Appendix J

Paleontological Assessment Report

PALEONTOLOGICAL ASSESSMENT FOR THE 22750 CARANCHO ROAD PROJECT

CUP190038
RIVERSIDE COUNTY, CALIFORNIA

APN 933-020-005-6

Prepared on Behalf of:

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September 15, 2020

Paleontological Database Information

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Report Date:	September 15, 2020
Report Title:	Paleontological Assessment for the 22750 Carancho Road Project, CUP190038, Riverside County, California (APN 933-020-005-6)
Prepared on Behalf of:	**Fuego Farms LLC** 12130 Millennium Drive, Suite 300 Los Angeles, California 90094 (310) 908-8468
Prepared for:	Riverside County Planning Department 4080 Lemon Street, 12th Floor Riverside, California 92501 (951) 955-3200
Prepared by:	Brian F. Smith and Associates, Inc. 14010 Poway Road, Suite A Poway, California 92064
USGS Quadrangles:	*Temecula, Fallbrook, Wildomar,* and *Murrieta, California* (7.5 minute)
Study Area:	71.5 acres
Key Words*:*	Paleontological assessment; tonalite; Low sensitivity; Riverside County.

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I. INTRODUCTION AND LOCATION

A paleontological resource assessment has been completed for the 22750 Carancho Road Project (Assessor's Parcel Number [APN] 933-020-005-6), located about five miles west of the city of Temecula within unincorporated Riverside County, California (Figures 1 and 2). The project area covers the intersection of four USGS 7.5-minute quadrangles, *Temecula, Fallbrook, Wildomar,* and *Murrieta, California*, in an unsectioned area of Township 7 and 8 South, Range 4 West of the San Bernardino Base and Meridian (see Figure 2). The 71.5-acre project proposes the development of a cannabis cultivation facility.

II. REGULATORY SETTING

The California Environmental Quality Act (CEQA), which is patterned after the National Environmental Policy Act, is the overriding environmental document that sets the requirement for protecting California's cultural and paleontological resources. The document does not establish specific rules that must be followed but mandates that governing permitting agencies (lead agencies) set their own guidelines for the protection of nonrenewable paleontological resources under their jurisdiction.

State of California

Under Guidelines for the Implementation of CEQA, as amended March 29, 1999 (Title 1, Chapter 3, California Code of Regulations: 15000 et seq.), procedures define the type of activities, persons, and public agencies required to comply with CEQA. In the Environmental Checklist, one of the questions to answer is, "Will the project directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?" (Section 15023, Appendix G, Section XIV, Part a). California Public Resources Code Section 5097.5 states:

a) No person shall knowingly and willfully excavate upon, or remove, destroy, injure or deface any historic or prehistoric ruins, burial grounds, archaeological or vertebrate paleontological site, including fossilized footprints, inscriptions made by human agency, rock art, or any other archaeological, paleontological or historical feature, situated on public lands, except with the express permission of the public agency having jurisdiction over such lands. Violation of this section is a misdemeanor.
b) As used in this section, "public lands" means lands owned by, or under the jurisdiction of, the state, or any city, county, district, authority, or public corporation, or any agency thereof.

