

## 3.5 Cultural, Paleontological, and Tribal Cultural Resources

This section describes the environmental and regulatory settings and draft significance criteria with respect to cultural, paleontological, and tribal cultural resources.

### 3.5.1 Environmental Setting

This subsection describes the environmental setting for cultural, paleontological, and tribal cultural resources. It also provides the results of background research and field surveys along the proposed project workspaces and right-of-way (ROW).

#### 3.5.1.1 Definitions

##### *Paleontological Resources*

###### Project Area

The project area refers to the land beneath the proposed project components (i.e., temporary workspace, permanent ROW, and aboveground facilities).

###### Study Area

The environmental setting for paleontological resources includes the project area and a 0.5-mile-wide buffer on either side of the pipeline.

##### *Cultural Resources*

###### Study Area

The cultural resources (archaeological and built environment) study area includes an area within a 1-mile radius of the proposed project's components (i.e., temporary workspace, permanent ROW, and aboveground facilities).

###### Survey Area

The survey area consists of an approximately 150-foot-wide survey corridor along both sides of the proposed project's centerline (i.e., an approximate 300-foot-wide corridor). It also includes all proposed staging areas.

###### Area of Consideration

The area of consideration (AOC) includes all proposed areas of temporary workspace, permanent ROW, and aboveground facilities. It also includes a 150-foot-wide buffer on each side of the temporary workspace and permanent ROW, as well as a one-parcel width around all aboveground facilities.

#### 3.5.1.2 Methodology

The discussion of the regional setting (see Section 3.5.1.3, Regional Setting) presented in the following geologic, cultural, ethnohistory, history, and natural conditions sections is based on information provided in the applicants' paleontological and cultural reports (Donohue and Deméré 2015; Donohue 2016; Gunderman et al. 2016; Manchen and Williams 2017; Williams 2016a, 2016b), unless otherwise cited.

This section describes the methods that are used to identify paleontological, prehistoric and historic archaeological, built environment, and tribal cultural resources, which included records searches, literature reviews, field surveys, and Native American consultation.

### ***Paleontological Resources***

The San Diego Natural History Museum (SDNHM) Department of PaleoServices provided a records and literature search, a paleontological survey, an assessment of potential impacts and sensitivity map, and a paleontological mitigation plan for the study area from the Rainbow Metering Station to Scripps Poway Parkway at Pomerado Road (Donohue and Deméré 2015; Donohue 2016).

The records and literature search for paleontological resources conducted by the SDNHM reviewed museum unpublished paleontological locality data, relevant published and unpublished geologic reports, peer-reviewed paleontological literature, and unpublished paleontological reports (Kennedy and Moore 1971; Givens and Kennedy 1979; Walsh 1996; County of San Diego 2009). The records and literature search was conducted for the study area.

An abbreviated paleontological survey conducted by the SDNHM covered only the parts of the project area that were underlain by sedimentary rock units to assess the potential for fossil resources and the results of the records and literature search. Local outcrops also were explored when no outcrops within the project area were available, as laterally occurring local outcrops are lithologically very similar to sediments that may be inaccessible within the project area (Donohue and Deméré 2015).

### ***Archaeological and Built Environment Resources***

Data regarding archaeological and built environment resources were collected through records searches, field surveys, and public comments obtained through scoping meetings and Native American consultation. Location data are not provided in this Master Environmental Assessment (MEA) to ensure the protection of culturally sensitive sites.

### **Records Searches**

A record search was conducted at the South Coastal Information Center (SCIC) in San Diego. The review consisted of a search of National Register of Historic Places (NRHP) and California Register of Historical Resources (CRHR) listed and eligible properties. Regional and local lists also were searched, such as the San Diego County Local Register of Historical Resources, the City of Escondido Register, the City of San Diego Historical Resources Register, and the City of Poway's Historical Marker Project (Castells et al. 2015, 2016; Davis 2015, 2016a, 2016b; Williams 2016a, 2016b). Additionally, researchers searched the California Historical Resources Inventory list, California Historical Landmarks list, and California Points of Historical Interest list for important, previously identified cultural resources (both archaeological and built environment resources) within the study area (Castells et al. 2015, 2016; Davis 2015, 2016a, 2016b; Williams 2016a, 2016b [page 17]).

The SCIC also houses regional site records (California Department of Parks and Recreation [DPR] 523 forms) that have been completed and submitted in past years. A search at the SCIC provided previously recorded resources and their locations, indicating what resources were already known within the study area prior to conducting a field survey.

The applicants' archaeological and architectural consultants conducted the records search prior to their surveys in 2015, 2016, and 2017 (Castells et al. 2015, 2016; Davis 2015, 2016a, 2016b; Williams 2016a, 2016b; Manchen and Williams 2017). These resources, as well as several newly recorded resources from their field surveys, are listed in Tables 3.5-7 and 3.5-8.

### **Field Survey**

Archaeologists and architectural historians inspected the survey area looking for cultural resources (archaeological and built environment resources). The applicants' cultural resources consultants conducted intensive surveys of the entire survey area and a visual inspection of a one-parcel buffer around

proposed aboveground feature locations, looking for archaeological and linear built environment resources, but not for standing buildings.

Archaeological and linear built environment resources that they encountered, whether previously or newly recorded, were recorded or updated on DPR 523 forms. The majority of these have not been evaluated for CRHR, San Diego County, City of San Diego, City of Escondido, or City of Poway eligibility as historic properties (SDG&E and SoCalGas 2015; Castells et al. 2015, 2016; Davis 2015, 2016a, 2016b; Williams 2016a, 2016b; Manchen and Williams 2017). Previously recorded standing building site forms were not updated during field surveys.

A reconnaissance-level survey was also conducted to identify built environment resources more than 45 years old. This survey methodology included photography of the resources identified and recording information in DPR forms.

The technical reports that accompany the Proponent’s Environmental Assessment, and its supplements, have provided most of the data presented in this MEA; data collected from the various historic properties registers, from SCIC, from the field, and from state landmarks and other lists also were used to inform this analysis (SDG&E and SoCalGas 2015; Castells et al. 2015, 2016; Davis 2015, 2016a, 2016b; Williams 2016a, 2016b; Manchen and Williams 2017).

#### Public Comment

Cultural resources considered important and mentioned by community members during scoping meetings and through comments sent in by mail to the California Public Utilities Commission (CPUC) have been added to the list of resources.

#### Native American Consultation

Consultation with California Native American tribes and individuals with knowledge of the region of the proposed project provides the opportunity for tribes to participate early in the project planning stage in order to identify cultural places, sacred lands, and tribal cultural resources within the AOC. Consultation allows tribes to provide comments and recommendations on the appropriate ways to protect or mitigate impacts on cultural places, sacred lands, and tribal cultural resources, if a proposed project were to be developed. Consultation was conducted by both the applicants and the CPUC.

### **3.5.1.3 Regional Setting**

#### ***Geologic Setting***

The geological setting of the proposed project is in the San Diego area of the Peninsular Ranges Geomorphic Province. The Peninsular Ranges are the result of the Pacific Plate and the North American Plate grinding past each other and forming north-south trending mountain ranges where the two plates collide along the San Andreas Fault Zone. The Peninsular Range Province extends from Mount San Jacinto in the north to Baja California in the south. (Wagner 2002)

San Diego County is informally divided into three geomorphic regions: the Coastal Plain Region of valleys next to the coast, the Peninsular Range Region of hills and mountains, and the Salton Trough Region in the east. The southern end of the proposed project would be sited on the easternmost side of the Coastal Plain Region, and this is where most of the paleontologically sensitive formations occur. The northern portion of the proposed project, where increases in elevation would occur, enters the Peninsular Range Region, which is primarily composed of Cretaceous igneous and Mesozoic metamorphic rocks with Holocene to Pleistocene sedimentary units in the valleys. (County of San Diego 2011)

Within the paleontological study area, numerous geologic formations are present and span from modern artificial fill to Early Cretaceous to Early Jurassic metamorphic rocks estimated to be between 140 and 200 million years old (mya; see Table 3.5-1) (Donohue and Deméré 2015; Donohue 2016).

Sedimentary rocks older than 11.7 thousand years (kya) have the potential to contain the in situ remains of extinct animals. Younger deposits can contain fossils that have been redeposited from older sediments, but they have lost their scientific value. The locations and Paleontological Potential Ratings of all geologic formations within the study area are addressed in Section 3.5.1.4, Paleontological Resources.

The following paragraphs provide a discussion of the various geologic units located within the study area.

#### Modern Artificial Fill (af)

Modern artificial fill deposits are the product of construction activities. Artificial fill is frequently present near roads from modern construction. Many of these deposits do not appear on geologic maps due to their small size or when the fieldwork was conducted for the maps. In California, these deposits are typically less than 100 years old and do not contain scientifically significant fossils, if any at all. Artificial fill ranges in thickness from less than 1 foot (0.3 meter [m]) to more than 20 feet (6 m) thick for some overpasses.

#### Late Holocene Wash Deposits (Qw)

Sediments are less than 4.2 kya (Walker et al. 2012) and, as such, are too young to contain fossils. These are the unconsolidated, active portions of modern washes and rivers in valleys and along the surfaces of alluvial fans. Sediments consist of sand to boulder clasts from local sources and coarsen upstream. The largest clasts are deposited during heavy storms and flash floods, and channels are frequently reworked during these instances (Kennedy and Tan 2007).

#### Holocene Alluvium (Qya)

These deposits are less than 11.7 kya (Gibbard and Head 2010) and, as such, are too young to contain fossils. Deposited in river beds and on alluvial flood plains, these poorly consolidated, permeable deposits consist of clasts ranging from pebble to clay (Todd 2004).

#### Holocene to Late Pleistocene Alluvial Flood-plain Deposits (Qya)

These sediments are less than 126 kya (Gibbard and Head 2010) and were deposited along more level areas of the region, carried away from river channels and alluvial fans during flooding events. Sediments are poorly consolidated, poorly sorted sands to clays (Kennedy and Tan 2007, 2008). Deeper sediments are older and can contain the remains of extinct, late Pleistocene terrestrial vertebrates.

#### Holocene to Late Pleistocene Colluvium (Qyc)

These deposits are typically less than 126 kya (Gibbard and Head 2010) and thinly cover much of the hillsides and mountain slopes. Typically, this deposit is not mapped unless it is a major deposit or for the purposes of a geologic map that focuses on the Quaternary deposits of a region. Sediments are poorly consolidated and poorly sorted, and clasts range from sands to clays (Kennedy and Tan 2007). Although old enough to contain the remains of extinct, late Pleistocene terrestrial vertebrates, the greater the exposure time to air, the more likely a bone is to weather away instead of being preserved.

Table 3.5-1 Geologic Units within the Study Area

Geologic Age	Age Range	Group	Formation; Age, and "Stage" <sup>(a)</sup> Notes
Modern	Typically less than 100 years old	none	artificial fill
Late Holocene	Less than 4.2 kya <sup>(b)</sup>		wash deposits
Holocene	Less than 11.7 kya		alluvium
Holocene to late Pleistocene	Less than 126 kya		alluvial flood-plain deposits
Late Pleistocene	11.7 to 126 kya		colluvium
Middle Pleistocene	126 kya to 781 kya		older alluvium
Quaternary	Less than 1.8 mya		Lindavista Formation
			landslide deposits
Middle Eocene	41.2 to 47.8 mya <sup>(c, d)</sup>	Poway	Pomerado Conglomerate; late Uintan NALMA, 41.2 to ~44 million years old <sup>(c, d, e)</sup>
			Mission Valley Formation; late Uintan NALMA, 41.2 to ~44 million years old, <sup>(c, d, e)</sup> "Tejon Stage" <sup>(c)</sup>
			Stadium Conglomerate; early Uintan NALMA, ~44 to 47.8 million years old; <sup>(c, d, e)</sup> "Tejon Stage" <sup>(c)</sup>
		La Jolla	Friars Formation; early Uintan NALMA, ~44 to 47.8 million years old <sup>(c, d, e)</sup>
			Torrey Sandstone
Early Cretaceous	100 to 146 mya <sup>(d, f)</sup>	none	Granodiorite of Indian Springs
			Monzogranite of Merriam Mountain
			Granodiorite of Rainbow
			Granodiorite of Woodson Mountain
			Granodiorite of Jesmond Dean
			Granodiorite of Indian Mountain
			diorite, undifferentiated
			tonalite, undifferentiated
			granodiorite and tonalite, undifferentiated
			quartz bearing diorite, undifferentiated
			gabbro, undifferentiated
			granite, undifferentiated
			metamorphosed and unmetamorphosed volcanic and sedimentary rocks, undifferentiated
Early Cretaceous to Early Jurassic	~140 to 200 mya <sup>(d, f)</sup>		

Sources: (b) Walker et al. 2012; (c) Kennedy and Tan 2008; (d) Cohen et al. 2013; (e) Alroy 2000; (f) Kennedy and Tan 2007

Notes:

Unless noted, all units are as per Kennedy and Tan 2007 or 2008.

Quaternary age ranges are as per pre-Gibbard and Head 2010 revision to the Quaternary, which pushed the start back from 1.8 million to 2.58 million years ago. Geologic Age naming has been updated to match Gibbard and Head 2010. Other age ranges as per Cohen et al. (2013) and refer to the span of the associated Geologic Age unless otherwise noted. Lower Cretaceous of Kennedy and Tan 2007 and mid-Cretaceous of Kennedy and Tan 2008 are Early Cretaceous based on the Age Ranges of these publications.

(a) Stage refers to informal Californian "Marine Molluscan Stage"

Key:

kya = thousand years old

mya = million years old

NALMA = North American Land Mammal Age

**Late Pleistocene Older Alluvium (Qoa)**

Sediments are between 11.7 and 126 kya (Gibbard and Head 2010) and are composed of locally derived, fluviially transported cobbles, sands, silts, and clays. The deposits found downstream of the source rocks are poorly sorted, permeable, and moderately well consolidated. They are exposed at the surface in many recently uplifted areas, such as valleys in the mountains, and because of this, can be slightly dissected at the surface (Kennedy and Tan 2007). These deposits are also present under most of the Holocene floodplains at about 10 feet (3 m) deep.

**Quaternary Landslide Deposits (Qls)**

Less than 2.58 mya (Gibbard and Head 2010), landslides can retain much or lose most of the geologic context of any beds that are carried by the slides. Deposits can be unconsolidated to moderately well consolidated, and slides can be reactivated after the initial failure (Kennedy and Tan 2007, 2008).

