarchaic Foraging Territories in the Great Basin. *American Antiquity* 68(1):5–38.
- Jones, T. L., R. T. Fitzgerald, D. J. Kennett, C. H. Miksicek, J. L. Fagan, J. Sharp, and J. M. Erlandson. 2002. The Cross Creek Site (CA-SLO-1797) and its Implications for New World Colonization. *American Antiquity* 67:213–230.
- Justice, Noel D. 2002. *Stone Age Spear and Arrow Points of California and the Great Basin*. Indiana University Press, Bloomington.
- Kelly, Isabel T., and Catherine S. Fowler. 1986. Southern Paiute. In *Great Basin*, edited by Warren L. D’Azevedo, pp. 435–465. *Handbook of North American Indians*, Vol. 11, William C. Sturtevant, general editor. Smithsonian Institution, Washington, D.C.

- Kelly, R. L., and L. C. Todd. 1988. Coming into the Country: Early Paleoindian Hunting and Mobility. *American Antiquity* 53:231-44.
- Knell, E. J., M. E. Hill, and M. Q. Sutton. 2021. Assessing the Validity of Mojave Desert Lake Mohave and Silver Lake Projectile-Point Types, *PaleoAmerica* 3(7):242–259.
- 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.
- Lamb, Sydney. 1958. Linguistic Prehistory in the Great Basin. *International Journal of American Linguistics* 24(2):95–100.
- Larson, Daniel. 1981. A Study of the Settlement Patterns of Southern Nevada as Reflected by the Archaeological Records. *Western Anasazi Reports* 3(1). Cedar City, Utah.
- Leakey, L. S. B., R. D. Simpson, and T. Clements. 1968. Archaeological Excavations in the Calico Mountains, California: Preliminary report. *Science* 160:1022–1033.
- _____. 1970. Man in America: The Calico Mountains Excavation. *Encyclopedia Britannica Yearbook of Science and the Future*, pp.64-79. Encyclopedia Britannica, Chicago.
- Leakey, L. S. B., R. D. Simpson, T. Clements, R. Berger, and J. Witthoft. 1972. Pleistocene Man at Calico: A Report on the International Conference on the Calico Mountains Excavations, San Bernardino County, California. San Bernardino County Museum, Redlands, California.
- _____. Levstik, Jennifer, Reese Cook, Greta Rayle, Helana Ruter, Paula Scott, and David
- Leonard, N. Nelson, III, and Christopher Drover. 1980. Prehistoric Turquoise Mining in the Halloran Springs District, San Bernardino County, California. *Journal of California and Great Basin Anthropology* 2(2):245–256.
- Lovato, Michelle. 2007. *Images of America: Apple Valley*. Arcadia Publishing, San Francisco, California.
- Lyneis, Margaret M. 1982. Prehistory in the Southern Great Basin. In *Man and Environment in the Great Basin*, edited by David B. Madsen and James F. O’Connell. Society for American Archaeology Papers 2:172–185.
- _____. 1988a. Tizon Brown Ware and the Problems Raised by Paddle-and-Anvil Potter in the Mojave Desert. *Journal of California and Great Basin Anthropology* 10(2):146–155.
- _____. 1988b. Ceramics from the Central Mojave Desert: Three Problems. Paper delivered at the 1988 Kelso Conference, Nipton, California.
- _____. 1992. *The Main Ridge Community at Lost City: Virgin Anasazi Architecture, Ceramics and Burials*. Anthropological Papers No. 117. University of Utah, Salt Lake City.
- _____. 1995. The Virgin Anasazi, Far Western Puebloans. *Journal of World Prehistory* 9:199–241.
- _____. 1997a. An Update of Colton’s Pottery Types of the Arizona Strip and Adjacent Areas in Utah and Nevada. Unpublished notes in possession of author.
- _____. 1997b. The Shinarump Problem, Part 1. Unpublished notes in the possession of the author.

_____. 2008. New and Revised Prehistoric Pueblo Pottery Wares and Types from North and West of the Colorado River: Gray Wares from the Western Area. In *Pottery Southwest* 27(1)3–20.

Madsen, D. B. 2004. *Entering America: Northeast Asia and Beringia before the Last Glacial Maximum*. University of Utah Press, Salt Lake City.

Madsen, David B., Dave N Schmitt, and David Page. 2015. *The Paleoarchaic Occupation of the Old River Bed Delta*. Anthropological Papers No. 28. University of Utah, Salt Lake City.

Martinez, Mandi, Alex Wesson, India Hesse, Karleen Ronsairo, Tanya Wahoff, Michael Bever, Mark W. Allen, Amy Gusick, Diane L. Winslow, Amy Jordan, and Rowland Reeve. 2022 (draft in progress). Draft Class III Cultural Resources Inventory for the TLRR Evaluation Project Along the Eldorado-Pisgah-Lugo 220 kV Transmission Line, San Bernardino County, California. Prepared for Bureau of Land Management, California Desert District and Southern California Edison. Prepared by SWCA Environmental Consultants, Pasadena, California.

Martinez, Mandi, Rafaella Lisboa, and Heather Gibson. 2019. *Ethnographic Literature Review for TLRR Evaluation Project Along the Eldorado-Pisgah-Lugo 115kV Transmission Line, San Bernardino County, California, and Clark County, Nevada*. Prepared for Bureau of Land Management, California Desert District and Southern California Edison. Prepared by SWCA Environmental Consultants, Pasadena, California.

McGuire, K. R. 1981. Archaeological Investigations in the Kennedy Meadows/Rockhouse Basin Segment of the Pacific Crest Trail. Report submitted to the United States Department of Agriculture, Forest Service, Sequoia National Forest, Porterville, California.

McGuire, K. R. and W. R. Hildebrandt. 2002. The Ascendance of Hunting during the California Middle Archaic: An Evolutionary Perspective. *American Antiquity* 67:231-256.

_____. 2005. Re-thinking Great Basin Foragers: Prestige Hunting and Costly Signaling during the Middle Archaic. *American Antiquity* 70(4):695-712.

McGuire, Kelly R., William R. Hildebrandt, and Jeffrey S. Rosenthal. 2015. NAWS China Lake Research Design and National Register Eligibility Guidance for Prehistoric Resources. Far Western Anthropological Resources Group, Inc., Davis. Report prepared by for Naval Facilities Engineering Command. On file at SWCA Environmental Consultants, Pasadena.