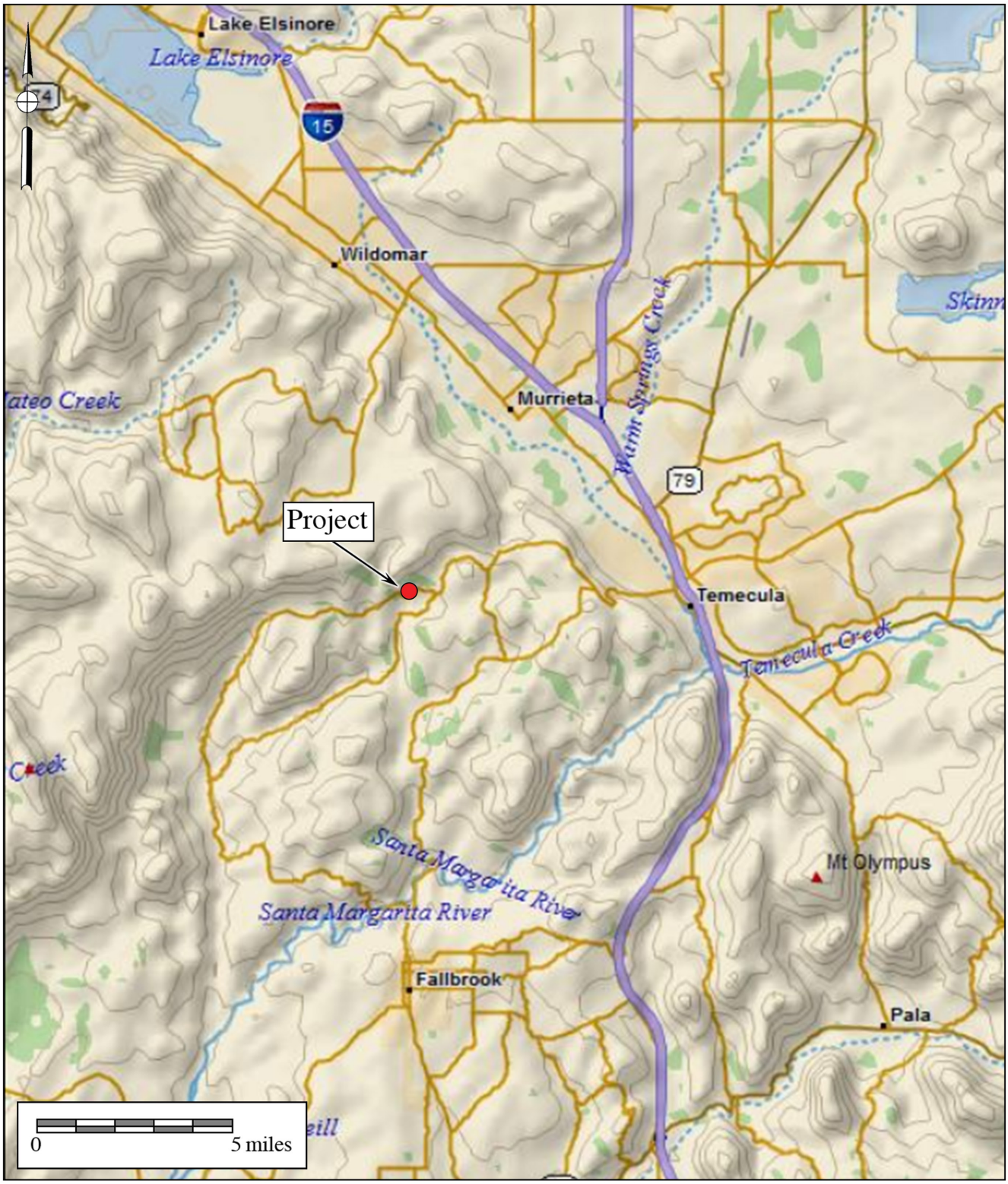


Figure 1

General Location Map

The 22750 Carancho Road Project

DeLorme (1:250,000)

