

**ENVIRONMENTAL ASSESSMENT
FOR THE
FEE-TO-TRUST TRANSFER
OF 548 ACRES BY THE
LA JOLLA BAND OF LUISEÑO INDIANS**

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1.0 INTRODUCTION

This Environmental Assessment (EA) has been prepared to comply with the National Environmental Policy Act (NEPA) of 1969 (42 United States Code [USC] 4321 et seq.); the Council on Environmental Quality (CEQ) regulations (40 Code of Federal Regulations [CFR] 1500-1508) for implementing NEPA; the Bureau of Indian Affairs' (BIA's) NEPA Handbook 59 IAM 3-H, which details environmental protection and NEPA policy for the BIA; and procedures issued by the Department of Interior (516 DM 1-7). This EA documents the environmental review of a proposal by the La Jolla Band of Luisefio Indians (Tribe) to transfer two parcels (APN 135-230-08-00 and APN 135-230-15-00) (Property) totaling 548 acres from simple fee status into Federal trust status (Project). The Tribe plans to develop about four homes on approximately five acres of the property. The BIA is the principal Federal agency with jurisdiction over Indian trust lands and other trust matters. The BIA will use the EA to determine if approval of the fee-to-trust transfer and subsequent would result in a significant effect on the Human Environment. This document is organized to be compliant with Section 508 of the Rehabilitation Act of 1973. To ensure that those of all abilities can access this document, it will be placed on the Tribe's website and printed for review at the Tribal Office.e

1.1 *Proposed Action*

This EA evaluates the environmental consequences of approval by the BIA of a request by the Tribe to bring the 548 acres into trust by the United States for the Tribe. The property is currently owned by the Tribe in fee status. Most of the property would remain in its present condition, and about four homes would be developed on approximately five acres in the northwest corner.

The Project area is situated on fee simple land within the La Jolla Indian Reservation (Reservation) in northern San Diego County, California (Figure 1). It is situated between the communities of Pala and Warner Springs, east of Interstate 15 and south of State Route 76 (SR 76). The fee-to-trust Project area is located within Section 21, Township 10 South, Range 1 East, Boucher Hill USGS 7.5' Quadrangle, San Bernardino Meridian (Figure 2). Surrounding land uses include low density rural residential, agricultural land, and open space (Figure 3). This EA evaluates the environmental consequences of the proposed fee-to-trust transfer action and the subsequent development of approximately four homes.

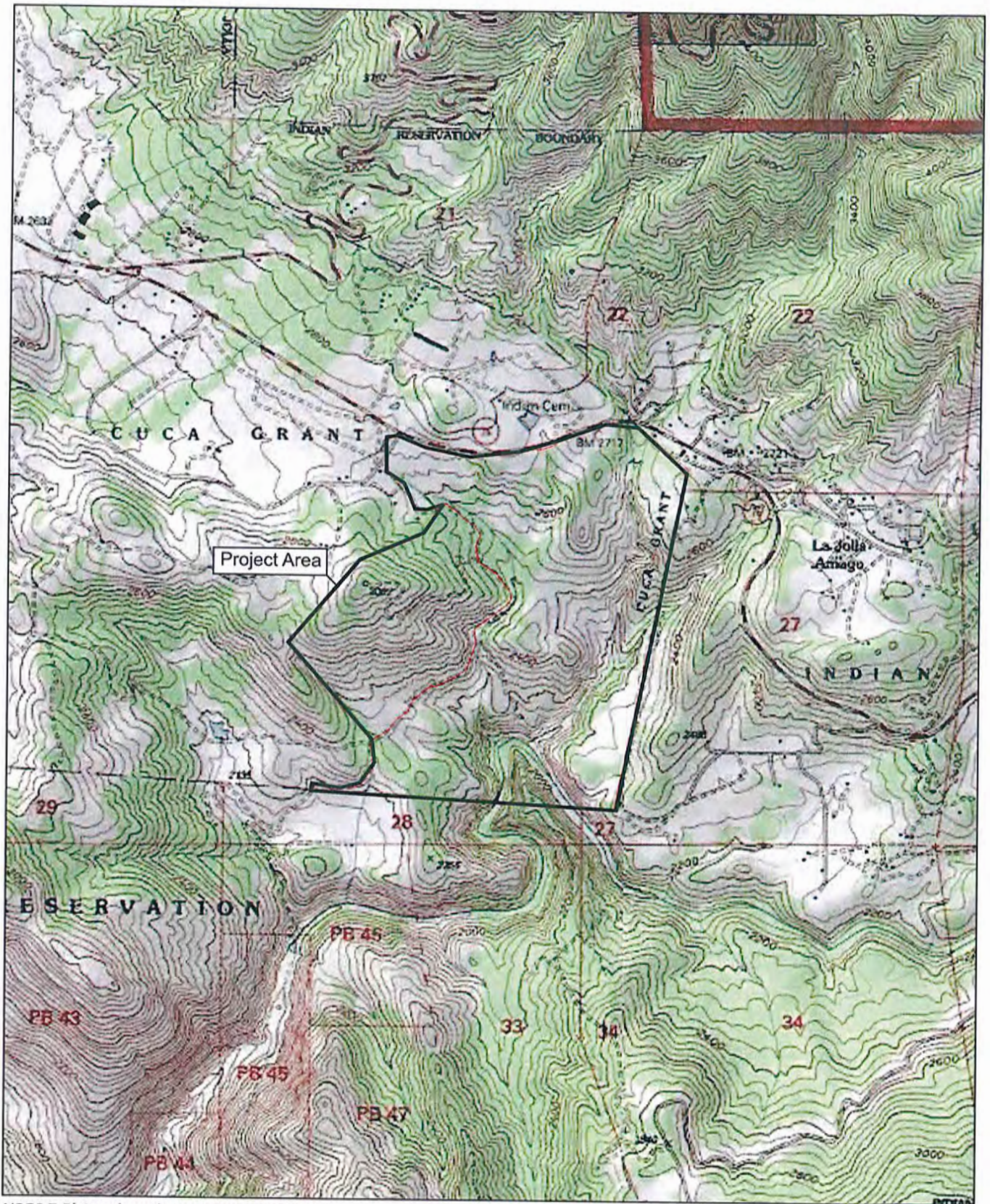
1.2 *Statement of Purpose and Need*

The purpose of the proposed action is, first and foremost, to provide increased long-term socio-economic security for the Tribe. The proposed action would accomplish this goal in several important ways. First, conveyance of the Property into Federal trust on behalf of the Tribe would increase the Tribe's total landbase. Adding this land to the Tribe's trust landbase would help ensure that future generations have adequate land in a rural or semi-rural environment. The addition of the Property to the existing land base offers the Tribe an opportunity to provide for future housing needs of its members.



Figure 1. Project Vicinity Map





USGS 7.5' Quadrangle: Boucher Hill & Palomar Observatory



Figure 2. Project Location Map



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Imagery Date: August, 2019



Figure 3. Aerial Photograph of Project Area



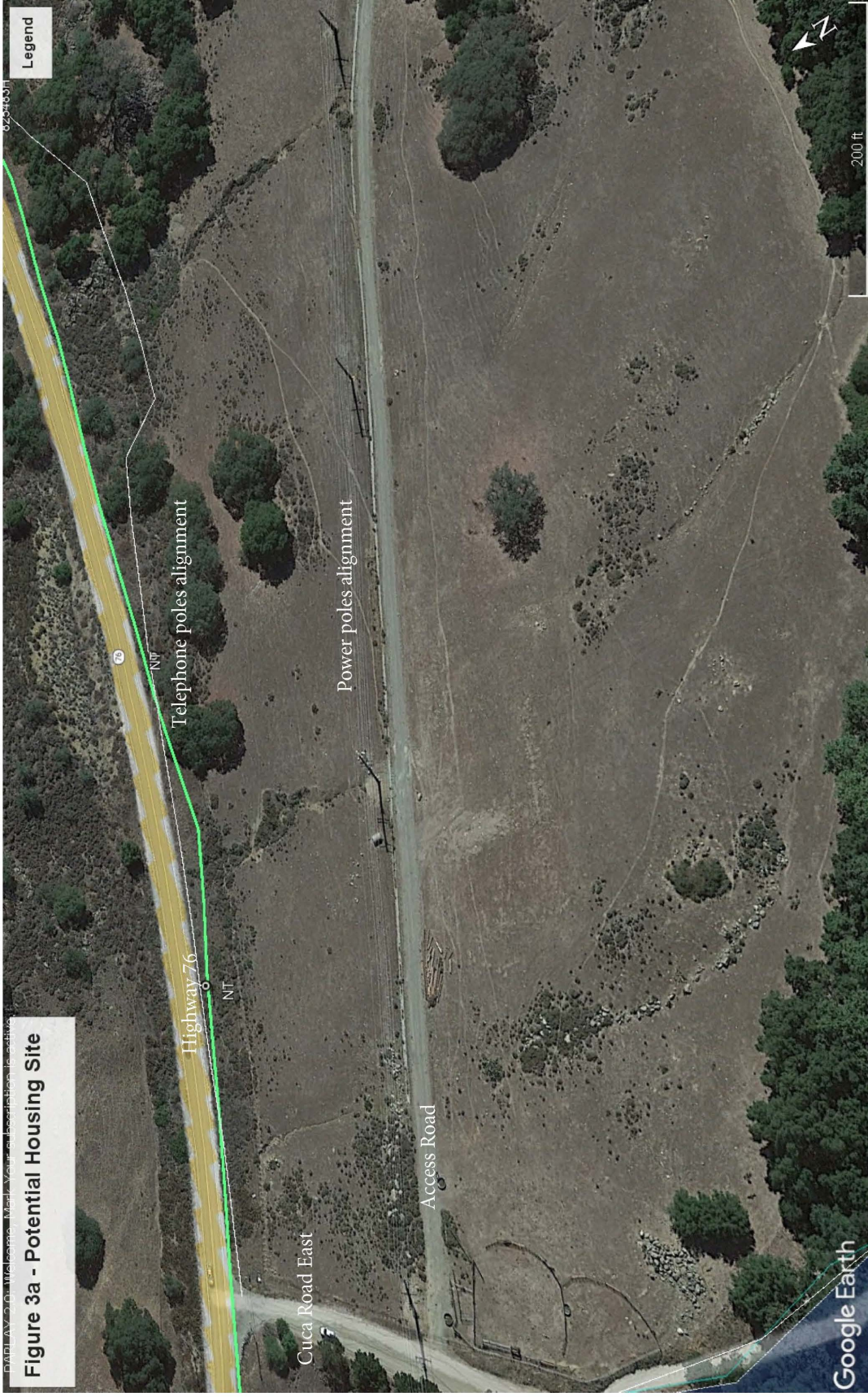


Figure 3a - Potential Housing Site

Legend

Google Earth

A second important benefit of the proposed fee-to-trust transfer would be that the property would serve as a buffer between the Reservation and adjacent private development. The fee-to-trust transfer would allow the Tribe to leave the property in a mostly undeveloped state, or to develop it in ways that would benefit its members, rather than risk being developed with unknown uses by private owners. The area Pauma Valley area to the west has undergone significant development pressure in the recent past, as have many of the back-country areas of San Diego County. Increased security to the Tribe and Tribal development on the Reservation would be realized by placing the property into trust. Increased protection to cultural resources located on the Reservation would also be realized with the transfer into trust status and subsequent Tribal and federal oversight. The Tribe purchased this land to keep this area rural and to provide a buffer zone free from development around the Reservation. If approved by the BIA, the housing would alleviate overcrowding on the Reservation and further benefit Tribal members.

A final way that the proposed action can provide increased economic security for the Tribe is by transferring land use decisions governing the Property from the County of San Diego to the Tribe. The transfer of this property into trust status would afford the Tribe greater control over land use matters associated with the property, in particular, by transferring the jurisdiction over land use decisions from the County to the Tribe and the BIA. Placing this land in trust for the benefit of the Tribe and its members would allow the land to fall under tribal governmental authority, which is critical for the exercise of tribal self-governance and self-determination.

In summary, the proposed action would increase the amount of land within the Reservation boundaries, provide a buffer between the existing Tribal housing and economic development and adjacent private development, transfer land use decisions to the Tribe and the BIA, and increase housing allowing the Tribe to provide for future generations in this location. The long-term survival of the La Jolla Band of Luiseño depends on the Tribe's ability to provide services to its members and to increase their economic opportunities. The Tribe is determined to utilize the fee-to-trust Property in ways that simultaneously improve their quality of life and protect the environment. Tribal and BIA jurisdiction over the Property would help accomplish these goals.

The Property is currently zoned for rural residential use. Impacts associated with a low-density housing development would be expected to be less than significant as there would not likely be substantial increase in population within the Pauma Valley. Some Tribal members currently living on or near the Reservation would relocate to the possible future homes and not generate significant new impacts to the area such as traffic or waste.

1.3 General Setting

The La Jolla Indian Reservation is situated in the northern portion of San Diego County, California. The Reservation lies 64 miles northeast of the city of San Diego, 30 miles east of the City of Oceanside and 17 miles northeast of the city of Escondido. The proposed fee-to-trust property is located on the south side of Palomar Mountain within Section 21, Township 10 South, Range 1 East on the Boucher Hill USGS 7.5' Quadrangle (see Figure 2). The site lies immediately south of State Route 76 approximately 6 miles east of Rincon. Elevations within

this portion of the Project area range from 4,750 feet above mean sea level (AMSL) in the south to approximately 4,920 above AMSL in the north.

The property proposed for fee-to-trust transfer is located adjacent to the La Jolla Indian Reservation, within the rural and recreational Palomar Mountain community. The property is currently undeveloped with the exception of portions of graded dirt roads and crossing utility lines. Vacant land generally surrounds the property with some rural residential uses scattered along the southern side of the mountain. The remainder of the Project area, located on existing tribal trust land, consists of steep slopes densely covered with vegetation.

1.4 Organization of Report

The remainder of this report is organized as follows. Section 2.0 describes the Project alternatives, including the Preferred Alternative (fee-to-trust transfer) and the No Action Alternative. Section 3.0 presents the affected environment and Section 4.0 provides information regarding the potential environmental effects of the proposed action. Section 5.0 presents the cumulative analysis of this action when considered with other past, present and reasonably foreseeable future actions; Section 6.0 provides references cited; and Section 7.0 lists Project personnel and Project consultation/coordination.

The biological resources technical report and biological letter update prepared in support of this EA are provided as Appendix A to this document. The cultural resources report comprises Appendix B, but is bound separately and not available for public review. A Phase I Environmental Site Assessment for hazardous materials was prepared and is attached to the EA as Appendix C.

2.0 PROJECT ALTERNATIVES

This section describes the proposed action as well as alternatives that have been considered by the Tribe. The purpose of the alternative analysis is to allow informed decisions concerning the environmental consequences of the proposed action and the alternatives by responsible and reviewing agencies, the public and decision makers.

Two alternatives are investigated in this EA. These alternatives include the Preferred Alternative (fee-to-trust transfer) and the No Action Alternative.

2.1 *Preferred Alternative (Fee-to-Trust Transfer)*

The Preferred Alternative consists of the proposed conveyance of 548 acres (APN 135-230-08-00 and APN 135-230-15-00), owned by the Tribe, into Federal trust status on behalf of the La Jolla Band of Luiseño Indians. Under this alternative, the fee-to-trust transfer would place title of the property into trust by the United States for the Tribe, pending approval by the Secretary of the Interior, and would shift jurisdiction over land use matters from San Diego County to the Tribe and Federal government. The shift to Tribal Trust status would allow the Tribe to provide additional land for future generations.

The Tribe originally purchased the Property for buffer land around the Reservation. The Tribe also plans to develop four single family Tribal homes on approximately five acres in the northwest corner.

2.2 *No Action Alternative*

The No Action Alternative would not allow the Property, currently owned in fee status by the La Jolla Band of Luiseño Indians, to be acquired by the United States in trust status for the Tribe. No development would occur. The property would remain in fee status and jurisdiction over land use matters would remain with the County of San Diego. The Tribe's goal to further provide for the long-term economic and cultural security for the Reservation and Tribal members would not be ensured and Tribal governmental regulatory compliance over land use would continue to be abdicated to another governmental entity. This would not serve the purpose and needs of the Tribe.

2.3 *Comparison of Project Alternatives*

Preferred Alternative

The Preferred Alternative would allow for the Property to be transferred into Federal trust status on behalf of the La Jolla Band of Luiseño Indians. The Tribe would be able to add buffer trust land between the existing Reservation and surrounding private land and provide additional land for future generations, with the shift in status to Trust land. The Tribe plans to develop rural residential housing in the northwest corner.

The proposed action of transferring the Property into trust status would not result in any

significant unmitigable impacts to the Human Environment. The Preferred Alternative represents the best means for the Tribe to achieve its goals to protect important cultural resources, provide land for future generations, and increase and improve the socioeconomic conditions for its members, without resulting in significant adverse environmental impacts.

No Action Alternative

The No Action Alternative would be the least preferable alternative. Approval of the No Action Alternative would represent a loss of potential long-term socio-economic security for the Tribe by not allowing jurisdiction over the Property to shift from the County of San Diego to the Tribe and Federal government. Under the No Action Alternative, the Tribe would be less capable of controlling land use of this property, improving its socio-economic status and overall quality of life, and protecting the environment. The No Action Alternative could impair the Tribe's ability to provide land for future generations. The No Action Alternative is therefore not in the best interest of the Tribe.

3.0 AFFECTED ENVIRONMENT

3.1 Land Resources

Topography and Soils

The Project area is located in the Jeff Valley/Cedar Creek area along the southerly side of Palomar Mountain in the unincorporated portion of San Diego County, along the south side of State Route 76.