McGuire, Randall H., and Michael B. Schiffer. 1982. *Hohokam and Patayan Prehistory of Southwestern Arizona*. Academic Press, Inc., New York, New York.

Meltzer, D.J., D. K. Grayson, G. Ardila, A. W. Barker, D. F. Dincauze, C. V. Haynes, F. Mena, L. Nunez and D. J. Stanford. 1997. On the Pleistocene Antiquity of Monte Verde, Southern Chile. *American Antiquity* 62(4):659-663.

Miles, Scott R., and Charles B. Goudey. 1998. Ecological Subregions of California: Section and Subsection Descriptions. U.S. Department of Agriculture, Forest Service. Available at <http://www.fs.fed.us/r5/projects/ecoregions/toc.htm>.

Miller, D. S., V. T. Holliday, and J. Bright. 2014. Clovis Across the Continent. In *Paleoamerican Odyssey*, edited by K.E. Graf, C.V. Ketron, and M.R. Waters, pp. 207–220. Texas A&M University Press, College Station.

- Mithun, Marianne. 2004. *The Languages of Native North America*. Reprinted. Cambridge University Press, Cambridge, Massachusetts. Originally published 1999, Cambridge University Press, Cambridge, Massachusetts
- Moratto, Michael J. 1984. *California Archaeology*. Academic Press, New York.
- _____. 2004. *California Archaeology*. Coyote Press, Salinas, California.
- _____. 2011. Brown Ware Pottery of the Southern Sierra, Nevada. In *Ceramic Traditions I*, edited by Brian Dervin Dillon and Matthew A. Bost. *Pacific Coast Archaeological Society Quarterly* 47(1&2):65–84.
- Lazenby, Cindy. 1989. *Chimney Rock* (1989); available electronically at http://www.lucernevalley.net/history/chimney_rock.htm
- Lovato, Michelle. 2007. *Images of America: Apple Valley* (Charleston: Arcadia Publishing, 2007).
- Morrissey, R. R. 1968. *Turquoise Deposits of Nevada*. Nevada Bureau of Mines and Geology Report No. 17. Mackay School of Mines, University of Nevada, Reno.
- National Park Service (NPS).
- _____. 2018. The Southern Paiute. Available at <https://www.nps.gov/cebr/learn/historyculture/the-southern-paiute.htm>. Accessed November 20, 2018.
- Nevin, David. 1974. *The Expressmen*. Time-Life Books, Alexandria, Virginia.
- Omernik, J.M. & Griffith. 2014. G.E. Environmental Management 54: 1249. <https://doi.org/10.1007/s00267-014-0364-1>.
- Owen, Ethel V. 1988. *History of Lucerne Valley* (1988); available electronically at: <http://desertgazette.com/blog/history-of-lucerne-valley/>
- Owen, L. A., T. Davis, M. W. Caffee, F. Budinger, D. Nash. 2011. Surface Ages and Rates of Erosion at the Calico Archaeological Site in the Mojave Desert, Southern California. *Geomorphology* 125:40–50.
- Payen, L.A. 1982. Artifacts or Geofacts at Calico: Application of the Barnes Test. *Ballena Press Anthropological Papers* 23:193–201, edited by J.E. Ericson, R. E. Taylor, and R. Berger, Los Altos, California.
- Pierce, Wendy N. 2011. Brown Ware Ceramics of the Prehistoric Owens Valley. In *Ceramic Traditions I*, edited by Brian Dervin Dillon and Matthew A. Bost. *Pacific Coast Archaeological Society Quarterly* 47(1&2):85–100.
- Pogue, J. E. 1970 [1915] *The Turquoise: A Study of Its History, Mineralogy, Geology, Ethnology, Archaeology, Mythology, Folklore, and Technology*. Reprinted. Rio Grande Press, Glorieta, New Mexico. Originally published 1915, National Academy of Sciences, Washington, D.C.
- Rafferty, Kevin A. 1984. *A Cultural Resources Investigation of a 480-Acre Desert Land Entry Act Application for Robert Lewis Moapa, Clark County, Nevada*. Cultural Resource Report BLM 5-1357(P), DAS 5-76-1. Environmental Research Center, Division of Anthropological Studies, University of Nevada, Las Vegas.

- Robinson, John W. 1989. *The San Bernardinos: The Mountain Country from Cajon Pass to Oak Glen, Two Centuries of Changing Use* (Arcadia, CA: Santa Anita Historical Society, 1989).
- Rogers, Malcolm J. 1929. *Report of an Archaeological Reconnaissance in the Mohave Sink Region*. San Diego Museum Papers No. 1. San Diego, California.
- _____. 1936. *Yuman Pottery Making*. San Diego Museum Papers No. 2. San Diego, California.
- _____. 1939. *Early Lithic Industries of the Lower Basin of the Colorado River and Adjacent Areas*. Museum of Man Papers No. 3. San Diego, California.
- _____. 1940. Archaeological Pottery Types of the Yuman Ethnographic Area. Manuscript in possession of Michael Waters, Tucson, Arizona.
- _____. 1945a. An Outline of Yuman Prehistory. *Southwestern Journal of Anthropology* 1(2):167–198.
- _____. 1945b. Final Yuman Pottery Types Nomenclature with Synonyms. Manuscript on file at the San Diego Museum Man, San Diego, California.
- _____. 1945c. Letter to Dr. E. W. Gifford, June 27, 1945. On file at the San Diego Museum of Man, San Diego, California.
- _____. 1966. *Ancient Hunters of the Far West*. Richard F. Pourade, editor. Union-Tribune Publishing Company, San Diego, California.
- Ruby, J. M. 1970. Culture Contact between Aboriginal Southern California and the Southwest. Unpublished Ph.D. dissertation, Anthropology Department, University of California, Los Angeles
- Sample, L. L. 1950. Trade and Trails in Aboriginal California. University of California Archaeological Survey Reports 8. Berkeley. San Manuel Band of Mission Indians. 2008. Tribal Government. Available at <http://www.sanmanuel-nsn.gov/tribal.php>. Accessed July 29, 2008.
- San Fernando Band of Mission Indians. 2021. Our History. Available at: <https://sfbmi.org/who-we-are>. Accessed May 28, 2021.
- San Manuel Band of Mission Indians. 2021. About SMBMI. Available at: <https://sanmanuel-nsn.gov/culture/about-smbmi>. Accessed May 25, 2021.
- Schaefer, Jerry. 1994. The Stuff of Creation: Recent Approaches to Ceramic Analysis in the Colorado Desert. In *Recent Research Along the Lower Colorado River*, edited by Joseph A. Ezzo. Statistical Research Technical Series No. 51. Statistical Research, Inc., Redlands, California.
- _____. 1995. Ceramics. In *Archaeological, Ethnographical, and Ethnographic Investigations at Tahquitz Canyon Palm Springs, California*, by Lowell Jon Bean, Jerry Schaefer, and Sylvia Brakke Vane. Prepared for Riverside County Flood Control and Water Conservation District. Cultural Systems Research Inc., Meleno Park, California.
- Schroeder, Albert H. 1952. *A Brief Survey of the Lower Colorado River from Davis Dam to the International Border*. Report on file at U.S. Department of the Interior, National Park Service, Washington, D.C.
- Schroth, Adella Beverly 1994. The Pinto Point Controversy in the Western United States. Unpublished Ph.D. dissertation, Department of Anthropology, University of California, Riverside.