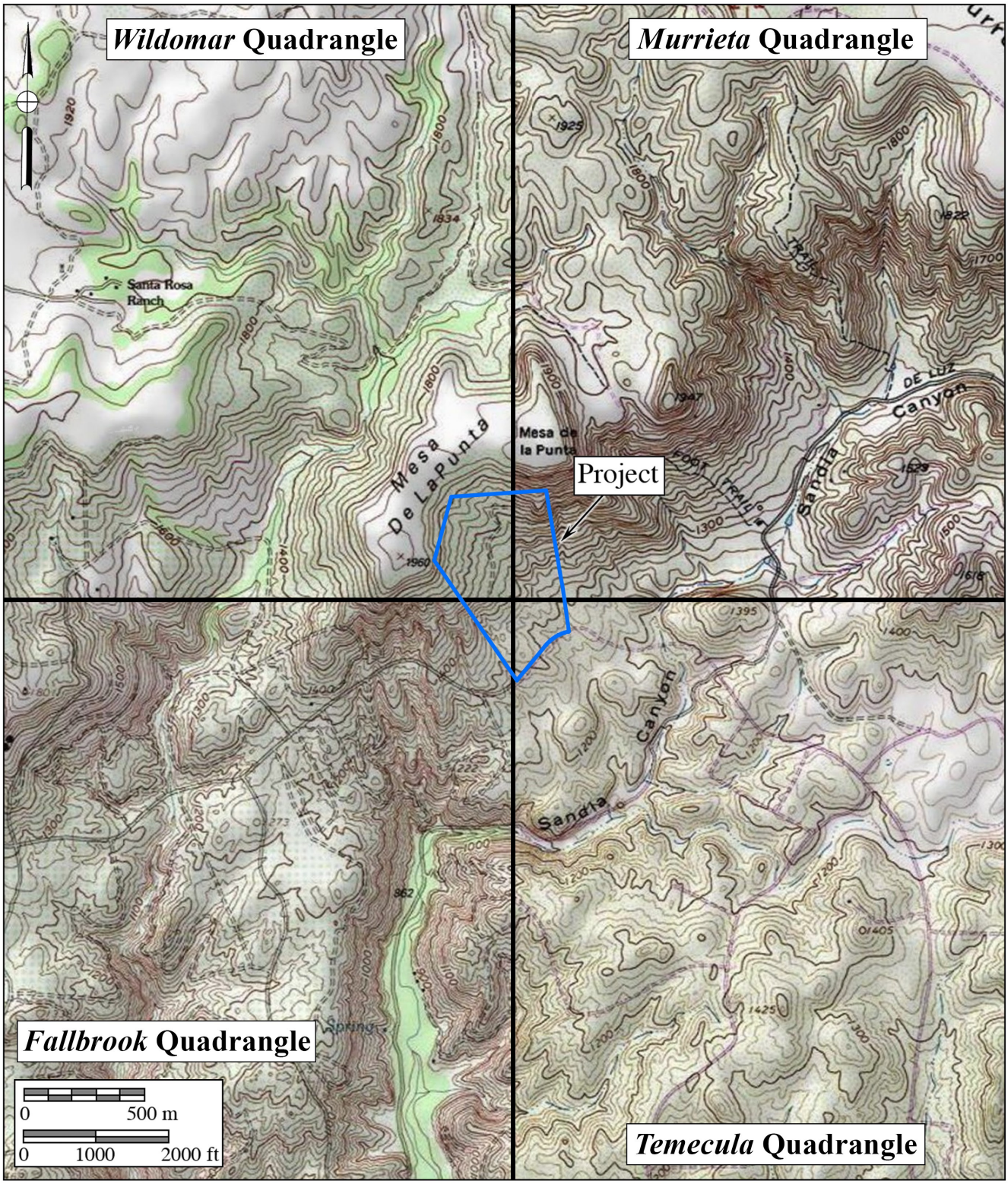


Figure 2

Project Location Map

The 22750 Carancho Road Project

USGS *Fallbrook, Temecula, Wildomar,* and *Murrieta* Quadrangles (7.5-minute series)

County of Riverside

According to County of Riverside Environmental Impact Report No. 521:

> The County of Riverside has existing programs in place that ensure applicable policies are imposed once a development proposal triggers a specific policy or policies. The need for specific policies is determined through subsequent CEQA analysis performed for site-specific projects. These measures are implemented, enforced and verified through their inclusion into project conditions of approval. (County of Riverside 2015)

For example, Policy OS 19.6 states:

> Whenever existing information indicates that a site proposed for development has high paleontological sensitivity as shown on Figure OS-8, a paleontological resource impact mitigation program (PRIMP) shall be filed with the County Geologist prior to site grading. The PRIMP shall specify the steps to be taken to mitigate impacts to paleontological resources. (County of Riverside 2015)

An interactive paleontological sensitivity mapping database is available online and maintained by the County of Riverside as a research tool to access the County's assignment of paleontological sensitivity levels for the various geologic formations within the county (County of Riverside 2020). This is specifically addressed in Section V of this report.