**Middle Pleistocene Lindavista Formation/Very Old Paralic Deposits (Qvop units 6-1)**

Locally named the Lindavista Formation and also mapped as very old paralic deposits, these sediments range from 126 to 781 kya (Gibbard and Head 2010). Deposited in interfingering estuarine, beach, strandline, and colluvial environments, sediments are poorly sorted, moderately permeable, reddish brown siltstones, sandstones, and conglomerates (Kennedy and Tan 2007, 2008). Fossils from the Lindavista Formation are primarily marine invertebrates (Gastil and Higley 1977).

The oldest deposit is unit 1, while the youngest within the study area is unit 6. As the area was uplifted, the oldest sediments of unit 1 were preserved on the highest terrace deposit (see Table 3.5-2).

**Table 3.5-2 Terraces and Elevations of the Lindavista Formation/Very Old Paralic Deposit Units**

Unit	Terrace	Elevation
Qvop <sub>6</sub>	Black Mountain terrace	456 feet
Qvop <sub>5</sub>	Rifle Range terrace	502–515 feet
Qvop <sub>4</sub>	Aqueduct terrace	558–571 feet
Qvop <sub>3</sub>	Aliso Canyon terrace	594–607 feet
Qvop <sub>2</sub>	Flores Hill terrace	623–636 feet
Qvop <sub>1</sub>	Eagle terrace	659–673 feet

Source: Kennedy and Tan 2008.

Key:

Qvop: Very Old Paralic Deposits

**Middle Eocene Pomerado Conglomerate (Tp)**

The middle Eocene (41.2 to 47.8 mya; Cohen et al. 2013) Pomerado Formation caps the Poway Group. This massive, terrestrial, cobble conglomerate with a dark yellowish-brown, coarse-grained sandstone matrix is 184 feet (56 m) thick at the type section (Kennedy and Tan 2008). The formation overlies, but is also equivalent to, portions of the Mission Valley Formation and the Stadium Conglomerate (Kennedy and Peterson 1975; Hall 2007). In many ways, the Pomerado Formation is identical to the underlying Stadium Conglomerate, with the exception of the presence of Poway clasts (Todd 2004). Sandstone beds within the formation contain late Uintan (41.2 to approximately 44 mya) (Alroy 2000; Cohen et al. 2013) terrestrial vertebrate fossils (Walsh et al. 1996).

**Middle Eocene Mission Valley Formation (Tmv)**

The middle Eocene Mission Valley Formation consists of light olive-grey, friable, fine- to medium-grained sandstone with cobble conglomerate tongues of nearshore marine shelf and terrestrial sediments. At the center of the Poway Group, the Mission Valley Formation reaches a maximum thickness of 167 feet (60 m) (Hall 2007 [p. 148]; Kennedy and Tan 2007, 2008). The finer-grained portions of the formation contain terrestrial vertebrate fossils of a late Uintan (41.2 mya to approximately 44 mya)

(Walsh et al. 1996; Alroy 2000; Cohen et al. 2013) and a “Tejon Stage” marine mollusk fauna (Kennedy and Moore 1971; Givens and Kennedy 1979).

#### Middle Eocene Stadium Conglomerate (Tst)

The Stadium Conglomerate rests at the base of the Poway Group. This massive cobble conglomerate with a dark yellowish-brown, coarse-grained sandstone matrix is 164 feet (50 m) thick at the type section (Kennedy and Tan 2007, 2008). Clasts average in the cobble range, and boulders can be as large as 1.6 feet (0.5 m) (Kennedy and Peterson 1975). The formation is lithologically identical to the overlying and partially temporally equivalent Pomerado Formation, with the exception of the presence of “Poway clasts” of metamorphosed volcanic cobbles and quartzite (Todd 2004). Instead of being entirely terrestrial in origin as the Pomerado Conglomerate was, these sediments were deposited in a deltaic environment (Hall 2007 [p. 148]). Sandstone beds within the formation contain an early Uintan (approximately 44 mya to 47.8 mya) (Alroy 2000; Cohen et al. 2013) terrestrial vertebrate fauna (Walsh et al. 1996) and a “Tejon Stage” marine mollusk fauna (Givens and Kennedy 1979).

#### Middle Eocene Friars Formation (Tf, Tfr)

The massive, yellowish grey, poorly indurated, medium-grained, sandstones and claystones with cobble conglomerate tongues are formed of marine lagoonal and fluvial sediments (Todd 2004 [Tfr]; Kennedy and Tan 2007, 2008 [Tf]). Placed within the La Jolla Group, the Friars Formation is a maximum of 164 feet (50 m) thick (Todd 2004). The finer-grained portions of the formation contain an early Uintan (approximately 44 mya to 47.8 mya) (Alroy 2000; Cohen et al. 2013) terrestrial vertebrate fauna (Walsh et al. 1996).

#### Middle Eocene Torrey Sandstone (Tt)

White to light brown, moderately well indurated, medium- to coarse-grained, massive to broadly cross-bedded arkosic sands were deposited in an estuarine or a barrier beach environment (Hall 2007; Kennedy and Tan 2007, 2008).

#### Early Cretaceous Intrusive Igneous Rocks

Eleven mid-Cretaceous (approximately 86.3 mya to 129 mya) (Cohen et al. 2013) formations of granite, monzogranite, granodiorite, tonalite, diorite, and gabbro are mapped along the proposed project route. All of these igneous deposits are the result of magma that cooled underground (Todd 2004; Kennedy and Tan 2007, 2008). None of these units have the potential for fossils.

#### Early Cretaceous to Early Jurassic Metamorphosed and Unmetamorphosed Rocks (Mzu)

These Early Cretaceous to Early Jurassic (approximately 140 to approximately 200 mya) (Cohen et al. 2013) low to high metamorphosed and unmetamorphosed, volcanic and meta-sedimentary rocks crop out throughout the proposed project. The sediments were deposited in a marine environment that also includes subaerially deposited island arc volcanics. (Kennedy and Tan 2007, 2008)

### ***Cultural Setting***

The cultural history within the San Diego region can be divided into three non-exclusive and sometimes overlapping periods: (1) prehistory (more than 500 to 600 years ago, but up to and including 1769, when there is documented, continued contact between Native American groups and Spanish and European settlers), (2) Native American ethno-history (1769 to the present), and (3) history (roughly 1769 to the present).

#### Prehistory

Prehistoric cultural chronology for the San Diego region subsequent to approximately 12,000 years ago is divided into three broad periods: Paleoindian (San Dieguito Complex), Archaic (La Jolla Complex/ Encinitas Tradition), and Late Prehistoric. The sequence is based on syntheses by Rogers (1939, 1945,

1966), Wallace (1955, 1978), Moriarty (1966), Warren (1967, 1968), and True (1980), among others. No accepted evidence of occupation in this region is present prior to 12,000 years ago.

The three prehistoric sub-periods defined for the prehistoric cultural chronology of the San Diego area are as follows:

- San Dieguito Complex. This period dates from 9,030 to 8,000 years before present (B.P.). Sites from this period have been identified in the past as part of the Western Lithic Co-Tradition or the Western Pluvial Lakes Tradition. Occupants of most sites appear to have made use of coastal and inland resources. Artifacts include biface points and knives, scrapers, cobble tools, milling tools, and bone tools used to process plants, shellfish, fish, bird, and small and large mammals. (Davis et al. 1969; Bedwell 1970)
- La Jolla Complex/Encinitas Tradition. This period dates from 8,600 to 1,300 years B.P. The Pauma Complex, located further inland, is similar to the La Jolla Complex but lacks shellfish (True 1980). Doughnut stones, discoidals, stone balls, plummets, Elko-eared points and stone, and shell and bone beads appear in this period, and shellfish gathering decreases. Hunting tools initially consisted of the atlatl and dart, but quickly advanced to bow and arrow. Most sites in California were in coastal areas.
- Late Prehistoric Cultures. This period dates from 1,300 years B.P. to historic contact (1769). The cultures are divided into two groups: “San Luis Rey” (Shoshonean) in northern San Diego County and “Kumeyaay” (Yuman) in southern San Diego County. Sites from this period largely include ceramics, although Cuyamaca<sup>1</sup> sites have more variety of type, such as pipes and effigies. Use of other traditional tools continues; marked differences between the two groups include Cuyamaca clay-lined hearths and cemeteries separate from living areas.

### ***Native American Ethnohistory***

Two Native American tribes use the area within and surrounding the survey area, the Luiseño and the Kumeyaay. The information in this section provides a brief overview of the socio-political organization, subsistence and cultural practices, and beliefs of the Luiseño and the Kumeyaay from 1769 to present day.

#### **Luiseño**

The northern portion of the survey area would be within the traditional use area of the Luiseño, so named due to their association with the San Luis Rey Mission. They call themselves *Payómkawichum* (People of the West). The Luiseño traditional use area extends from southern Orange County, south through Riverside County to northern Escondido. The language the Luiseño speak is part of the Cupan group of the Takic subfamily of the Uto-Aztecan language family. Oral histories state that life started in the Temecula Valley at *‘Éxva Teméeku*, the birthplace of the Luiseño First People, the *Káamalam. Teméeku* was the place where the world came to be. (Pechanga Band of Luiseño Indians 2017)

Specific details of Luiseño social structure are difficult to reconstruct due to the effects of missionization; however, based on information collected by missionaries and converted Luiseño community members, their social structure is described as including a complex hierarchy of shamans and secular leaders, who guided the community’s social and political tasks for successful resource exploitation. Certain parcels of land containing oak trees and other food resources were traditionally used, and generally recognized as belonging to a specific lineage. Whether Luiseño lineages formed larger kinship units prior to historic contact is not clear from discussions in current literature. (Bean and Shipek 1978)

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<sup>1</sup> “Cuyamaca” is a Spanish version of the name the native Kumeyaay peoples used for this region.

The integral geographic and sociopolitical unit of the ethnohistoric Luiseño was the rancheria, which included one or more village locations. Abundant natural resources along the valley floor sustained semi-permanent villages whose residents claimed additional lands on Palomar Mountain. The traditional settlement pattern consisted of secondary and autonomous village groups, each with specific hunting, collecting, and fishing areas located in diverse ecological zones. Typically, these were in valley bottoms, along streams, or along coastal strands near mountain ranges. (Bean and Shipek 1978)

Two or more permanent base camps were used, along with a number of special purpose camps, such as quarry sites, hunting blinds, and milling stations. One type of base camp was the winter village, which was occupied continuously for 4 to 6 months annually; this was where most ceremonies took place. Winter villages were generally located in sheltered valleys and often featured pictographs associated with rituals. The other type of base settlement was the late summer/fall, acorn-gathering and hunting camp, located near oak trees owned by the village group. The entire village lived and worked together in these base camps. (Bean and Shipek 1978)

In spring, the winter village group was divided into smaller family groups. These groups would occupy different areas where fresh vegetables resources were available, or they would go to the coast for shellfish gathering. The spring disaggregation is a normal occurrence in gathering societies. It occurs after winter supplies have been depleted, and it compensates for the paucity of resources in spring. The late summer/fall camps also were subdivisions of the main villages group and were occupied by kin-groups. The major coalescence occurred in the winter villages, after the varied resources were gathered, and the subsistence of the village was assured. (Bean and Shipek 1978)

Today, the Luiseño consist of six federally recognized tribes: the La Jolla Band of Luiseño Indians, the Pala Band of Mission Indians, the Pauma Band of Luiseño Indians, the Pechanga Band of Luiseño Indians, the Rincon Band of Luiseño Indians, and the Soboba Band of Luiseño Indians. The Luiseño also include two non-federally recognized bands, the San Luis Rey Band of Mission Indians and the Mount Laguna Band of Kwaaymii Indians. The 2010 U.S. Census shows that 7,392 people self-identified as Luiseño (United States Census 2010).

### Kumeyaay

A portion of the survey area is located within the historical territory of the Kumeyaay, which extends from northern Escondido to some distance south of Ensenada in northern Baja California, and east nearly as far as the lower Colorado River. The Kumeyaay were historically referred to as the Diegueño after their association with the Mission San Diego de Alcalá. The Takic-speaking Luiseño and Cahuilla lived to the north, and other inhabitants who spoke a variety of distinct languages belonging to the Yuman language family were located to the east and to the south. The Kumeyaay can be divided into two regional groups separated by the San Diego River. The northern group is known as the Ipai, and the southern group is known as the Tipai. (Loumala 1978)

The Kumeyaay were organized into autonomous bands, which usually occupied a main village and several smaller habitation sites. Communities disbanded seasonally and established smaller groups of 200 to 1,000 people to gather, process, and store resources. Subgroups spoke individual dialects and often intermarried. (Royo 1999)

As typical of California seasonal hunters and gatherers, the Kumeyaay diet consisted mainly of plant foods, especially acorns, but also various other seeds and bulbs. This was supplemented by small game, including mammals and reptiles, and coastal inhabitants also had access to fish, shellfish, and sea mammals (Loumala 1978). Plants also were utilized for medicinal, ceremonial, and utilitarian purposes. The medicinal use of plants covered a wide range of ailments, including European-introduced diseases such as syphilis, smallpox, and tuberculosis (Dennis et al. 1998). Ceremonial usage included tattoos,

girls' puberty ceremonies, and rock art. A variety of objects were manufactured with plant materials, including houses, granaries, baskets, nets, adhesives, clothing, and soaps (Dennis et al. 1998). The Kumeyaay maintained extensive trade networks as far east as the Colorado River, moving acorns, dried seafood, and seashells eastward and bringing salt, seeds, and mesquite beans west (Loumala 1978).

Trade routes also were used for communication. Runners could relay important information over great distances in a relatively short time. When the Quechan at Yuma rebelled against the Spanish in 1780, the news reached the Kumeyaay at the Mission in San Diego that same evening, a distance of 120 miles (Connolly Campo 2013).

Today, the Kumeyaay consist of 12 federally recognized tribes: the Barona Group of Capitan Grande Group of Mission Indians, the Campo Band of Kumeyaay Mission Indians, the Ewiiapaayp Band of Kumeyaay Indians, the La Posta Band of Diegueno Mission Indians, the Manzanita Band of Diegueno Mission Indians, the Mesa Grande Band of Diegueno Mission Indians, the San Pasqual Band of Diegueno Mission Indians, the Iipay Nation of Santa Ysabel, the Sycuan Band of the Kumeyaay Nation, the Viejas Band of Kumeyaay Indians, the Inaja Band of Diegueno Mission Indians of the Inaja and Cosmit Reservation, and the Jamul Indian Village. The 2010 U.S. Census shows that 5,432 people self-identified themselves as Kumeyaay (Diegueno) (United States Census 2010).