The Project area includes several rugged, steep mountainous slopes and ridge tops along the southern flank of Palomar Mountain with elevations ranging from approximately 4,750 feet above mean sea level (AMSL) in the south to approximately 4,920 above AMSL in the north.

Soils consist of the Crouch series, Holland series, and Tollhouse series (Bowman 1973). Soils in the Crouch series consist of well-drained, deep to moderately deep coarse sandy loams. These soils occur on mountainous uplands with slopes ranging between 5 and 75 percent (Bowman 1973). Soil types reported as occurring on-site include Crouch coarse sandy loam with 30 to 50 percent slopes and Crouch rocky coarse sandy loam with 30 to 50 percent slopes (CtF and CuG).

Soils in the Holland series are described by Bowman (1973) as consisting of well-drained, moderately deep and deep fine sandy loams. Soils in this series can be found on mountainous uplands with slopes ranging between 2 and 60 percent. Holland stony fine sandy loam with 30 to 60 percent slopes is reported as occurring on-site. This soil type occurs on steep to very steep slopes and is 20 to 25 percent stones and cobblestones (Bowman 1973).

The Tollhouse series consists of excessively drained, shallow to very shallow coarse sandy loams (Bowman 1973). These soils occur on mountains with slopes ranging between 5 and 65 percent at elevations between 3,000 and 5,000 feet. Tollhouse rocky coarse sandy loam, 30 to 65 percent slopes is reported as occurring on-site (Bowman 1973). This soil type occurs on steep to very steep slopes and is only 5 to 10 inches over hard rock. Large boulders cover 20 to 25 percent of the area and rock outcrops cover approximately 10 percent (Bowman 1973).

Regional Geology

The landscape of the Project area is largely a product of the region's geology. During the Jurassic and late Cretaceous (>100 million years ago) a series of volcanic islands paralleled the current coastline in the San Diego region. At about the same time, a granitic and gabbroic batholith was being formed under and east of these volcanoes. This batholith was uplifted to form the granitic rocks and outcrops of the Peninsular Range including Palomar Mountain. The Project is near the southwestern margin of this batholith and is underlain by these granitic rocks which are exposed as bedrock outcrops of tonalite (quartz diorite) throughout the property.

The Elsinore Fault Zone, a major northwest-striking fault system, runs through the northeast portion of the La Jolla Reservation and the Project area. The Elsinore Fault Zone is classified as “active” pursuant to State of California Alquist-Priolo guidelines (Hart 1994). The Project area is not within the Alquist-Priolo Fault Rupture Hazard Zone, however. Displacements along faults within the Elsinore Fault Zone form a distinctive series of northwest-southeast striking, linear mountain blocks separated by valley troughs (Kennedy, 1977). Within the vicinity of the Project area, the Elsinore Fault Zone is a structurally complex area comprised of several smaller, related fault splays and fault zones. The La Jolla Reservation and Project area are located approximately mid-way between two splays of the Elsinore Fault, and may be situated on or adjacent to a third possible splay of the fault.

Mapping by Rogers (1966) indicates the Palomar Mountain area is traversed by a series of northwest-southeast trending faults of the Elsinore Fault Zone and the Agua Caliente Fault Zone. Subsequent work by Leighton (1987) documented five northwest-southeast trending fault traces across the Jeff Valley portion of Palomar Mountain. The presence of these faults and their associated fracture zones are considered to be a significant influence on the groundwater system in the area of the proposed Project.

3.2 Water Resources

Surface Water

The Project is located on the south-facing slopes of Palomar Mountain north of the San Luis Rey River. The headwaters of the river are located approximately 20 miles upstream. The only major surface impoundment in the upper watershed is Vista Irrigation District’s Lake Henshaw, with a storage capacity of 53,400 acre-feet. The San Luis Rey River provides a major water resource for the area. Perennial water is present in Cedar Creek and La Jolla Amago Creek, among other, more seasonal creeks that drain from the Palomar Mountain area and from the south. Downstream from the Project area is a spring and westerly from the Project on the Reservation are numerous springs. The Project area exists within the 557 square mile San Luis Rey River Watershed.

La Jolla Amago Creek bisects the Project area. At the time of the biological resources survey, the creek exhibited flowing water and the creek bottom was lined with granite rocks ranging in diameter between 1 and 3 feet. Only upland plant species were observed within this portion of the creek. There are no navigable or jurisdictional waters within the Project area.

The Project area are located approximately 26 miles southwest of the southern terminal of Bautista Creek, which is the nearest Federally Administered Wild or Scenic river. Bautista Creek is located entirely within Riverside County. There are currently no Wild or Scenic Rivers located within San Diego County (Appendix A).

Groundwater

Groundwater is the source for the domestic water supply for the community and on the Reservation. Homes on Palomar Mountain obtain their water from the Palomar Mutual Water District or from private wells. Groundwater aquifers on the Reservation are primarily found in fractured bedrock. The occurrence and movement of groundwater is significantly tied to the occurrence of the Elsinore Fault Zone and adjacent joint systems. Most of the Reservation homes, community buildings, and commercial uses are served by wells connected through three community water systems. According to well drillers' logs, the groundwater aquifers are principally comprised of fractured granite. The depth below the ground surface (bgs) where water was first encountered during drilling ranged from 135 feet to 327 feet bgs. These depths are much deeper than the wells static water levels, which range from 10 feet to 80 feet bgs. Therefore, the aquifer system can be characterized as a confined or artesian aquifer (Teel, et. al. 2004).

The La Jolla Indian Reservation includes areas of terraces and mountain slope on the north and south sides of the San Luis Rey River. The Project area and surrounding areas are within the watershed of the San Luis Rey River which occupies approximately 560 square miles in northern San Diego, stretching eastward 56 miles from the Pacific Ocean. The San Luis Rey River runs through the Reservation for approximately 7.8 miles, with the headwaters of the river located approximately 20 miles upstream. Other major streams include 2.1 miles of Cedar Creek and 2.6 miles of Yapicha Creek. The Escondido Canal runs through approximately 1.1 miles of the Reservation (Teel, et.al. 2004). The only major surface impoundment in the upper watershed is Vista Irrigation District's Lake Henshaw, with a storage capacity of 53,400 acre-feet. The San Luis Rey River provides a major water resource for the area. Perennial water is present in Cedar Creek, among other, more seasonal creeks that drain from the Palomar Mountain area and from the south. The Project area is located on the south-facing slopes of Palomar Mountain and is intersected by a portion of the San Luis Rey River. Cedar Creek crosses under SR-76 through a portion of the Project area, as well as a portion of La Jolla Amago Creek. Downstream from the Project area is a spring and westerly from the Project area are numerous springs on the Reservation.

The nearest sole-source aquifer is the Camp-Cottonwood Creek aquifer which is located approximately 36 miles south of the Project area.

Water Quality

Storm water runoff and its potential effects on water quality is an environmental issue that has received increasing attention from regulatory agencies in recent years. The National Pollution Discharge Elimination System (NPDES), established pursuant to the provisions of the Clean Water Act, is a national program for regulating and administering permits for all discharges to receiving waters. The EPA is ultimately charged with regulating discharges to surface waters. In some states, the EPA has delegated permitting authority to a state agency but continues to regulate discharges originating on Indian lands into receiving waters. Under the 1988 Clean Water Act, Tribes can be treated as states for the purposes of the NPDES.

All construction Projects encompassing one acre or more on Indian lands must be covered by the EPA's NPDES General Storm Water Permit for Construction Activities. In the event of a proposed construction Project, a Notice of Intent (NOI) must be submitted to the EPA at least two days prior to the commencement of construction in order to achieve Project authorization under the EPA's General Storm Water Discharge Permit. A NPDES permit is not required for this fee-to-trust transfer because no construction or any other facility is currently proposed. At such time as the Tribe proposes to pursue housing or limited commercial enterprises, the Tribe would proceed with additional environmental review if required by the BIA and would follow all applicable requirements of the NEPA revised implementing procedures and would seek a NPDES permit if the project encompasses an area greater than one acre or if that future project is not eligible for an exclusion.

3.3 Air Quality

Climate

The climate of the region can generally be described as arid, and water is a critical resource. For the Palomar Mountain area, the annual average maximum temperature is 66 degrees Fahrenheit (F), ranging from 51 degrees F in January to 84 degrees F in July. The annual average minimum temperature is 45 degrees F, ranging from 34 degrees F in January and February to 62 degrees F in July and August. Average annual total precipitation is 28 inches at the Palomar Observatory, with most of the rain falling from November through April. Snowfall occurs between November and April, with an average snow depth of one to two feet during these months.

The Project is located in the San Diego Air Basin (SDAB). The boundaries of the air basin are coincident with those of the county. The climate of San Diego County is profoundly influenced by the Pacific Ocean and its semi-permanent high pressure systems that result in dry, warm summers and mild, occasionally wet winters. One of the main determinants of the climatology is a semipermanent high-pressure area (the Pacific High) in the eastern Pacific Ocean. In the summer, this pressure center is located well to the north, causing storm tracks to be directed north of California. This high-pressure cell maintains clear skies for much of the year. When the Pacific High moves southward during the winter, this pattern changes, and low-pressure storms are brought into the region, causing widespread precipitation. In San Diego County, the months of heaviest precipitation are November through April, averaging about 9-14 inches annually.

Two climatic phenomena contribute to air pollution problems in San Diego County. Subsidence inversions occur in the summer and the base of the inversion, at elevations between 1,000 and 3,000 feet, forms a "lid" to trap pollutants, which have been generated in the coastal plain and blown inland by the onshore winds. Thus, the highest pollution levels are often found in the western mountain slope communities, such as Alpine, Ramona and Descanso. The Project area is located west of the southern slope of Palomar Mountain, and does not experience the higher pollution levels associated with inversion conditions.

The normal wind pattern is moderate to strong onshore winds during the day and weak offshore winds at night. The Santa Ana wind condition is a reversal of the normal winds, and offshore winds blow pollutants out to the ocean. A strong Santa Ana will produce clear days. However, a weak Santa Ana, and conditions at the start and end of a Santa Ana wind period, will transport air pollutants from Los Angeles and Orange Counties out to sea and southward, then back to shore in San Diego County. This phenomenon will produce higher pollutant concentrations in the coastal communities.

Regulatory Standards

The Federal Clean Air Act (42 U.S.C. §7401) requires the adoption of National Ambient Air Quality Standards (NAAQS) to protect the public health, safety, and welfare from known or anticipated effects of air pollution. Current standards are set for sulfur dioxide (SO₂), carbon monoxide (CO), nitrogen dioxide (NO₂), ozone (O₃), particulate matter equal to or less than 10 microns in size (PM₁₀), fine particulate matter equal to or less than 2.5 microns in size (PM_{2.5}), and lead (Pb). These pollutants are called criteria pollutants. The State of California Air Resources Board (ARB) has established standards for the federal criteria pollutants that are generally more restrictive than the NAAQS, and additional standards for atmospheric sulfates, vinyl chloride, hydrogen sulfide, and visibility. Federal and state standards are shown in Table 1.

Clean Air Act – General Conformity

The CAA requires each state to develop, adopt, and implement a State Implementation Plan (SIP) to achieve, maintain, and enforce federal air quality standards throughout the state. SIP documents are developed on a pollutant-by-pollutant basis whenever one or more air quality standards are being violated. Local governments and air pollution control districts have had the primary responsibility for developing and adopting the regional elements of the California SIP.

The 1990 Amendments to CAA Section 176 require the USEPA to promulgate rules to ensure that federal actions conform to the appropriate SIP. These rules, known together as the General Conformity Rule (40 CFR §§ 51.850-.860 and 40 CFR §§ 93.150-.160) require any federal agency responsible for an action in an area designated as nonattainment or maintenance to determine that the action conforms to the applicable SIP or that the action is exempt from the General Conformity Rule requirements. This means that federally supported or funded activities will not (1) cause or contribute to any new air quality standard violation, (2) increase the frequency or severity of any existing standard violation, or (3) delay the timely attainment of any standard, interim emission reduction, or other milestone. Actions will conform to a SIP and be exempt from a conformity determination if an applicability analysis shows that the total direct and indirect emissions from the Project construction and operation activities will be less than specified emission rate thresholds, known as *de minimis* limits.

Table 1. *National and California Ambient Air Quality Standards*

Pollutant	Averaging Time	California	Federal Standards
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		Standards	Primary ^a	Secondary ^b
O ₃	1 Hour	0.09 ppm (180 µg/m ³)	–	–
	8 Hour	0.070 ppm (137 µg/m ³)	0.070 ppm (137 µg/m ³)	Same as Primary
PM10	24 Hour	50 µg/m ³	150 µg/m ³	Same as Primary
	AAM	20 µg/m ³	–	Same as Primary
PM2.5	24 Hour	–	35 µg/m ³	Same as Primary
	AAM	12 µg/m ³	12.0 µg/m ³	15.0 µg/m ³
CO	1 Hour	20 ppm (23 mg/m ³)	35 ppm (40 mg/m ³)	–
	8 Hour	9.0 ppm (10 mg/m ³)	9 ppm (10 mg/m ³)	–
	8 Hour (Lake Tahoe)	6 ppm (7 mg/m ³)	–	–
NO ₂	AAM	0.030 ppm (57 µg/m ³)	0.053 ppm (100 µg/m ³)	Same as Primary
	1 Hour	0.18 ppm (339 µg/m ³)	0.100 ppm (188 µg/m ³)	–
SO ₂	24 Hour	0.04 ppm (105 µg/m ³)	–	–
	3 Hour	–	–	0.5 ppm (1,300 µg/m ³)
	1 Hour	0.25 ppm (655 µg/m ³)	0.075 ppm (196 µg/m ³)	–
Lead	30-Day Avg.	1.5 µg/m ³	–	–
	Calendar Quarter	–	1.5 µg/m ³	Same as Primary
	Rolling 3-Month Avg.	–	0.15 µg/m ³	
Visibility Reducing Particles	8 Hour	Extinction coefficient of 0.23 per km – visibility ≥ 10 miles (0.07 per km – ≥30 miles for Lake Tahoe)	No Federal Standards	
Sulfates	24 Hour	25 µg/m ³		
Hydrogen Sulfide	1 Hour	0.03 ppm (42 µg/m ³)		
Vinyl Chloride	24 Hour	0.01 ppm (26 µg/m ³)		
<p>O₃: ozone; ppm: parts per million; µg/m³: micrograms per cubic meter; PM10: respirable particulate matter less than 10 micrometers in diameter; AAM: Annual Arithmetic Mean; –: no standard; PM2.5: fine particulate matter less than 2.5 micrometers in diameter; CO: carbon monoxide; mg/m³: milligrams per cubic meter; NO₂: nitrogen dioxide; SO₂: sulfur dioxide; km: kilometer.</p> <p>^a <i>National Primary Standards</i>: The levels of air quality necessary, within an adequate margin of safety, to protect the public health.</p> <p>^b <i>National Secondary Standards</i>: The levels of air quality necessary to protect the public welfare from any known or anticipated adverse effects of a pollutant.</p> <p>Note: More detailed information in the data presented in this table can be found at the CARB website (www.arb.ca.gov).</p> <p>Source: CARB 2016.</p>				

Attainment Designations

Specific geographic areas are classified as either “attainment” or “nonattainment” areas for each pollutant based on the comparison of measured data with federal and state standards. If an area is redesignated from nonattainment to attainment, the Clean Air Act (CAA) requires a revision to the SIP, called a maintenance plan, to demonstrate how the air quality standard will be maintained for at least 10 years.

Existing Air Quality

The SDAB currently meets the federal standards for all criteria pollutants except O₃ and meets state standards for all criteria pollutants except O₃, PM₁₀, and PM_{2.5}. The SDAB currently falls under a federal “maintenance plan” for CO, following a 1998 redesignation as a CO attainment area. Current attainment designations for San Diego County are shown in Table 2.

Table 2. San Diego County Attainment Designations

Criteria Pollutant	Federal Designation	State Designation
Ozone (8-Hour)	Moderate Nonattainment	Nonattainment
Ozone (1-Hour)	Attainment *	Nonattainment
Carbon Monoxide	Attainment	Attainment
PM10	Unclassifiable **	Nonattainment
PM2.5	Attainment	Nonattainment
Nitrogen Dioxide	Attainment	Attainment
Sulfur Dioxide	Attainment	Attainment
Lead	Attainment	Attainment
Sulfates	No Federal Standard	Attainment
Hydrogen Sulfide	No Federal Standard	Unclassified
Visibility	No Federal Standard	Unclassified

* The federal 1-hour standard of 12 pphm was in effect from 1979 through June 15, 2005. The revoked standard is referenced here because it was employed for such a long period and because this benchmark is addressed in State Implementation Plans.

** At the time of designation, if the available data does not support a designation of attainment or nonattainment, the area is designated as unclassifiable.

SDAPCD 2017, USEPA 2017

Regional Air Quality

Ambient air pollutant concentrations in the SDAB are measured at air quality monitoring stations operated by the San Diego Air Pollution Control District (SDAPCD). The closest SDAPCD air quality monitoring stations to the Project area are the Escondido - East Valley Parkway monitoring station, located at 600 East Valley Parkway, Escondido, approximately 15 miles south of the Pauma Reservation and the Camp Pendleton monitoring station, located above Del Mar Beach in Camp Pendleton. The Escondido station is impacted by transportation sources on Interstate 15 and Highway 78. The station monitors O₃, CO, PM₁₀, PM_{2.5}, and NO₂. Due to its geographical location, the Camp Pendleton station records over-water transport from the South Coast Air Basin; the station monitors O₃, PM_{2.5}, and NO₂. Neither station is located near enough

to the Project area to be used to characterize criteria pollutants at the Project area.