Paleontological resources are further addressed under the 2008 Multipurpose Open Space Element of the Riverside County General Plan, Policy OS 19.9, which states:

> This policy requires that when existing information indicates that a site proposed for development may contain paleontological resources, a paleontologist shall monitor site grading activities, with the authority to halt grading to collect uncovered paleontological resources, curate any resources collected with an appropriate repository, and file a report with the Planning Department. (County of Riverside 2008)

The "SABER Policy" (Safeguard Artifacts Being Excavated in Riverside County), which was enacted in October 2011 by the Riverside County Board of Supervisors, also requires that any paleontological resources found or unearthed in the county of Riverside be curated at the Western Science Center on Searl Parkway in the city of Hemet.

III. GEOLOGY

Geomorphically, the project is located on a south-facing slope between Sandia Canyon and Mesa De La Punta. Mesa De La Punta consists of a few small, steeply-sided mesas that form the southern boundary of the Santa Rosa Plateau and Ecological Preserve. The geology of the area is shown on Figure 3 (Morton and Miller 2006; Kennedy and Tan 2007). Geologically, the project is underlain by Cretaceous-aged tonalite (area in pink labeled "Kt" on Figure 3). Mesa De La Punta is capped by olivine basaltic lavas of the Tertiary-aged (middle to upper Miocene) Santa Rosa basalt (area in brown labeled "Tvsr" on Figure 3).

IV. PALEONTOLOGICAL RESOURCES

Definition

Paleontological resources are the remains of prehistoric life that have been preserved in geologic strata. These remains are called fossils and include bones, shells, teeth, and plant remains (including their impressions, casts, and molds) in the sedimentary matrix, as well as trace fossils such as footprints and burrows. Fossils are considered older than 5,000 years of age (Society of Vertebrate Paleontology 2010) but may include younger remains (subfossils), for example, when viewed in the context of local extinction of the organism or habitat. Fossils are considered a nonrenewable resource under state, county, and local guidelines (see Section II of this report). Fossils do not occur in plutonic or volcanic rocks, such as those mapped at the 22750 Carancho Road Project (see Figure 3).

Paleontological Resource Records Search

An in-house records search was performed for paleontological resources that are known in the vicinity of the project. Sources for records include those held by the Los Angeles County Natural History Museum (LACM), the San Bernardino County Museum (SBCM), the University of California Museum of Paleontology in Berkeley (UCMP), and primary literature. No fossil localities are known within the project boundaries, nor from within a one-mile radius of the project. The closest geologic formation with fossil localities is the Pleistocene Pauba Formation, located approximately four to five miles east of the project, with outcrops occurring near and around Temecula and Murrieta. The Pauba Formation is locally fossiliferous, yielding the bones of various reptiles, rodents, giant ground sloths, horses, camels, mammoths, and mastodons, to name a few (Reynolds and Reynolds 1990; Pajak et al. 1996).