Seymour, Gregory R. 1995. *A Fresh Approach to the Study of Lower Colorado River Buff Ware Ceramics*. Prepared for Dr. Margaret M. Lyneis, Department of Anthropology, University of Nevada, Las Vegas.

_____. 1997. Reevaluation of Lower Colorado Buff Ware Ceramics: Redefining the Patayan In Southern Nevada. Unpublished Master's thesis, Department of Anthropology, University of Nevada, Las Vegas.

Shutler, Richard, Jr. 1961. *Lost City Pueblo Grande de Nevada*. Nevada State Museum Anthropological Papers No. 5. Carson City, Nevada.

Simpson, R. D. 1958. The Manix Lake Archaeological Survey. *The Masterkey* 32(1):4–10.

_____. 1960. Archaeological Survey of the Eastern Calico Mountains. *The Masterkey* 34(1):25–35.

Smith, Gerald A. 1963. Archaeological Survey of the Mojave River Area and Adjacent Regions. San Bernardino County Museum Association. Unpublished report on file at the South Central Coastal Information Center, Fullerton, California.

Smith, Geoffrey M., and Pat Barker. 2017. The Terminal Pleistocene/Early Holocene Record in the Northwestern Great Basin: What we know, what we don't know, and how we may be wrong. *PaleoAmerica* 3(1):13–47.

Smith, G. M., A. Cherkinsky, C. Hadden, and A. P. Ollivier 2016. The Age and Origin of Olivella Beads from Oregon's LSP-1 Rockshelter: The Oldest Marine Shell Beads in the Great Basin. *American Antiquity* 81(3):550–561.

Smith, Gerald A., and Ruth D. Simpson. 1964. *An Introduction to the Basketry of Contemporary Indians of San Bernardino County*. San Bernardino Museum, Bloomington, California.

Stein, Pat. 1994. Historic Trails in Arizona from Coronado to 1940. Prepared for the Arizona State Historic Preservation Office, Phoenix. SWCA Environmental Consultants, Phoenix, Arizona.

Stoffle, Richard, and Maria N. Zedeno. 2001. Historical Memory and Ethnographic Perspectives on the Southern Paiute Homeland. *Journal of California and Great Basin Anthropology* 23(2):229–248. Stone, P., G. C. Dunne, J. G. Moore, and G. I. Smith. 2000. Geologic Map of the Lone Pine 15' Quadrangle, Inyo County, California. USGS Numbered Series 2617, scale 1:62,500.

Sutton, M. Q. 1996. The Current Status of Archaeological Research in the Mojave Desert. *Journal of California and Great Basin Anthropology* 18(2):221–257.

_____. 2017. Chasing Ghosts? Rethinking the Prehistory of the Late Holocene Mojave Desert. *Pacific Coast Archaeological Society Quarterly* 2017(53):1–78.

_____. 2019. Reassessing the Paleoindian Witt Archaeological Locality, Tulare Lake, San Joaquin Valley, California. *PaleoAmerica* 5(3):276–299.

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, Lanham, Maryland.

- Theodoratus, Dorothea, Geri Emberson, David White, Steven W. Conkling, and Deborah McLean. 1998. Death Valley National Park Cultural Affiliation Study. Report prepared for Death Valley National Park. Report on file at the Eastern Information Center, Riverside, California.
- Thomas, D. H. 1983. The Archaeology of Monitor Valley: 2. Gatecliff Shelter. *Anthropological Papers of the American Museum of Natural History* 59(1). New York.
- Twenty-Nine Palms Band of Mission Indians. 2021. Twenty-Nine Palms Band of Mission Indians. The Official Tribal Government Website. Available at: <https://www.29palmstribes.org/>. Accessed May 26, 2021.
- Van Camp, Gena R. 1979. *Kumeyaay Pottery: Paddle-and-Anvil Techniques of Southern California*. Ballena Press Anthropological Papers No. 15. Socorro, New Mexico.
- Vane, S.B. 1992. California Indians, Historians, and Ethnographers. *California History* 71(3):324–341.
- Vicari, Mary Ann, Victor Villagran, and Jennifer Durk. 2023. *Class III Cultural Resources Inventory for the TLRR Evaluation Project Along the Eldorado-Pisgah-Lugo 115-kV Transmission Lines, Clark County, Nevada*. SWCA Environmental Consultants, Las Vegas, NV. Prepared for Bureau of Land Management, Las Vegas Field Office, and Southern California Edison, Rosemead, CA.
- Walker, C. J. 1986. Back Door to California: The Story of the Mojave River Trail. Mojave River Valley Museum Associate. Barstow, California.
- Walker, H. P., and D. Bufkin. 1986. Historical Atlas of Arizona. University of Oklahoma Press, Norman.
- Wallace, William J. 1962. Prehistoric Cultural Developments in the Southern California Deserts. *American Antiquity* 28(2):172–180.
- Warren, C. N. 2002. Time, Form, and Variability: Lake Mojave and Pinto Periods in Mojave Desert Prehistory. In *Essays in California Archaeology: A Memorial to Franklin Fenega*, edited by W. J. Wallace and F.A. Riddell, pp. 129–141. Contributions of the University of California Archaeological Research Facility 60, Berkeley.
- Warren, C. N. 1980. The Archaeology and Archaeological Resources of the Amargosa-Mohave Basin Planning Units. In *A Cultural Resources Overview for the Amargosa-Mohave Basin Planning Units*, edited by C. N. Warren, M. Knack, and E. Warren, pp. 2–134. Submitted to the Bureau of Land Management, Desert Planning Staff, Riverside, California.
- Warren, C. N. 1984. Early Holocene Cultural Adaptation in the Mojave Desert, California. Manuscript in possession of authors.
- _____. 1986. Prehistory of the Southwestern Area. Warren L. D’Azevedo (ed.). In *Handbook of North American Indians*, Vol. 11, Great Basin, pp. 183–193. Smithsonian Institution, Washington, D.C.
- Warren, Claude N., and Robert Crabtree 1986. Prehistory of the Southwestern Area. In *Great Basin*, edited by W. L. d’Azevedo, pp. 183–193. *Handbook of North American Indians*, Vol. 11, W. C. Sturtevant, general editor. Smithsonian Institution, Washington, D.C.
- Warren, Claude N., and Carl Phagan. 1988. Fluted Points in the Mojave Desert: Their Technology and Cultural Context. *Early Human Occupation in Far Western North America: The Clovis-Archaic Interface* (1988):121–130.