3.4 *Biological Resources*

A biological resources study was conducted for the proposed Project by Tierra in consultation with Mr. Brant Primrose (Primrose Biological Services) and is included in Appendix A to this EA. The biological resources survey was conducted in February 2021 and the study focused on the occurrence of wetlands and/or riparian habitats, the occurrence of any “wild and scenic rivers,” the potential take of any federally listed threatened or endangered species under the Endangered Species Act (ESA), the potential take of Bald or Golden Eagles protected under the Bald and Golden Eagle Protection Act, and the potential take of migratory birds listed under the Migratory Bird Treaty Act (including its regulatory framework) within the Project area. Prior to the survey, a search was conducted of the California Natural Diversity Data Base (CNDDDB), a computerized inventory of endangered, threatened or rare species occurrences maintained by the California Department of Fish and Wildlife (CDFW). Input on the potential occurrence of sensitive species in the area by the U.S. Fish and Wildlife Service (USFWS) was also reviewed. USFWS IPaC yielded one critical habitat for one endangered species, the Southwestern Willow Flycatcher. This has been removed as USF&WS have accepted the Tribe’s species management plan. A nesting bird survey will be conducted 3/15 to 9/15 if construction will occur during that time. Other species noted in IPaC without overlaying habitat to project area, included the Least Bell’s Vireo, Arroyo Toad, and Coastal California Gnatcatcher (Please refer to Appendix A-Bio Study).

The nomenclature used in the report conforms to the following sources: Hickman (1993) for plant species, Holland (1996, as amended) for plant communities, Stebbins (1985) for reptiles and amphibians, the American Ornithologist’s Union (1983, as updated) for bird species, and Jones *et al.* (1992) for mammals.

Habitats

Most of the Property supports native chaparral vegetation. Also largely present is non-native grassland, riparian oak woodland and small patches of other native habitats and some disturbed areas. The onsite habitats are summarized below. The Project area is largely dominated by mixed Chamise Chaparral (CC), Inland Coastal Sage Scrub (CSS), or soft chaparral biotic community, and Non-Native Grassland (NNG), with instances of Interior Live Oak Woodland and Riparian Oak Woodland. Chamise chaparral is characterized by 1-3 meter tall shrubs dominated by chamise (*Adenostoma fasciculatum*). Stands are densely interwoven with very little herbaceous understory or litter. Forbs observed include Bigelow’s mossfern (*Selaginella bigelovii*), bird’s beak (*Cordylanthus sp.*), and navarretia (*Navarretia sp.*). Inland Coastal Sage Scrub is similar to coastal sage scrub in structure and species composition but occurs inland on the western slopes of the mountains. In the Project area, this habitat is dominated by white sage (*Salvia apiana*) and California sagebrush (*Artemisia californica*). Other plants observed include monkey flower (*Mimulus aurantiacus*), and our lord’s candle (*Yucca whipplei*).

Coast live oak woodland is dominated by coast live oak (*Quercus agrifolia*) and has a dense evergreen canopy. The shrub layer is poorly developed and the understory usually

consists of non-native annual grasses. Species observed in this habitat include rip-gut brome (*Bromus diandrus*), slender wild oat (*Avena barbata*), white flowering currant (*Ribes indecorum*), toyon (*Heteromeles arbutifolia*) and elderberry (*Sambucus mexicana*).

Southern interior live oak riparian forest is a dense, evergreen riparian woodland dominated by interior live oak (*Quercus agrifolia* var. *oxiadenia*). It is rich in herbs and poor in understory. It occurs on bottomlands and outer floodplains along larger streams, on fine-grained, rich alluvium. This vegetative community is characterized by interior live oak (*Quercus agrifolia* var. *agrifolia*), big-leaf maple (*Acer macrophyllum*), Douglas mugwort (*Artemisia douglasiana*), toyon (*Heteromeles arbutifolia*), morning glory (*Marah macrocarpus*), and blue elderberry (*Sambucus mexicana*; Holland 1986).

Native grasslands are a rare and declining habitat in southern California. Dominant species include purple needle-grass (*Nassella pulchra*), nodding needlegrass (*Nassella cernua*), foothill needlegrass (*Nassella lepida*), and melica (*Melica imperfecta*). Other species observed include lotus (*Lotus purshianus*), soft chess (*Bromus hordeaceus*), rip-gut brome (*Bromus diandrus*), and croton (*Croton californicus*).

Non-native grasslands are typically found in areas that have been previously disturbed and are characterized by a high concentration of annual exotic grasses. This vegetation community was observed on both sides of Highway 76. Species observed include soft chess, rip-gut brome, cheat-grass (*Bromus tectorum*) and slender wild oat. Ruderal describes areas that have been cleared or otherwise subject to repeated disturbance. As a result, such areas are generally devoid of vegetation or are only sparsely vegetated with opportunistic weedy species.

Plants

The plant species observed typify the diversity normally found in chaparral and lightly disturbed areas in the interior areas of San Diego County. The list of observed species is expected to represent at least 80 percent of the naturalized plants occurring on the Property. Several of the plants observed are Special Status Species, although none are federally listed as Endangered or Threatened Species. The CNDDDB search revealed that 23 sensitive species of plant had potential to occur within the Boucher Hill USGS Quad. None of these species were identified within the Project area. A complete list of plant species observed in the Project area is provided in Table 3.

Animals

Twenty-three species of animals were recorded during the biological resources survey. These are generally common species, abundant in the site's general vicinity. None of the animals observed are Special Status Species, and none are federally-listed as Endangered or Threatened Species. A complete list of the animal species observed in the Project area is provided in Table 4.

Wetlands

U.S. Fish and Wildlife Service (USFWS) mapping data is available for the Project area. No protected wetlands exist within the Project area (USFWS, 2020). Riparian habitat exists within portions of the Project area. The species indicative of this habitat are limited and disturbed. The riparian habitat would not be affected by the transfer of the property from simple fee to Trust status and there are no federally definable “wetlands” wild and scenic rivers, or navigable or jurisdictional waters within the Project area.

Table 3. Flora Observed within the Project area

<i>SCIENTIFIC NAME</i>	<i>COMMON NAME</i>	<i>Special Status Species (Y/N)</i>
<i>Achnatherum diegoense</i>	San Diego Needlegrass	N
<i>Acmispon glaber</i>	Deerweed	N
<i>Adenostoma fasciculatum</i>	Chamise	N
<i>Anagalis arvensis</i>	Scarlet’s Pimpernel	N
<i>Agave americana</i>	Century Plant	N
<i>Apiastrum graveolens</i>	Mock Parsley	N
<i>Artemesia californica</i>	Big Sagebrush	N
<i>Asclepias californica</i>	Milkweed	N
<i>Avena barbata</i>	Wild Oat	N
<i>Arctostapylos glauca</i>	Big Berry Manzanita	N
<i>Baccharis pilularis</i>	Coyote Brush	N
<i>Baccharis salicifolia</i>	Mule Fat	N
<i>Baccharis sarothroides</i>	Broom Baccharis	N
<i>Brassica nigra</i>	Mustard	N
<i>Bromus hordeaceus</i>	Soft Chess	N
<i>Bromus madritensis</i>	Red Brome	N
<i>Bromus tectorum</i>	Cheat Grass	N
<i>Ceanothus leucodermis</i>	Chaparral Whitethorn	N
<i>Ceanothus tomentosus</i>	Ramona-lilac	N
<i>Centaurea melitensis</i>	Tocalote	N
<i>Clarkia sp.</i>	Clarkia	N
<i>Conyza canadensis</i>	Horseweed	N
<i>Conyza foliosus</i>	Leafy daisy	N
<i>Cordylanthus rigidus</i>	Bird’s Beak	N
<i>Corethrogyne filaginifolia</i>	California Sand-Aster	N
<i>Crassula connata</i>	Pygmyweed	N
<i>Croton setigerus</i>	Doveweed	N
<i>Cryptantha intermedia</i>	Cryptantha	N

SCIENTIFIC NAME	COMMON NAME	Special Status Species (Y/N)
<i>Daucus pusillus</i>	Rattlesnake weed	N
<i>Deinandra fasciculata</i>	Fascicled Tarweed	N
<i>Encelia farinose</i>	Brittlebush	N
<i>Eriogonum fasciculatum</i>	Buckwheat	N
<i>Erodium botrys</i>	Red-Stem Filaree	N
<i>Erodium cicutarium</i>	Red Stem Filaree	N
<i>Galium aparine</i>	Common Bedstraw	N
<i>Galium angustifolium</i>	Bedstraw	N
<i>Galium nuttallii</i>	San Diego Bedstraw	N
<i>Gilia capitata ssp. abrotanifolia</i>	Ball Gilia	N
<i>Hazardia squarrosa</i>	Sawtooth Goldenbush	N
<i>Heliotropium curvassicum</i>	Heliotrope	N
<i>Hesperoyucca whipplei</i>	Chaparral Candle	N
<i>Heteromeles arbutifolia</i>	Toyon	N
<i>Heterotheca grandiflora</i>	Telegraph Weed	N
<i>Juncus arcticus var. mexicanus</i>	Mexican Rush	N
<i>Lonicera subspicata</i>	Honeysuckle	N
<i>Lotus agrophyllus</i>	Silverleaf Lotus	N
<i>Malosma laurina</i>	Laurel Sumac	N
<i>Marah macrocarpus</i>	Wild Cucumber	N
<i>Marrubium vulgare</i>	Horehound	N
<i>Mimulus aurantiacus</i>	Bush Monkey Flower	N
<i>Mirabilis laevis</i>	Wishbone Plant	N
<i>Nassella pulchra</i>	Purple Needlegrass	N
<i>Navarretia hamata</i>	Hooked Pincushion Plant	N
<i>Opuntia oricola</i>	Chaparral Prickly -Pear	N
<i>Oxalis sp.</i>	Clover	N
<i>Paeonia californica</i>	California Peony	N
<i>Pellaea andromedifolia</i>	Coffee Fern	N
<i>Pellaea mucronata</i>	Bird Foot Fern	N
<i>Pennisetum setaceum</i>	Fountain Grass	N
<i>Pentagramma triangularis</i>	California Goldback Fern	N
<i>Plantanus racemose</i>	Sycamore	N
<i>Quercus agrifolia var. oxyadenia</i>	Interior Coast Live Oak	N
<i>Quercus berberidifolia</i>	Scrub Oak	N
<i>Quercus chryolepis</i>	Canyon Live Oak	N
<i>Quercus engelmannii</i>	Engelmann's Blue Oak	N

SCIENTIFIC NAME	COMMON NAME	Special Status Species (Y/N)
<i>Ribes indecorum</i>	White-Flowered Currant	N
<i>Rhamnus crocea</i>	Spiny Redberry	N
<i>Rhamnus tomentella ssp. tomentella</i>	Chaparral Coffeeberry	N
<i>Rubus ursinus</i>	California Blackberry	N
<i>Rhus trilobata</i>	Skunk bush	N
<i>Salix laevigata</i>	Red Willow	N
<i>Salix lasiolepis</i>	Arroyo Willow	N
<i>Salvia apiana</i>	White Sage	N
<i>Sambucus Mexicana</i>	Blue Elderberry	N
<i>Scrophularia californica</i>	California Bee plant	N
<i>Selaginella bigelovii</i>	Bigelow's Spike-Moss	N
<i>Selaginella cinerascens</i>	Mesa Spike-Moss	N
<i>Sisyrinchium bellum</i>	Blue-Eyed-Grass	N
<i>Sonchus asper</i>	Prickly lettuce	N
<i>Sonchus oleraceus</i>	Common-Sow Thistle	N
<i>Thalictrum fenderli</i>	Meadow-Rue	N
<i>Toxicodendron diversilobum</i>	Poison Oak	N
<i>Viguiera laciniata</i>	San Diego SunFlower	N
<i>Vulpia myuros</i>	Rat Tail Fescue	N
<i>Wyethia ovata</i>	Southern Mule's Ear	N

Table 4. Fauna Observed within the Project area

SCIENTIFIC NAME	COMMON NAME	Special Status Species (Y/N)
BIRDS		
<i>Aphelocoma californica</i>	Western Scrub Jay	N
<i>Corvus corax</i>	Common Raven	N
<i>Troglodytes aedon</i>	House Wren	N
<i>Zenaida macroura</i>	Morning Dove	N
<i>Pipilo maculatus</i>	Spotted-Tohee	N
<i>Geococcyx californianus</i>	Road Runner	N
<i>Oreortyx pictus</i>	Mountain Quail	N
<i>Falco sparverius</i>	American Kestrel	N
<i>Polioptila californica</i>	Blue Gray Gnatcatcher	N
<i>Toxostoma redivivum</i>	California Thrasher	N
<i>Cathartes aura</i>	Turkey Vulture	N
<i>Buteo jamaicensis</i>	Red Tailed Hawk	N

<i>SCIENTIFIC NAME</i>	COMMON NAME	Special Status Species (Y/N)
<i>Psaltriparus minimus</i>	Bushtit	N
<i>Meleagris gallopavo</i>	Wild Turkey	N
<i>Melanerpes formicivorus</i>	Acorn Woodpecker	N
<i>Chamaea fasciata</i>	Wrentit	N
<i>Calypte anna</i>	Anna's Hummingbird	N
INVERTEBRATES		
<i>Pieris rapae</i>	Cabbage White	N
<i>Philotes sonorensis</i>	Sonoran Blue	N
<i>Chlosyme California</i>	California Patch	N
<i>Vanessa cardui</i>	Painted Lady	N
<i>Junonia coenia grisea</i>	Buckeye	N
MAMMALS		
<i>Sylvilagus sp.</i>	Cottontail	N

No areas contained sufficient hydrology, hydric soils, or hydrophytic vegetation to qualify as federal wetlands. Portions of the San Luis Rey River and La Jolla Amago Creek, as well as natural drainages occur within the Project area, however there is not a predominance of hydrophytic vegetation or hydric soils, and there is not sufficient flow that would facilitate anaerobic growing conditions in the soil at the time of the survey.

Listed Species

USFWS's list and maps of sensitive species were consulted to identify sensitive species with potential to occur within the Project area. Plant and animal species are considered sensitive if they have been listed as such by Federal or State resource agencies, or by special interest groups such as the California Native Plant Society (CNPS). The California Department of Fish and Wildlife (CDFW) publish comprehensive lists for sensitive plants and animals through the California Natural Diversity Database (CNDDDB) which were used as guides for this Project. The CDFW also publishes the CNDDDB RareFind, a computerized inventory of information on the location and condition of California's rare, threatened and endangered, and sensitive plants, animals and natural communities.

The CNDDDB RareFind and CNPS inventories were used in anticipation of the current biological survey to determine which sensitive species and communities have potential to occur within a nine-quad radius of the Project area. The inventory search identified a number of species which have been mapped or have potential to occur within the Rodriguez Mountain USGS quad.

Sensitive Species

There are 92 species of plants and 102 species of animals which are State or Federally sensitive

and known to occur within a 10-mile radius of the Project area (CNDDDB, 2021). Of those species of plants and animals, 23 species of plants and 44 species of animals have potential to occur within the Boucher Hill USGS Quad. More specifically, 11 species of plants and animal were reported as having potential to occur within the Project area. These 11 species are discussed in Appendix A.

Although no federally-listed species of plants or animals were detected during the preliminary site surveys, there is potential that Stephen's Kangaroo Rat (*Dipodomys stephensi*) could be found on site. Detecting these species would require protocol field surveys pursuant to the recommendations of the USFWS. If present, these species could constitute significant constraints to any future site development, requiring avoidance and/or "take" authorization via the issuance of a Section 10 (a) Endangered Species Permit from the Department of the Interior (USFWS) or a Section 7 Consultation between the BIA and the USFWS.

3.5 Cultural Resources

A cultural resources survey of the Project area was conducted by Tierra Environmental Services archaeologists in 2021 (Attachment B). The survey of the Project area was conducted by Hillary Murphy, Andres Berdeja, Thomas Stanley, Kent Smolik, Chay Morrissey, and Ariana Yanez on multiple days throughout February 2021. Native American Tribal Representatives Tim Stevens-Welsh, Michelle Nelson, Squire Redfern, Chris Davey Jr, and Thomas McLean accompanied Tierra staff throughout the survey effort. The survey relocated two of the four previously recorded sites and identified 23 new cultural resources within the Project area. The Cultural Resources Survey report contains confidential information and is not available for review without the written permission of the Tribe and the BIA. Although vegetation was dense in many areas, the understory was generally open and provided good survey visibility. The following information summarizes the cultural resources survey report.

Records Search Results

The archaeological inventory includes archival and other background studies in addition to Tierra's field survey of the Project area. The archival research consisted of literature and records searches at local archaeological repositories in addition to an examination of historic maps, aerial photographs, and historic site inventories. This information was used to identify previously recorded resources and determine the types of resources that might occur in the survey area. The methods and results of the archival research are described below.

The records and literature search for the Project was conducted at the South Coastal Information Center at San Diego State University. The records search included a half-mile radius of the Project area to provide background on the types of sites that would be expected in the region. Copies of historic maps were provided by the South Coastal Information Center and these were supplemented by additional historic research. Additionally, the BIA provided records on file to Tierra for surveys and resources conducted within a quarter mile of the Project area.

Twenty archaeological investigations have taken place in the vicinity of the Project area with six investigations having intersected portions of the Project area. Approximately half of the Project area itself has not been previously surveyed. Table 5 summarizes the investigations provided by both the SCIC and the BIA within a greater radius of half-mile. Historic research included an examination of a variety of resources. The current listings of the National Register of Historic Places were checked through the National Register of Historic Places website. The California Inventory of Historic Resources (State of California 1976) and the California Historical Landmarks (State of California 1992) were also checked for historic resources. The 1948 Boucher Hill and 1949 Palomar Observatory USGS Quadrangles did not indicate structures within the Project area.