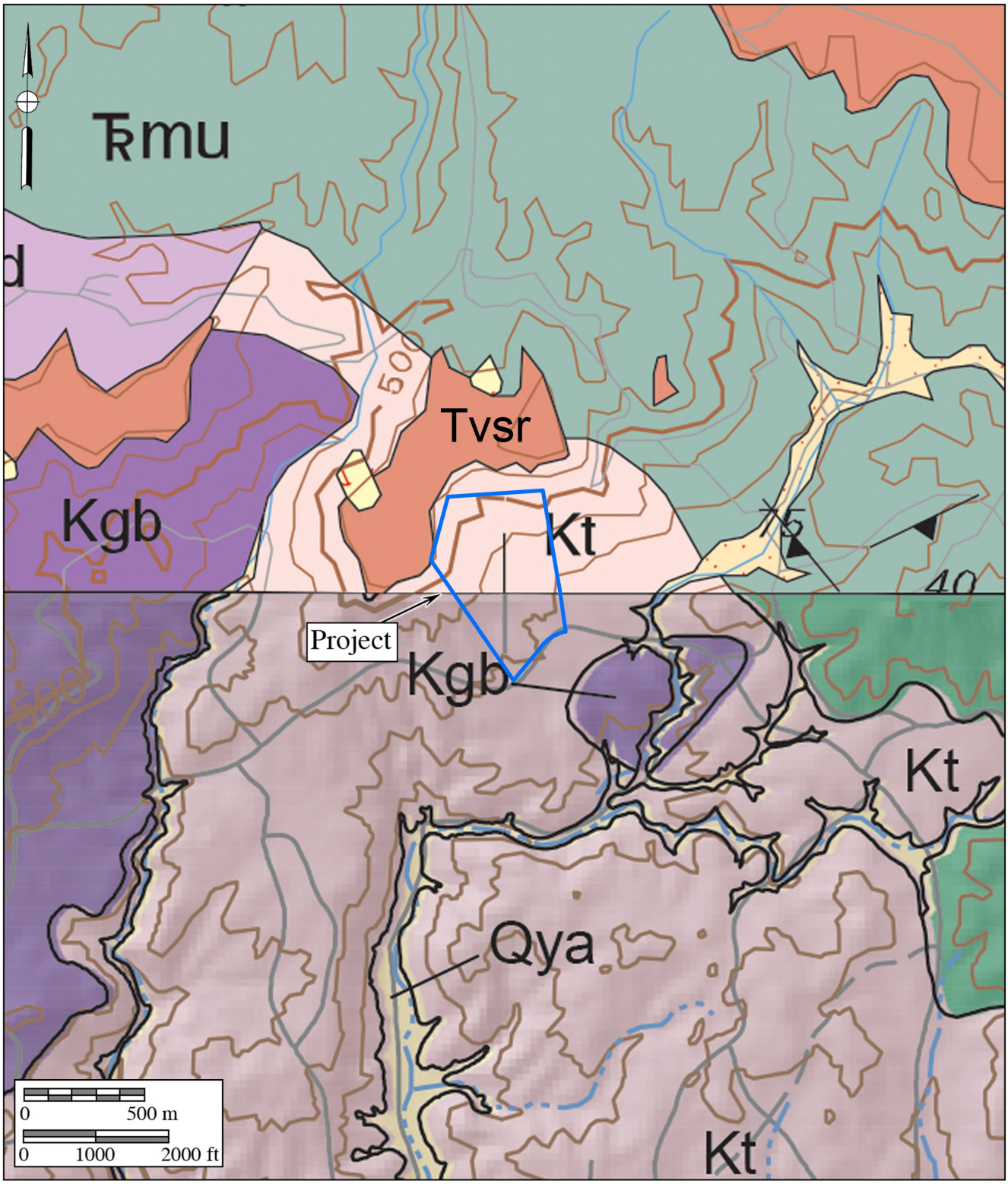


Figure 3

Geologic Map

The 22750 Carancho Road Project

Geology after Kennedy and Tan (2007) and Morton and Miller (2006)

V. PALEONTOLOGICAL SENSITIVITY

Overview

The degree of paleontological sensitivity of any particular area is based on a number of factors, including the documented presence of fossiliferous resources on a site or in nearby areas, the presence of documented fossils within a particular geologic formation or lithostratigraphic unit, and whether or not the original depositional environment of the sediments is one that might have been conducive to the accumulation of organic remains that might have become fossilized over time. Late Quaternary (Holocene or "modern") alluvium is generally considered to be geologically too young to contain significant nonrenewable paleontological resources (*i.e.,* fossils) and, therefore, is typically assigned a low paleontological sensitivity. Old, Pleistocene (more than 11,700 years old), alluvial and alluvial fan deposits in the Inland Empire, however, often yield important Ice Age terrestrial vertebrate fossils, such as extinct mammoths, mastodons, giant ground sloths, extinct species of horse, bison, and camel, saber-toothed cats, and others (Jefferson 2009). Therefore, these Pleistocene sediments are accorded a High paleontological resource sensitivity.