- Waters, Michael R. 1980. Lake Cahuilla: Late Quaternary Lacustrine History of the Salton Trough, California. Unpublished Ph.D. dissertation, Department of Geosciences, University of Arizona, Tucson.
- _____. 1983a. Late Holocene Lacustrine Chronology and Archaeology of Ancient Lake Cahuilla, California. *Quaternary Research* 19:373–387.
- _____. 1983b. Man and Pleistocene Lake Cahuilla, California. *Journal of New World Archaeology* 5(3):1–58.
- Whitaker, Adrian, and Christopher Parker. 2021. *Bedrock Milling Features in California: Archaeological Context and Research Design*. California Department of Transportation, Sacramento.
- Whitley, D. S., G. Gumerman, J. M. Simon, and E. D. Rose. 1988. The Late Prehistoric Period in the Coso Range and Environs. *Pacific Coast Archaeological Society Quarterly* 24(1):2–7.
- Wilkins, Mira. 1989. *The History of Foreign Investment in the United States to 1914: Borax and Radium* (Cambridge, MA: Harvard University Press, 1989).
- Yenne, Bill. 1985. *The History of the Southern Pacific*. Bison Books, University of Nebraska Press, Lincoln, Nebraska.
- Yohe, Robert M, II. 1992. A Re-evaluation of Western Great Basin Cultural Chronology and Evidence for the Timing of the Introduction of the Bow and Arrow to Eastern California Based on New Excavations at the Rose Spring Site (CA-INY-372). Unpublished Ph.D. dissertation, Department of Anthropology, University of California, Riverside.
- Young, D. A., and R. A. Bettinger. 1992. The Numic Spread: A Computer Simulation. *American Antiquity* 57(1):85–98.
- Zeanah, D.W. 2004. Sexual division of labor and central place foraging: a model for the Carson Desert of western Nevada. *Journal of Anthropological Archaeology* 23(1):1-32.

9.1.6 Energy

California Renewables Portfolio Standard Program: emissions of greenhouse gases, California Senate Bill 100 (2017-2018), Chapter 312 (Cal Stat. 2018)

City of Hesperia. 2010. Climate Action Plan. Available at <https://www.cityofhesperia.us/DocumentCenter/View/1587/Climate-Action-Plan-7210?bidId=>

Clark County. 2020. Sustainability and Climate Action Plan. Available at https://www.clarkcountynv.gov/government/departments/environment_and_sustainability/sustainability/sustainability_climate_action_plan.php

County of San Bernardino. 2020. Countywide Plan: County Policy Plan. Available at <http://www.sbcounty.gov/Uploads/LUS/GeneralPlan/Policy%20Plan%20and%20Policy%20Maps.pdf>

9.1.7 Geology, Soils, and Paleontological Resources

9.1.7.1 Geology and Soils

Brandt, J. and M. Sneed 2017. Land subsidence in the southwestern Mojave Desert, California, 1992-2009. U.S. Geological Survey, Fact Sheet 2017-3053. <https://pubs.er.usgs.gov/publication/fs20173053>

- Branum, D., R. Chen, M. Petersen, and C. Wills. 2016. Earthquake Shaking Potential for California. California Geological Survey, Map Sheet 48, Revised 2016.
- California Geological Survey (CGS). 2022. Earthquake Zones of Required Investigation. Accessed April 2022. <https://maps.conservation.ca.gov/cgs/EQZApp/app/>
- California Geological Survey (CGS). 2018. Deep-Seated Landslide Susceptibility (MS58), Map Service. <https://maps.conservation.ca.gov/cgs/#datalist>
- California Geological Survey (CGS). 2016. Map Sheet 48: Earthquake Shaking Potential for California, Map Service. <https://maps.conservation.ca.gov/cgs/#datalist>
- Clark County, Nevada. 2018. Multi-Jurisdictional Hazard Mitigation Plan. Available at http://www.clarkcountynv.gov/fire/oem/Documents/General%20Documents/Clark%20County%20HMP_080918_compiled.pdf
- Nevada Bureau of Mines and Geology. 2018. Las Vegas Earthquake Hazard and Seismic Vulnerabilities. Available at http://www.nbmng.unr.edu/nhmpc/Presentations/Earthquake_Hazard_Presentations/Las_Vegas_Earthquake_Hazard.pdf
- San Bernardino County. 2011. Multi-Jurisdictional Hazard Mitigation Plan Update. October 11. <http://www.sbcounty.gov/Uploads/SBCFire/content/oes/pdf/Hazard-Mitigation-Plan.pdf>
- Scheffe, K.F. and S.L. Lacy. (2004). Hydro-Compactable Soils. In: Muckel, G.B. (ed.) Understanding Soil Risks and Hazards. Lincoln, NE: United States Department of Agriculture, Natural Resources Conservation Service, National Soil Survey Center. Pp. 60-64.
- Southern California Earthquake Center (SCEC). 1999. Recommended Procedures for Implementation of DMG Special Publication 117, Guidelines for Analyzing and Mitigating Liquefaction in California. March. <http://www-sceec.usc.edu/resources/catalog/LiquefactionproceduresJun99.pdf>
- United States Geological Survey (USGS). 2022a. Quaternary Fault and Fold Database of the United States, Interactive Fault Map. Accessed April 2022. <https://usgs.maps.arcgis.com/apps/webappviewer/index.html?id=5a6038b3a1684561a9b0aadf88412fcf>
- United States Geological Survey (USGS). 2022b. 2008 National Seismic Hazard Maps - Source Parameters. Accessed April 2022. https://earthquake.usgs.gov/cfusion/hazfaults_2008_search/query_main.cfm?CFID=2238891&CFTOKEN=f144aaed4863e155-405944D8-A380-48B8-ACDC806067EA71C5
- United States Geological Survey (USGS). 2008. The ShakeOut Scenario. Open-File Report 2008-1150. <https://pubs.usgs.gov/of/2008/1150/of2008-1150.pdf>
- Wills, C.J. 2011. Susceptibility to Deep-Seated Landslides in California. California Geological Survey, Map Sheet 58. ftp://ftp.conservation.ca.gov/pub/dmg/pubs/ms/058/MS_058.pdf