### ***History***

Pertinent themes for the historic context (i.e., the setting in which resources are evaluated) include the Spanish occupation, Mexican occupation, American settlement/agriculture, transportation, and 20th century urbanization. The discussion that follows describes each theme and how it relates to the survey area.

#### **Spanish Occupation, 1769–1821**

California was claimed by Spain in 1542 and was occupied by Spaniards beginning in 1769, with a presidio and a mission established by the Franciscans in present-day San Diego (Aviña 1976). Even at this early date, San Diego was important as a coastal port for carrying on trade with the Philippines, as well as receiving supplies from Mexico, which also was held by the Spanish. Spanish soldiers and priests followed the Franciscans, establishing pueblos and missions in California, as far north as San Francisco to ensure Spain's hold on this remote territory. Nearly 30 years later, on June 13, 1798, the eighteenth mission in California was founded approximately 5 miles east of present-day Oceanside (CMRC 2016). Named Mission San Luis Rey de Francia, it is referred to as the "King of the Missions."

In October of 1797, Father Juan Norberto de Santiago, during an expedition out of Mission San Juan Capistrano, came through the Temecula area in search of a site for a new mission. With his party of seven soldiers, he traveled to the shore of present-day Lake Elsinore, then southward through the Temecula Valley and on to the ocean (City of Temecula 2017).

In 1816, Franciscans from Mission San Luis Rey de Francia established the asistencia of San Antonio de Pala, which was located within a mission rancho located approximately 25 miles east of Mission San Luis Rey de Francia (CMRC 2016). Here, as elsewhere, the mission priests began Christianizing the local Native Americans. The Pala asistencia still stands and is located approximately 5 miles east of the survey area. While the most intensive use and occupation of the area by Spaniards occurred along the San Diego County coast, the interior region also was occupied and exploited.

#### **Mexican Occupation, 1821–1848**

Mexico gained independence from Spain in 1821. In 1833, the mission lands were secularized (Secularization Act of 1833), with much of the land being transferred to political appointees. Ranches and farms were established throughout the San Diego area (Cowan 1977; Ohles 1997). In 1821, Jose Sanchez,

a Franciscan priest, accompanied Mariano Payeras, prefect of the missions, on a visit to the village of Temecula (City of Temecula 2017). The “Rancho Mission San Diego de Alcalá” was given to Santiago Arguello by Governor Pio Pico in 1846; it consisted of 59,076 acres and encompassed a portion of the northern San Diego area. The land was given to Arguello for his military service to Mexico in its war against Spain. (Union Title 1968)

East of San Diego was Rancho El Cajon, encompassing El Cajon, Flinn Springs, Santee, Lakeside, Bostonia, and land further to the east. Inland and approximately 25 miles north of San Diego was the Rancho San Bernardo, originally called “El Paraje O Canada de San Bernardo,” granted to Don Jose Snook between 1842 and 1845 (Rossi 2012). Just to the north, Juan Bautista Alvarado established Rancho El Rincon del Diablo, which encompassed the future site of Escondido (Fark 2017). Further north, Rancho Temecula was granted to Felix Valdez in 1845 and encompassed the area that was later to become the city of Temecula (City of Temecula 2017). At most of the ranchos, cattle raising was the primary land use, though raising of crops, orchards, and vineyards also were established.

### Mexican War

In 1846, the Mexican-American War erupted, following the Bear Flag Revolt (Ohles 1997). One battle, possibly the best known and most controversial skirmish of the Mexican War, occurred within 5 miles of the survey area. This was the Battle of San Pasqual, which took place in the San Pasqual Valley, east of present-day Escondido (Regan 2016). It occurred on December 6, 1846, with American forces led by Brigadier General Stephen Watts Kearny and Mexican troops led by General Andrés Pico.

On October 6, 1846, Kearny traveled toward San Diego from Arizona with 121 men, including Kit Carson, a well-known American frontiersman. Lieutenant Archibald Gillespie and a small volunteer group joined the party, informing them that a group of Mexican insurgents were camped at San Pasqual, 6 miles to the west. Although it was raining heavily, and Kearny’s party had low morale and were in a poor state, Kearny planned an attack on the Mexicans for the next morning. (Regan 2016)

That night, the Mexicans learned of Kearny’s presence and left their camp; Kearny pursued them. The battle is said to have lasted as little as 15 minutes, in which time the Americans suffered huge losses, particularly among their officers. Fog and clouds obscured commands and line of sight for the advancing Americans. The rain also dampened their gun powder such that their rifles would not fire. The Californios, as the Mexican soldiers were called, killed 21 Americans and seriously wounded 17 others, including Kearny and three captains. They easily won the brief battle in San Pasqual Valley. (Regan 2016)

Kearny and company were surrounded by Pico’s force the next day on what is known as Mule Hill at Rancho San Bernardo, near the proposed project. The Americans had retreated to the hill and soon ran out of food. They were forced to eat their own mules and horses. Fortunately, they were rescued by an American relief force from San Diego (Regan 2016). The Mule Hill Trail, which is the path Kearny and his men traveled from the San Pasqual battlefield to Mule Hill, is located within the survey area.

Another battle took place in January of 1847 in a canyon near Temecula, involving Mexican soldiers and Temecula and Cahuilla Indian groups. The Temecula warriors captured and killed 11 Mexican soldiers. More Mexican soldiers were sent to catch the Temeculans and avenge the executions. They enlisted the help of a Cahuilla group, who held a grudge with the Temeculans over previous conflicts. The Mexicans were able to lure the Temeculans out of a canyon they were hiding in, enabling the Cahuillas to kill them. The Temeculans were buried in a common grave seven days later, near present-day Highway 79. (City of Temecula 2017)

The following year, General Andrés Pico and John C. Frémont signed the Articles of Capitulation, ending hostilities between the United States and Mexico. Mexico relinquished California with the Treaty of Guadalupe Hidalgo in 1848 and ceded the lands of present-day California to the United States (Fogelson 1993 [page 10]). Within two years of the Treaty of Guadalupe Hidalgo, California applied for admission as a state.

### American Settlement/Agriculture, 1850–1950

The County of San Diego and the City of San Diego were established in 1850, following California statehood. Once California had officially become part of the United States, it was extremely common for the established Mexican ranchos to be sold or otherwise acquired by non-Mexicans.

### Temecula

Temecula was first a rancho, then a village during the Mexican period. By 1857, it had a store, and the first stagecoach to enter Temecula Valley arrived that same year. Late in 1858, the first Butterfield Overland stagecoach line arrived in Temecula, and in 1859, a post office was established at the Magee Store. During the late 1860s, Temecula received a wave of immigrants from the eastern United States, largely people who were discontented after the Civil War. (City of Temecula 2017)

While the Overland stagecoach service stopped due to the Civil War, the railroad (California Southern Railroad) arrived in 1882 from National City and San Diego. The railroad line, however, was washed out by severe rains in 1884, leaving the town again without railroad service. This loss of transportation hampered the growth and development of the community. (Solomon 2009; City of Temecula 2017)

### Escondido, 1850s–1888

Juan Bautista Alvarado, owner of the Rancho El Rincon del Diablo, died in the early 1850s, as did his wife. Their children sold their shares of the rancho to a San Diego judge, Oliver S. Witherby, who farmed the land and grazed sheep and cattle. In the early 1860s, Witherby also began mining gold on his property and built an ore mill that he named the Rincon del Diablo and Escondido Mining Company. This was the first recorded use of the word “Escondido.” (Fark 2017)

By 1868, Witherby sold his rancho to others, who converted the primarily cattle ranch into a sheep ranch, which operated for the next 15 years. During this time, reports of the valley’s beauty and good climate circulated, bringing more people to the area. In 1884, the Escondido Company purchased the property and planted a large vineyard of Muscat grapes requiring little irrigation. Escondido soon was known for its Muscats. Within a few years, the Escondido Company deeded the area to the Escondido Land & Town Company, which subdivided the land, planting more vineyards and citrus groves. (Fark 2017)

In 1886, Escondido had its beginnings as a town. The Escondido Land & Town Company constructed the 100-room Escondido Hotel and attracted seven churches to the area by offering free land to any religious organization that would build a church there. The University of Southern California built a three-story seminary for college students on the hill at present-day Third Avenue and Hickory Street. Later, it became Escondido’s first high school (1894). (Fark 2017)

Construction of the San Diego Central Railway, an affiliate of the Atchison, Topeka, and Santa Fe Railroad, was started in March 1887, connecting Escondido to Oceanside. The Escondido Land & Town Company invested in the railroad because they knew it was critical for movement of local products and for the development of the community. (Dodge 1889; Fark 2017)

The Santa Fe Depot was built on Grand Avenue to accommodate this service, and it served passengers until after World War II in 1945. The City of Escondido was incorporated on October 8, 1888, at which time it had a population of 249. (Fark 2017)

### Bernardo, 1848–1965

Don Jose Snook was owner of the Rancho San Bernardo during the Mexican period. He died in 1848. He was an English sea captain who eventually settled on a land grant, became a Catholic and a Mexican citizen, and in 1837 married Maria Antonia Alvarado, a member of a prominent Spanish explorer family. Snook had established the ranch as a large stock-raising operation and raised cattle, horses, sheep, oxen, and mules on his property. Upon his death in 1848, the ranch was left to his siblings in England, with his widow receiving a life estate. John Snook, one of Don Jose Snook’s brothers who had come from England, took over the ranch. Following his death in 1852 and Maria’s in 1862, the property was inherited by six nieces and nephews, all in England, who opted to sell the property. (Rossi 2012)

With the new owner, James McCoy, subdivision of the rancho began. McCoy sold off parts of his acreage to three men, two of whom further subdivided their property into smaller ranches. By 1872, enough settlers were in the area to require mail delivery three times a week; a fourth-class post office given the name “Bernardo” was established. In a few more years, the first general store was established in Bernardo, followed by a blacksmith shop and other businesses. At this time, it was a village of farmers and ranchers. The town of Bernardo flourished for a time, then declined and disappeared by the early 1920s. Its demise was hastened by the growth of the city of Escondido a few miles north and the completion of the Lake Hodges Dam and Reservoir in 1919. (Rossi 2012)

Portions of the original Rancho San Bernardo were still intact in the early 1920s, although privately owned. These portions of the ranch then were sold to the San Diego Water Company, and rancher George Daley leased the land from the water company until 1943, when he purchased the acreage from the water company. After Daley’s death in 1957, others bought the land with the purpose of developing a planned community. In the early 1960s, the self-contained Rancho Bernardo community was developed and by 1964 was home to 2,000 residents. (Rossi 2012)

### Poway, 1870s–1880s

In the 1880s, Poway had a population of almost 800 people, most of whom were farmers, dairymen, or bee-keepers. Poway began its development because of a population boom in San Diego. Other valleys in the area became populated for the same reasons. In 1871, stage coach service was begun through the Poway area, running from San Diego in the south to the Santa Maria Valley in the north. (SDCDPR 2013)

By the late 1880s, Poway included a general store, a church, a hotel, and a school, as well as farms where grapes and fruit trees were grown. Two different railroads attempted to establish lines through Poway around this time—the San Diego Central and the Southern Pacific Railroad. Neither company succeeded in their plans, leading to a land bust in Poway. (Castells et al. 2015)

### Transportation

#### *Government Highway, 1871–1873/Atkinson Toll Road/Mussey Grade Road, 1888*

William Tweed established the first stage coach service for the region in 1871, which traversed the “Government Highway” from San Diego through backcountry places like Mission Valley, Poway, San Pasqual Valley, and Santa Maria Valley. The route was slow and rough, and others attempted a better path by means of the Atkinson Toll Road in 1873. This road was steep and difficult to maintain, but continued in use until 1888, when it was superseded by a more usable, better road known as the Mussey-Matthew Cañon Road, which came to be known as the Mussey Grade Road. (SDCDPR 2013)

Portions of the Government Highway have not been identified within the survey area, but may exist in several locations.

### *US Highway 395, 1934–1986*

US Highway 395 (US 395) was first named as a United States Numbered Highway in 1926 by the American Association of State Highway Officials (AASHTO). The name, however, only referred to a section of road from Spokane, Washington, to the Canadian border, at British Columbia. In 1934, AASHTO declared that US 395 extended as far south as San Diego, California. It is composed of segments of many other existing roads, previously named California (CA) Legislative Route Number (LRN) 43 (CA 18), CA LRN 19 (US 60), CA LRN 78 (CA 740/CA 74) and CA LRN 77 (CA 71). By 1939, US 395 was fully marked with US 395 signs down to San Diego. (Kaiser 2008)

US 395 maintained its original configuration in northern San Diego County from 1934 until 1947. During this period, the highway followed a route north and west of Escondido that arched widely to the west, passing through San Marcos, Vista, Bonsall, and Fallbrook, then trudging northeast on Red Mountain Grade to Rainbow, California. In 1947, that section of the route was shifted to the east, to bypass San Marcos, Vista, Bonsall, and Fallbrook, forming a straighter, north-northwest trending stretch of highway between Escondido and Rainbow. In 1949, the Temecula bypass was constructed, which decommissioned the old Rainbow Canyon alignment, which has since become part of Interstate (I-) 15. (Kaiser 2008)

A portion of US 395 was improved to freeway standards in 1966, encompassing 20 miles of highway, from San Diego nearly to Escondido. In 1969, I-15 was named and officially occupied the US 395 route between Hesperia and San Diego. US 395 was designated as “Temporary I-15” for a time. By 1986, the new I-15 was completed through northern San Diego and Riverside Counties and US 395 was no longer designated “TEMP I-15.” (Kaiser 2008)

Segments of Old US 395 remain in the survey area, and some of these have been recorded by archaeologists as historic sites. Other segments have not been recorded, but likely exist within the survey area. US 395, like its successor I-15, contributed tremendously to the World War II and post-World War II development of northern and interior San Diego County, enabling commuters to work in San Diego and at military bases, while living in smaller towns and cities such as Poway, Escondido, Fallbrook, and Rancho Bernardo.