Professional Standards

The Society of Vertebrate Paleontology (2010) drafted guidelines outlining procedures that include:

> [E]valuating the potential for impacts of a proposed action on paleontological resources and for mitigating those impacts. Impact mitigation includes pre-project survey and salvage, monitoring and screen washing during excavation to salvage fossils, conservation and inventory, and final reports and specimen curation. The objective of these procedures is to offer standard methods for assessing potential impacts to fossils and mitigating these impacts.

The guidelines include four categories of paleontological sensitivity for geologic units (formations) that might be impacted by a proposed project, as listed below:

- *High Potential:* Rock units from which vertebrate or significant invertebrate, plant, or trace fossils have been recovered.
- *Undetermined Potential:* Rock units for which little information is available concerning their paleontological content, geologic age, and depositional environment, and that further study is needed to determine the potential of the rock unit.
- *Low Potential:* Rock units that are poorly represented by fossil specimens in institutional collections or based upon a general scientific consensus that only preserve fossils in rare circumstances.

- *No Potential:* Rock units that have no potential to contain significant paleontological resources, such as high-grade metamorphic rocks and plutonic igneous rocks.

Paleontological Sensitivity Assessment

A "paleontological sensitivity map and report" generated by the Riverside County Land Information System in August 2020 (Figure 4) ranks the project (the area underlain by granitic rocks) as having a mostly Undetermined potential (dark green-tinted areas) to yield nonrenewable paleontological resources, and therefore, an Undetermined paleontological sensitivity. Small areas in the northern and southern corners of the project are assigned a Low potential (light green-tinted areas) to yield nonrenewable paleontological resources, and therefore, a Low paleontological sensitivity. The Cretaceous granitic rocks (tonalite) underlying the project are regarded as having a paleontological resource potential of Low to none. The likelihood of discovering fossils in granitic rocks is nil.

VI. RECOMMENDATIONS

Based on the presence of granitic rocks below the project, their Low paleontological sensitivity, and their nonfossiliferous nature, a paleontological resource Mitigation Monitoring and Reporting Program for the 22750 Carancho Road Project is not warranted.

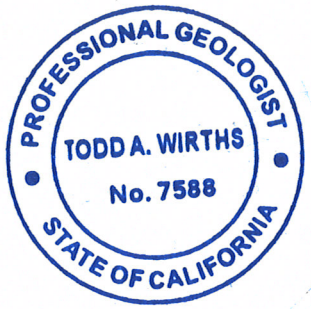
VII. CERTIFICATION

I hereby certify that the statements furnished above and in the attached exhibits present the data and information required for this paleontological report, and that the facts, statements, and information presented are true and correct to the best of my knowledge and belief, and have been compiled in accordance with CEQA criteria.