Table 5. Cultural Resource Investigations Previously Conducted Within a Half-Mile Radius of the Project area

Report #	Title	Author	Year
SD-00157	Archaeological Investigation: Gilbert Lot Split	Berryman, S.	1977
SD-01285	Archaeological Reconnaissance on the La Jolla Indian Reservation, San Diego County, California.	Napton, K.; Greathouse, E.	1979
Unknown	Archaeological Reconnaissance on the La Jolla Indian Reservation, San Diego County, California Supplementary Report.	Napton, K.; Greathouse, E.	1980
SD-05429	Archaeological Survey Report for the La Jolla Water Enhancement Project La Jolla Reservation, CA	Pignuolo, A.	2000
SD-09516	The Cemeteries and Gravestones of San Diego County: An Archaeological Study	Caterino, D.	2005
SD-10143	Archaeological Survey Report for the La Jolla Water Enhancement Project La Jolla Reservation, California	Pignuolo, A.; Baksh, M.	2000
Unknown	Cultural Resources Survey Report for the La Jolla Hazardous Fuel Reduction and Firebreak Project, La Jolla Reservation, California	Pignuolo, A. et al.	2001
Unknown	Cultural Resources Survey Report for the La Jolla Water Enhancement Project. Letter Report.	Pignuolo, A.	2001
SD-10997	Final Archaeological Overview for the Cleveland National Forest California	Carrico, R.; Cooley, T.; Barrie, L.	2003
SD-11506	Cultural Resources Survey for the Bureau of Indian Affairs Proposed Roads Improvement Project, La Jolla Indian Reservation, San Diego County, California	Sikes, N.; Martinez, A.	2009
SD-12221	Cultural Resource Survey for the SDG&E 13-Pole Replacement Project, Palomar/Rincon, San Diego County, California (ETS 8123)	Gardner, J.; Potter, E.	2009
SD-12224	Cultural Resources Survey for the SDG&E One-Pole Replacement Project, Palomar Mountain, San Diego County, California	Gardner, J.	2009
SD-12354	Cultural Resources Survey Report for the La Jolla Homes Project La Jolla Reservation, California	McGinnis, P.; Murphy, H.	2009
SD-14756	Archaeological Survey for a Housing Improvement Program (HIP) Home on BIA Tract 66 La Jolla Indian Reservation San Diego County, California	Hall, D.	2013
SD-14892	Historic Resources Inventory Report Retaining Walls	U.S. Department of	2013

Table 5. Cultural Resource Investigations Previously Conducted Within a Half-Mile Radius of the Project area

Report #	Title	Author	Year
	Construction, Well Houses Fireproofing, & Road Hardening Project Pauma Valley, California	Homeland Security	
SD-15376	Archaeological Survey for Pole Replacement: P617776, La Jolla Indian Reservation, San Diego County, California (SDG&E eTS #29696)	Hector, S.	2015
SD-15774	Retrofit of Roof Vents on 44 Residences on the La Jolla Indian Reservation, Pauma Valley, California	Amaglio, A.	2014
SD-16206	Escondido Canal Historic District, San Luis Rey River, Escondido	Unknown	2016
SD-18169	ETS 41491: Confidential Cultural Resources Monitoring Report for the CMP, Pole Replace, P168248, Pauma Valley Project	Knabb, K.	2019
SD-18290	Historic Properties Management Plan/Historic Properties Treatment Plan for the Cleveland National Forest Master Special Use Permit and Permit to Construct Powerline Replacement Projects, Final Version	Hector, S.; Williams, B.	2016

**shaded (or bolded) entries involve the current Project area*

Table 6. Cultural Resources Previously Recorded Within a Half-Mile Radius of the Project area

Site	Description	Recorder	Year
CA-SDI-268	Multi-component: Prehistoric Bedrock Milling; Historic Rancheria	True	1953
CA-SDI-308	Prehistoric Petroglyph	Plotnincev	Unknown
CA-SDI-516	Multi-component: Prehistoric Bedrock Milling; Historic Rancheria	True	1959
CA-SDI-623	Prehistoric Habitation Site	Napton, K.; Greathouse, E.	1979
CA-SDI-768	No information provided	Unknown	Unknown
P-37-032754	Prehistoric Lithic Scatter	Schaefer, J.; Williams, B.	2012
P-37-032755	Prehistoric Ceramic Scatter	Schaefer, J.; Williams, B.	2012
P-37-036515	Historic Utility Line	Gorman, J.	2014
P-37-037741	Prehistoric Bedrock Milling	Piek, L.; Cuevas, A.	2018
LJF-S-11	Historic Wall	Pigniolo, A.; Murray S.	2000

**shaded entries involve the current Project area*

The records search identified ten previously recorded cultural resources within a half-mile radius of the Project area (Table 6). These records provide an idea of the types of cultural resources that might be expected within the Project area. They suggest a variety of site types are present in the area ranging from habitation sites to historic structures. As indicated in Table 6 nearly all of the recorded cultural resources in the Project vicinity are prehistoric. These sites are dominated by bedrock milling features and associated cultural material indicating temporary occupation.

Of the ten resources identified in the in records search, four (CA-SDI-516, P-37-032754, P-37-032755, P-37-036515) were previously recorded within the Project boundary.

CA-SDI-516

Originally recorded by True in 1959, this resource consists of prehistoric bedrock milling features. Specific numbers of features and surfaces is unknown, though True noted a “few bedrock mortars, small to medium, round-bottomed” (True 1959). Reported in a spring area with dense grass groundcover, no associated artifacts were observed at the time of recordation. The site record also denotes an “Indian Rancheria” as having been at this location between 1857 and 1885, as recorded by Joan Oxendine in 1982 (True 1959).

P-37-032754

This resource was recorded by Brian Williams of ASM Affiliates in 2010 as an isolated prehistoric quartz flake. The lithic was observed in a field used for cattle grazing near utility pole Z118052 (Williams 2010a).

P-37-032755

This resource was recorded by Brian Williams of ASM Affiliates in 2010 as an isolated prehistoric brownware ceramic body sherd. The sherd was observed near utility pole Z118062 on a slope above a tributary (Williams, 2010b).

P-37-036515

This resource is a segment of a historic-era utility transmission line. ASM Affiliates recorded the utility line in 2010. Constructed between 1924 and 1964, the poles were recorded as wooden with two arms and metallic cross braces supporting ceramic and/or porcelain insulators (Gorman, 2014). ASM Affiliates’ evaluation found the structure to not meet necessary criteria for eligibility listing on the California Register and NRHP (Gorman, 2014).

Culture History**Paleoindian Period**

The earliest well documented prehistoric sites in southern California are identified as belonging to the Paleoindian period, which has locally been termed the San Dieguito complex/tradition. The Paleoindian period is thought to have occurred between 12,000 years ago, or earlier, and 8,000 years ago in this region. Although varying from the well-defined fluted point complexes such as Clovis, the San Dieguito complex is still seen as a hunting focused economy with limited use of seed grinding technology. The economy is generally seen to focus on highly ranked resources such as large mammals and relatively high mobility which may be related to following large game. Archaeological evidence associated with this period has been found around inland dry lakes, on old terrace deposits of the California desert, and also near the coast where it was first documented at the Harris Site.

Early Archaic Period

Native Americans during the Archaic period had a generalized economic focus on hunting and gathering. In many parts of North America, Native Americans chose to replace this economy with types based on horticulture and agriculture. Coastal southern California economies remained largely based on wild resource use until European contact (Willey and Phillips 1958). Changes in hunting technology and other important elements of material culture have created two distinct subdivisions within the Archaic period in southern California.

The Early Archaic period is differentiated from the earlier Paleoindian period by a shift to a more generalized economy and an increased focus on use of grinding and seed processing technology. At sites dated between approximately 8,000 and 1,500 years before present, the increased use of groundstone artifacts and atlatl dart points, along with a mixed core-based tool assemblage, identify a range of adaptations to a more diversified set of plant and animal resources. Variations of the Pinto and Elko series projectile points, large bifaces, manos and portable metates, core tools, and heavy use of marine invertebrates in coastal areas are characteristic of this period, but many coastal sites show limited use of diagnostic atlatl points. Major changes in technology within this relatively long chronological unit appear limited. Several scientists have considered changes in projectile point styles and artifact frequencies within the Early Archaic period to be indicative of population movements or units of cultural change (Moratto 1984) but these units are poorly defined locally due to poor site preservation.

During the 1940s and 1950s, D.L. True located a number of Archaic Period sites in inland northern San Diego County that appeared to exhibit an assemblage different from the coastal Archaic material (True 1958, 1980; True and Beemer 1982). These sites were typically on small saddles and hills overlooking stream drainages and were characterized mainly by surface artifact scatters of basin and slab metates, manos, some scraper planes, debitage and rarely discoidals. True originally called this material "Old Complex" sites and later the Pauma Complex (True 1958; True and Beemer 1982). True and Beemer concluded after an examination of a number of Pauma sites, that it was still too early to determine whether there was a relationship between the La Jolla and Pauma materials, and whether that relationship is "temporal, economic, or cultural in nature" (1982:258). Given that the distance between the two very different environments (coastal and inland) is only a few dozen kilometers, and the sites appear to be contemporaneous, it seems most rational that the different materials are seasonal manifestations of a typical single Archaic mobility strategy using coastal and inland resources.

Similar environmental variability exists in the Archaic in the Southwest and other regions, and all varying sites are considered to be different aspects of annual positioning strategies of the same hunter-gatherer groups (Bayham et al. 1986; Sayles 1983; Sayles and Antevs 1941). It seems likely that this is the case in northern San Diego County, but as noted by True and Beemer, "ultimate resolution of this kind of problem requires a direct examination and analysis of each collection by the same investigator" (1982:258). This problem remains an important issue in southern California prehistory.

Late Archaic or Late Prehistoric Period

The Late Prehistoric Period began around 2,000 BP when dramatic cultural changes occurred. An intrusion of Shoshonean-speakers into the northern part of San Diego County occurred around 1,500 BP. The Late Prehistoric period in San Diego County is recognized archaeologically by smaller projectile points, the replacement of flexed inhumations with cremation, the introduction of ceramics, and an emphasis on inland plant food collection and processing, especially acorns. Inland semi-sedentary villages were established along major water courses, and montane areas were seasonally occupied to exploit acorns and piñon nuts, resulting in permanent milling stations on bedrock outcrops. Mortars for acorn processing increased in frequency relative to seed-grinding basins.

This period is known archaeologically in the southern part of San Diego County as the Yuman (Rogers 1945) or the Cuyamaca Complex (True 1970). In the northern part of the county, where the Project is located, the period is known as the San Luis Rey Complex (Meighan 1954; True et. al. 1974).

The San Luis Rey Complex is divided into two phases. San Luis Rey I is a preceramic phase dating from approximately 2,000 BP to 500 BP (True et. al. 1974). The material culture of this phase includes small triangular pressure flaked projectile points, manos, portable metates, olivella beads, drilled stone ornaments, and mortars and pestles. The San Luis Rey II phase differs only in the addition of ceramics and pictographs. Dates for the introduction of ceramics have not been satisfactorily documented.

Ethnohistoric Period

The Shoshonean inhabitants of northern San Diego County were called Luiseños by Franciscan friars who named the San Luis Rey River and established the San Luis Rey Mission in the heart of Luiseño territory. Their territory encompassed an area from roughly Agua Hedionda on the coast, east to Lake Henshaw, north into Riverside County, and west through San Juan Capistrano to the coast (Bean and Shipek 1978).

The Luiseño shared boundaries with the Gabrieliño and Serrano to the west and northwest, the Cahuilla from the deserts to the east, the Cupeño to the southeast and the Ipai, to the south. All but the Ipai are linguistically similar to the Luiseño, belonging to the Takic subfamily of Uto-Aztecan (Bean and Shipek 1978). The Yuman Ipai have a different language and cultural background but shared certain similarities in social structure, and some Ipai incorporated some Luiseño religious practices.

The Luiseño were divided into several autonomous lineages or kin groups. The lineage represented the basic political unit among most southern California Indians. According to Bean and Shipek (1978) each Luiseño lineage possessed a permanent base camp, or village, in the San Luis Rey Valley and another in the mountain region for the exploitation of acorns, although this mobility pattern may only apply to the ethnohistoric present. Nearly all resources of the

environment were exploited by the Luiseño in a highly developed seasonal mobility system. Each lineage had exclusive hunting and gathering rights in their procurement ranges and violation of trespass was seriously punished (Bean and Shipek 1978).

Acorns were the most important single food source used by the Luiseño. Their villages were usually located near water necessary for leaching acorn meal. Seeds from grasses, manzanita, sage, sunflowers, lemonade berry, chia and other plants were also used along with various wild greens and fruits. Deer, small game and birds were hunted and fish and marine foods were eaten. Generally women collected the plant resources and the men hunted but there was no rigid sexual division of labor (Bean and Shipek 1978).

Houses were arranged in the village without apparent pattern. The houses in primary villages were conical structures covered with tule bundles, having excavated floors and central hearths. Houses constructed at the mountain camps generally lacked any excavation, probably due to the summer occupation. Other structures included sweathouses, ceremonial enclosures, ramadas and acorn granaries. Domestic implements included wooden utensils, baskets and ceramic cooking and storage vessels.

Hunting implements consisted of the bow and arrow, curved throwing sticks, nets and snares. Shell and bone hooks as well as nets were used for fishing. Lithic resources of quartz and metavolcanics, and some cherts were available locally in some areas. Exotic materials, such as obsidian and steatite, were acquired through trade.

The traditional Luiseño religion is a complex and deeply philosophical belief system with powerful religious leaders, elaborate ceremonies and a veil of secrecy (White 1963). Each ritual and ceremonial specialist maintained the knowledge of the full meaning of a ceremony in secrecy and passed on the knowledge to only one heir. The decimation of the population after European contact undoubtedly caused the loss of some religious specialists and brought about abbreviated versions of ceremonies (Winterrowd and Shipek 1986), many of which are still practiced today. Surviving ceremonies include initiation for cult candidates, installation of religious chiefs, funerals and clothes burning (Bean and Shipek 1978).

Spanish explorers first encountered coastal Luiseño villages in 1769 and later established the Mission San Luis Rey de Francia in 1798, four miles inland from the mouth of the river. The missions "recruited" the Luiseño to use them as laborers and convert them to Catholicism. The inland Luiseño were not heavily affected by Spanish influence until 1816, when an outpost of the mission was established 20 miles further inland, at Pala (Sparkman 1908).

At the time of contact, Luiseño population estimates range from 5,000 to as many as 10,000 individuals. Missionization, along with the introduction of European diseases, greatly reduced the Luiseño population. Most villagers, however, continued to maintain many of their aboriginal customs and simply adopted the agricultural and animal husbandry practices learned from Spaniards.

By the early 1820s California came under Mexico's rule, and in 1834 the missions were secularized resulting in political imbalance which caused Indian uprisings against the Mexican rancheros. Many of the Luiseños left the missions and ranchos and returned to their original village settlements.

When California became a sovereign state in 1849, the Luiseño were recruited more heavily as laborers and experienced even harsher treatment. Conflicts between Indians and encroaching Anglos finally led to the establishment of reservations for some Luiseño populations, including the La Jolla Reservation in 1875. Other Luiseños were displaced from their homes, moving to nearby towns or ranches. The reservation system interrupted Luiseño social organization and settlement patterns, yet many aspects of the original Luiseño culture still persist today. Certain rituals and religious practices are maintained and traditional games, songs and dances continue as well as the use of foods such as acorns, yucca and wild game.

Historic Period

Cultural activities within San Diego County between the late 1700s and the present provide a record of Native American, Spanish, Mexican, and American control, occupation, and land use. An abbreviated history of San Diego County is presented for the purpose of providing a background on the presence, chronological significance, and historical relationship of cultural resources within the county.

Native American control of the southern California region ended in the political views of western nations with Spanish colonization of the area beginning in 1769. De facto Native American control of the majority of the population of California did not end until several decades later. In southern California Euroamerican control was firmly established by the end of the Garra uprising in the early 1850s (Phillips 1975).

The Spanish Period (1769-1821) represents a period of Euroamerican exploration and settlement. Dual military and religious contingents established the San Diego Presidio and the San Diego and San Luis Rey Missions. The Mission system used Native Americans to build a footing for greater European settlement. The Mission system also introduced horses, cattle, other agricultural goods and implements; and provided construction methods and new architectural styles. The cultural and institutional systems established by the Spanish continued beyond the year 1821, when California came under Mexican rule.

The Mexican Period (1821-1848) includes the retention of many Spanish institutions and laws. The mission system was secularized in 1834 which dispossessed many Native Americans and increased Mexican settlement. After secularization, large tracts of land were granted to individuals and families and the rancho system was established. Cattle ranching dominated other agricultural activities and the development of the hide and tallow trade with the United States increased during the early part of this period. The Pueblo of San Diego was established during this period and Native American influence and control greatly declined. The Mexican Period

ended when Mexico ceded California to the United States after the Mexican-American War of 1846-48.

Soon after American control was established (1848-present) gold was discovered in California. The tremendous influx of American and Europeans that resulted, quickly drowned out much of the Spanish and Mexican cultural influences and eliminated the last vestiges of de facto Native American control. Few Mexican ranchos remained intact because of land claim disputes and the homestead system increased American settlement beyond the coastal plain.

The 548-acre Project area proposed for trust status is part of a larger property commonly and historically known as "Cuca Ranch." Cuca Ranch (Rancho Cuca) was a 2,174-acre Mexican land grant on the south side of Palomar Mountain. It was given to a Luiseño family (headed by Maria Juana de Los Angeles), by Governor Pio Pico in 1845. Maria Juana de Los Angeles built an adobe house on the property and raised cattle. Several Luiseños originally lived on Cuca Ranch. In the 1880-1890 period most of the original ranch was been sold off to various owners, and the dispossessed Luiseños were accepted on the La Jolla and Rincon Reservations.