9.1.7.2 Paleontological Resources

Text pending.

9.1.8 Greenhouse Gas Emissions

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

IPCC. (2007). Climate Change 2007: Impacts, Adaptation, and Vulnerability. Working Group II Contribution to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change. Located at https://www.ipcc.ch/pdf/assessmentreport/ar4/wg2/ar4_wg2_full_report.pdf.

MDAQMD. 2016. California Environmental Quality Act (CEQA) and Federal Conformity Guidelines. Located at <https://www.mdaqmd.ca.gov/home/showpublisheddocument/192/636305688064730000>

9.1.9 Hazards and Hazardous Materials

California Department of Parks and Recreation. 1989. Fort Tejon Historic Park General Plan. October. Available online at: <https://www.parks.ca.gov/pages/21299/files/351.pdf>

CAL FIRE. 2005. Fire Threat Map, Version 5. October 20. Available online at: https://frap.fire.ca.gov/media/10315/firethreat_19_ada.pdf

California Energy Commission. 2020. Natural Gas Pipeline (Diameter Range). ArcGIS Feature Service. Available online at: https://services9.arcgis.com/C2UkwXxRekdnbbm6/arcgis/rest/services/Natural_Gas_Pipeline_180117/FeatureServer

California Inter-Utility Coordinating Committee. 2010. California Joint Utility Traffic Control Manual, Fifth Edition. April. Available online at: <https://www.santabarbaraca.gov/civicax/filebank/blobdload.aspx?blobid=12060>. Retrieved: April 5, 2018.

California Office of Emergency Services. 2020. Oil Product Pipelines. ArcGIS Feature Service. Available online at: https://services.arcgis.com/BLN4oKB0N1YSgvY8/arcgis/rest/services/Oil_Product_Pipelines/FeatureServer

Clark County. 2017. Clark County Comprehensive Master Plan. Available at https://www.clarkcountynv.gov/government/departments/comprehensive_planning_department/library/comprehensive_master_plan.php

Dillon, Gregory K; Gilbertson-Day, Julie W. 2020. Wildfire Hazard Potential for the United States (270-m), version 2020. 3rd Edition. Fort Collins, CO: Forest Service Research Data Archive. <https://doi.org/10.2737/RDS-2015-0047-3>. Data available at https://apps.fs.usda.gov/fsgisx01/rest/services/RDW_Wildfire/RMRS_WildfireHazardPotential_classified_2020/ImageServer

Office of Emergency Services. 2016. State of California Emergency Plan. Available online at: <http://www.caloes.ca.gov/PlanningPreparednessSite/Documents/SEP%20Update%20for%20Public%20Comment%202016.pdf>

San Bernardino County. 2018. Evacuation Routes Feature Layer. Available at https://services9.arcgis.com/C2UkwXxRekdnbbm6/arcgis/rest/services/EvacRoutes_180221/FeatureServer

9.1.10 Hydrology and Water Quality

California Department of Fish and Wildlife. 2020. Seeps and Springs, Areas of Conservation Emphasis (ACE), version 3.0. ArcGIS Feature Service. Available online at <https://arcadis.maps.arcgis.com/home/item.html?id=2a214bdfc9084425a7e2c7371b6efb18#overview>

California Department of Water Resources. 2020. California's Groundwater: Update 2020. Available at <https://water.ca.gov/Programs/Groundwater-Management/Bulletin-118#>

Colorado River Regional Water Quality Control Board. 2019. Water Quality Control Plan for the Colorado River Basin. Available at https://www.waterboards.ca.gov/coloradoriver/water_issues/programs/basin_planning/docs/2020/rb7bp_e2019.pdf

Lahontan Regional Water Quality Control Board. 1995. Lahontan Region Basin Plan. Available at https://www.waterboards.ca.gov/lahontan/water_issues/programs/basin_plan/references.html

Mojave Water Agency. 2104. Mojave Region Integrated Regional Water Management Plan. Available at https://www.mywaterplan.com/files/Mojave_IRWM-Plan_Final_62614.pdf

Nevada Department of Conservation and Natural Resources. 1966. Water Resources—Reconnaissance Series, Report 36: Ground-Water Appraisal of the Eldorado-Piute Valley Area, Nevada and California. Available at http://images.water.nv.gov/images/publications/recon%20reports/rpt36-eldorado_piute_valley.pdf

United States Geological Survey. 2022. National Hydrography Dataset. Available at <https://hydro.nationalmap.gov/arcgis/rest/services/nhd/MapServer>

9.1.11 Land Use and Planning

Bureau of Land Management. 2016. Desert Renewable Energy Conservation Plan. Available at <https://eplanning.blm.gov/epl-front-office/eplanning/planAndProjectSite.do?methodName=dispatchToPatternPage¤tPageId=95675>

Bureau of Land Management. 2006. West Mojave Plan: Amendment to the California Desert Conservation Area Plan. Available at <https://eplanning.blm.gov/epl-front-office/eplanning/planAndProjectSite.do?methodName=renderDefaultPlanOrProjectSite&projectId=72544>