### Twentieth Century Urbanization

#### *Temecula*

The 1890s saw the development of a granite quarrying industry, and by the turn of the century, Temecula had become an important shipping point for grain and cattle. Large cattle drives took place through the town. Its first bank opened in 1914, and the first road was paved the following year. (City of Temecula 2017)

Into the 1960s, cattle and agriculture were the primary economic pursuits in Temecula Valley, but everything changed in 1964, when the very large and prominent Vail Ranch was sold to the Kaiser Development Company. Much of the land was subdivided and sold for housing tracts, and the name of the valley was changed to Rancho California, though some of the property became valuable avocado and grape-growing land. (City of Temecula 2017)

After the Vail Ranch was sold to the Kaiser Development Company, Temecula Valley was transformed into a new community known as Rancho California, as ranch and crop lands were subdivided for real estate development and home building. Once I-15 went through, in 1986, Temecula grew and prospered. The Rancho California city was incorporated, and the name was officially changed to Temecula. (City of Temecula 2017)

### *Escondido*

Following its incorporation as a city in 1888, Escondido continued to be known as a grape-growing area. To celebrate the grape harvest every September, the town organized an event, called “Grape Day” on September 9, 1908. Grape Day continued to be a very popular celebration until 1950, when the lack of grapes in the valley caused its demise. Grapes had been a fitting crop for the area because they required little or no water, and Escondido is an arid place. When water became available in later years, citrus and avocados replaced the vineyards, bringing more money per acre at harvest. (Fark 2017)

During the 1910s, 1920s, and 1930s, the town held its annual grape harvest festival at Grape Day Park. Other social events took place at this community gathering center, such as fiestas, German band concerts, other musical concerts, and parades down Grand Avenue. In 1946, Escondido formed the Philharmonic Arts Association and held its first concert series. (California Center for the Arts, Escondido 2017)

By 1950, US 395 linked Escondido to San Diego. As the county had many defense contracts in the 1950s due to both the Korean and Cold Wars, more people moved into the area. More housing was needed, which led to the building of subdivisions, and vineyards and citrus groves became home sites. Citrus production declined to the point that in 1960 the lemon packing house, thought to be the largest in the world under one roof, closed. Some citrus groves were replaced by avocados, but industry and retail gained in importance over agriculture. (Fark 2017)

In 1962, the city first formulated plans for a civic center meant to include a city hall, a community services center, and an arts center. The population of Escondido grew in the 1970s, leading to more subdivisions, more shopping centers, and a renewed interest in a civic center and the arts. In the late 1980s, the construction of such facilities came to fruition. (California Center for the Arts, Escondido 2017)

Since the mid-20th century, Escondido has become a bedroom community, although it does possess a large hospital, a modest commercial component, and a large arts center. (Fark 2017)

The agricultural industry was extremely important and integral to Escondido’s economic and social life and is still important in its history. The Old Escondido Historic District contains 900 houses and includes Escondido’s oldest neighborhood, with a mix of homes and styles dating from the 1880s to the present. (Fark 2017)

### *Vista*

While the community of Vista is outside the survey area, one segment of the Vista Irrigation District Bench Flumes (Aqueduct) (P-37-030889), a recorded historical resource, is within it. Due to its great importance in the development of Vista and surrounding agricultural fields and to its method of construction and unique design, the site is eligible for listing on the CRHR under criteria A and C.

The flumes are part of the Vista Irrigation District, which was created in 1923. The flumes were constructed between 1925 and 1927 and consist of a linear system of gunite bench flumes, tunnels, and above- and below-ground siphons that connect Dixon Reservoir to the east with Pechstein Reservoir on the west. The system is 11.25 miles long. To construct it, 7,300 feet of 42-inch gravity concrete pipe were employed, as well as 4,600 feet of 42-inch reinforced concrete pipe, 16,000 feet of 36-inch and 40-inch steel siphon, and 35,000 feet of gunite bench flume. The building of the flumes provided the town of Vista, with a population of 337 in January of 1926, with the resources to grow in population and in agricultural production. Within two years, Vista’s population had expanded to more than 1,000 persons, and maps for 19 subdivisions were filed. The flumes are of vital importance, as they have provided the community of Vista with potable water for more than 85 years. (Van Wormer and Walter 2016)

The flumes transect the survey area on the northern outskirts of Escondido, at North Nutmeg Street and consist of underground pipe at that location. In this location, they lay beneath the ground and presumably consist of 42-inch concrete pipe, though this is not known for certain. (Van Wormer and Walter 2016)

*Poway*

Though the railroads failed to materialize in the 1880s and drought hit the area, Poway managed to survive into the twentieth century. It carried on as a small town supported by agriculture, producing grain, alfalfa, peaches, and grapes into the 1970s, with the first subdivision being established in the late 1950s. Once a local reservoir was constructed nearby in 1970, Poway had an available water and energy source that enabled it to sustain a larger population and greater development. As homes and businesses were built, agricultural lands receded. The City of Poway was incorporated in 1980. (Castells et al. 2015)

Two single-family houses in Poway were recorded by the applicants as part of their surveys. Both are from the 1960s, dating to the transitional period between a primarily agricultural community and an urban, subdivided city of homes and commercial enterprises.

*San Diego*

San Diego experienced a population boom in the 1880s. This was due to gold rushes, land booms, and developments in transportation. Nevertheless, development proved slower than expected, and the 1888 population of more than 30,000 dwindled to just over 16,000 within five years. Many moved to Los Angeles (Furnis 2014). Nevertheless, its 1880s boom caused many outlying communities to come into existence as homesteaders, and others moved into the area. Communities, such as Poway, Escondido, Temecula, Rancho Bernardo, and others, were influenced by San Diego and continued to develop through the 20<sup>th</sup> century.

As shown in Table 3.5-3, the major themes and periods are reflected by the known built environment resources within the study area. Most of the resources recorded are twentieth century houses that are located within the cities of Temecula, Escondido, and Poway, each of which began as part of a Mexican land grant. The other resources are largely related to constructed infrastructural resources, such as roads, highways, water systems, and gas lines.

Table 3.5-3 Historic Themes, Resources, and Periods of Significance

Theme	Mexican Occupation 1821–1848	Settlement/ Agriculture 1850–1950	Transportation 1846–1975	Twentieth Century Urbanization 1900–1975
<b>Resource Name</b>				
Rancho Mission San Diego de Alcalá (a land grant), City of San Diego	X	X		X
Rancho El Cajon (a land grant)	X			
Rancho San Bernardo (a land grant), Rancho Bernardo (a city)	X	X		X
Rancho El Rincon del Diablo (a land grant), Escondido (a city)	X	X		X
Rancho Temecula (a land grant), City of Temecula	X	X		X
Mule Hill/ Mule Hill Trail (historic trail)	X		X	
Poway (a city)		X		X
US Highway 395			X	

Table 3.5-3 Historic Themes, Resources, and Periods of Significance

Theme	Mexican Occupation 1821–1848	Settlement/ Agriculture 1850–1950	Transportation 1846–1975	Twentieth Century Urbanization 1900–1975
Vista Irrigation District Bench Flumes (a water conveyance system)				X
Gas Line 1600				X

**Natural Resources**

The proposed project would be located within the Southern Coastal Sage Scrub floristic community of the Peninsular Ranges and South Coast floristic regions of the California Floristic Province (Hall 2007). An understanding of the natural resource setting helps to provide clues as to the types of plants and animals that may be present at archaeological sites, as well as the potential for preservation. Elevations within the proposed project range from 243 to 1,674 feet (74 to 510 m) (GoogleEarth 2017a). Elevations within the Peninsular Ranges Geomorphic Province and the Peninsular Ranges and South Coast floristic regions range from sea level to a maximum of 10,839 feet (3,303 m) at the peak of Mount San Jacinto at the northern end of the region (GoogleEarth 2017b).

The Southern Coastal Sage Scrub floristic community extends from sea level to approximately 3,000 feet (915 m) in elevation in coastal valleys, canyons, and hills, where the marine layer moderates temperatures and brings in moisture year-round (Hickman 1993). The climate consists of warm, dry summers and cool, moist winters. Annual rainfall averages 6 to 11 inches and falls primarily between November and March. El Niño conditions occur every 5 to 10 years and increase the rainfall totals to an average of 14 inches, but can be over 25 inches (Fisk 2017a). Current average daily temperatures range from 40 to 90 degrees Fahrenheit (°F) but can drop below 32°F and rise above 100°F. From 1870 to the present, average annual temperatures have increased from about 61.5°F to 65°F (Fisk 2017b).

Also known as soft chaparral, the Southern Coastal Sage Scrub floristic community is one of the most heavily impacted floristic communities in southern California due to urban expansion. Drought-resistant, fire-tolerant, and aromatic shrubs are characteristic of this province, with California sagebrush (*Artemisia californica*), black sage (*Salvia mellifera*), and wild buckwheat (*Eriogonum fasciculatum*) dominating the landscape. Other characteristic plants include our Lord’s candle (*Hesperoyucca whipplei*), coast prickly pear (*Opuntia littoralis*), white sage (*Salvia apiana*), bush monkeyflower (*Mimulus longiflorus*), deerweed (*Lotus scoparius*), and lupines (*Lupinus* spp.). (Hickman 1993)

Animal resources in this community include marine and terrestrial species of invertebrates, fish, reptiles, birds, and mammals. Native large land mammals include mule deer (*Odocoileus hemionus*), big horn sheep (*Ovis canadensis*), coyotes (*Canis latrans*), black bears (*Ursus americanus*), bobcats (*Lynx rufus*), and cougars (*Puma concolor*). Historically, pronghorn (*Antilocapra americana*), bison (*Bison bison*), grizzly bears (*Ursus arctos californicus*), and Mexican jaguars (*Panthera onca*) were present. (Williams 1986; SDNHM 2012)

The most common marine mammals are grey whales (*Eschrichtius robustus*), bottle-nosed dolphins (*Tursiops truncatus*), common dolphins (*Delphinus delphis*), pilot whales (*Globicephala macrorhynchus*), sea lions (*Zalophus californianus*), and harbor seals (*Phoca vitulina*). Historically, northern right whales (*Eubalaena glacialis*), sea otters, (*Enhydra lutris*), and fur seals (*Arctocephalus townsendi*, *Callorhinus ursinus*) were present. (SDNHM 2012)

Economically, important crops of the area include avocados, honey, lemons, and strawberries. Avocados were introduced to California in the mid-1800s and first planted in Fallbrook in 1912 (Chester 2000). San Diego County is currently the largest producer of avocados in the United States. Avocados have influenced the economy of the Fallbrook region, such that a portion of I-15 is called the Avocado Highway (San Diego County Farm Bureau 2017).

### 3.5.1.4 Paleontological Resources

The SDNHM records and literature search indicated 12 documented fossil collecting sites (localities) within the study area (see Table 3.5-4) (Donohue and Deméré 2015).

Table 3.5-4 Fossils from the San Diego Natural History Museum Department of PaleoServices  
Records Search within the Study Area

Number of Fossils	Common Name	Formation	Age	Localities	Location
29	Giant bison, bat, gopher, rabbit, squirrel, woodrat and other rodents, lizards, snakes, frogs, terrestrial snails, leaf impressions	Quaternary older alluvium	Pleistocene, Rancholabrean	SDNHM 6685, 6686, 6687	SR 76 / I-15 interchange
680	Ancient mammals (e.g., rodents, primates, insectivores, hooved ruminant mammals, hooved carnivorous mammals, and marsupials), crocodiles, lizards, turtles, and vascular land plants	Pomerado Conglomerate	Middle Eocene	SDNHM 3493, 4041, 4042	East of Lake Miramar, Eastview site 3 and Spring Canyon 1 and 2
17	Terrestrial vertebrates: soft-shelled turtles, rodents, insectivores, early primates, and hooved mammals; marine vertebrates: shark, ray, and bony fish teeth	Mission Valley Formation	Middle Eocene	SDNHM 3493	SR 52 west
169	Horse, camel, primate, rodent, extinct hooved mammals, carnivores, insectivores, bats, gliders, marsupials, turtles, crocodiles, lizards, snakes, frogs, birds, and land plants	Friars Formation	Middle Eocene	SDNHM 3498, 3591, 3865, 5538, 5539	East of Lake Miramar, Carmel Mountain Ranch Community

Key:  
I-15 = Interstate 15  
SDNHM = San Diego Natural History Museum Department of PaleoServices  
SR = State Route

One new fossil locality in the Mission Valley Formation was discovered approximately 1,000 feet east of the Proposed L2010 Extension Loop during the survey conducted by the SDNHM. Although unidentifiable, the presence of bone fragments during the survey illustrates that this area of the Mission Valley Formation has a high potential for fossil resources (Donohue and Deméré 2015).

Based on the mammalian biostratigraphy described by Walsh (1996), Walsh et al. (1996), and SDNHM unpublished paleontological mitigation reports, the assignments of the Eocene strata along the southern portion of the project area were found to differ from the age assignments of Kennedy and Tan (2008) (Appendix 1, page 5 in Donohue and Deméré [2015]). Most notably, the Torrey Sandstone is absent from this area, and deposits assigned to the Torrey Sandstone contain fossils characteristic of the Mission Valley Formation. Further, some deposits mapped as the Stadium Conglomerate may actually be

assignable to the conglomerate tongue of the Friars Formation based on the types of mammalian fossils recovered from these strata. Figure 2 in Donohue and Deméré (2015) shows the revised stratigraphy for the Eocene sedimentary rocks in the southern portion of the project area. Also shown are the general relationships of sedimentary, volcanic, and plutonic rocks that occur along State Route (SR) 52 from approximately the I-15 interchange in the west, to the SR 125 interchange in the east. It is noteworthy that all of the Eocene rock units/formations aforementioned are known to possess a high paleontological potential, and thus the distinction between these units is not a critical point. (Donohue and Deméré 2015)

**Paleontological Resource Potential Rating Analysis**

Using the results of the records and literature searches and survey, all geologic units within the study area were analyzed for their fossil potential. The County of San Diego’s Guidelines for Determining Significance were utilized to rank all units within the study area based on their potential to contain significant fossil resources, as shown in Tables 3.5-5 and 3.5-6 (County of San Diego 2009). Table 3.5-5 provides information for a course of action if development were to occur to resources with a particular resource potential rating.