The most well-known owner was the Mendenhall family which also referred to the property as Potrero Ranch. Cuca Ranch is surrounded on most sides by portions of the La Jolla Indian Reservation already held in trust status.

Cuca Ranch is known to be rich in prehistoric and historic cultural resources. One village has been referred to as Kuka (with synonyms including Cuca, El Potrero, Luque, Quque, Cugue, Cugui, Cuqui, Cuque, and CA-SDI-242). This village has been speculated to be located within the boundaries of Cuca Ranch (Harvey 1975:23).

Another major prehistoric site, named Molpa, was excavated by True, Meighan and Crew (1974) from 1955 to 1957. The site has also been referred to by such names as Maulhatpa, Mauhatpa, Maulapa, and Maulahatpa (White 1963:107). The site was recorded as containing extensive milling features, milling artifacts, ceramics, lithic tools, and other artifacts, as well as some rock art. Based on the map included in True, Meighan and Crew, Molpa appears to be located within the boundaries of Cuca Ranch in what would have been Section 28, had this area been sectioned (1974:71). The precise location of this site is not known due to limited mapping capabilities in the 1950s.

Survey Results

The pedestrian survey was conducted to identify cultural resources that were located within the Project area. Visibility varied greatly across the Project area as a result of dramatic geographic features including steep slopes, vegetation and groundcover density.

The literature and records search identified four previously recorded resources within the Project area. The survey effort attempted to relocate these resources. The survey effort also identified 23 previously unrecorded resources within the Project area. In total, 27 cultural resources have been

identified within the current Project area (Figure 4). Please see details below for further information.

Previously Recorded Resources

CA-SDI-516

Originally recorded by True in 1959, this resource consists of prehistoric bedrock milling features. The site record also denotes an “Indian Rancheria” as having been at this location between 1857 and 1885 (True 1959). This resource was not relocated during the current effort.

P-37-032754

This resource was recorded by Brian Williams of ASM Affiliates in 2010 as an isolated prehistoric quartz flake. This resource was relocated during the current effort and found to be in similar condition to those previously recorded.

P-37-032755

This resource was recorded by Brian Williams of ASM Affiliates in 2010 as an isolated prehistoric brownware ceramic body sherd. This resource was not relocated during the current effort. As originally recorded on a slope, it is possible the sherd has since been washed downslope into the neighboring drainage.

P-37-036515

This resource is a segment of a historic-era utility transmission line. This resource was revisited during the current effort. However, in the years since its original recordation in 2010 by Brian Williams of ASM, the original wooden poles have been replaced by steel poles. The poles were cut down and observed lying next to their replacements along the transmission line within the Project area.

Newly Identified Resources

The newly identified resources are summarized below.

LJFTT-AB-001H

This resource is a possible historic-era rock ring. Measuring 95.25-inches long by 90.5-inches wide on the exterior, the ring is comprised of one to two courses high of small granitic boulders (or large cobbles). The granite is exfoliating which is common for the area. Internal measurements of the cleared area are 40.25-inches long by 30.25-inches wide. The ring is located on a gentle southwest-facing slope surrounded by mature sagebrush, manzanita, and white flowering currant bushes. Visibility is poor at approximately 15 percent given prominent groundcover and grasses. There does not appear to be many disturbances in the immediate vicinity.

LJFTT-AB-002i

This resource is a prehistoric isolated lithic artifact consisting of one piece of quartz shatter measuring 3.3cm by 2.4cm by 1.5cm. The isolate is located on a gentle southeastern down sloping

hill adjacent to a game trail running along a northwest-southeast axis. The area consists of a few sagebrush bushes and oak trees located eight meters due south of an unpaved road. The only disturbance in the immediate area is the unpaved road located due south from the artifact.

LJFTT-CM-001/H

This site is a large prehistoric habitation site consisting of bedrock milling features, artifact scatters and a rock alignment. The site is located atop a knoll beneath multiple oak trees, and extends into the very-gentle sloping cleared valley to the south and west. The site is bounded to the north by State Route 76, to the west by a steep drainage running along a north/south axis, to the southwest by a steep slope, to the southeast by a rising hillside and to the east by a downward slope. The majority of the scattered artifacts were observed in areas of bioturbation, cattle trails, and sporadic patches of exposed soils. Visibility was fair at approximately 35 percent due to prevalent groundcover and grasses, and leaf duff under oaks. Disturbances observed on site consist primarily of cattle ranching, and ubiquitous bioturbation. The site, measuring 190m north/south by 205m east/west, is comprised of five loci (Locus A-E) with artifact scatters in between.

Locus A consists of a large bedrock outcrop with 21 features containing 119 milling surfaces and associated artifacts. Locus A is comprised of a large bedrock outcrop extending down slope of the larger knoll. While the bedrock appears connected, parts are submerged beneath soils and the bedrock appears terraced down slope to the south in three parts (northern, middle, southern). All of the bedrock is low-lying granite. The northernmost terrace is located adjacent to a big oak tree and contains milling surfaces spread throughout multiple boulders. In this northern terrace, there were a total of ten slicks and four basins observed. The middle terrace is a single exposed bedrock outcrop that is relatively flat and sloping due south. This middle terrace is open without any tree coverage, unlike the northern and southern terraces. In this middle terrace, there are a total of 32 slicks, ten basins, one conical mortar, and one possible mortar observed. The southernmost terrace is located beneath a large oak tree. This terrace contains the most milling surfaces observed within Locus A totaling 28 oval mortars, 13 slicks, 11 basin mortars, four pecking surfaces, three drilling surfaces, one possible slick, and one possible mortar. Associated artifacts include nine ceramic sherds, six lithic flakes, one pink tourmaline crystal (Photographs in Confidential Appendix B), one milky quartz preformed projectile point, and one crystal quartz bifacial projectile point (Photographs in Confidential Appendix B).

Locus B contains eight milling features with 69 milling surfaces and four associated prehistoric artifacts. The granitic milling outcrop is located on a westward slope beneath a cluster of roughly ten oak trees. Dense leaf duff covers the outcrop. The outcrop exhibits erosion and highly weathered features, some covered in lichen. The first milling feature has a total of 13 slicks, 12 saucer mortars, 11 conical mortars, two oval mortars, and one possible mortar. The second milling feature has one conical mortar and one possible mortar that are both in poor condition, highly exfoliated and very weathered. The third milling feature has a single basin mortar in fair condition and highly exfoliated. The fourth milling feature has a single possible mortar in poor condition and highly exfoliated. The fifth milling feature has seven basin mortars, three possible mortars, three slicks, two saucer mortars, and two conical mortars. The sixth milling feature is a single milling

slick in fair condition with a few high polish points. The seventh feature has two milling slicks in fair condition with minimal signs of weathering and a few high spots observed. The eighth milling feature has four slicks, one possible mortar, and one possible pecking. The mortar and pecking are highly eroded and in poor condition. The prehistoric artifacts associated with Locus B are two fragmented metavolcanic modified flakes and two brownware ceramic body sherds.

Locus C consists of one prehistoric milling feature and 29 prehistoric artifacts. The prehistoric milling surface is in poor condition, highly exfoliated, highly weathered, and covered in lichen. There was only a single saucer mortar observed on the milling feature and it is in poor condition. The prehistoric artifacts include 22 ceramic sherds and 12 prehistoric lithic flakes. Of the 22 prehistoric ceramic sherds, 19 are brownware sherds and three are Colorado buffware sherds. Of the 19 brownware sherds, three are ceramic rim sherds. Most of the prehistoric ceramic sherds are in good condition, with minimal weathering observed.

Locus D contains two milling features with three milling surfaces and four associated artifacts. Additionally, a rock feature alignment (RFA-1) was also observed. The outcrop is located on an eastern slope beneath the canopy of a large oak tree with cacti growing out of the center of the outcrop. The first feature has a single possible mortar in poor condition; it is mostly eroded and highly weathered. The second milling feature has two conical mortars in poor condition. The four prehistoric artifacts associated with the milling features are three lithic flakes and a single crystal quartz projectile point fragment.

RFA-1 is a possible prehistoric amphitheater and/or a historic corral located on top of the flat knoll located in the center of the site. The knoll contains five oak trees around its perimeter. The rock alignments are located between and in some cases, connect tree to tree. There are three prehistoric artifacts observed in conjunction with the rock alignments including two crystal quartz lithic flakes and one buffware ceramic body sherd. There are two historic artifacts associated with the linear feature which include one historic can nailed to an oak tree, and barbed wire. The barbed wire is wrapped around and/or at the base of the various oak trees.

Locus E is a prehistoric milling outcrop with three milling surfaces. The granitic milling outcrop is located on a west-facing slope above a perennial drainage running north to south on the western side of the site. The feature has two oval mortars and one possible mortar. There are no artifacts beyond Locus E.

In addition to the five loci, a moderately dense artifact scatter was observed in the fields to the west and south of the knoll. An estimated 100+ quartz (milky and crystal), metavolcanic (green and black), chert and ceramics (brownware and buffware) were observed. A green metavolcanic cottonwood projectile point base fragment was observed in this field. Additionally, the aforementioned tourmaline crystal and crystal quartz bifacial projectile point affiliated with Locus A were actually in the field immediately south of Locus A. For their protection and in concurrence with the Native American monitor on site, the artifacts were relocated into Locus A beneath a grouping of cacti for protection and preservation. These artifacts were largely observed in bioturbation piles as ground cover was prolific at the time of survey. It is possible there are many

more artifacts not observed beneath this ground cover.

LJFTT-HM-001

This resource is a prehistoric bedrock milling feature with a single milling surface. The feature, measuring 2.35 by 1.25 by 0.40 meters, contains a very eroded milling slick with slight depression. The slick measures 13 by 10 by 0.5cm. The granitic boulder is part of a larger outcrop but no other surfaces were observed. The site is located on a gentle western-facing slope within a dense chamise chaparral community. No associated artifacts were observed with the feature. No disturbances were observed within proximity to the site.

LJFTT-HM-002H

The resource is a historic refuse deposit. The historic scatter continues down slope to the west and covers an area 55ft long by 25ft wide. The historic refuse deposit is a concentration of various burnt and heavily oxidized metal objects and equipment in various states of decay. Remnants of a trailer, metal fan, metal springs, a large battery, metal gas can, straps, flanges, a trailer hitch, a double-sink, as well as broken and distorted glass (due to high heat) were observed. Due west from the concentration is an amber glass bottle seam-base fragment. The makers mark indicated it is an Owens-Illinois bottle dating back to a 1935 manufacture year out of the Streator, Illinois plant. There were no disturbances observed in the immediate area.

LJFTT-HM-003H

This resource consists of two segments of a historic road. The historic road is Old Highway State Route (SR)-76 located in two segmented areas about 10m from the current SR-76. The historic highway measures 13 feet to 24 feet wide, the western most portion of Old Highway SR-76 is 680 feet in length, and the eastern most portion is 525 feet in length. Both portions of the preexisting highway are adjacent to the current Highway SR-76. Both segments of the historic highway run perpendicular to gentle down sloping hills running north to south with pockets of moderately dense chamise and sagebrush. A few oak trees are also located throughout the immediate area. There are a few degrading wooden posts scattered alongside the road. The wooden poles' measurements range from five to eight-feet, six-inches in length by five to six-inches wide. The road itself is in a state of dilapidation as the asphalt is deteriorating and missing in places. Historic aerials show the old road was a dirt access road in 1946, prior to the creation of SR-76. SR-76 was established between 1953 and 1968 on aerials between 1966 and 1968 on topographic maps (HistoricAerials.com, 2021). There are no visible disturbances in the immediate vicinity.

LJFTT-HM-004H

This resource is metal-rusted possible tub basin, likely an industrial drain tub (Photograph 3). The tub measures 55 ½ inches long by 38 ¾ inches wide by 37 inches tall. Posts at each corner raise the basin approximately a foot above ground. The posts rise above the basin to hold supports between the shorter sides, above the basin. These supports bow downward in the middle as to have held something in place, perhaps to drain. It is unknown what this apparatus was utilized for or when. The resource is situated directly on top of Old Highway SR-76 (LJFTT-HM-003H), and is located 25 meters due south of the current SR-76 highway. The area immediately adjacent to the resource is sparsely covered in Chamise and Sagebrush on a small inclined eastward slope.

LJFTT-HM-005

This resource is a prehistoric milling feature with a single milling surface. The granitic milling feature is very weathered, highly exfoliated, covered in lichen, and fire affected measuring 4.3m long by 2.9m wide. The milling surface is a possible mortar that is very weathered and highly exfoliated which measures 15cm long by 14cm wide by 3cm deep. The milling surface is in poor condition with little to no high polished points observed. The resource is located on a downward slope to the north. The granitic bedrock outcrop is located in an open field surrounded by sagebrush. No associated artifacts were observed with the feature. There are no disturbances observed in the immediate area.

LJFTT-HM-006i

This resource is a prehistoric isolated flake artifact. The lithic artifact is a black basalt tertiary flake and measures 3.1cm long by 2.8cm wide by 0.5cm thick. The artifact was found on the surface adjacent to bioturbation backfill on a southern sloping field sparsely covered with sagebrush. The only disturbance observed in the immediate area is bioturbation.

LJFTT-KS-001

This resource is a prehistoric bedrock milling feature with one milling surface. The milling feature is a granitic outcrop that has been fired-affected, highly weathered, and covered in lichen that measures 4m in length by 3m wide by 2.5m in height. The resource is located on the hillside of a southern drainage that flows east to southwest. The milling surface is a conical mortar in good condition with some weathering and measures 14cm long by 12cm wide by 4cm in depth. The outcrop is covered in poison oak, underneath an oak tree due south 5 meters from the feature. Given the amount of leaf duff covering neighboring boulders observed in this wash, it is possible additional milling may be present. No associated artifacts were observed with the feature. There were no major disturbances observed in the immediate area.

LJFTT-KS-002

This resource consists of two prehistoric milling features with two milling surfaces. The first milling feature is a granitic outcrop that is heavily eroded and highly weathered. The milling feature is sparsely covered in lichen and measures 30m long by 20m wide by 6m in height with one sole milling slick. The milling slick measures 45cm long by 21cm wide and is highly exfoliated with a few high polished points.

The second granitic milling feature is covered in lichen and heavily eroded. This feature measures 2m long by 1.5m wide by 0.65m in height with a single milling slick. The milling slick measures 19cm long by 19cm wide and is highly weathered with only a few high polished points remaining. The bedrock milling features are located along the southern side of Ka'ii road on a southeastern sloping hillside densely covered by highly exfoliated granitic outcrops near a handful of oak trees. No associated artifacts were observed with the features and there were no disturbances observed in the immediate area.

LJFTT-KS-003

This resource is a prehistoric milling feature with one milling surface. The granitic bedrock milling feature measures 0.79m long by 0.68m wide at surface height with one possible mortar. The

possible mortar is highly eroded and highly weathered and measures 14cm long by 13cm wide by 2.5cm deep. The milling feature is located beneath an oak tree about 85m due southeast of resource LJFTT-KS-002. No associated artifacts were observed with the feature. There were no disturbances observed in the immediate area.

LJFTT-KS-004

The resource is a single prehistoric milling feature with four milling surfaces. The granitic bedrock milling feature measures 2m long by 1.5m wide at surface level with four milling slicks. The first slick is in great condition with evidence of possible pecking in the center and measures 34cm in diameter. The second slick is in poor condition with spalling and partial erosion and measures 16cm long by 11cm wide. The third slick is in great condition. It is highly polished with evidence of possible pecking and measures 27cm long by 16cm wide. The fourth slick is in great condition containing high polished points with evidence of spalling at the center and measures 30cm long by 23cm wide. The resource is located along Ka'ii Road near the fork in the road adjacent to two houses which are located off-Property. No associated artifacts were observed with the feature. Disturbances in the area consist of modern trash in the vicinity and are related to the close proximity of Ka'ii Road and the residential houses which are located off-Property.

LJFTT-KS-005

This resource is a group of prehistoric granitic bedrock milling outcrops that consist of five features and 19 milling surfaces. The first milling feature has a single milling surface. The granite bedrock is in fair condition with evidence of weathering throughout. The milling surface is a slick in fair condition with possible pecking, weathered, and partially covered with lichen. The second milling feature is in fair condition due to being fire-affected and has a single milling surface. The milling surface is a slick that is partially eroded, cracked, and covered with lichen and moss. The third milling feature is in fair condition due to being fire-affected and covered in lichen and moss. This feature has a total of three slicks, two of which are in good condition. The remaining slick is in poor condition with evidence of heavy weathering. The fourth milling feature contains the densest concentration of milling surfaces of this site with 13 surfaces. The feature is in good condition with some signs of weathering and exfoliation. Of the 13 milling surfaces observed, 10 are slicks, three of which have evidence of pecking. The remaining surfaces consist of two oval mortars, one of which contains evidence of pecking, and one basin surface. Most of the surfaces on feature four are in good to excellent condition, with a few milling surfaces in fair to poor condition. The fifth milling feature is in good condition though is partially exfoliated and covered in lichen with a single milling surface. The milling surface is a sole conical mortar in great condition with exfoliated edges. The resource is located due southwest of an alluvial plain along a drainage running in a northwest to southern axis; there are boulders in line running paralleled in the terrace above the drainage. No associated artifacts were observed with the features. There were no disturbances observed in the immediate area of the prehistoric resource.

LJFTT-MN-001

This resource consists of a potential prehistoric milling surface with a lithic component. The overall site measures approximately 35 meters east/west by 9 meters north/south. The milling feature is a small granitic boulder, measuring 0.95 by 0.55 by 0.47 meters, with a potential

milling slick. The possible slick is highly exfoliated with only one highly polished point. The possible slick measures 18 by 11 cm with no depth. Located approximately nine meters south-southwest is a crystal quartz flake measuring 3.3 by 3.0 by 1.6cm. Thirty meters west of this lithic are two crystal quartz debitage fragments. The site is located along a fingered ridge consisting of well-developed chamise chaparral scrub approximately five feet high, and scattered granitic boulders. Visibility of the site is poor at approximately 15 percent given the dense vegetation. The only visible disturbance in this vicinity is evidence of cattle moving through the area.