Bureau of Land Management. 2002. Final Environmental Impact Statement: Proposed Northern & Eastern Mojave Desert Management Plan: Amendment to the California Desert Conservation Area Plan 1980. Available at https://eplanning.blm.gov/epl-front-office/projects/lup/73191/97519/117677/nemo_plan_vol-1_2002.pdf and https://eplanning.blm.gov/epl-front-office/projects/lup/73191/97520/117678/nemo_plan_vol-2_2002.pdf

Bureau of Land Management. 2002. Record of Decision for Approved Northern & Eastern Mojave Desert Management Plan: An amendment to the California Desert Conservation Area Plan 1980. Available at https://eplanning.blm.gov/epl-front-office/projects/lup/73191/97521/117679/nemo_rod_12-02.pdf

Bureau of Land Management. 1999. California Desert Conservation Area Plan (as amended). Available at https://eplanning.blm.gov/epl-front-office/projects/lup/66949/82080/96344/CDCA_Plan.pdf

California State Lands Commission. 2015. Strategic Plan 2016-2020. Available at <http://www.slc.ca.gov/About/Docs/StrategicPlan.pdf>

City of Boulder City. 2015. Boulder City Master Plan. Available at <https://www.bcnv.org/176/Planning-Maps-and-Publications>

City of Hesperia. 2010. City of Hesperia General Plan 2010. Available at <https://www.cityofhesperia.us/DocumentCenter/View/15728/General-Plan-Update-August-2019>

Clark County. 2017. Clark County Comprehensive Master Plan. Available at https://www.clarkcountynv.gov/government/departments/comprehensive_planning_department/library/comprehensive_master_plan.php

County of San Bernardino. 2020. Countywide Plan: County Policy Plan. Available at <http://www.sbcounty.gov/Uploads/LUS/GeneralPlan/Policy%20Plan%20and%20Policy%20Maps.pdf>

9.1.12 Mineral Resources

Bureau of Land Management. 2014. Draft DRECP and EIR/EIS. Chapter III.15. Mineral Resources. Available at https://www.drecp.org/draftdrecp/files/d_Volume_III/III.15_Mineral_Resources.pdf

California Department of Conservation. 2018. Mines Online. Division of Mine Reclamation. Online resource available at <https://maps.conservation.ca.gov/mol/index.html>

California Department of Conservation, Division of Mines and Geology. Undated. Guidelines for Classification and Designation of Mineral Lands. Available at <https://www.conservation.ca.gov/smgb/Guidelines/Documents/ClassDesig.pdf>

City of Hesperia. 2010. City of Hesperia General Plan 2010. Available at <https://www.cityofhesperia.us/DocumentCenter/View/15728/General-Plan-Update-August-2019>

County of San Bernardino. 2020. Countywide Plan: County Policy Plan. Available at <http://www.sbcounty.gov/Uploads/LUS/GeneralPlan/Policy%20Plan%20and%20Policy%20Maps.pdf>

Nevada Division of Minerals. 2020. MajorMines2020. Available at <https://services.arcgis.com/CXYUMoYknZtf5Qr3/arcgis/rest/services/MajorMines2020/FeatureServer>

San Bernardino County. 2018. List of Active Mines. Available at <http://www.sbcounty.gov/uploads/lus/Mine/MineList.pdf>

San Bernardino County. 2018. Surface Mining and Reclamation. Available at <http://cms.sbcounty.gov/lus/Mining/MiningHome.aspx>

San Bernardino County. 2007. 2006 General Plan Program: Final Environmental Impact Report and Appendices. Available at <http://www.sbcounty.gov/Uploads/lus/GeneralPlan/FinalEIR2007.pdf>

9.1.13 Noise

California Department of Transportation (Caltrans). 1998. Technical Noise Supplement. Available at <http://www.dot.ca.gov/hq/env/noise/pub/Technical%20Noise%20Supplement.pdf>.

City of Hesperia. 2010. City of Hesperia General Plan 2010. Available at <https://www.cityofhesperia.us/DocumentCenter/View/15728/General-Plan-Update-August-2019>

Federal Transit Administration. 2006. Transit Noise and Vibration Impact Assessment, Report Number FTA-VA-90-1003-06. Available at https://www.transit.dot.gov/sites/fta.dot.gov/files/docs/FTA_Noise_and_Vibration_Manual.pdf

National Park Service. 2006. Management Policies 2006, 4.9 – Soundscape Management. Available at https://www.nps.gov/subjects/sound/soundscape-management-policy_4-9.htm

U.S. Forest Service. 2008. Sound Measurements of Helicopters during Logging Operations at Southwestern Oregon Timber Sales. Available at https://www.fs.fed.us/eng/techdev/IM/sound_measure/helo_index.shtml

9.1.14 Population and Housing

State of California. 2018. Demographics Projections. Department of Finance. Data available at <http://www.dof.ca.gov/Forecasting/Demographics/Projections/>

University of Nevada-Las Vegas. 2019. 2019-2060 Population Forecasts: Long-Term Projections for Clark County, Nevada. Available at <https://files.clarkcountynv.gov/clarknv/Planning/Demographics/2019%20CBER%20Population%20Forecasts.pdf#:~:text=We%20predict%20that%20Clark%20County%E2%80%99s%20population%20will%20reach,for%20Clark%20County%20equaled%20slightly%20above%202.28%20million>

9.1.15 Public Services

California Inter-Utility Coordinating Committee. 2018. California Temporary Traffic Control Handbook. Available at <https://www.sce.com/nrc/aboutsce/regulatory/distributionmanuals/tcm.pdf>

Las Vegas Metropolitan Police Department. 2020. Annual Report 2019. Available at <https://www.lvmpd.com/en-us/Documents/2019AnnualReport.pdf>

City of Hesperia. 2018. Hesperia Police Department. Available at: <http://cityofhesperia.us/306/Police>

County of San Bernardino. 2020. Countywide Plan: County Policy Plan. Available at <http://www.sbcounty.gov/Uploads/LUS/GeneralPlan/Policy%20Plan%20and%20Policy%20Maps.pdf>

San Bernardino County Fire Department (SBCFD). 2018a. About the San Bernardino County Fire Department Webpage. Available at <https://sbcfire.org/about/>

SBCFD. 2018b. Fire Chief Welcome Webpage. Available at <https://sbcfire.org/firechief/>

San Bernardino County Regional Parks Department. 2018. About Us. Available at <https://parks.sbcounty.gov/about-us/>