**Table 3.5-5 Paleontological Resource Potential Ratings**

Potential	Description
<b>No Potential</b>	Geologic formations that are composed entirely of volcanic or plutonic igneous rock, such as basalt or granite, and therefore, do not have any potential for producing fossil remains. These formations have no paleontological resource potential, i.e. they are not sensitive. Assessment or mitigation of paleontological resources is unnecessary.
<b>Marginal</b>	Geologic formations that are composed either of volcanoclastic (derived from volcanic sources) or metasedimentary rocks, but that nevertheless have a limited probability for producing fossils from certain formations at localized outcrops. Volcanoclastic rock can contain organisms that were fossilized by being covered by ash, dust, mud, or other debris from volcanoes. Sedimentary rocks that have been metamorphosed by heat and/or pressure caused by volcanoes or plutons are called metasedimentary. If the sedimentary rocks had paleontological resources within them, those resources may have survived the metamorphism and still may be identifiable within the metasedimentary rock, but since the probability of this occurring is so limited, these formations are considered marginally sensitive. Assessment or mitigation of paleontological resources is not likely to be necessary.
<b>Low</b>	Geologic formations that, based on their relatively young age and/or high-energy depositional history, are judged unlikely to produce unique fossil remains. Low resource potential formations rarely produce fossil remains of scientific significance and are considered to have low sensitivity. However, when fossils are found in these formations, they are often very significant additions to our geologic understanding of the area. Surface-disturbing activities may require field assessment to determine appropriate course of action.
<b>Moderate</b>	Geologic formations known to contain paleontological localities. These geologic formations are judged to have a strong, but often unproven, potential for producing unique fossil remains. On-site monitoring or spot-checking will be necessary during construction activities.
<b>High</b>	High resource potential and high sensitivity are assigned to geologic formations known to contain paleontological localities with rare, well-preserved, critical fossil materials for stratigraphic or paleoenvironmental interpretation, and fossils providing important information about the paleoclimatic, paleobiological, and/or evolutionary history (phylogeny) of animal and plant groups. In general, formations with high resource potential are considered to have the highest potential to produce unique invertebrate fossil assemblages or unique vertebrate fossil remains and are, therefore, highly sensitive. On-site monitoring will be necessary during construction activities.

Source: County of San Diego 2009.

**Paleontological Resource Potential Classifications**

Geologic units assigned a “No Paleontological Resource Potential Ranking” include the modern artificial fill, unmapped Holocene to late Pleistocene colluvium, Quaternary landslide deposits, Cretaceous intrusive igneous rocks, and Early Cretaceous to Early Jurassic metamorphosed and unmetamorphosed volcanic and sedimentary rocks. These formations have no potential to produce in situ fossils, and no mitigation measures are required.

Table 3.5-6 Paleontological Resource Potential of the Project Area

Formations	Potential Rating <sup>(a)</sup>	Mileposts									
		0 to 5	5 to 10	10 to 15	15 to 20	20 to 25	25 to 30	30 to 35	35 to 40	40 to 45	45 to 47
Artificial fill, modern	no	u	u	u	u	X	u	u	u	u	u
Alluvial flood-plain deposits, Holocene to late Pleistocene	Low <sup>(b)</sup>	X	X	X	X	X	X	X	X	X	X
Colluvium, Holocene to late Pleistocene	Low <sup>(b)</sup>						X				
Landslide, Quaternary	no								X		
Older alluvium, late Pleistocene	low or high <sup>(c)</sup>	X	X		X	X	X	X			
Lindavista Formation, middle Pleistocene	moderate									X	
Pomerado Conglomerate, middle Eocene	high									n	n
Mission Valley Formation, middle Eocene	high							X	X	X	X
Stadium Conglomerate, middle Eocene	moderate							X	X	X	X
Friars Formation, middle Eocene	high							X	X		X
Torrey Sandstone, middle Eocene	moderate									X	
Granodiorite of Indian Springs, Early Cretaceous	no					X					
Monzogranite of Merriam Mountain, Early Cretaceous	no			X	X	X					
Granodiorite of Rainbow, Early Cretaceous	no	X									
Granodiorite of Woodson Mountain, Early Cretaceous	no					X	X				
Granodiorite of Jesmond Dean, Early Cretaceous	no			X	X	X					
Granodiorite of Indian Mountain, Early Cretaceous	no		X	X							
Diorite, undifferentiated, Early Cretaceous	no			X				X	X		
Tonalite, undifferentiated, Early Cretaceous	no	X	X	X			X	X			
Quartz bearing diorite, undifferentiated, Early Cretaceous	no					d?					
Gabbro, undifferentiated, Early Cretaceous	no	X		X			d?	X			

Sources: Kennedy and Tan 2007, 2008; Cohen et al. 2013

Notes:

Quaternary Geologic Age naming has been updated to match Gibbard and Head (2010). Lower Cretaceous of Kennedy and Tan (2007) and mid-Cretaceous of Kennedy and Tan (2008) are Early Cretaceous based on the Age Ranges of these publications.

(a) Potential Rating is as per County of San Diego (2009, 2011); Donohue and Deméré (2015).

(b) Potential Rating low in cuts <10 feet (<3 meters) (below the original topographic surface; deeper cuts would need to be evaluated for potential).

(c) Potential Rating low in Escondido and high elsewhere.

Key:

X = Present within the project area.

d? = Adjacent to the proposed project and may be present at depth within the project area.

n = Adjacent to the proposed project but is not likely to be present within the project area due to its stratigraphic position.

u = unmapped but probably present within the project area

Units assigned a “Low Paleontological Resource Potential Ranking” for sediments less than 10 feet below the original topographic surface include the late Holocene wash deposits, the Holocene to late Pleistocene alluvial flood-plain deposits, and mapped Holocene to late Pleistocene colluvium. The late Pleistocene older alluvium in the Escondido area is assigned a low paleontological resource potential ranking. These sediments have only a very slight potential to produce in situ fossils, because of their geologic age or paleoenvironment.

For the modern artificial fill, the late Holocene wash deposits, and the Holocene to late Pleistocene alluvial flood-plain deposits, a geotechnical report and project plans would aid in determining if potentially fossiliferous sediments are present. The thickness of the modern artificial fill would need to be reviewed on a case-by-case basis. For the late Holocene wash deposits and the Holocene to late Pleistocene alluvial flood-plain deposits and colluvium, late Pleistocene fossiliferous sediments typically are present more than 10 feet below the original topographic surface.

The middle Pleistocene Lindavista Formation, middle Eocene Stadium Conglomerate, and middle Eocene Torrey Sandstone are assigned a moderate paleontological resource potential ranking. Fossils in these formations occur; however, their presence is limited locally and/or due to the paleoenvironment.

High paleontological resource potential ranked formations include the late Pleistocene older alluvium, exclusive of the Escondido area, and the middle Eocene Pomerado Conglomerate, Mission Valley Formation, and the Friars Formation. These potential ranks were assigned based on the presence of significant terrestrial vertebrate fossils found in these sediments near the project area and in other parts of San Diego County.

### **3.5.1.5 Cultural Resources**

A total of 752 previous cultural resource reports have addressed areas within the study area; 117 cultural resource reports have directly addressed the survey corridor. The results of the records search show 571 previously recorded cultural resources within the study area. The archaeological sites include a range of site types, from habitation and work sites with prehistoric rock art, milling features, ceramics, and stone tools and debris to isolated stone tools and historic debris clusters. Built environment resources include historic roads, trails, and highways, as well as single-family houses and a canal (Castells et al. 2015, 2016; Davis 2015, 2016a, 2016b; Williams 2016a, 2016b; Manchen and Williams 2017).

The following provides a discussion of those archaeological and built environment resources located within the AOC for this MEA. The NRHP and CRHR statuses noted in Table 3.5-7 are based on information provided in the applicants’ February 2016 *Cultural Resource Survey Report for the San Diego Gas & Electric Company and Southern California Gas Company Pipeline Safety & Reliability Project, San Diego County, California* and the March 2018 *Historical Resource Evaluation Report for the Proposed Pipeline Safety and Reliability Project San Diego County, California*, unless otherwise noted.

#### **Archaeological Resources**

Table 3.5-7 lists 42 prehistoric and historic archaeological resources that were identified within the AOC. Among these resources, three were newly identified, 11 were re-identified, and 16 were not re-identified. For four resources, it is not known if they were identified during the 2015, 2016, and 2017 surveys. Eight were not revisited as they are along the existing Line 1600, which was not surveyed by the applicants.

Table 3.5-7 Archaeological Resources Located within the Area of Consideration

Site Number (P-37-)	Site Number (CA-SDI-)	Site No. (Temp)	Description	Site Type	Status	Date Recorded	NRHP Eligibility Status	CRHR Eligibility Status
N/A	N/A	3602-S-6	Bedrock Milling Feature	Prehistoric	Newly Recorded	2015	Unevaluated	Unevaluated
N/A	N/A	3602-S-4	Historic Foundation	Historic	Newly Recorded	2015	Unevaluated	Unevaluated
N/A	N/A	3602-I-2	Isolate: Granite Mano Fragment	Prehistoric	Newly Recorded	2015	Not Eligible	Not Eligible
000007	7	N/A	Bedrock Milling Feature, Petroglyphs, Pictographs	Prehistoric	Re-identified	1957	Unevaluated	Unevaluated
000577	577	N/A	Bedrock Milling Feature, Petroglyphs, Pictographs	Prehistoric	Not Re-identified	No Date	Unevaluated	Unevaluated
000592	592	N/A	Lithic Scatter, Military Property	Multicomponent	Not Re-identified	No Date	Unevaluated	Unevaluated
004556	4556	N/A	Lithic Scatter, Bedrock Milling Feature	Prehistoric	Not Re-identified	1976	Unevaluated	Unevaluated
004560	4560	N/A	Lithic Scatter	Prehistoric	Re-identified	1971	Unevaluated	Unevaluated
004561	4561	N/A	Lithic Scatter, Bedrock Milling Feature	Prehistoric	Re-identified	1971	Unevaluated	Unevaluated
004806	4806	N/A	Lithic Scatter, Ceramic Scatter, Bedrock Milling	Prehistoric	Re-identified	1976	Eligible	Eligible due to potential NRHP-eligibility
005034 <sup>(a)</sup>	5034	N/A	Isolate: Hammer/Chopper and Flake	Prehistoric	Not Revisited	1979	Unknown	Unknown

Table 3.5-7 Archaeological Resources Located within the Area of Consideration

Site Number (P-37-)	Site Number (CA-SDI-)	Site No. (Temp)	Description	Site Type	Status	Date Recorded	NRHP Eligibility Status	CRHR Eligibility Status
005072	5072	N/A	Lithic, Milling, Ceramic, Shell	Prehistoric	Not Re-identified	1976, 1977, 1980, 1984, 2000	Eligible	Eligible due to potential NRHP-eligibility
005211	5211	N/A	Lithic Scatter. Bedrock Milling Feature	Prehistoric	Not Re-identified	1977	Unevaluated	Unevaluated
005340 <sup>(a)</sup>	5340	N/A	Lithic Scatter, Ceramic Scatter, Bedrock Milling Feature, Habitation Debris	Prehistoric	Not Revisited	1977	Unknown	Unknown
006001	6001	N/A	Bedrock Milling Feature	Prehistoric	Not Re-identified	1978	Unevaluated	Unevaluated
006083	6083	N/A	Bedrock Milling Feature, Lithic Scatter	Prehistoric	Not Re-identified	1978	Unevaluated	Unevaluated
006722	6722	N/A	Bedrock Milling Feature	Prehistoric	Not Re-identified	1978	Unevaluated	Unevaluated
007119 <sup>(a)</sup>	7119	N/A	Lithic Scatter with Historic Trash	Multicomponent	Not Revisited	1979	Unknown	Unknown
007310	7310	N/A	Bedrock Milling Feature, Trash Scatters	Multicomponent	Not Re-identified	1978	Unevaluated	Unevaluated
007313	7313	N/A	Lithic Scatter, Bedrock Milling Feature	Prehistoric	Not Re-identified	1978	Unevaluated	Unevaluated
007315	7315	N/A	Lithic Scatter	Prehistoric	Not Re-identified	1978	Unevaluated	Unevaluated

Table 3.5-7 Archaeological Resources Located within the Area of Consideration

Site Number (P-37-)	Site Number (CA-SDI-)	Site No. (Temp)	Description	Site Type	Status	Date Recorded	NRHP Eligibility Status	CRHR Eligibility Status
007836 <sup>(b)</sup>	7836	N/A	Reburial	Prehistoric	Not Re-identified	2007	Unevaluated	Unevaluated
009124	9124	N/A	Landscaping, Trash Scatter, Cistern	Historic	Re-identified	1981, 2002	Recommended Not Eligible	Unevaluated
010169	10169	N/A	Lithic Scatter	Prehistoric	Not Re-identified	1993	Unevaluated	Unevaluated
010311	10311	N/A	Lithic Scatter, Bedrock Milling Feature	Prehistoric	Not Revisited	1985	No information available	No information available
010680	10680	N/A	Bedrock Milling Feature	Prehistoric	Not Revisited	1986	No information available	No information available
010785	10785	N/A	Bedrock Milling Feature	Prehistoric	Unknown	1987, 1992	Unevaluated	Unevaluated
011466	11466	N/A	Bedrock Milling Feature; Historic Sign	Multicomponent	Re-identified and Updated	1989	Unevaluated	Unevaluated
011467	11467	N/A	Lithic Scatter	Prehistoric	Re-identified and Updated	1989	Unevaluated	Unevaluated
012540 <sup>(a)</sup>	12540	N/A	Bedrock Milling Feature	Prehistoric	Not Revisited	1991	Unknown	Unknown
012587	12587	N/A	Bedrock Milling Feature, Lithic Scatter	Prehistoric	Re-Identified	1992	Unevaluated	Unevaluated
012919	12919	N/A	Ranch, Trash Scatter	Historic	Not Re-identified	1992, 2000	Unevaluated	Unevaluated
012920	12920	N/A	Trash Scatter	Historic	Not Re-identified	1992	Unevaluated	Unevaluated
012964	12964	N/A	Bedrock Milling Feature	Prehistoric	Not Revisited	1992	Unevaluated	Unevaluated
013205	13205	N/A	Lithic Scatter, Ceramics Scatter	Prehistoric	Unknown	1992	Unevaluated	Unevaluated
014275	14275	N/A	Trash Scatter	Historic	Re-identified	1995, 2002	Recommended Not Eligible	Unevaluated

Table 3.5-7 Archaeological Resources Located within the Area of Consideration

Site Number (P-37-)	Site Number (CA-SDI-)	Site No. (Temp)	Description	Site Type	Status	Date Recorded	NRHP Eligibility Status	CRHR Eligibility Status
017538	15368	N/A	Bedrock Milling Feature, Lithic Scatter	Prehistoric	Re-identified and Updated	1999	Unevaluated	Unevaluated
017539	15369	N/A	Advertisement, Painted on Boulder	Historic	Re-identified and Updated	1999	Unevaluated	Unevaluated
019184	N/A	N/A	Isolate: Metavolcanic Flake	Prehistoric	Not Re-identified	2000	Unevaluated	Unevaluated
024934 <sup>(c)</sup>	N/A	N/A	Isolate: Quartzite Cobble, Assayed	Prehistoric	Unknown	2003	Not Eligible	Not Eligible
024935 <sup>(c)</sup>	N/A	N/A	Isolate: Quartzite Cobble, Assayed	Prehistoric	Unknown	2003	Not Eligible	Not Eligible
033534 <sup>(a)</sup>	21079	N/A	Bedrock Milling Feature	Prehistoric	Not Revisited	2013	Unknown	Unknown

Notes:

- (a) Site forms were reviewed for these resources. The information provided on the site forms was not sufficient to provide information on the NRHP/CRHR status. These are shown as "unknown."
- (b) May be considered a tribal cultural resource.
- (c) Isolates P-37-024934 and P-37-024935 are evaluated as part of the applicants' July 2016 *Cultural Resource Survey Report for Distribution Systems Modifications on the San Diego Gas & Electric Company and Southern California Gas Company Pipeline Safety & Reliability Project, San Diego County, California*.