LJFTT-TES-001

This resource is an extremely large habitation site atop a mesa immediately east of La Jolla Amago Creek. The site measures 346m north/south by 226m east/west and includes milling features with various milling surfaces, groundstone, and lithic and ceramic artifact scatters. The overall topography of this site involves large swaths of granitic bedrock and boulders running in parallel veins on subtle terraces along north-south axes. The terraces drop down to the west, towards La Jolla Amago Creek. Similar to bedrock observed throughout the Project area, the condition of the granite at this site is often partially covered with lichen and moss with cracking and some weathering.

Due to the sheer volume of artifacts, complexity and expansiveness of this site, it was decided the recordation effort would utilize more specific categories to better record features and artifact scatters than the term “loci” that was used elsewhere in the Project area at smaller sites. These large bedrock swaths were abundant with milling surfaces and were recorded as “milling complexes.” Within the milling complexes were often dense concentrations of milling surfaces and beyond these concentrations were sporadic outlying milling surfaces. These dense concentrations were recorded as “milling surface concentrations” and a milling complex may have multiple milling surface concentrations within its boundary. Occasionally, solitary granitic boulders were observed with one or two milling surfaces. In these instances, they were recorded as a “milling feature.” Between the veins of bedrock were open terraces of relatively flat grass-covered fields. Occasionally in these locations, dense concentrations of artifact scatters were observed and recorded as “artifact concentrations.” Due to the volume of surfaces and artifacts observed, only those with unique characteristics or diagnostics had measurements taken. In the artifact concentrations, estimations for the total artifacts present were made. In addition to these designated areas, there are sporadic artifacts, lithics and ceramic sherds, observed in spaces between the concentrations and complexes on the northern half of the site.

There were 15 milling complexes (MC) and ten milling features recorded within the site. These complexes and features resulted in the identification of 815 milling surfaces comprised of: milling slicks (n=470); mortars: basins (n=150), conical (n=60), extremely large conical (n=6), oval (n=2), possible (n=1); and cupules (n=126+). The extremely large conical mortars were described as such by their distinct size, often in excess of 20cm in diameter and depth, in comparison to other mortars experienced throughout the Project area. These extremely large mortars are in excellent condition, straight sided and conical-bottomed with substantive collars. One of these mortars is oval in shape indicating that multiple people ground at the same time

from opposite ends of the surface, according to information shared by Chairwoman Contreras (2021) (Photographs in Confidential Appendix B).

MC-1 is the northernmost complex and contained five milling surface complexes (MSC) that resulted in identification of 118 slicks, 42 basins, 16 conical mortars, 40 cupules, and four extra-large conical mortars. Associated artifacts observed within MC-1 include fire-affected ceramic sherds, approximately 75 lithics comprised of crystal quartz, milky quartz, blue, black and green metavolcanics. Additionally, a milky quartz cottonwood projectile point base fragment was observed among the scatter of lithics and ceramics. Disturbances to MC-1 include some modern glass and drilling into MSC-1.

MC-2 is a large outcrop where the northeast side of the complex is more prominent with surfaces. There are 25 milling slicks, seven basin mortars, and four cupules identified. Associated artifacts include milky and crystal quartz, and metavolcanic flakes.

MC-3 is a large outcropping within approximately eight oak trees containing two slicks, 2 basin mortars, one extra-large conical mortar. Additionally, an artifact scatter containing 10 gray metavolcanic, milky and crystal quartz flakes were observed alongside a single brownware body sherd.

MC-4 contains one milling surface concentration and four artifact concentrations. The milling at MC-4 includes 60 slicks, 23 basin mortars, and eight conical mortars. The milling varies greatly from highly polished excellent condition to poor, highly eroded with only a few high polished points. There are four artifact concentrations within the complex and many artifacts outside of these concentrations but within MC-4's boundaries. The artifact assemblages contain both prehistoric artifacts and a historic component as well. The prehistoric artifacts include 110+ of quartz and metavolcanic debitage, 30+ brownware ceramic body sherds, two green metavolcanic projectile points, one milky quartz projectile point, one early stage milky quartz biface fragment, one granitic highly polished groundstone mano, and one obsidian micro flake. One fragment of sun-colored amethyst, colorless, aqua, and milk glass fragments were observed along with rusted metal fragments.

MC-5 is located on the western edge of the site overlooking La Jolla Amago creek from a bluff above. Vegetation at this location begins to transition from grass ground cover and oak trees to include more sagebrush, buckwheat and cacti. The milling surfaces include 25 slicks, nine basin mortars, and one conical mortar. Additionally, 12 quartz flakes were observed in the vicinity as well as a milky quartz cottonwood projectile point base fragment.

MC-6 is a large bedrock outcrop with a dense artifact scatter. The majority of the milling surfaces are located in the central and northern end of the complex and consist of 64 slicks, 20 conical mortars, 19 basins, nine cupules, and one possible mortar. One granitic fire-affected mano was observed as well. Associated artifacts include 100+ milky and crystal quartz, and metavolcanic lithics and three brownware body sherds.

MC-7 contains three milling surface concentrations plus outlying surfaces. This complex is located on the southwest corner of the site, above a drop off to La Jolla Amago creek below. The complex includes 24 slicks, six basin mortars, six conical mortars, and one extra-large conical mortar. Associated artifacts include 200+ lithics; mostly micro flakes of quartz (milky and crystal) and metavolcanic (black, gray, green).

MC-8 is a complex located in the center of the site containing four milling surface concentrations. The milling includes 55 slicks, ten basin mortars, five conical mortars and 70+ cupules. Of the 70+ cupules, 40+ are located on lichen-covered small boulder sitting atop bedrock features (MC-8: Feature 1). The remaining 30+ are located on multiple boulders within MC-8. The cupules found onsite are often located on the edges of boulders and those located on Feature 1 were crafted in visible rows out from the edges of the boulder (Photographs in Confidential Appendix B). It was not possible to count all of the cupules on Feature 1 as they extended down the side of the boulder and against the bedrock the boulder is sitting on. The location of Feature 1 does not appear to be in a natural position. Associated artifacts at this complex include 40+ metavolcanic and quartz (milky and crystal) flakes. Most notably, a desert side-notched projectile point base fragment of white chert with no inclusions was observed at this complex (Photographs in Confidential Appendix B). Additionally, there is a historic component at this complex consisting of sun-colored amethyst and aqua glass fragments, a whiskey bottle fragment with no seam and a brandy finish bottle neck. The maker's mark on the bottle reads "ILER'S [M]ALT WHISKEY" indicating the bottle is out of the Willow Springs Distillery in Omaha, Nebraska dated to the late 1800's/early 1900's (Sullivan, 2012). Additional historic elements consist of enamel pots, plates, drums, and metal fragments.

MC-9 consists of two boulders containing nine slicks and three basin mortars. A felled oak and cracking on the boulders indicate fire having passed through the complex. Associated artifacts include two quartz shatter and one metavolcanic flake. Rusted metal fragments were also observed among the complex.

MC-10 is a highly eroded complex with discoloring indicative of fire activity. There is one basin mortar and two conical mortars recorded in this complex, though due to the poor condition of the bedrock, it is possible more surfaces once existed.

MC-11 is an outcrop trending east/west rather than the typical north/south fashion of the other complexes. A large dead oak tree lies across the complex, bisecting it. There are 27 slicks, 13 basin mortars, and two conical mortars identified in this complex. Associated artifacts include one milky and one quartz flakes, and two black metavolcanic micro flakes.

MC-12 is a complex with ubiquitous milling surfaces throughout the complex, there are no real defined concentrations. The complex is in poor condition exhibiting evidence of fire through discoloration and cracking. The surfaces include 19 slicks and one basin mortar. No associated artifacts were observed in this complex.

MC-13 is a smaller complex than most others and contains only three slicks. The complex is in poor condition exhibiting evidence of fire through discoloration and cracking. There is a lot of modern trash (colorless glass shards, metal straps, barbed wire) among the complex.

MC-14 is a smaller complex containing only four slicks. The complex is located in the field adjacent to residential homes and modern trash is prevalent throughout the vicinity. In addition to the slicks, associated artifacts include a ground stone, shaped mano and an obsidian flake.

MC-15 is a complex similar to MC-14. The complex contains six slicks with 20+ lithics comprised of quartz (milky and crystal) and metavolcanic (green and purple). The complex is located in the field adjacent to residential homes and modern trash is prevalent throughout the vicinity.

There are ten individual milling features scattered throughout the site between the more extensive milling complexes. Collectively, the milling features contain 16 slicks, 11 basin mortars, four conical mortars, and two oval mortars.

Artifact Concentration (AC) 1 is a lithic and ceramic scatter containing 32 debitage fragments and two brownware body sherds spanning 12m by 14m. The debitage assemblage is made up of black and green metavolcanics, milky and crystal quartz, and one obsidian micro-flake. One basin mortar was observed on a small boulder in the center of AC1.

AC-2 is a lithic scatter on a terrace between MC-6's southwest edge and MC-7's northeast edge. Approximately 200+ lithic fragments were observed consisting of milky and crystal quartz and metavolcanic. The majority of the lithics observed were micro flakes. Additionally, one obsidian micro flake and a fire-affected metavolcanic projectile point base fragment were observed. No ceramic sherds were observed.

AC-3 contains a metate with two groundstone manos around the trunk of a substantial oak tree on the property. The granitic metate is unifacial and is mostly subsurface. It is difficult to ascertain if it contains a basin or a slick. One mano maintains defined shouldering, has been shaped, is bifacial and polished. It is in excellent condition and has been ground around the edges. The second mano is oval and shaped with battered ends and has less shouldering than the other.

AC-4 is a large dense artifact scatter located in a wide field between the substantial bedrock veins of MC-5 and MC-8. The artifacts observed in this field consist of 200+ debitage, mostly micro flakes, of quartz (milky and crystal) and metavolcanic (green and black), and brownware ceramic sherds. A crystal quartz biface projectile point fragment and an obsidian micro flake were also observed. There is a narrow, surface-level vein of bedrock exposed in the center of the field. This vein is divided into three milling surface concentrations containing 48 slicks, 14 basin mortars, and 3 conical mortars.

LJFTT-TS-001i

This resource consists of two prehistoric isolated artifacts: a lithic flake and a groundstone mano. A milky quartz flake fragment, measuring 2.9cm long by 2.1cm wide by 0.5cm thick, is located at the base of a bedrock outcrop on a southern downward slope. A granitic mano fragment, measuring 10cm long by 7cm wide by 3.5cm thick, was also observed immediately west of the same bedrock outcrop. The mano is fragmented as the bottom half is missing. The outcrop is on a south-facing downward slope north of an alluvial valley with moderately dense vegetation. The flake was observed atop the bedrock while the mano was located in a cattle trail at the base of the bedrock. Bioturbation and cattle appear to be the largest sources of disturbances in the immediate vicinity. No milling surfaces were observed on the bedrock.

LJFTT-TS-002/H

This resource consists of two historic wall features and a single prehistoric milling feature with one milling surface. The resource is located on a knoll near a handful of oak trees and a few modern bee keeping boxes due southwest of the first historic feature were observed. Additionally, a single-lane dirt access road runs in a north-south axis to east, and downslope, of the resource.

The first historic feature, Feature 1, is a rock wall measuring 95 feet long (E/W) and 7 feet 3 inches wide (N/S) by 3 feet-4 inches tall. This feature consists of granitic rocks stacked five courses high and is in good condition with some weathering and lichen sparsely covering the wall. Feature 1 runs in a northwest to east axis, connecting to established oak trees, along the knoll top's mesa. Approximately ten meters east of Feature 1's eastern terminus begins Feature 2's western edge.

Feature 2 is a second historic rock wall measuring 78 feet long (E/W) by 6 feet 3 inches wide (N/S) by 3 feet tall. The feature consists of smaller granitic rocks stacked five to six courses high and is in fair to poor condition due to being highly weathered and lichen-covered. The wall was constructed to follow a southeast to northeast axis. The eastern half of the wall was constructed on the edge of the knoll as it slopes down to the aforementioned dirt access road. This portion of the wall has collapsed and is in poor condition. Both Feature 1 and 2 are similar in construction materials and methods.

The prehistoric granitic bedrock milling feature is in poor condition; it is highly exfoliated and partially covered in lichen with a single milling surface. The surface is a basin mortar and is very eroded yet with some polish remaining on the eastern side of the mortar. No associated artifacts were observed with the feature.

The first recorded portion of Old Highway SR-76 (LJFTT-HM-003H) is 50 meters due north of the resource. The area appears to be continually utilized over the years as is evidenced by access roads and bee boxes, ranchers were observed driving into the area during the time of survey.

LJFTT-TS-003

This resource is a prehistoric granitic bedrock milling feature with a single slick. The feature is located on an eastern-facing gentle slope to La Jolla Amago Creek. The feature is located among a community of granite boulders, poison oak, and oak trees on a terrace west of the

aforementioned creek. Additionally, this feature is among adjacent similar milling features (LJFTT-TS-004, LJFTT-TS-008) all located on this gentle sloping terrace. No associated artifacts were observed with the feature. There were no disturbances besides cattle trails in the vicinity.

LJFTT-TS-004

This resource is a group of prehistoric granitic bedrock milling outcrops on a eastward gentle sloping hillside among a community of oak trees and granite boulders adjacent to LJFTT-TS-003. The overall site measures 40m east/west by 12m north/south and encompasses five features with 27 milling surfaces. Moderately dense poison oak is found among the features.

The first milling feature is highly exfoliated and partially covered in lichen with two milling surfaces. The first milling surface is a conical mortar and the second surface is a basin mortar; both are very weathered.

The second milling feature is also highly exfoliated and partially covered in lichen. This feature contains three milling surfaces: a basin mortar, a conical mortar, and a slick. The mortars are very weathered while the slick is in good condition.

The third milling feature is highly exfoliated, partially covered in lichen and moss with a total of three milling surfaces. The first and second milling surfaces are conical mortars in good condition with some weathering. The third milling surface is a basin mortar in fair condition.

The fourth milling feature is very weathered with a total of 15 milling surfaces including five conical mortars, three oval mortars, three milling slicks, two basin mortars, one saucer mortar, and one possible mortar. Four of the five conical mortars are in excellent condition and highly polished while the remaining mortar is in poor condition with no polishing. The three oval mortars are in fair condition with signs of weathering and a few polished high points. Of the three milling slicks, two are in fair condition with evidence of weathering. The remaining slick is in poor condition and heavily exfoliated with little to no polish points observed. The two basin mortars are in good condition with some signs of weathering and well-defined in the granitic outcrop. The one saucer mortar is in fair condition with little to no polishing. The one possible mortar is in poor condition, poorly defined, and has evidence of weathering.

The fifth milling feature has evidence of weathering and is sparsely covered in lichen with a single milling surface. The milling surface is a conical mortar in poor condition with little to no polishing.

La Jolla Amago Creek is located 50 to 70 meters due east downhill from the prehistoric milling resource. No associated artifacts were observed near the features. Cattle ranching trails were the sole disturbance in the vicinity of the site.

LJFTT-TS-008

This resource is a prehistoric granitic milling feature with three milling surfaces. The feature, measuring 4.7m by 3m, is highly exfoliated and eroded. The feature is located on an eastern

sloping hill adjacent to an oak tree that is partially covering the northern portion of the bedrock milling outcrop. Of the three milling surfaces located on the outcrop, two are well-defined slicks in good condition with signs of exfoliation and weathering and very high polished points. The third surface is a conical mortar in fair condition; it is highly exfoliated with signs of weathering. There were no disturbances observed in the immediate area.

LJFTT-TS-009i

This resource is a prehistoric single lithic isolate. The artifact is a fragmented crystal quartz flake located near an exfoliated granitic bedrock outcrop in dense chamise chaparral. There were no disturbances observed in the immediate area.

LJFTT-TS-010

The resource is a prehistoric granitic bedrock milling feature with four milling surfaces. The milling feature is located beneath two oak trees and ten meters due north of Ka'ii Road. Of the four milling surfaces observed, two of them are slicks in poor to fair condition with a few high polish points. The two remaining surfaces are an oval mortar in poor condition with a polished bottom, and a basin mortar in poor condition with polished spots on its northeast edge. There were no disturbances observed in the immediate area.

Site Significance

To be eligible for listing in the NRHP, a resource must be significant in American history, architecture, archaeology, engineering, or culture. Districts, sites, buildings, structures, and objects of potential significance must meet one or more of the following four established criteria (U.S. Department of the Interior, 1992):

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

Unless the property possesses exceptional significance, it must be at least 50 years old to be eligible for NRHP listing (U.S. Department of the Interior, 1992).

Criteria considerations. Ordinarily cemeteries, birthplaces, or graves of historical figures, properties owned by religious institutions or used for religious purposes, structures that have been moved from their original locations, reconstructed historic buildings, properties primarily commemorative in nature, and properties that have achieved significance within the past 50 years

Criteria A, B, and C if they can be shown to be either associated with important events, important persons, or possess distinguishable characteristics.

As defined in 36 CFR Part 800.16, a *historic property* does not have to be nominated for, or listed in, the NRHP to be afforded protection under the NHPA. Indeed, *most* of the properties managed under this and other federal historic-preservation authorities have never been formally nominated for listing in the NRHP. Yet each resource, prior to a formal recommendation and concurrence, is considered to be eligible and treated with the same care and concern as a formally listed resource. The significance of a historic district, site, building, structure or object - and thus its required consideration under the law - is determined by the property's *eligibility* for the NRHP with respect to the criteria set forth in 36 CFR Part 60.4.