San Bernardino County Sheriff's Department (SBCSD). 2018. San Bernardino County Sheriff's Department Infographic Webpage. Available at <http://cms.sbcounty.gov/sheriff/Home/DepartmentInfographic.aspx>

9.1.16 Recreation

Bureau of Land Management. Undated. Mojave National Trails Monument Map. Available at https://www.blm.gov/sites/blm.gov/files/documents/files/CA_MojaveTrails_NM_1.pdf

City of Hesperia. 2018. City of Hesperia Non-Motorized Transportation Plan Map. Available at https://www.cityofhesperia.us/DocumentCenter/View/3489/Non-Motorized_Transportation_Plan_24x36?bidId=

City of Hesperia. 2010. City of Hesperia General Plan 2010. Available at <https://www.cityofhesperia.us/DocumentCenter/View/15728/General-Plan-Update-August-2019>

National Park Service. 2002. Mojave National Preserve General Management Plan. Available at <https://www.nps.gov/moja/learn/management/gmp.htm>

County of San Bernardino. 2020. Countywide Plan: County Policy Plan. Available at <http://www.sbcounty.gov/Uploads/LUS/GeneralPlan/Policy%20Plan%20and%20Policy%20Maps.pdf>

San Bernardino County. Regional Parks Department Webpage. Available at <http://cms.sbcounty.gov/parks/Home.aspx>

9.1.17 Transportation

California Department of Transportation (Caltrans). 2016. Truck Networks on California State Highways. Available at: <http://www.dot.ca.gov/trafficops/trucks/docs/truckmap-d06.pdf>

Caltrans. 2002. Guide for the Preparation of Traffic Impact Studies.

California Inter-Utility Coordinating Committee. 2014. California Joint Utility Traffic Control Manual. February 2014. 6th Addition.

Nevada Department of Transportation. 2013. Nevada Statewide Bicycle Plan. Available at <https://www.dot.nv.gov/home/showpublisheddocument/3632/636185961871870000>

State of California. 2017. California Legislative Information; Streets and Highways Code. Available at https://leginfo.legislature.ca.gov/faces/codes_displayText.xhtml?lawCode=SHC&division

Victor Valley Transit Authority. 2022. VVTA website. Available at <http://vvta.org>

9.1.18 Tribal Cultural Resources

Bean, Lowell J., and Charles R. Smith. 1978. Serrano. In California, edited by Robert F. Heizer, pp. 570–574. Handbook of North American Indians, Vol. 8, William G. Sturtevant, general editor, Smithsonian Institution, Washington, DC.

Beattie, George (translator). 1955. Appendix II: Diario De Un Exped' Tera Adentro Del P. Jose' M' A. De Zalvidea, Desde El 19 De Julio Hasta El 14 De Agosto De 1806. In Preliminary Report of the Archaeological Survey of the Deep Creek Site on the Upper Mojave River, by Gerald A Smith. San Bernardino County Museum Association Quarterly 2(2), Redlands, California.

Byerly, Ryan M. 2018. Ethnographic Literature Review Related to the Hydrostatic Testing of Lines 300 A/B by Pacific Gas and Electric Company, San Bernardino County, California. Report submitted to Bureau of Land Management, California Desert District Office, on behalf of Pacific Gas and Electric Company, by Far Western Anthropological Research Group, Inc., Davis, California.

Chmara-Huff, Fletcher P. 2006. A Critical Cultural Landscape of the Pahrump Band of Southern Paiute. Unpublished Master's Thesis, Department of Geography and Regional Development, The University of Arizona.

Coues, Elliott. 1900. On the Trail of a Spanish Pioneer: The Dairy and Itinerary of Francisco Garcés (Missionary Priest) in His Travels through Sonora, Arizona, and California, 1775–1776. Volumes 1 and 2. Francis P. Harper, New York.

Davis, James T. 1961. Trade Routes and Economic Exchange among the Indians of California. University of California Archaeological Survey Reports 54. Ramona, California.

- Earle, David D. 2003. Ethnohistorical and Ethnographic Overview and Cultural Affiliation Study of the Fort Irwin Region and the Central Mojave Desert. Earle and Associates, Palmdale, California. Prepared by TRC Solutions, Inc., Salt Lake City, Utah.
- _____. 2005. The Mojave River and the Central Mojave Desert: Native Settlement, Travel, and Exchange in the Eighteenth and Nineteenth Centuries. *Journal of California and Great Basin Anthropology* 25(1):1–38.
- Farmer, Malcolm F. 1935. The Mohave Trade Route. *The Masterkey* 9(4):154–157.
- Fenelon, James V., and Clifford E. Trafzer. 2014. From Colonialism to Denial of California Genocide to Misrepresentations: Special Issue on Indigenous Struggles in the Americas. *American Behavioral Scientist* 58(1):3–29.
- Fowler, Catherine S. 2009. Reconstructing Southern Paiute-Chemehuevi Trails in the Mojave Desert of Southern Nevada and California: Ethnographic Perspectives from the 1930s. In *Landscapes of Movement: Trails, Paths, and Roads in Anthropological Perspective*, edited by James Snead, Clark Erickson, and J. Darling, pp. 84–105. University of Pennsylvania Press, Philadelphia.
- Gatto, Michael. 2014. California Assembly Bill No. 52, Chapter 532. Approved by Governor September 25, 2014; filed with secretary of State September 25, 2014.
- Harner, Michael J. 1957. Potsherds and the Tentative Dating of the San Gorgonio–Big Maria Trail. *University of California Archaeological Survey Reports* 37:35–37.
- Heizer, Robert F. (editor). 1941. Aboriginal Trade between the Southwest and California. *The Masterkey* 15(5):185–188.
- _____. 1978. California. *Handbook of North American Indians*, Vol. 8, William G. Sturtevant, general editor, Smithsonian Institution, Washington, D.C.
- Johnston, F. J., and P. H. Johnston. 1957. An Indian Trail Complex of the Central Colorado Desert: A Preliminary Survey. *University of California Archaeological Survey Reports* 37:22–34.
- Kelley, Isabel T., and Catherine S. Fowler. 1986. Southern Paiute. In *Great Basin*, edited by Warren L. D’Azevedo, pp. 435–465. *Handbook of North American Indians*, Vol. 11, William G. Sturtevant, general editor, Smithsonian Institution, Washington, DC.
- Kelly, Isabel Truesdell. 1932–1934. Southern Paiute Field Notes. Copies in possession of C. S. Fowler, University of Nevada, Reno (notebooks cited by year, number, and pages).
- _____. 1934. Southern Paiute Bands. *American Anthropologist* 36(4):548–560.
- _____. 1964. *Southern Paiute Ethnography*. University of Utah Press, Salt Lake City.
- Kelly, Isabel Truesdell, Richard F. Van Valkenburgh, and United States Indian Claims Commission. 1976. *Southern Paiute Ethnography*. Garland Pub. Inc., New York.
- Kroeber, Alfred L. 1908. A Mission Record of the California Indians. *University of California Publications in American Archaeology and Ethnology* 8(1):1–27.
- _____. 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.