Key:

CRHR = California Register of Historical Resources

N/A = not applicable

NRHP = National Register of Historic Places

### ***Built Environment Resources***

Through the records searches at SCIC and elsewhere and through field surveys, 969 built environment resources have been identified and recorded within the study area. Thirty-five built environment resources are located within the AOC. These include single-family houses, an apartment building, a dog kennel or animal shelter, un-relocated ranch buildings, historic road segments, a canal/flume, and a stone wall. The resources are listed in Table 3.5-8.

Historic bridges also were identified through online research; these are noted in Table 3.5-9. The California Department of Transportation maintains a structures maintenance and investigations listing that also depicts the historical significance of state and local agency bridges. The historic bridge inventory was updated in 2015 for bridges built between 1965 and 1974; therefore, the National Register status of some of the bridges may have changed (Caltrans n.d.).

#### **3.5.1.6 Native American Consultation**

##### ***Consultation Conducted by the Applicants***

The applicants' cultural resources consultant submitted a request to the California Native American Heritage Commission (NAHC) for a search of the Sacred Lands File on April 9, 2015. The Sacred Lands File lists places that have been identified by tribal communities as sacred. On April 22, 2015, the NAHC responded that the search indicated the potential for Native American cultural resources to be impacted by the proposed project within the U.S. Geological Survey Valley Center quadrangle. The NAHC also provided a Native American contact list from which to request additional information. All individuals and organizations on the Native American contact list were contacted by letter on April 23, 2015. (Appendix C in Castells et al. [2016])

Seven of the tribes responded to the applicants, including the Pala Band of Mission Indians, the Pauma Band of Luiseño Indians, the Viejas Band of Kumeyaay Indians, the Pechanga Band of Luiseño Indians, the Soboba Band of Luiseño Indians, the Rincon Band of the Luiseño Indians, and the La Posta Band of Mission Indians.

##### ***Consultation Conducted by the CPUC***

Two tribes with interests within San Diego County previously sent letters to the CPUC stating that they would like to be consulted under Assembly Bill (AB) 52 of the California Public Resources Code (PRC) 21080.3.1 for projects under CPUC jurisdiction and within the tribes' area of interest (Pechanga Band of Luiseño Indians and San Luis Rey Band of Mission Indians). Two additional tribes, the Federated Indians of Graton Rancheria and the Torres Martinez Desert Cahuilla Indians, requested notification for all CPUC projects under AB 52. AB 52 consultation letters were sent to these tribes on November 3, 2016. The notification letters provided information on the proposed project and asked whether the tribes wanted to initiate consultation. Responses were received from all four of the tribes; however, only two, the San Luis Rey Band of Mission Indians and the Pechanga Band of the Luiseño Indians, requested further consultation.

The CPUC also sent a letter to the NAHC requesting a search of the Sacred Lands File on October 20, 2016. The NAHC responded on the same day that cultural sites were recorded within the API and requested that three tribes, as well as an intertribal organization, be specifically contacted for more information about the sites.

Table 3.5-8 Built Environment Resources Located within the Area of Consideration

Site Number (P-37-)	Site No. (Temp)	Address	APN	Description	Date Recorded	Date Built	NRHP Eligibility Status <sup>(a)</sup>	CRHR Eligibility Status
008870	N/A	N/A	N/A	Historic Dam, Foundation	1981	-	Unevaluated	Unevaluated
017740	N/A	509 W. 2nd Avenue, Escondido	233-032-07	Single Family Residence	1983	Circa 1925	Contributor to a fully documented district that may become eligible (Code 4D)	Unevaluated
017741	N/A	510 W. 2nd Avenue, Escondido	233-022-08	Single Family Residence	1983	Circa 1925	Contributor to a fully documented district that may become eligible (Code 4D)	Unevaluated
018638	N/A	502 W. 11th Avenue, Escondido	236-061-17	Single Family Residence	1983	Circa 1935	Contributor to a fully documented district that may become eligible (Code 4D); Recommended Not Eligible	Recommended Not Eligible
019199	N/A	N/A	N/A	Ranch Site	2009, updated 2012, updated 2015	Unknown	Recommended Not Eligible	Unevaluated
030889	N/A	N/A	N/A	Canal/Aqueduct Vista Irrigation Bench Flumes	2009, 2016 updated	1925-1927	Recommended Eligible	Eligible due to potential NRHP-eligibility
033557 <sup>(b)</sup>	N/A	N/A	N/A	Old Hwy 395 C marker	2015	1914-1934	Unevaluated as contributing element, but part of NRHP-eligible resource	Unevaluated
033557 <sup>(b)</sup>	3602-02	N/A	N/A	Road, Route 395	2015	1947	Unevaluated as contributing element, but part of NRHP-eligible resource	Unevaluated
033557 <sup>(b)</sup>	3602-I-01	N/A	N/A	Road, Route 395	2015	1947	Unevaluated as contributing element, but part of NRHP-eligible resource	Unevaluated
033557 <sup>(b)</sup>	SXPQ-13	N/A	N/A	Old HWY 395	2013	1947	Unevaluated as contributing element, but part of NRHP-eligible resource	Unevaluated
N/A	N/A	123 W. Felicita Avenue, Escondido	236-261-17 or 235-261-17	Possible Single Family Residence (turned into dog kennel?)	1983?	Circa 1905	Contributor to a fully documented district that may become eligible (Code 4D); Recommended Not Eligible	Recommended Not Eligible

Table 3.5-8 Built Environment Resources Located within the Area of Consideration

Site Number (P-37-)	Site No. (Temp)	Address	APN	Description	Date Recorded	Date Built	NRHP Eligibility Status <sup>(a)</sup>	CRHR Eligibility Status
N/A	N/A	12640 Stone Canyon Rd, Rainbow, Poway	275-231-06-00	Single Family Residence	2015	1969	Recommended Not Eligible	Recommended Not Eligible
N/A	N/A	12644 Stone Canyon Rd, Rainbow, Poway	275-231-05-00	Single Family Residence	2015	1960	Recommended Not Eligible	Recommended Not Eligible
N/A	N/A	145 W. Felicita Avenue, Escondido	236-260-11	Single Family Residence (now an apartment complex)	1983?	Circa 1925	No Longer Exists	No Longer Exists
N/A	N/A	1676 S. Escondido Blvd., Escondido	236-460-27	Single Family Residence	Unknown	1935	Contributor to a fully documented district that may become eligible (Code 4D)	Unevaluated
N/A	N/A	3180 Rainbow Valley Boulevard, Fallbrook	102-650-05-00	Single Family Residence	2015	1958	Recommended Not Eligible	Recommended Not Eligible
N/A	N/A	408 W. Lincoln, Escondido	228-080-13-00	Single Family Residence	2015	1932	Recommended Not Eligible	Recommended Not Eligible
N/A	N/A	47787 Rainbow Canyon Road, Temecula	918-130-007	Single Family Residence	2015	1936	Recommended Not Eligible	Recommended Not Eligible
N/A	N/A	47980 Rainbow Canyon Road, Temecula	918-130-015	Single Family Residence	2015	1967	Recommended Not Eligible	Recommended Not Eligible
N/A	N/A	515 W. Valley Parkway, Escondido	229-401-02	Knights of Columbus	Unknown	1935	Might become eligible (Code 4)	Unevaluated

Table 3.5-8 Built Environment Resources Located within the Area of Consideration

Site Number (P-37-)	Site No. (Temp)	Address	APN	Description	Date Recorded	Date Built	NRHP Eligibility Status <sup>(a)</sup>	CRHR Eligibility Status
N/A	N/A	518 W. Washington Ave, Escondido	229-171-15	Single Family Residence	Unknown	1900	Ineligible for the NRHP, but still of local interest (Code 5)	Unevaluated
N/A	N/A	520 W. Washington Ave, Escondido	229-171-08	Single Family Residence	Unknown	1930	Contributor to a fully documented district that may become eligible (Code 4D)	Unevaluated
N/A	N/A	523 W. Washington Ave, Escondido	229-171-04	Single Family Residence	Unknown	1900	No information available.	No information available.
N/A	N/A	525 W. Washington Ave, Escondido	229-271-15	Single Family Residence	Unknown	1920	Contributor to a fully documented district that may become eligible (Code 4D)	Unevaluated
N/A	N/A	733 S. Pine Street, Escondido	233-341-09	Single Family Residence	1983?	Circa 1925	Contributor to a fully documented district that may become eligible (Code 4D); Recommended Not Eligible	Recommended Not Eligible
N/A	TL-1600	N/A	N/A	Gas Line 1600 1600 (TL1600-S-1)	2012	1949	Unevaluated	Unevaluated
N/A	3602-S-01	N/A	N/A	U-shaped Stone Wall	2015	Unknown	Unevaluated	Unevaluated
017742	N/A	522 W. 2nd Ave, Escondido	233-022-10	Single Family Residence	Unknown	1925	Contributor to a fully documented district that may become eligible (Code 4D)	Unevaluated
017743	N/A	527 W. 2nd, Avenue, Escondido	233-132-06	Single Family Residence	Unknown	1925	Contributor to a fully documented district that may become eligible (Code 4D)	Unevaluated
017744	N/A	529 W. 2nd, Avenue, Escondido	233-032-05	Single Family Residence	Unknown	1925	Contributor to a fully documented district that may become eligible (Code 4D)	Unevaluated
017807	N/A	443 W. 4th, Escondido	233-132-01-00	Single Family Residence	2015	1928	Recommended Not Eligible	Recommended Not Eligible

**Table 3.5-8 Built Environment Resources Located within the Area of Consideration**

Site Number (P-37-)	Site No. (Temp)	Address	APN	Description	Date Recorded	Date Built	NRHP Eligibility Status <sup>(a)</sup>	CRHR Eligibility Status
017870	N/A	429 W. 5th Avenue, Escondido	233-132-13	Single Family Residence	Unknown	1900-1901	Might become eligible (Code 4)	Unevaluated
018553	N/A	491 W. 11th Avenue, Escondido	236-102-10	Single Family Residence	Unknown	1925	Might become eligible (Code 4)	Unevaluated
018676	N/A	445 W. 15th Avenue, Escondido	236-223-46	Single Family Residence	Unknown	1930	Contributor to a fully documented district that may become eligible (Code 4D)	Unevaluated
018684	N/A	0 Bear Valley Parkway, Escondido	271-030-12	Chimney, Rough Stone	Unknown	1895	Contributor to a fully documented district that may become eligible (Code 4D)	Unevaluated

Notes:

- (a) The code of 4 means that a resource might become eligible for listing on the NRHP. The code of 4D indicates that a resource may become eligible for the NRHP as a contributing property, indicating that they might have the potential to be contributing resources to a historic district. The state historic preservation office currently interprets the old 4 and 4D status codes as the new 7N code, which requires re-evaluation of the resource. The code of 5 indicates that a resource is ineligible for the NRHP, but may be of local interest.
- (b) Resource P-37-033557 refers to US Highway 395. It is not clear from the 2016 and 2018 reports which segments are recommended as eligible. Therefore, the status shown is intended to show the overall status from the applicants' reports is that US Highway 395 is recommended eligible for the NRHP.

Key:

APN = assessor's parcel number  
 CRHR = California Register of Historical Resources  
 N/A = not applicable  
 NRHP = National Register of Historic Places

Table 3.5-9 Historic Bridges Located within the Area of Consideration

Bridge No.	Address	APN	Description	Date Recorded	Date Built	NRHP Eligibility Status	CRHR Eligibility Status
57 1242	UTM 33.109108, -117.049717	N/A	San Pasqual Creek	Unknown	1900	Recommended Not Eligible	Unevaluated
57 0508L	UTM 33.130714, -117.093025	N/A	Centre City Parkway UC	Unknown	1964	Recommended Not Eligible	Unevaluated
57 0508R	UTM 33.130528, -117.092946	N/A	Centre City Parkway UC	Unknown	1964	Recommended Not Eligible	Unevaluated
57 0508S	UTM 33.13042, -117.092897	N/A	Centre City Parkway UC	Unknown	1964	Recommended Not Eligible	Unevaluated
57C0409R	UTM 33.146233, -117.093256	N/A	Reidy Canyon	Unknown	1943	Recommended Not Eligible	Unevaluated
57C0502	UTM 33.254139, -117.154036	N/A	Moosa Canyon Creek	Unknown	1943	Recommended Not Eligible	Unevaluated
57C0476	UTM 33.319158, -117.160075	N/A	Keys Canyon	Unknown	1947	Recommended Not Eligible	Unevaluated
57C0408L	UTM 33.121525, -117.088108	N/A	Escondido Creek	Unknown	1948	Recommended Not Eligible	Unevaluated
57C0408R	UTM 33.121628, -117.087939	N/A	Escondido Creek	Unknown	1948	Recommended Not Eligible	Unevaluated
57C0579	UTM 33.412164, -117.159836	N/A	Rainbow Creek	Unknown	1949	Recommended Not Eligible	Unevaluated
57C0346	UTM 33.263861, -117.076483	N/A	South Fork Keys Canyon	Unknown	1950	Recommended Not Eligible	Unevaluated
57C0801	UTM 33.352839, -117.159583	N/A	San Luis Rey River Tributary	Unknown	1950	Recommended Not Eligible	Unevaluated
57C0409L	UTM 33.146064, -117.093431	N/A	Grove Creek (Centre City Parkway)	Unknown	1964	Recommended Not Eligible	Unevaluated
57C0443	UTM 33.131375, -117.094258	N/A	Grove Creek	Unknown	1966	Recommended Not Eligible	Unevaluated
57C0439	UTM 32.95475, -117.062967	N/A	North Fork Poway Creek	Unknown	1970	Recommended Not Eligible	Unevaluated
57C0455	UTM 33.140472, -117.053239	N/A	Escondido Creek	Unknown	1970	Recommended Not Eligible	Unevaluated
57C0600	UTM 33.084053, -117.056131	N/A	Bolas Creek	Unknown	1970	Recommended Not Eligible	Unevaluated

Key:

- AOC = area of consideration
- APN = Assessor's parcel number
- CRHR = California Register of Historical Resources
- N/A = not applicable
- NRHP = National Register of Historic Places
- UC = Undercrossing
- UTM = Universal Transverse Mercator

Additionally, the NAHC provided the names and contact information for 35 individuals representing 23 tribes and requested that all of them be contacted (Totton 2016). On November 29, 2016, a project notification letter was sent to the 28 individuals recommended by the NAHC and not already contacted under the AB 52 process. The letter provided information of the proposed project and requested the tribe's comments and concerns. Follow-up letters, emails, and phone calls were conducted to elicit comments. Emails were sent on May 18, 2017, to tribes consulting under AB 52 and NAHC consultation providing information about the dates, location, and times of the public scoping meetings for the project. Information on how to provide publicly available comments via US mail, online, and email and the dates comments are due was also provided. Twelve tribes responded to the notification letters, and one tribe provided comments during the public scoping meeting on February 21, 2017. Follow-up telephone calls, emails, and meetings were conducted in order to address responses received from each of these tribes. The tribes were notified of the Administrative Law Judge decision, and thereby, that the formal proceedings were complete.