Of the 27 resources recorded within the Project area, one (P-37-036515) has been previously evaluated for its eligibility for inclusion on the NRHP. ASM Affiliates evaluated the historic utility line and found it to not meet criteria necessary for inclusion on the NRHP. Additionally, six isolated artifacts (P-37-032754, P-37-032755, LJFTT-AB-002i, LJFTT-HM-006i, LJFTT-TS-001i, LJFTT-TS-009i) by definition do not meet the necessary criteria for inclusion on the NRHP. Site CA-SDI-516 was not re-identified during the current effort despite extensive attempts to relocate it. The remaining 19 sites (LJFTT-AB-001H, -CM-001, -HM-001, -HM-002H, -HM-003H, -HM-004H, -HM-005, -KS-001, -KS-002, -KS-003, -KS-004, -KS-005, -MN-001, -TES-001, -TS-002/H, -TS-003, -TS-004, -TS-008, -TS-010) have not been evaluated for their eligibility for inclusion on the National Register. For the purposes of this Project only, these sites will be treated as eligible for inclusion on the NRHP.

The 19 sites which may qualify for eligibility on the NRHP are considered potentially eligible for this Project. Should the Tribe decide to develop the land in the future, these 19 sites are recommended to be avoided or formally evaluated for the potential significance and eligibility for listing on the NRHP.

3.6 Socioeconomic Conditions and Environmental Justice

According to the most currently available *Report on Service Population and Labor Force* available, the La Jolla Tribe has an enrollment of 696 members living on or adjacent to the Reservation (Bureau of Indian Affairs, 2001). According to the same report, the La Jolla Tribe has an unemployment rate of 56 percent, which is significantly higher than the overall unemployment rates of San Diego County and the State, at 5.3 percent and 3.2 percent, respectively, during the same time period. In addition, income levels for 8 percent of the population that are employed fall below the poverty guidelines.

Executive Order 12898 and accompanying Presidential Memorandum require that all federal agencies address environmental justice concerns to ensure fair treatment of all members of a community. Environmental justice concerns may arise from impacts on the natural or physical environment, such as human health or ecological impacts on low-income populations, minority populations, and Indian tribes, and from interrelated social, cultural and economic impacts.

These concerns must be addressed through the NEPA process by identifying and addressing disproportionately high and adverse human health or environmental effects of the responsible agency's programs, policies, and activities on low-income populations, minority populations, and Indian tribes, particularly with respect to multiple and cumulative exposure to environmental hazards. Impacts from the proposed Project related to environmental justice concerns have been addressed through the analysis provided in the Environmental Consequences section.

There would not be an anticipated significant increase in traffic as the residents of a few new homes would likely relocate from elsewhere on the Reservation and would not generate "new" traffic in the area.

3.7 *Resource Use Patterns*

3.7.1 *Transportation Networks*

Regional access to the La Jolla Reservation is provided by State Route 76 (SR 76) which traverses the Reservation in an east to west direction. SR 76 connects to Interstate 15 to the west and to Highway 79 to the east. Valley Center Road (County S6) connects to Highway 76 from the south just west of the Reservation. The Project area lies immediately south of SR 76 with the northwestern corner occurring at the intersection of SR 76 and Cuca Loop East.

SR 76 is a winding road with several sharp curves, with one lane in each direction. It is about 24 feet wide. The speed limit is posted at 45 miles per hour (mph). SR-76 is classified as a Major Road on the County Circulation Element east of I-15, although according to County standards, major roads should be 78 feet wide in 98 feet of right of way, providing four through lanes. The annual ADT on SR-76 ranges from 12,300 near I-15 to 1,950 west of the Project area at the junction with SR-79, with an annual ADT of 3,600 on SR-76 at the Project area (Caltrans, 2017).

The functioning of a road segment or an intersection can be expressed as a level of service (LOS). LOS refers to the operational conditions within a traffic stream and motorists' perceptions in terms of delay, freedom to maneuver, traffic interruptions, comfort, convenience, and safety. There are six LOS capacity conditions designated from "A" to "F." LOS A represents a light traffic with minimal delays and LOS F represents significant traffic congestion. In general, the region-wide goal for an acceptable level of service on all freeways, roadway segments, and intersections is LOS D. Based on the annual ADT and the size and configuration of SR-76 (two-lane collector with no fronting property), the existing LOS along SR-76 at the Project area is LOS A. This designation represents a free flow of traffic with little or no delay.

3.7.2 Land Use

The Property is currently zoned as Existing Land Use (LU) 9101 – Vacant and Undeveloped Land with Planned Land Use (PLU) 1000 – Spaced Rural Residential by the County of San Diego. The unincorporated area adjacent to the Reservation is generally zoned Limited Agriculture (A70) by the County of San Diego Zoning Ordinance and is designated as National Forest and State Park by the North Mountain Subregional Plan, as part of the Land Use Element of the County General Plan and as a Resource Conservation Area in the Conservation Element of the General Plan. The A70 zone and land use designations are intended to create and preserve areas primarily for agricultural production and are applied to lands with sensitive resources or significant natural resources that require special attention.

3.7.3 Public Services

The public services addressed in this EA include solid waste disposal, electricity and natural gas availability, wastewater service, and water availability.

Solid Waste Disposal

Solid waste disposal for the La Jolla Indian Reservation and vicinity is provided by Waste Management located in El Cajon. Trash pick-up on the Reservation is bi-weekly. Waste is transported to a transfer station and ultimately to a landfill.

Electricity and Natural Gas Availability

Electric power for the Reservation is provided by the San Diego Gas and Electric Company. Propane is used for heating and cooking with only a few homes on all electric power. There is no natural gas provided to the Reservation.

Waste Water Service

All wastewater produced by the La Jolla Reservation is treated by individual septic systems. The majority of these systems are comprised of a settling tank and a system of pipes extending into a leach field. The sewage flows into the settling tank where most of the suspended solids settle to the bottom. The remaining effluent flows out of the tank through a series of perforated pipes and percolates into the soil where organic material and pathogens are removed before it reaches the water table.

Water Availability

All drinking water on the Reservation comes from groundwater sources via wells. Water is pumped from wells to storage tanks then is provided to the Tribal Offices, individual homes, and the campground by the Reservation water system. The system includes a water main, pipelines and water tanks. Water is dispersed through the main water line through gravitational forces.

3.7.4 Other Resource Use Patterns

The Project area is located on and adjacent to portions of the 8,541-acre La Jolla Indian Reservation in northern San Diego County. Portions of the Property are currently used to raise a few cattle. Scattered Reservation housing, a public campground, and other improvements are located in other parts of the Reservation. No Tribal hunting or fishing grounds or gathering areas have been identified within the Project area. The site is not used for timber harvesting, mining, or recreation. No land use plans exist for the existing Reservation.

3.8 Other Values

This section discusses sound and noise, public health and safety, and visual aesthetics.

3.8.1 Sound and Noise

Noise is defined as unwanted or annoying sound that is typically associated with human activity and which interferes with or disrupts normal activities. Although exposure to high noise levels has been demonstrated to cause hearing loss, the principal human response to environmental noise is annoyance.

The Project area consists principally of undeveloped land south of SR 76. Noise levels are relatively low and typical of a rural environment. Traffic volumes occur SR 76 generate only low levels of noise throughout the day. There are no known noise sensitive threatened or endangered species on the Project area.

3.8.2 Public Health and Safety

This section describes the availability of fire and law enforcement services for the La Jolla Reservation and the potential for the occurrence of hazardous materials on the Property or vicinity.

Fire

The La Jolla Band maintains an all-volunteer fire department that responds to small fires on the Reservation. If the volunteers are unavailable or a larger force is needed, the Lake Henshaw Department responds or the Rincon Reservation Fire Department responds. The Pauma and Pala Fire Departments are also able to respond. The California Department of Forestry and Fire Protection (CDF) is available to provide emergency fire protection backup, as well.

Law Enforcement

Law enforcement for the Project area is within the jurisdiction of the San Diego County Sheriff and would not change if the land is taken into Trust. The La Jolla Reservation has a security officer who patrols in the evenings and on weekends.

Hazardous Materials

A search of available environmental records, consistent with requirements of ASTM Standard Practice for Environmental Site Assessments, was completed for the Property. The records search was conducted to determine whether the Project area or surrounding properties have known or suspected contamination or hazardous spills or releases into the environment. The search revealed no mapped sites on the fee-to-trust property or within the standard search radius on federal, state, or local databases. The Bureau of Indian Affairs will conduct a site inspection to confirm the results of the records search prior to approval of the fee-to-trust request.

A Phase I Environmental Site Assessment was conducted in May 2021 by Consulting Engineer, Mr. Marc Boogay (Appendx C). The assessment included the following:

- A subject site inspection and vicinity visit, with assessment of the possible presence of soil and groundwater contamination and threats from current or past subject site and vicinity usage.
- A review of readily available (published) regulatory agency records, including lists of CERCLIS and Superfund/SARA subject locations, hazardous waste storage/generation locations, vicinity violations and releases, and leaking underground tanks.
- A review of readily available local government agency records including enforcing UST/AST regulatory agencies, enforcing hazardous materials storage agencies, county/city departments of environmental health, and local departments of Building, Planning, Public Works, and Fire.
- A review of readily available soils, topographic, and geologic/hydrogeologic data for the subject site and vicinity. A review of readily available historical information for the subject site, including aerial photographs, interviews, and records regarding on-subject site hazardous materials/wastes.
- Review of documents as provided by the Client, including appraisals, geotechnical and soils reports, chain-of-title information, etc.

The Phase I Environmental Subject Site Assessment was conducted in conformance with the scope and limitations of the American Society of Testing & Materials (ASTM) Practice E: 1527-13 for the subject site identified as the 548-acres of contiguous vacant raw land comprising the APNs 135-230-1500 and 135-230-0800 on the south side of Mt. Palomar along Hwy 76 near Pauma Valley in San Diego County, CA. Any exceptions to, or deletions from, this practice are described in the corresponding section of this report.

The assessment did not identify recognized environmental conditions with historical and present vacant usage. Environmental threats were found with previous nearby land uses for agricultural usages; however, none was deemed to rise to the level of a recognized environmental condition. No further action is deemed warranted at this time (Boogay, 2021).

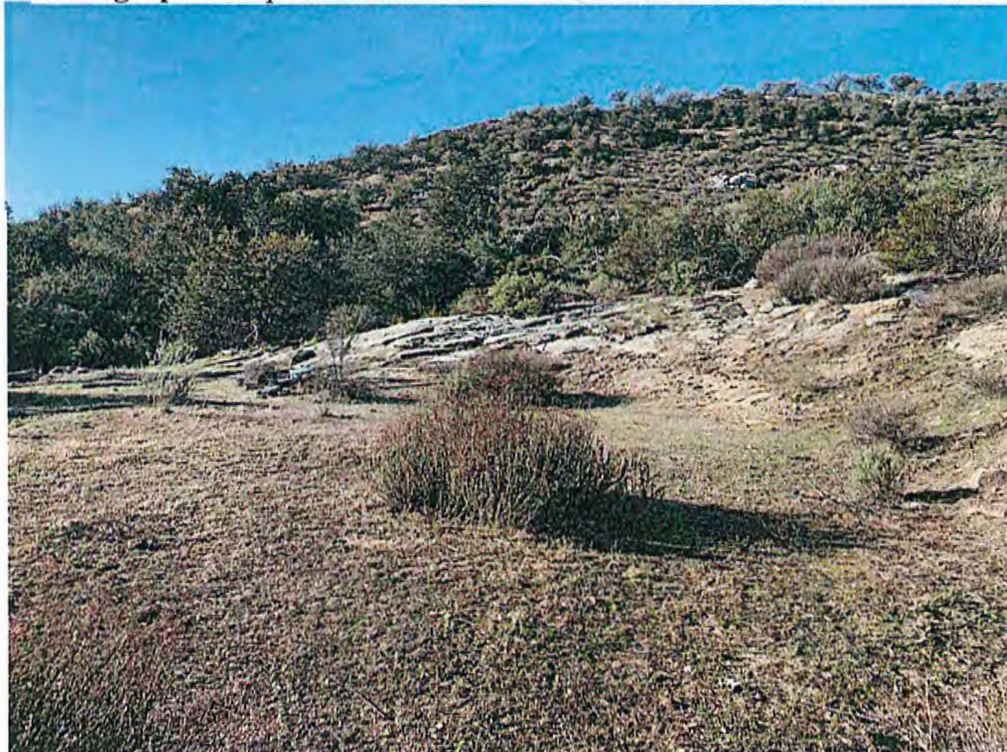
3.8.3 Visual Aesthetics

The Property is currently undeveloped with the exception of established dirt roads and use for grazing or pasture. The property is densely filled with vegetation and consists of steep to very steep slopes of Palomar Mountain. The Project area is accessible via SR 76 and is visible from by drivers travelling in either direction. See *Photograph 1* and *Photograph 2* for representative overviews of the Property.

Photograph 1. *Representative Overview of Project area. View: Northeast*



Photograph 2. *Representative Overview of Project area. View: Southwest*



4.0 ENVIRONMENTAL CONSEQUENCES

4.1 Land Resources

Preferred Alternative

No significant impacts to land resources are expected to result from transfer of the Property into trust status. Impacts to land resources from the development of four homes are expected to be minimal. The homes will be clustered near the entry to the property from Highway 76, as shown on project map and serve to provide security. No mitigation measures are required in association with the fee-to-trust transfer or subsequent housing development.

No Action Alternative

Under the No Action Alternative, the Property would not be transferred into trust status and there would be no impacts to land resources. Land use regulation would remain with the County of San Diego, rather than being transferred to the Ja Jolla Tribal government and BIA.

4.2 Water Resources

Preferred Alternative

Surface Water and Groundwater Resources

The proposed Project involves the transfer of the Property from fee simple status to trust status. No significant impacts to surface waters or groundwater are expected to result from transfer of the Property into trust status or subsequent development of four homes. No mitigation measures are required. Domestic water will be provided through extension of existing lines from the east. This area will be served by Eastern Well #1 & #2 and is within the capacity of the 177,000 gallon Storage tank. There are currently no groundwater issues, like an overdraft condition or unreliability with well 1 and 2 that would be exacerbated by adding the 4 houses. The extension of water lines will be made from and through previously disturbed locations.

Water Quality

Proposed future development of four homes, with assistance from the All Mission Indian Housing Authority needs to understand that house and roadway construction results in removal of vegetation which can lead to erosion and the silting of waterways, which would be a potentially significant impact. Erosion-control mitigation measures will include perimeter silt fencing, minimizing disturbed area, mulching, and revegetation. These will control both water flow and soil loss and prevent construction-related silt from entering water bodies. Construction of homes and roadways will create less than significant impacts to water quality with deployment of these erosion control mitigation measures.

No Action Alternative

Under the No Action Alternative, the Property would not be transferred into trust status and there would be no impact to water resources. Land use regulation would remain with the County of San Diego rather than being transferred to the La Jolla Tribal government and BIA.

4.3 Air Quality

Preferred Alternative

Clean Air Act Conformity

This project, including development of four houses, does not have the potential to emit significant emissions of air pollution. Therefore, it is in compliance with the State Implementation Plan prepared under the Clean Air Act. Construction will cause short term localized degradation of air quality from earth moving and heavy equipment operations. Water trucks will be used to reduce dust. Therefore, the proposed transfer of land from fee to trust would conform to the State Implementation Plan.

The construction of four rural residential homes would not result in emissions above a de minimus level and therefore would conform per 93.153(b).

Greenhouse Gas Emissions

The proposed Project would not conflict with an applicable plan, policy or regulation adopted for the purpose of reducing GHG emissions. Traffic-related emissions from residents of the four houses would be anticipated to be negligible. Similar to the discussion in Clean Air Act conformity, above, construction will cause short term greenhouse gas emissions from earth moving and heavy equipment operations as well as water trucks used to reduce dust.

No Action Alternative

Clean Air Act Conformity

Under the No Action Alternative, the Property would not be transferred into trust status and there would be no impacts to air quality. Land use regulation would remain with the County of San Diego rather than being transferred to the La Jolla Tribal government.

Greenhouse Gas Emissions

Under the No Action Alternative, the Property would not be transferred into trust status and there would be no greenhouse gas emissions.

4.4 Biological Resources

Preferred Alternative

Transfer of the Property from fee simple status to trust status and the subsequent development of four homes would not result in any impacts to sensitive biological resources. Section 7 consultation with the USFWS has been completed and mitigation measures have been identified and included in the project design to avoid and minimize impacts to protected species. No federally sensitive habitats occurs on site however sensitive plants and animals may occur at various times throughout various seasons. Although not federally-protected, southern coast live oak riparian forest is considered a sensitive habitat in California, where development and population growth have increased the impacts of human activities on natural resources. Oak forest contributes to air quality, erosion control, and to the aesthetic quality of the landscape. It also provides habitat for over 300 wildlife species and serves as a corridor between wildlife populations. The habitat quality of oak forests is determined by a number of factors, including plant density, composition, oak tree diversity, and age structure. Mitigation measures discussed in the affected environment section will be closely monitored.

The four homes planned for development will be constructed in the northwest corner of the property. This area consists of chamise chaparral, which is not sensitive habitat. A recent EA for construction of a Fire Station on an adjacent Reservation property included field surveys for Stephens Kangaroo Rats. None were found. Prior to construction a biologist will be brought in to survey.

Avoidance and Mitigation Measures

Project activities will be completed following standard operating procedures and best management procedures. Impacts would be less than significant with the implementation of the following mitigation measures which will also be incorporated into the Project design and implementation to avoid and minimize impacts to biological resources, including SKR and migratory birds:

General Biological Conditions

Native plants or wildlife will not be collected or harassed if encountered on site.