- _____. 1955. Nature of the Land-holding Group. *Ethnohistory* 2(4):303–314.
- Laird, Carobeth. 1976. *The Chemehuevis*. Malki Museum Press, Banning, California.
- Lindsay, Brendan C. 2012. *Murder State: California Native American Genocide 1846-1873*. University of Nebraska Press, Lincoln and London.
- Madley, Benjamin. 2016. *An American Genocide: The United States and the California Indian Catastrophe*. Yale University Press, New Haven, Connecticut.
- Malouf, Carling I., and John M. Findlay. 1986. Euro-American Impact Before 1870. In *Great Basin*, edited by Warren L. D’Azevedo,. *Handbook of North American Indians*, Vol. 11, William G. Sturtevant, general editor, Smithsonian Institution, Washington, DC.
- Mithun, Marianne. 2006. *The Languages of Native North America*. Reprinted. Cambridge University Press, Cambridge, Massachusetts. Originally published 1999, Cambridge University Press, Cambridge, Massachusetts.
- Moratto, Michael J. 1984. *California Archaeology*. Academic Press, New York.
- National Park Service. 2001. National Historic Trail Feasibility Study and Environmental Assessment: The Old Spanish Trail. Available at <https://parkplanning.nps.gov/document.cfm?parkID=454&projectID=12591&documentID=38207>
- NAHC (Native American Heritage Commission). 2022. Online GIS of Tribal Territories. Available at <https://www.arcgis.com/apps/View/index.html?appid=03512d83d12b4c3389281e3a0c25a78f&extent=-130.0858,31.7873,-109.6622,42.6447>.
- Sample, L. L. 1950. Trade and Trails in Aboriginal California. University of California Archaeological Survey Reports 8. Berkeley.
- Schneider, Joan S., Michael K. Lerch, Gerald A. Smith. 1995. A Milling-Implement Quarry at Elephant Mountain, California. *Journal of California and Great Basin Anthropology* 17(2):191-221.
- Stoffle, Richard, and Maria Zedeño. 2001. Historical Memory and Ethnographic Perspectives on the Southern Paiute Homeland. *Journal of California and Great Basin Anthropology* 23(2):229–248.
- 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.
- Sutton, Mark Q., and David D. Earle. 2017. The Desert Serrano of the Mojave River. *Pacific Coast Archaeological Society Quarterly*, 53(2&3).
- Vane, Sylvia Brakke. 1992. California Indians, Historians, and Ethnographers. *California History* 71(3):324–341.
- Walker, Clifford J. 1986. *Back Door to California: The Story of the Mojave River Trail*. Mojave River Valley Museum Association, Barstow, California.
- Wheeler, George M., D. W. Lockwood, and P.W. Hamel Chief Topographer. 1869. Map showing Detailed Topography of the Country Traversed by the Reconnaissance Expedition through Southern and Southeastern Nevada. Washington, DC: U.S. Government.

9.1.19 Utilities and Service Systems

California Department of Resources Recycling and Recovery (CalRecycle). 2022. SWIS Facility/Site Activity Details: Victorville Sanitary Landfill (36-AA-0045). Accessed at <https://www2.calrecycle.ca.gov/SolidWaste/SiteActivity/Details/1870?siteID=2652>

California Department of Water Resources. 2016. Bulletin 118: Interim Update 2016. Available at <https://water.ca.gov/Programs/Groundwater-Management/Bulletin-118>

Hesperia Water District. 2016. Final Draft: 2015 Urban Water Management Plan. Available at <http://www.cityofhesperia.us/DocumentCenter/View/13505/2015-UWMP-FINAL-DRAFT-2016-05-11?bidId=>

The INGAA Foundation, Inc. 2015. Criteria for Pipelines Co-Existing with Electric Power Lines. Available at <https://www.ingaa.org/File.aspx?id=24732>

Mojave Water Agency. 2014. Mojave Region Integrated Regional Water Management Plan. Available at http://www.mywaterplan.com/files/mojave_irwm-plan_final_62614.pdf

San Bernardino County. 2007. County of San Bernardino 2007 General Plan. Amended 2014. Available at <http://www.sbcounty.gov/Uploads/lus/GeneralPlan/FINALGP.pdf>

State of California. 2017. What is IRWM?. State of California, California Department of Water Resources. Available at <http://www.water.ca.gov/irwm/>

U.S. Environmental Protection Act (USEPA). 2004. Understanding the Safe Drinking Water Act. Office of Water. EPA 816-F-04-030.

Victor Valley Wastewater Reclamation Agency. 2018. Frequently Asked Questions webpage. Available at <https://www.vvwra.com/about-us>

9.1.20 Wildfire

Dillon, Gregory K; Gilbertson-Day, Julie W. 2020. Wildfire Hazard Potential for the United States (270-m), version 2020. 3rd Edition. Fort Collins, CO: Forest Service Research Data Archive. <https://doi.org/10.2737/RDS-2015-0047-3>. Data available at https://apps.fs.usda.gov/fsgisx01/rest/services/RDW_Wildfire/RMRS_WildfireHazardPotential_classified_2020/ImageServer

National Park Service. 2020. Final wildfire perimeters from authoritative agency datasets. Wildland Fire Management Research, Development, & Application program data team. ArcGIS Feature Service. Available at https://services3.arcgis.com/T4QMspbfLg3qTGWY/arcgis/rest/services/Interagency_Fire_Perimeter_History_All_Years_Read_Only/FeatureServer

9.2 Electronic References

References listed in Section 9.1 that are available electronically are so-noted above; all references listed above are available free of charge. SCE will provide to the CPUC electronic or hardcopy versions of references cited in Section 9.1 upon request.

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