### 3.5.1.7 Tribal Cultural Resources

The identification of tribal cultural resources (TCRs) may be garnered through information obtained during the cultural resources records search previously described, communication with the NAHC through its search of the Sacred Lands File, ethnographic research, consultation with interested tribal communities, and comments received during the public scoping meetings and comments sent by mail. Information regarding TCRs had not been acquired by the time of the Administrative Law Judge decision regarding the proposed project. As such, no information is available regarding this type of resource.

## 3.5.2 Regulatory Setting

This subsection summarizes federal, state, and local laws; regulations; and standards that govern cultural, paleontological, and tribal cultural resources.

### 3.5.2.1 Federal

The responsibility for compliance with the federal laws and regulations presented herein generally falls to those federal agencies who own land upon which activities are to occur or those who are responsible for the permitting, approvals, licensing, or funding of activities. Federal regulations are provided here for informational purposes.

#### ***Paleontological Resources Protection Act***

The Paleontological Resources Preservation Act (PRPA; 123 Statute 1172; 16 United States Code [U.S.C.] 470aaa) requires the Secretaries of the Interior and Agriculture to manage and protect paleontological resources on federal land using scientific principles and expertise. The PRPA includes specific provisions addressing management of these resources by the Bureau of Land Management, National Park Service, Bureau of Reclamation, U.S. Fish and Wildlife Service, and Forest Service of the U.S. Department of Agriculture.

(a) *The PRPA Section 6306 on Prohibited Acts and Criminal Penalties states that a person may not:*

- (1) *excavate, remove, damage, or otherwise alter or deface or attempt to excavate, remove, damage, or otherwise alter or deface any paleontological resources located on federal land unless such activity is conducted in accordance with this subtitle;*
- (2) *exchange, transport, export, receive, or offer to exchange, transport, export, or receive any paleontological resource if the person knew or should have known such resource to have been*

*excavated or removed from federal land in violation of any provisions, rule, regulation, law, ordinance, or permit in effect under federal law, including this subtitle; or*

- (3) *sell or purchase or offer to sell or purchase any paleontological resource if the person knew or should have known such resource to have been excavated, removed, sold, purchased, exchanged, transported, or received from federal land.*
- (b) *False Labeling Offences - A person may not make or submit any false record, account, or label for, or any false identification of, any paleontological resource excavated or removed from federal land.*
- (c) *Penalties - A person who knowingly violates or counsels, procures, solicits, or employs another person to violate subsection (a) or (b) shall, upon conviction, be fined in accordance with title 18, United States Code, or imprisoned not more than five years, or both; but if the sum of the commercial and paleontological value of the paleontological resources involved and the cost of restoration and repair of such resources does not exceed \$500, such person shall be fined in accordance with title 18, United States Code, or imprisoned not more than 2 years, or both.*
- (d) *Multiple Offences - In the case of a second or subsequent violation by the same person, the amount of the penalty assessed under subsection (c) may be doubled.*
- (e) *General Exception - Nothing in subsection (a) shall apply to any person with respect to any paleontological resource which was in the lawful possession of such person prior to the date of enactment of this Act.*

### **Antiquities Act**

The Antiquities Act of 1906 states, in part:

*that any person who shall appropriate, excavate, injure, or destroy any historic or prehistoric ruin or monument, or any object of antiquity, situated on lands owned or controlled by the Government of the United States, without the permission of the Secretary of the Department of the Government having jurisdiction over the lands on which said antiquities are situated, shall upon conviction, be fined in a sum of not more than five hundred dollars or be imprisoned for a period of not more than ninety days, or shall suffer both fine and imprisonment, in the discretion of the court.*

Although there is no specific mention of natural or paleontological resources in the act itself, or in the act's uniform rules and regulations (Title 43 Part 3, Code of Federal Regulations, "objects of antiquity" have been interpreted to include fossils by the National Park Service, Bureau of Land Management, Forest Service, and other federal agencies.

### **National Environmental Policy Act**

The National Environmental Policy Act (NEPA) (42 U.S.C. §§ 4321 et seq.) directs federal agencies to use all practicable means to "Preserve important historic, cultural, and natural aspects of our national heritage." If the presence of a significant environmental resource is identified during the scoping process, federal agencies and their agents must take the resource into consideration when evaluating a project's effects. Consideration of paleontological resources may be required under NEPA when a project is proposed for development on federal land or land under federal jurisdiction. The level of consideration depends upon the federal agency involved.

### **National Historic Preservation Act**

The National Historic Preservation Act of 1966, as amended (NHPA) (54 U.S.C. 300101 et seq.), is the primary federal law governing the preservation of cultural and historic resources in the United States. The law establishes a national preservation program and a system of procedural protections that encourage the

identification and protection of cultural and historic resources of national, state, tribal and local significance. Primary components of the act include the following:

- a) Articulation of a national policy concerning historic and cultural resources;
- b) Establishment of a comprehensive program for identifying historic and cultural resources for listing in the NRHP;
- c) Creation of a federal-state/tribal-local partnership for implementing programs established by the act;
- d) Requirement that federal agencies take into consideration actions that could adversely affect historic properties listed or eligible for listing on the NRHP, known as the Section 106 Review;
- e) Establishment of the Advisory Council on Historic Preservation, which oversees federal agency responsibilities governing the Section 106 Review; and
- f) Placement of specific stewardship responsibilities on federal agencies for historic properties owned or within their control. (Section 110 of the NHPA)

Section 106, as noted above (item d), requires that any federal agency with

*direct or indirect jurisdiction over a proposed federal or federally assisted undertaking in any state and the head of any federal department or independent agency having authority to license any undertaking shall, prior to the approval of the expenditure of any federal funds on the undertaking or prior to the issuance of any license, as the case may be, take into account the effect of the undertaking on any district, site, building, structure, or object that is included in or eligible for inclusion in the NRHP. The head of any such federal agency shall afford the Advisory Council on Historic Preservation a reasonable opportunity to comment with regard to such undertaking.*

### **National Register of Historic Places**

The NRHP is the nation's official list of buildings, structures, objects, sites, and districts worthy of preservation because of their significance in American history, architecture, archeology, engineering, and culture. The NRHP recognizes resources of local, state, and national significance that have been documented and evaluated according to uniform standards and criteria.

Authorized under the NHPA, the NRHP is part of a national program to coordinate and support public and private efforts to identify, evaluate, and potentially protect historic and archeological resources. It is administered by the National Park Service, which is part of the U.S. Department of the Interior.

To be eligible for listing in the NRHP, a resource must meet at least one of the following criteria:

- A) is associated with events that have made a significant contribution to the broad patterns of our history;
- B) is associated with the lives of persons significant in our past;
- C) embodies the distinctive characteristics of a type, period or method of construction, or represents the work of a master, or possesses high artistic values, or represents a significant and distinguishable entity whose components may lack individual distinction; and /or
- D) has yielded, or may be likely to yield, information important in history or prehistory.

### ***Native American Graves Protection and Repatriation Act of 1990***

The Native American Graves Protection and Repatriation Act of 1990 (25 U.S.C. §3001 et seq.) requires all federal agencies and museums receiving federal funds to inventory their collections, notify appropriate parties of sensitive collections, acknowledge requests from native groups for repatriation, review the collections and requests, and, if appropriate, repatriate human remains, grave associations, sacred objects, and items of cultural patrimony to affiliated tribes or individuals. It establishes that Native American human remains legally belong to the nearest affiliated Native American tribe or family of known individuals rather than to the owner of the land on which they were found. This statute also requires that archaeologists consult with land management officials prior to conducting field work on federal land or in a federal undertaking.

### ***Archaeological Resources Protection Act of 1979***

The Archaeological Resources Protection Act of 1979 (ARPA) (Public Law 96-95; 16 U.S.C. 470aa–mm) prohibits the excavation or removal of an archaeological resource from federal or traditional Native American lands without a permit from the appropriate land management agency. Under ARPA, the sale, purchase, exchange, transport, or possession of an archaeological resource removed without permission of the land management agency is forbidden. Violators convicted of violation of ARPA are subject to fine and imprisonment.

## **3.5.2.2 State**

### ***California Environmental Quality Act***

#### Paleontological Resources

The California Environmental Quality Act (CEQA) (PRC 21000–21189) declares that it is state policy to: “take all action necessary to provide the people of this state with...historic environmental qualities.” It further states that public or private projects financed or approved by the state are subject to environmental review by the state. All such projects, unless entitled to an exemption, may proceed only after this requirement has been satisfied. In the event that a project is determined to have a potential significant environmental effect, CEQA requires consideration of mitigation measures and alternatives to avoid or substantially lessen the significant effect. If paleontological resources are identified, the lead agency must take those resources into consideration when evaluating the project effects. The level of consideration may vary with the importance of the resource.

#### Cultural Resources

CEQA Guidelines Section 15064.5 recognizes that an historical resource includes: (1) a resource listed in, or determined to be eligible by the State Historical Resources Commission for listing in, the CRHR; (2) a resource included in a local register of historical resources; and (3) any object, building, structure, site, area, place, record, or manuscript that a lead agency determines to be historically significant or significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political, military, or cultural annals of California by the lead agency, provided the lead agency’s determination is supported by substantial evidence in light of the whole record. In some cases, an archaeological resource may be considered a historical resource. CEQA Guidelines section 15126.4(b) establishes mitigation guidelines for effects on historical resources and historical resources of an archaeological nature.

CEQA Guidelines section 15064.5(c) states that if an archaeological resource does not meet the criteria for a historical resource contained in CEQA Guidelines section 15064.5, then the resource may be treated in accordance with the provisions of PRC section 21083.2, if it is a “unique archaeological resource.” A “unique archaeological resource” is defined as “an archaeological artifact, object, or site about which it can be clearly demonstrated that, without merely adding to the current body of knowledge, there is a high probability that it meets any of the following criteria of the CRHR.” If it can be demonstrated that a

project would cause damage to a unique archaeological resource, the lead agency may require reasonable efforts to preserve in place or avoid the resources. This section also establishes mitigation requirements for the excavation (data recovery) of unique archaeological resources.

If an archaeological resource is neither a unique archaeological nor a historical resource, effects of a proposed project on the resource would not be considered significant.

### Tribal Cultural Resources

As of 2015, CEQA established that “[a] project with an effect that may cause a substantial adverse change in the significance of a tribal cultural resource is a project that may have a significant effect on the environment” (PRC § 21084.2). In order to be considered a “tribal cultural resource,” a resource must be either:

- (1) *listed, or determined to be eligible for listing, on the national, state, or local register of historic resources, or*
- (2) *a resource that the lead agency chooses, in its discretion, to treat as a tribal cultural resource.*

To help determine whether a proposed project may have such an effect, the lead agency must consult with any California Native American tribe that requests consultation and is traditionally and culturally affiliated with the geographic area of the project. If a lead agency determines that a project may cause a substantial adverse change to tribal cultural resources, the lead agency must consider measures to mitigate that impact. PRC § 20184.3 (b) provides examples of mitigation measures that lead agencies may consider to avoid or minimize impacts on tribal cultural resources.

### **California Office of Historic Preservation and State Historic Preservation Officer**

The California Office of Historic Preservation State of California Preservation Officer implements the policies of the NHPA on a statewide level and maintains the California Historical Resources Information System, which contains the State Historic Resources Inventory, resource records, and research reports. The State Historic Preservation Officer is an appointed official who implements historic preservation programs within the state’s jurisdictions. The Office of Historic Preservation maintains the CRHR under the direction of the State Historic Preservation Officer and the State Historical Resources Commission.

### California Register of Historical Resources

The CRHR is an authoritative listing and guide to be used by state and local agencies, private groups, and citizens in identifying the existing historic resources of the state and to indicate which resources deserve to be protected, to the extent prudent and feasible, from substantial adverse change § 5024.1(a)). The criteria for eligibility for the CRHR are based on NRHP criteria (PRC § 5024.1(c)), which state that a resource is eligible if it:

1. Is associated with events that have made a significant contribution to the broad patterns of California’s history and cultural heritage;
2. Is associated with the lives of persons important in our past;
3. Embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of an important creative individual, or possesses high artistic values; or
4. Has yielded, or may be likely to yield, information important in prehistory or history.

Resources that do not retain sufficient integrity to meet NRHP listing criteria still may be eligible for listing on the CRHR. Certain resources are determined by the statute to be automatically included in the CRHR, including California properties that are formally determined eligible for or are listed in the NRHP.

### **California Public Resources Code**

In addition to CEQA, a number of other sections of the PRC provide additional regulations that govern the treatment of paleontological, historical, and archaeological resources.

PRC Section 30244 requires reasonable mitigation for adverse impacts on archaeological and paleontological resources as identified by the State Historic Preservation Office. This is in reference to coastal zones and is contained as part of Article 5. Land Resources.

PRC Section 5097.5 states that no person “shall knowingly and willfully excavate upon, or remove, destroy, injure, or deface, any historic or prehistoric ruins, burial grounds, archaeological, or vertebrate paleontological site, including fossilized footprints, inscriptions made by human agency, or any other archaeological, paleontological, or historical feature, situated on public lands, except with the express permission of the public agency having jurisdiction over such lands.”

Violation of this section is a misdemeanor. As used in this section, “public lands” means lands owned by, or under the jurisdiction of, the state, or any city, county, district, authority, or public corporation, or any agency thereof.