Any wildlife encountered during the course of an activity, including construction, operation, and decommissioning will be allowed to leave the area of its own accord, unharmed.

Feeding of wildlife and/or leaving of food or trash as an attractive nuisance to wildlife is discouraged. Particular attention will be paid to “micro-trash” (including such small items as screws, nuts, washers, nails, coins, rags, small electrical components, small pieces of plastic, glass or wire, and any debris or trash that is colorful or shiny).

All trash and food items will be promptly contained within closed, wildlife-proof containers. These will be regularly removed from the project site to reduce the attractiveness of the area to ravens and other predators.

The project proponent, its agents, or contractors will cover or fill all potential pitfalls to wildlife or cavities in which wildlife may become trapped when not attended. These include pits, trenches, vats, buckets, pipes, etc. Ramping will be provided in open trenches when necessary to provide escape routes for entrapped wildlife.

The project proponent, its agents, or contractors will preserve existing native vegetation to the extent practicable. Precautions will be taken to avoid damage to native vegetation by people or equipment.

To the extent practicable, material laydown yards, staging areas, and areas of surface disturbance associated with the project will be located in previously disturbed areas or in areas where habitat quality is poor.

To prevent the introduction of invasive plant species, project proponents, their agents, or contractors will ensure that all vehicles and equipment that have been used on sites outside of the project area are cleaned prior to entering the project area.

When applicable, weed-free dirt, mulch, gravel, and other materials will be used.

Domestic pets are discouraged on site. This does not apply to the use of domestic animals that may be used to aid in official and approved monitoring procedures/protocols, or service animals under Titles II and III of the Americans with Disabilities Act.

Special Wildlife Conditions

To prevent impacts to Federally Threatened Stephens' Kangaroo Rat (SKR), a survey and assessment for SKR burrows and appropriate habitat will be conducted no more than 14 days prior to initiating ground disturbing activities. If SKR burrows, populations or individuals are discovered during the surveys, consultation will be initiated with the USF&WS, and ground disturbing actions will be postponed until consultation has been completed.

The project biologist responsible for implementing burrow surveys and mapping will have, at a minimum, demonstrated ability to identify appropriate kangaroo rat habitat, distinguish kangaroo rat burrows and complexes, and have demonstrated small mammal handling experience. This experience must be clearly identified on their resume, including breaking the hours of experience down by type of experience, location of experience, name and contact information of the supervising biologist, and providing work references.

All project related activities will comply with the Migratory Bird Treaty Act (MBTA) and the Bald and Golden Eagle Protection Act to the greatest extent possible. Active nests (i.e., nests with eggs or chicks) are protected year-round. Project related activities requiring disturbance to, or removal of, an active nest or causing a breeding bird to leave the nest for prolonged lengths of time will not be implemented.

To the extent possible, work will be scheduled outside of the bird breeding/nesting season (February 15 to August 31) to avoid impacts to nesting birds.

If work must be scheduled during the bird breeding season, a qualified biologist will conduct a pre-construction nesting bird survey, to include a 500-ft buffer from the edge of the project area, to ensure that no active nests are present in the project vicinity.

If an active nest is located, the nest area will be flagged for avoidance, and a buffer zone delineated, flagged, or otherwise marked. Buffer distances can be determined by a Nesting Bird Management Plan (NBMP), approved by the USF&WS, that considers species, terrain, habitat type, and activity levels.

In the absence of an approved NBMP, the following buffer distances are recommended:

Passerines: For non-ESA species, exclusionary buffers will be no less than 100 feet.

Raptors (excluding eagles): No less than 500 feet.

Federally listed birds: No less than 300 feet.

No Action Alternative

Under the No Action Alternative, the Property would not be transferred into trust status and there would be no impacts to living resources. Land use regulation would remain with the County of San Diego rather than being transferred to the La Jolla Tribal government and BIA.

4.5 Cultural Resources

Preferred Alternative

The proposed Project involves the transfer of the Property from fee simple status to trust status and development of four homes. Of the 27 resources recorded within the APE, one (P-37-036515) has been previously evaluated for its eligibility for inclusion on the NRHP. ASM Affiliates evaluated the historic utility line and found it to not meet criteria necessary for inclusion on the NRHP. Additionally, six isolated artifacts (P-37-032754, P-37-032755, LJFTT-AB-002i, LJFIT-HM-006i, LJFTT-TS-001 i, LJFTT-TS-009i) by definition do not meet the necessary criteria for inclusion on the NRHP. Site CA-SDI-516 was not re-identified during the current effort despite extensive attempts to relocate it. The remaining 19 sites (LJFTT-AB-001H, -CM-001, -HM-001, -HM-0021-I, -HM-003H, -HM-004H, -HM-005, -KS-001, -KS-002, -KS-003, -KS-004, -KS-005, -MN-001, -TES-001, -TS-002/H, -TS-003, -TS-004, -TS-008, -TS-010) have not been evaluated for their eligibility for inclusion on the National Register. For the purposes of this Project only, these sites would be treated as eligible for inclusion on the NRHP (Table 7).

Table 7. Cultural Resources and NRHP Eligibility Status

Site	Description	NRHP Eligibility	Eligibility Reason
CA-SDI-516	Prehistoric: Bedrock Milling	Not Eligible	Not relocated during survey
P-37-032754	Prehistoric: Lithic Isolate	Not Eligible	Does not meet criteria
P-37-032755	Prehistoric: Ceramic Isolate	Not Eligible	Not relocated during survey, and Does not meet criteria
P-37-036515	Historic: Utility Line	Not Eligible	Previously evaluated and determined not eligible
LJFTT-AB-001H	Historic: Rock Ring	Possible	Considered eligible until evaluated
LJFTT-AB-002i	Prehistoric: Lithic Isolate	Not Eligible	Does not meet criteria
LJFTT-CM-001	Prehistoric: Habitation Site	Possible	Considered eligible until evaluated
LJFTT-HM-001	Prehistoric: Bedrock Milling	Possible	Considered eligible until evaluated
LJFTT-HM-002H	Historic: Refuse Deposit	Possible	Considered eligible until evaluated
LJFTT-HM-003H	Historic: Road	Possible	Considered eligible until evaluated
LJFTT-HM-004H	Historic: Machinery	Possible	Considered eligible until evaluated
LJFTT-HM-005	Prehistoric: Bedrock Milling	Possible	Considered eligible until evaluated
LJFTT-HM-006i	Prehistoric: Lithic Isolate	Not Eligible	Does not meet criteria
LJFTT-KS-001	Prehistoric: Bedrock Milling	Possible	Considered eligible until evaluated
LJFTT-KS-002	Prehistoric: Bedrock Milling	Possible	Considered eligible until evaluated
LJFTT-KS-003	Prehistoric: Bedrock Milling	Possible	Considered eligible until evaluated
LJFTT-KS-004	Prehistoric: Bedrock Milling	Possible	Considered eligible until evaluated
LJFTT-KS-005	Prehistoric: Bedrock Milling	Possible	Considered eligible until evaluated
LJFTT-MN-001	Prehistoric: Bedrock Milling	Possible	Considered eligible until evaluated
LJFTT-TES-001	Prehistoric: Habitation Site	Possible	Considered eligible until evaluated
LJFTT-TS-001i	Prehistoric: Lithic Isolate	Not Eligible	Does not meet criteria
LJFTT-TS-002/H	Multi-component: Prehistoric: Bedrock Milling, Historic: Wall	Possible	Considered eligible until evaluated
LJFTT-TS-003	Prehistoric: Bedrock Milling	Possible	Considered eligible until evaluated
LJFTT-TS-004	Prehistoric: Bedrock Milling	Possible	Considered eligible until evaluated
LJFTT-TS-008	Prehistoric: Bedrock Milling	Possible	Considered eligible until evaluated
LJFTT-TS-009i	Prehistoric: Lithic Isolate	Not Eligible	Does not meet criteria
LJFTT-TS-010	Prehistoric: Bedrock Milling	Possible	Considered eligible until evaluated

With the development of four homes in the northwest corner of the property, only P-37-032754 will be impacted. This resource is an isolated quartz flake, which is not eligible for listing on the NRHP. No significant impacts to cultural resources will occur, and no mitigation is required.

No Action Alternative

Under the No Action Alternative, the Property would not be transferred into trust status and there would be no impacts to cultural resources. The no action alternative would not transfer land use authority over the Property to the Tribe, and the additional protection for cultural resources that would be afforded by the transfer would not be realized. Land use regulation would remain with the County of San Diego.

4.6 Socioeconomic Conditions and Environmental Justice

Preferred Alternative

Implementation of the Preferred Alternative would result in immediate and long-term beneficial socioeconomic impacts to the La Jolla Band of Luiseño Indians. Specifically, the proposed action would accomplish this in two important ways. First, conveyance of the Property into Federal trust on behalf of the Tribe would provide the Tribe with much-needed land for future generations.

A second important way in which the fee-to-trust transfer would improve the Tribe's long-term socioeconomic security would be the transfer of jurisdiction over land use decisions from the County to the Tribe and the Federal government. The Tribe is determined to utilize the property in ways that simultaneously improve Tribal members' socioeconomic status, maintain a rural setting in the area, and protect the environment. Tribal and Federal jurisdiction over the properties would help accomplish these goals. The Tribe would no longer pay taxes on the Property to the County of San Diego. Property taxes on the Property equate to less than 0.006 percent of the total County tax revenue. This limited reduction in tax revenue would not constitute a significant adverse impact to San Diego County.

No environmental justice concerns have been identified through the analysis provided in this EA, and no mitigation measures are required at this time. A disproportionately high and adverse human health or environmental impact on minority populations, low-income populations, or Indian tribe is not likely to result from the Proposed Action.

No Action Alternative

Adverse and potentially significant impacts related to socioeconomics are anticipated to result from the No Action Alternative. Under the No Action Alternative, the Property would not be transferred into trust status. The Tribe would not gain land use jurisdiction over the property. The Tribe would be less capable of controlling land use of this property, improving its socio-economic status and overall quality of life, and protecting the environment. Approval of the No Action Alternative would represent a loss of potential long-term socio-economic security for the La Jolla Indian Reservation by not allowing jurisdiction over the Property to shift from the County to the Tribe.

4.7 Resource Use Patterns

4.7.1 Transportation Networks

Preferred Alternative

The proposed fee-to-trust transfer of the Property would not affect existing transportation networks. The construction of four homes would not be expected to affect existing transportation networks. Traffic is currently light in the area and that 4 houses would only add a few more cars a day to the current situation, which is not expected to significantly impact traffic.

Access from Highway 76 to driveways for the potential homes will be created on previously disturbed lands. No mitigation measures are required.

No Action Alternative

Under the No Action Alternative, the Parcel would not be transferred into trust status and there would be no impacts to the transportation network. Land use regulation would remain with the County of San Diego, rather than being transferred to the La Jolla Tribal government and BIA.

4.7.2 Land Use

Preferred Alternative

The addition of 4 houses in this portion of the property would not create any access restrictions or otherwise conflict with any neighboring land uses and therefore there is a less than significant impact to land use. No mitigation measures are anticipated or required.

No Action Alternative

Under the No Action Alternative, the Property would not be transferred into trust status and there would be no impacts to land use. Land use regulation would remain with the County of San Diego, rather than being transferred to the La Jolla Tribal government and BIA.

4.7.3 Public Services

Preferred Alternative

With the development of only four rural homes no significant impacts to the current disposal of solid waste, provision of electricity and natural gas, wastewater service, or the availability of water service on the Property or nearby areas are expected to result from approval of the Preferred Alternative. Power poles and telephone poles cross the property and drop will be made at the houses. Solid waste will be taken to the Tribe's Transfer Station. No mitigation measures are required.

No Action Alternative

Under the No Action Alternative, the Property would not be transferred into trust status and there would be no impacts to public services. Provision of public services would remain with the current service providers and land use regulation would remain with the County of San Diego.

4.7.4 Other Resource Use Patterns

Preferred Alternative

Transfer of the property into trust status and the subsequent development of 4 homes will require extension of domestic waterlines from the Reservation to the east, as discussed above, as well as onsite septic systems. This will not result in significant impacts to other resource use patterns. No mitigation measures are required.

No Action Alternative

Under the No Action Alternative, the Property would not be transferred into trust status and there would be no impacts to resource use patterns. Land use regulation would remain with the County of San Diego, rather than being transferred to the La Jolla Tribal government.

4.8 Other Values

4.8.1 Sound and Noise

Preferred Alternative

Construction noise would be limited to daytime hours and would be short in duration. Due to the nature of the proposed undertaking, the noise would be relatively low. The Project area is also predominantly in open rural spaces with the nearest sensitive receptors being 1-2 existing homes which are located at least 500 meters from each of the proposed new Home Sites. Upon completion of construction, very little noise would be generated by the Project. No significant noise impacts would occur as a result from transfer of the Property into trust status or the subsequent development of four homes. No mitigation measures are required.

No Action Alternative

Under the No Action Alternative, the Property would not be transferred into trust status and there would be no impacts to the environment from noise. Land use regulation would remain with the County of San Diego, rather than being transferred to the La Jolla Tribal government and BIA.

4.8.2 Public Health and Safety

Preferred Alternative

An increased need for fire suppression or law enforcement can be anticipated for the Preferred Alternative. Neither the transfer of the property (5% addition) or the construction of four homes (increasing from 215 to 219) is anticipated to significantly increase the threat of wildfire or the need for additional law enforcement. The Project also would not introduce the storage, transport or use of hazardous materials to the Project area and vicinity.

No significant impacts to public health and safety are anticipated and no mitigation measures are required.

No Action Alternative

Under the No Action Alternative, the Property would not be transferred into trust status and there would be no impacts to public health and safety. Jurisdiction over the subject Property would remain in the hands of the county and state, while the remainder of the Reservation is within Tribal and federal jurisdiction. The Tribe would not have primary jurisdiction for fire suppression, including paramedic support. Land use regulation would remain with the County of San Diego, rather than being transferred to the La Jolla Tribal government and BIA.

4.8.3 Visual Aesthetics

Preferred Alternative

No significant impacts to visual or aesthetic characteristics of the Project area would occur as a result of the transfer of the Property into trust status or the development of four rural homes on approximately five acres. Offsite views of the low-density housing would be minimal and only apparent for tens of seconds from SR 76. Furthermore, low density housing would be in keeping with surrounding land use with planned use of the Property. No mitigation measures are required at this time.

No Action Alternative

Under the No Action Alternative, the Property would not be transferred into trust status and there would be no impacts to the visual aesthetics of the area. Land use regulation would remain with the County of San Diego, rather than being transferred to the La Jolla Tribal government and BIA.

5.0 CUMULATIVE EFFECTS

Cumulative effects are effects on the environment which result from the incremental impact of the proposed action, when added to other past, present, and reasonably foreseeable future actions. Cumulative impacts can result from individually minor but collectively significant actions taking place over a period of time (40 CFR 1508.7).

Anticipated growth on the Reservation will occur as individual Projects are developed by the Tribal Council. Growth adjacent to the Reservation on private land is subject to review by the County of San Diego for conformance to the General Plan, habitat conservation plans, and other land use policies and regulations.

The primary objectives of the proposed fee-to-trust transfer Project are to improve the Tribe's long-term socio-economic security by increasing the total land base of Trust property. In addition, the Tribe wishes to maintain a rural environment by providing a buffer zone free from development around the Reservation. The Tribe also wishes to transfer land use decisions from the County of San Diego to the Tribe and the BIA. The Project is not expected to result in or contribute to any significant unmitigable direct or indirect impacts. There are no other anticipated development Projects located on the La Jolla Indian Reservation at this time. Therefore, the proposed fee-to-trust transfer of the Property with the construction of four rural homes would not result in any cumulative impacts.

The housing would provide Tribal members currently living on or near the Reservation to relocate, and as such it would not generate a population influx to the area. As such, the development of four homes would not create an influx of patrons or vehicles to the area. Housing would be beneficial to the socio-economic preservation of the Tribe and the Reservation.

Mitigation measures discussed in the EA and appendices will be used for ongoing/routine operations and maintenance of this project's developments and any future large scale developments will undergo their own environmental review.

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7.0 PERSONNEL AND CONSULTATION & COORDINATION

7.1 Personnel

The following personnel at TIERRA Environmental Services contributed to the preparation of this Environmental Assessment:

- Michael Baksh, Principal Environmental Planner
- Kyle Stankowski, Senior Environmental Planner
- Hillary Murphy, Senior Archaeologist
- James Kurtz, Senior Scientist

The Biological Resources study was prepared by Brant Primrose of Primrose Biological Services

The Cultural Resources study was prepared by Tierra Environmental Services.

The Phase I Environmental Site Assessment was conducted by Mr. Marc Boogay, Consulting Engineer.

7.2 Consultation & Coordination

The following agencies and persons were consulted for their input regarding existing environmental conditions and analyses of the proposed actions' environmental consequences:

La Jolla Band of Luiseño Indians

- Chairwoman Norma C. Contreras
- Councilman Jack Musick
- Councilman William C. Nelson II
- Tim Stevens-Welsh
- Michelle Nelson
- Squire Redfern
- Chris Davey Jr.
- Thomas McLean

Federal Agencies

- Dan Hall, Archeologist, Bureau of Indian Affairs (BIA), Pacific Region Office
- Chad Broussard, Environmental Protection Specialist, BIA, Pacific Regional Office
- Peter DeJongh, regional Biologist, BIA, Pacific regional Office

APPENDIX A
BIOLOGICAL RESOURCES DOCUMENTATION

APPENDIX B
CULTURAL RESOURCES DOCUMENTATION
(CONFIDENTIAL; NOT AVAILABLE FOR PUBLIC REVIEW)

APPENDIX C
PHASE I ENVIRONMENTAL SITE ASSESSMENT