September 15, 2020

Todd A. Wirths
Senior Paleontologist
California Professional Geologist No. 7588

Date



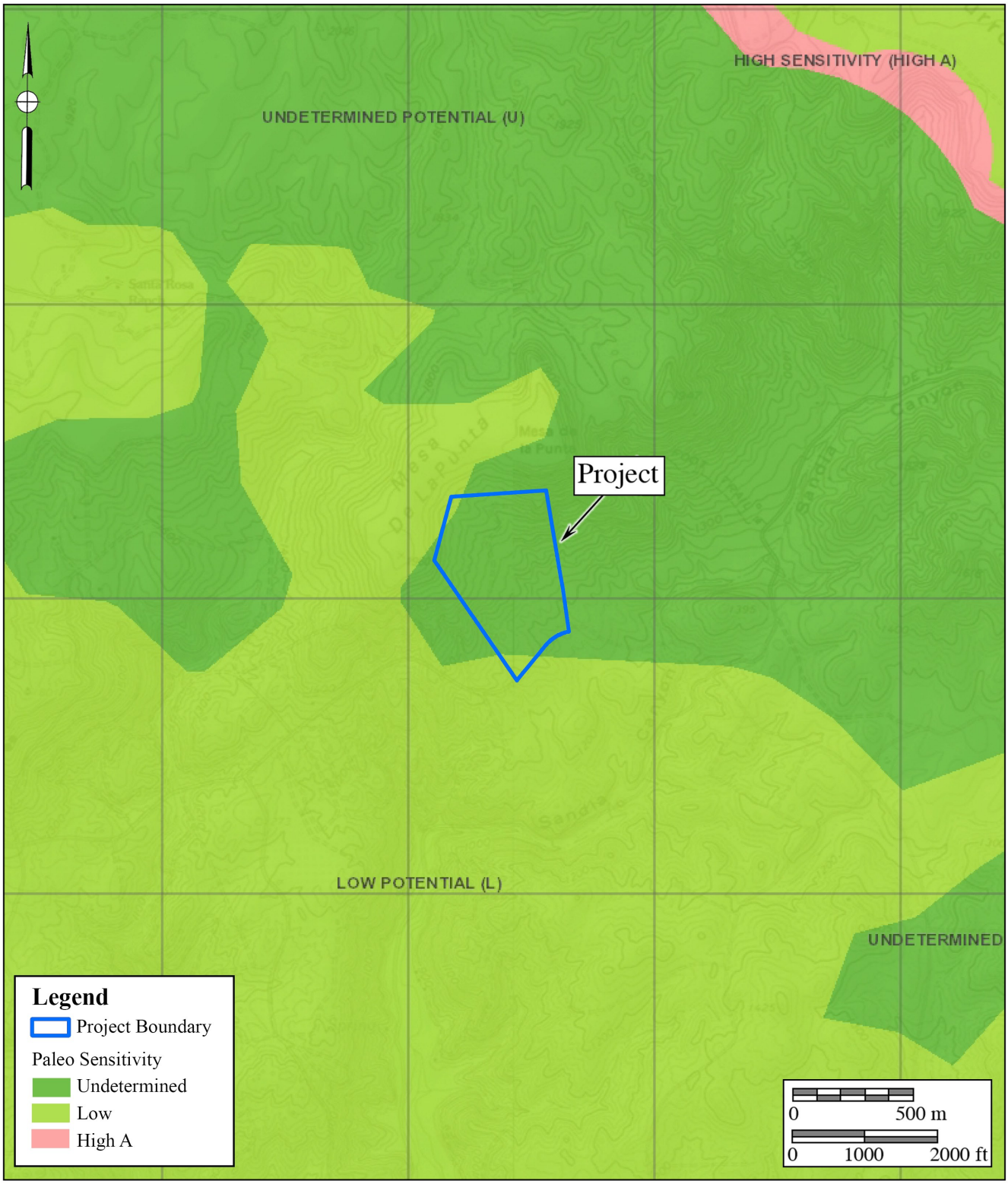


Figure 4

Paleontological Sensitivity Map

The 22750 Carancho Road Project

After Riverside County Land Information System (2020)

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APPENDIX A

Resumes of Key Personnel

Todd A. Wirths, MS, PG No. 7588

Senior Paleontologist

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Education

Master of Science, Geological Sciences, San Diego State University, California **1995**

Bachelor of Arts, Earth Sciences, University of California, Santa Cruz **1992**

Professional Certifications

California Professional Geologist #7588, 2003
Riverside County Approved Paleontologist
San Diego County Qualified Paleontologist
Orange County Certified Paleontologist
OSHA HAZWOPER 40-hour trained; current 8-hour annual refresher

Professional Memberships

Board member, San Diego Geological Society
San Diego Association of Geologists; past President (2012) and Vice President (2011)
South Coast Geological Society
Southern California Paleontological Society

Experience

Mr. Wirths has more than a dozen years of professional experience as a senior-level paleontologist throughout southern California. He is also a certified California Professional Geologist. At BFSA, Mr. Wirths conducts on-site paleontological monitoring, trains and supervises junior staff, and performs all research and reporting duties for locations throughout Los Angeles, Ventura, San Bernardino, Riverside, Orange, San Diego, and Imperial Counties. Mr. Wirths was formerly a senior project manager conducting environmental investigations and remediation projects for petroleum hydrocarbon-impacted sites across southern California.

