

5.6 CULTURAL RESOURCES**5.6.1 Significance Criteria**

Potential impacts to cultural resources could occur if:

- A substantial adverse change in the significance of a historical resource either listed or eligible for listing on the National Register of Historic Places, the California Register of Historic Resources, or a local register of historic resources were to occur, or
- The project were to cause a substantial change in the significance of a unique archaeological resource, destroy a unique paleontological resource or site or disturb human remains, including those interred outside of formal cemeteries.

Potential impacts to archaeological and historic resources are further defined as follows:

- Potentially Significant Impacts are those resulting from construction, operation, or maintenance activities that would adversely impact the integrity of significant or potentially significant prehistoric archaeological resources, and are unavoidable as the project is planned. Examples of these resources are archaeological resources or historic districts that cover an extensive area, are materially dense, and provide little or no opportunity for avoidance or adequate mitigation.
- Less Than Significant Impacts are those resulting from construction, operation, or maintenance activities that could adversely impact the integrity of significant or potentially significant prehistoric archaeological resources, and for which there is sufficient opportunity for resource avoidance. Examples of these resources are archaeological resources or historic sites that have an uneven distribution providing adequate opportunities for avoidance, or for which adequate mitigation is available.
- No Impacts would occur where no known or previously unrecorded resources are present in the project area or close enough to be impacted by the project.

Paleontological resource sensitivity is further defined as follows:

- Paleontologic sensitivity is defined as the potential for a geologic unit to produce scientifically significant fossils. This is determined by rock type, past history of the rock unit in producing significant fossils, and fossil localities that are recorded from that unit. Paleontologic sensitivity is derived from the fossil data collected from the entire geologic unit, not just from a specific survey.

A three-tiered classification system for paleontological sensitivity, recommended by the Society of Vertebrate Paleontologists (SVP) and recognized in California, is listed below:

- High sensitivity – Indicates fossils are currently observed onsite, localities are recorded within the study area, and/or the unit has a history of producing numerous significant fossil remains.
- Low sensitivity – Indicates significant fossils are not likely to be found because of a random fossil distribution pattern, extreme youth of the rock unit, and/or the method of rock formation, such as alteration by heat and pressure.
- Indeterminate Sensitivity – Unknown or undetermined sensitivity indicates that the rock unit has not been sufficiently studied or lacks good exposures to warrant a definitive rating. This rating is treated initially as having a high sensitivity or potential. After study or monitoring, the unit may fall into one of the other categories.

Fossils are considered to be scientifically significant if they meet or potentially meet any one or more of the following criteria:

- Taxonomy – fossils that are scientifically judged to be important for representing rare or unknown taxa, such as defining a new species
- Evolution – fossils that are scientifically judged to represent important stages or links in evolutionary relationships, or fill gaps or enhance under-represented intervals in the stratigraphic record
- Biostratigraphy – fossils that are scientifically judged to be important for determining or constraining relative geologic (stratigraphic) age, or for use in regional to interregional stratigraphic correlation problems
- Paleocology – fossils that are scientifically judged to be important for reconstructing ancient organism community structure and interpretation of ancient sedimentary environments
- Taphonomy – fossils that are scientifically judged to be exceptionally well or unusually or uniquely preserved, or are relatively rare in the stratigraphy

5.6.2 Environmental Impacts

5.6.2.1 Proposed Segment 1 and Alternative 1

5.6.2.1.1 Construction. There are 11 previously recorded prehistoric archaeological sites and 12 historic sites in and around the area of the proposed Segment 1 and Alternative 1.

Prehistoric sites include a burial site (CA-LAN-427), nine lithic scatters (CA-LAN-980/981, -1084, -1086, -1088, -1181, -1182, -1334, -1518, -1830), and a yucca or agave roasting pit (CA-LAN-2246). Historical sites include adobe structures (CA-LAN-1074H, -1083H, -1612H, and -2070H), cemeteries (CA-LAN-1180H and -1579H), a Chinese labor camp (CA-LAN-1455H), mining sites (P-19-002746 and -003081), roads (P-19-180661 and -120075), and a historic transmission line (P-19-186857). For the paleontological resources, there is the potential in much of the area encompassing proposed Segment 1 and Alternative 1 of encountering fossils of older Quaternary and Middle Miocene age.

The archaeological sites collectively represent the prehistoric and historic land uses of these areas and how those land uses changed over time. These cultural patterns and processes contribute to our understanding of the prehistory of the project area.

5.6.3 Mitigation Measures

5.6.3.1 Proposed Segment 1 and Alternative 1

APM Cultural-1: Archaeological and Historic Resources. As demonstrated by the records search and field check phases of the Antelope Transmission Project, a number of archaeological and historical resources occur along the proposed Segment 1 and Alternative 1, although more are present along the proposed Segment 1. Therefore, if the new T/L is to be constructed along either of these two routes, it is recommended first that a full-scale archaeological reconnaissance be undertaken, and second that archaeological monitoring during construction take place in order to reduce any potential impacts to these resources. In some cases, mitigation measures might be necessary in order to reduce potentially significant impacts on such resources. These mitigation measures may include but not be limited to standard test pits, testing for depth and extent of the archaeological deposit, or data recovery.

It should be noted, however, that this model was developed merely as a guide in future planning efforts by SCE. The recommendations outlined above are in no way intended to exclude any areas from further archaeological reconnaissance, nor is the model designed to serve as an alternative for conducting cultural resource inventories in advance of proposed construction.

APM Paleo-1: Paleontological Resources. The following mitigation measures have been developed to reduce the potential impacts of project construction on paleontological resources to a less than significant level. The measures are derived from the guidelines of the SVP and meet the requirements of Kern and Los Angeles counties and CEQA. These mitigation measures have been used throughout California and have been demonstrated to be

successful in protecting paleontological resources while allowing timely completion of construction:

- A certified paleontologist would be retained by SCE to supervise monitoring of construction excavations and to produce a mitigation plan for the proposed project. Paleontological monitoring would include inspection of exposed rock units and microscopic examination of matrix to determine if fossils are present. The monitor would have authority to temporarily divert grading away from exposed fossils in order to recover the fossil specimens.
- If microfossils are present, the monitor would collect matrix for processing. In order to expedite removal of fossiliferous matrix, the monitor may request heavy machinery to assist in moving large quantities of matrix out of the path of construction to designated stockpile areas. Testing of stockpiles would consist of screen washing small samples to determine if significant fossils are present. Productive tests would result in screen washing of additional matrix from the stockpiles to a maximum of 6,000 pounds per locality to ensure recovery of a scientifically significant sample.
- Quaternary Alluvium, Colluvium, and Quaternary Landslide Deposits have a low paleontological sensitivity level, and would be spot-checked on a periodic basis to insure that older underlying sediments are not being penetrated.
- A certified paleontologist would prepare monthly progress reports to be filed with the client.
- Recovered fossils would be prepared to the point of curation, identified by qualified experts, listed in a database to allow analysis, and deposited in a designated repository.
- At each fossil locality, field data forms would record the locality, stratigraphic columns would be measured, and appropriate scientific samples submitted for analysis.
- The certified paleontologist would prepare a final mitigation report to be filed with the client, the lead agency, and the repository.

Implementation of the measures above would mitigate all potential impacts to paleontological resources to a less than significant level.