- PRC Sections 5097.91 through 5097.991 establishes and authorizes the NAHC. These sections also prohibit the acquisition or possession of Native American artifacts or human remains taken from a Native American grave or cairn, except in accordance with an agreement reached with the NAHC, and provide for Native American remains and associated grave artifacts to be repatriated. Subsections 5097.98(b) and (e) require a landowner on whose property Native American human remains are found to limit further development activity in the vicinity until conferring with the most likely descendants (as identified by the NAHC) to consider treatment options. Because of the importance of human remains to the Native American community, Health and Safety Code Sections 7050 through 7054 make the disturbance and removal of human remains felony offenses.
- PRC Sections 5097.993 through 5097.994 is referred to as the Native American Historic Resource Protection Act. These sections make it a misdemeanor crime to perform the unlawful and malicious excavation, removal, or destruction of Native American archaeological or historical sites on public or private lands.
- PRC Section 6254(r) protects Native American graves, cemeteries, and sacred places maintained by the NAHC by protecting records of such resources from public disclosure under the California Public Records Act. This section is under Chapter 3.5, Inspection of Public Records.

### **Native American Human Remains**

Sites that may contain human remains important to Native Americans must be identified and treated in a sensitive manner, consistent with state law (i.e., Health and Safety Code §7050.5 and PRC §5097.98). In summary, in the event that human remains are encountered during project development and in accordance with the Health and Safety Code Section 7050.5, the County Coroner must be notified if potential human bone is discovered. The coroner then determines within two working days of being notified if the remains are subject to his or her authority. If the coroner recognizes the remains to be Native American, he or she shall contact the NAHC by phone within 24 hours, in accordance with PRC Section 5097.98. The NAHC will then designate a Most Likely Descendant with respect to the human remains. The Most Likely Descendant has the opportunity to recommend to the property owner or the person responsible for the excavation work means for treating or disposing, with appropriate dignity, the human remains and associated grave goods.

### **California Administrative Code, Title 14, Sections 4307 and 4308**

These sections refer to geological features and archaeological features. Section 4307 states the following: “(a) No person shall destroy, disturb, mutilate, or remove earth, sand, gravel, oil, minerals, rocks, paleontological features, or features of caves.” This thereby is relevant to paleontological features. Section 4308 is similar, but with regard to archaeological and historical features. It states the following: “No person shall remove, injure, disfigure, deface, or destroy any object of archaeological, or historical interest or value.” These sections are pertinent to area under the jurisdiction of the State Department of Parks and Recreation.

### **3.5.2.3 Regional and Local Regulations**

#### **San Diego County Code**

San Diego County Administrative Code Section 396.7 (Ordinance 9493) establishes the San Diego County Local Register of Historic Resources, a listing to be used to identify historic resources, defines eligible properties and significance criteria, and outlines nomination procedures.

The County’s Resource Protection Ordinance Title 8, Division 6, Chapter 6, limits development on lands deemed to have special environmental significance, including historic and prehistoric sites. The ordinance defines significant prehistoric or historic sites and describes actions that can be taken to protect such sites. The ordinance provides exemptions for essential public facilities for which no less environmentally damaging location, alignment, or non-structural alternative exists.

The County’s Grading, Clearing and Watercourses Ordinance Section 87.429 requires that if human remains or Native American artifacts are encountered, grading operations shall be suspended in that area, and that the operator shall immediately inform the County Official. Compliance with the requirements of Health and Safety Code Section 7050.5 and PRC Section 5097.99 is necessary.

The County’s Grading, Clearing and Watercourses Ordinance Section 87.430 provides for the requirement of a paleontological monitor at the discretion of the County. It states: “If fossils greater than 12 inches in any dimension are encountered, then all grading operations in the area where they were found shall be suspended immediately and not resumed until authorized by the County Official. The permittee shall immediately notify the County Official of the discovery. The County Official shall investigate and determine the appropriate resource recovery operations, which the permittee shall carry out prior to the County Official’s authorization to resume normal grading operations.”

County Ordinance No. 9890, Section 41.113, deals with Parks and Recreation areas and pertains to the Sycamore Canyon – Goodan Ranch Preserve and the Mission Trails Regional Park. The ordinance states that it shall be unlawful for any person without written authorization from the Parks Department to engage in or retain any person to engage in removing earth, sand, gravel, fossil, remnant of a fossil, artifact or remnant of an artifact.

#### **County of San Diego General Plan (County of San Diego 2011)**

The San Diego County General Plan, adopted in 2011, establishes objectives to protect cultural, historical, and paleontological resources within the plan area. Relevant policies from the Conservation and Open Space (COS) section include the following:

#### **Paleontological Resources**

- ***COS-9.1 Preservation.*** *Require the salvage and preservation of unique paleontological resources when exposed to the elements during excavation or grading activities or other development processes.*

- ***COS-9.2 Impacts of Development.*** Require development to minimize impacts to unique geological features from human related destruction, damage, or loss.

### Archaeological Resources

- ***COS-7.1 Archaeological Protection.*** Preserve important archaeological resources from loss or destruction and require development to include appropriate mitigation to protect the quality and integrity of these resources.
- ***COS-7.2 Open Space Easements.*** Require development to avoid archaeological resources whenever possible. If complete avoidance is not possible, require development to fully mitigate impacts to archaeological resources.
- ***COS-7.3 Archaeological Collections.*** Require the appropriate treatment and preservation of archaeological collections in a culturally appropriate manner.
- ***COS-7.4 Consultation with Affected Communities.*** Require consultation with affected communities, including local tribes to determine the appropriate treatment of cultural resources.
- ***COS-7.5 Treatment of Human Remains.*** Require human remains be treated with the utmost dignity and respect and that the disposition and handling of human remains will be done in consultation with the most likely descendant (MLD) and under the requirements of federal, state, and county regulations.
- ***COS-7.6 Cultural Resource Data Management.*** Coordinate with public agencies, tribes, and institutions in order to build and maintain a central database that includes a notation whether collections from each site are being curated, and if so, where, along with the nature and location of cultural resources throughout the County of San Diego.

### Historical Resources

- ***COS-8.1 Preservation and Adaptive Reuse.*** Encourage the preservation and/or adaptive reuse of historic sites, structures, and landscapes as a means of protecting important historic resources as part of the discretionary application process and encourage the preservation of historic structures identified during the ministerial application process.

The County of San Diego General Plan contains Community Plans for more than 20 communities and subregional planning areas within the county. The proposed project would cross the North County Metropolitan Subregional Plan Area and Community Plan Areas for the communities of Bonsall, Rainbow, and Fallbrook. These plans are supplements to the County General Plan with specific emphasis on the planning needs of the focal subregion or community. Each supplemental plan includes resource conservation and open space policies that address the resources unique to that community.

#### ***Bonsall Community Plan (County of San Diego 2011)***

The Bonsall Community Plan covers the planning area of Bonsall, within northern San Diego County. Regarding cultural resources, the Community Plan of Bonsall includes the following specific policies, in addition to having policies that apply county-wide, as expressed in the County of San Diego General Plan (see above):

***COS-1.6.1 Prevent development, trenching, grading, clearing and grubbing and other related activities that can be damaging to significant prehistoric or historic sites.***

***COS-1.6.2 Encourage the preservation and maintenance of the Bonsall Bridge, as a historic structure of great beauty, symbolic of Bonsall's rural community character.***

*COS-1.6.3 Require the preservation of historic buildings and sites in the community:*

- Original James Bonsall (Mullins) Residence
- Little Gopher Canyon Road
- Old Bonsall Bridge
- Bonsall Schoolhouse

These objectives are intended to address the goal of preserving important historic and prehistoric archaeological resources.

***Rainbow Community Plan (County of San Diego 2014)***

The Rainbow Community Plan covers the planning area of the village of Rainbow, within northern San Diego County. Regarding cultural resources, the Rainbow Community Plan addresses the subject under Chapter 3, Section 3.1 h (Cultural Resources), where it directs the reader to “Refer to the General Plan goals and policies” (Section 3.1 h of County of San Diego 2011). The Rainbow Community Plan does not provide policies specific to Rainbow, but includes policies that apply countywide, as expressed in the County of San Diego General Plan.

***Fallbrook Community Plan (County of San Diego 2015)***

The Fallbrook Community Plan covers the planning area of Fallbrook, within northern San Diego County (Goal 2.4, p. 19 of County of San Diego 2011). In regard to cultural resources, the community of Fallbrook has policies regarding built environment resources that are expressed for the county as a whole in the County of San Diego General Plan (see above) and one policy within its Community Plan:

*Policy Land Use 2.4.5 Encourage the protection of historic structures and require new development to be compatible with historic or existing buildings that convey the desired community character.*

***City of Escondido General Plan (City of Escondido 2012)***

The City of Escondido General Plan Resource Conservation chapter includes policies intended to encourage the preservation of important cultural and paleontological resources within the plan area. Relevant policies include the following:

- ***Cultural Resources Policy 5.1.*** *Maintain and update the Escondido Historic Sites Survey to include significant resources that meet local, state, or federal criteria.*
- ***Cultural Resources Policy 5.2.*** *Preserve significant cultural and paleontological resources listed on the national, state, or local registers through: maintenance or development of appropriate ordinances that protect, enhance, and perpetuate resources; incentive programs; and/or the development review process.*
- ***Cultural Resources Policy 5.3.*** *Consult with appropriate organizations and individuals (e.g., South Coastal Information Center of the California Historical Resources Information System, Native American Heritage Commission, Native American groups and individuals, and San Diego Natural History Museum) early in the development process to minimize potential impacts to cultural and paleontological resources.*
- ***Cultural Resources Policy 5.4.*** *Recognize the sensitivity of locally significant cultural resources and the need for more detailed assessments through the environmental review process.*
- ***Cultural Resources Policy 5.5.*** *Preserve historic buildings, landscapes, and districts with special and recognized historic or architectural value in their original locations through preservation,*

*rehabilitation (including adaptive reuse), and restoration where the use is compatible with the surrounding area.*

- **Cultural Resources Policy 5.6.** *Review proposed new development and/or remodels for compatibility with the surrounding historic context.*

#### **City of Poway General Plan (City of Poway 1991)**

The Prehistoric and Historic Resources Element of the City of Poway General Plan (within the Resources Section) describes the historic and prehistoric resources within the plan area and defines criteria used to determine sites' degree of sensitivity. This element outlines goals and policies related to archaeological and historical resources, including establishing archaeological guidelines for treatment of archaeological resources, artifact recovery procedures, and mitigation options and maintaining a list of historic sites.

#### **City of San Diego General Plan (City of San Diego 2008)**

The Historic Preservation (HP) Element of the City of San Diego General Plan includes objectives to preserve and restore historical and cultural resources within the plan area. This element defines designation criteria for historical resources. Relevant policies from this element include the following:

- **HP-A.2.** *Fully integrate the consideration of historical and cultural resources in the larger land use planning process.*
- **HP-A.4.** *Actively pursue a program to identify, document, and evaluate the historical and cultural resources in the City of San Diego.*
- **HP-A.5.** *Designate and preserve significant historical and cultural resources for current and future generations.*
- **HP-B.2.** *Promote the maintenance, restoration, and rehabilitation of historical resources through a variety of financial and development incentives. Continue to use existing programs and develop new approaches as needed. Encourage continued private ownership and utilization of historic structures through a variety of incentives.*

### **3.5.3 Draft Significance Criteria**

Had an impact analysis been completed for the proposed project, significance criteria would likely have been based on CEQA Guidelines Appendix G. An impact might have been considered significant if the project would:

- a) Cause a substantial adverse change in the significance of a historical resource as defined in § 15064.5;
- b) Cause a substantial adverse change in the significance an archaeological resource pursuant to §15064.5;
- c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature;
- d) Disturb any human remains, including those interred outside of formal cemeteries; or
- e) Cause a substantial adverse change in the significance of a tribal cultural resource (TCR), defined in PRC 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 CRHR, or in a local register of historical resources as defined in PRC 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 PRC Section 5024.1. In applying the criteria set forth in subdivision (c) of PRC Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.

### 3.5.3.1 Paleontological Significance

As CEQA does not directly define a unique paleontological resource or site or unique geological feature, the significance criteria for paleontological resources may have been expanded to include the following:

Only trained paleontologists with specific expertise in the type of fossils being evaluated can determine the scientific significance of paleontological resources. Fossils are considered to be significant if one or more of the following criteria apply:

1. The fossils provide information on the evolutionary relationships and developmental trends among organisms, living or extinct;
2. The fossils provide data useful in determining the age(s) of the rock unit or sedimentary stratum, including data important in determining the depositional history of the region and the timing of geologic events therein;
3. The fossils provide data regarding the development of biological communities or interaction between paleobotanical and paleozoological biotas;
4. The fossils demonstrate unusual or spectacular circumstances in the history of life;
5. The fossils are in short supply and/or in danger of being depleted or destroyed by the elements, vandalism, or commercial exploitation and are not found in other geographic locations.

As so defined, significant paleontological resources might have been determined to be fossils or assemblages of fossils that are unique, unusual, rare, uncommon, or diagnostically important. Significant fossils can include remains of large to very small aquatic and terrestrial vertebrates or remains of plants and animals previously not represented in certain portions of the stratigraphy. Assemblages of fossils that might aid stratigraphic correlation, particularly those offering data for the interpretation of tectonic events, geomorphologic evolution, and paleoclimatology are also critically important (Scott and Springer 2003; Scott and Sagebiel 2004).

#### ***Species Abundance and Representative Samples***

The rarity or abundance of a species in a formation or in the fossil record is important to note, as it also plays a key role in how significant a fossil is. For example, pollen, plankton (diatoms, forams, fusulinids, etc.), marine bivalves, or marine snails are common in the fossil record. It is unusual for a fossil locality of marine bivalves and snails to produce any new information on the paleontological, paleoenvironmental, or temporal setting of an area. Marine bivalves and snails should typically be collected as representative samples, where only a few specimens of each species are collected. In these instances, estimates of what percentage each species is in the fauna should be recorded as part of the field notes (e.g., pecten species 1: 50 percent; pecten species 2: 30 percent; oyster: 20 percent). When a rare invertebrate species is observed, however, all specimens should be recovered. For example, abalone occur as far back as the Late Cretaceous, but only about one fossil has been recovered for every 2 million years of geological history (Geiger and Groves 1999).

Plant fossils and trace fossils may or may not be common, and each situation should be assessed separately. Root traces, plant hash, and other fossils that are not identifiable at least to family should not be collected. While dinosaur trackways are rare in California, Quaternary rodent burrows are not.

Vertebrates are much rarer in the fossil record, so all identifiable vertebrate remains should be collected.

### 3.5.4 References

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