Selected Recent Reports

2019 *Paleontological Assessment for the Eastvale Self Storage Project, City of Eastvale, Riverside County, California.* Prepared for Gossett Development, Inc. Report on file at Brian F. Smith and Associates, Inc., Poway, California.

2019 *Paleontological Resource Impact Mitigation Monitoring Program for the IPT Perris DC III Western/Nandina Project, Perris, Riverside County, California.* Prepared for IPT/Black Creek Group. Report on file at Brian F. Smith and Associates, Inc., Poway, California.

2019 *Paleontological Assessment for the 10407 Elm Avenue Project, City of Fontana, San Bernardino County, California*. Prepared for Advantage Environmental Consultants, Inc. Report on file at Brian F. Smith and Associates, Inc., Poway, California.

2019 *Paleontological Assessment for the 10575 Foothill Boulevard Project, City of Rancho Cucamonga, San Bernardino County, California*. Prepared for T&B Planning, Inc. Report on file at Brian F. Smith and Associates, Inc., Poway, California.

2019 *Paleontological Resource Impact Mitigation Program (PRIMP) for the Speedway TPM 37676 Project, Temescal Valley, Riverside County, California.* Prepared for Speedway Development. Report on file at Brian F. Smith and Associates, Inc., Poway, California.

2019 *Paleontological Assessment for the Natwar Project, Perris, Riverside County, California.* Prepared for Advantage Environmental Consultants, LLC. Report on file at Brian F. Smith and Associates, Inc., Poway, California.

2019 *Paleontological Resource and Mitigation Monitoring Assessment, Beyond Food Mart, City of Perris, Riverside County, California.* Prepared for T&B Planning, Inc. Report on file at Brian F. Smith and Associates, Inc., Poway, California.

2019 *Paleontological Assessment for the MorningStar Marguerite Project, Mission Viejo, Orange County, California.* Prepared for T&B Planning. Report on file at Brian F. Smith and Associates, Inc., Poway, California.

2019 *Paleontological Monitoring Report for the West Markham Project (TR 33587), City of Perris, Riverside County, California*. Prepared for Markham JP/ARA, LLC. Report on file at Brian F. Smith and Associates, Inc., Poway, California.

2019 *Paleontological Monitoring and Mitigation Report for the Artesa at Menifee Town Center Project Site, Sherman Road and La Piedra Road, Menifee, Riverside County, California.* Prepared for MBK Real Estate. Report on file at Brian F. Smith and Associates, Inc., Poway, California.

2019 *Paleontological Monitoring Report, Diarq Residence, La Jolla, City of San Diego, San Diego County, California.* Prepared for West Way Drive, LLC. Report on file at Brian F. Smith and Associates, Inc., Poway, California.

2019 *Paleontological Monitoring Report for the Nimitz Crossing Project, City of San Diego.* Prepared for Voltaire 24, LP. Report on file at Brian F. Smith and Associates, Inc., Poway, California.

2019 *Paleontological Resource Impact Mitigation Program (PRIMP) for the Jack Rabbit Trail Logistics Center Project, City of Beaumont, Riverside County, California.* Prepared for JRT BP 1, LLC. Report on file at Brian F. Smith and Associates, Inc., Poway, California.

2020 *Paleontological Monitoring Report for the Oceanside Beachfront Resort Project, Oceanside, San California.* Prepared for S.D. Malkin Properties. Report on file at Brian F. Smith and Associates, Inc., Poway, California.

2020 *Paleontological Resource Impact Mitigation Program for the Nakase Project, Lake Forest, Orange County, San California.* Prepared for Glenn Lukos Associates, Inc. Report on file at Brian F. Smith and Associates, Inc., Poway, California.