Appendix E Cultural Resources Report

CULTURAL RESOURCES INVENTORY REPORT for the NORTH CENTRAL VALLEY ENERGY CENTER PROJECT, SAN JOAQUIN COUNTY, CALIFORNIA

Prepared for:

North Central Valley Energy Storage, LLC

Prepared by:



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National Archaeological Database (NADB) Information

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Acronyms and Abbreviations

Acronym or Abbreviation	Definition		
APE	Area of Potential Effects		
BESS	battery energy storage system		
CEQA	California Environmental Quality Act		
County	San Joaquin County		
CRHR	California Register of Historical Resources		
GPS	Global Positioning System		
kV	kilovolt		
MLD	Most Likely Descendant		
NAHC	Native American Heritage Commission		
NHPA	National Historic Preservation Act		
NRHP	National Register of Historic Places		
PG&E	Pacific Gas and Electric		
PRC	Public Resources Code		
Project	North Central Valley Energy Center Project		
SCADA	supervisory control and data acquisition system		

Management Summary

North Central Valley Energy Storage, LLC proposes to construct and operate the North Central Valley Energy Center Project ("Project") in San Joaquin County, California to store 528 megawatt-hours of energy. The Project would consist of a 132-megawatt by 4-hour battery energy storage system ("BESS") with associated on-site switchyard, inverters, fencing, roads, and supervisory control and data acquisition system ("SCADA"). The Project also includes a 115 kilovolt ("kV") overhead generation transmission line, which would extend to the adjacent Pacific Gas and Electric ("PG&E") Bellota substation, and an expansion of the existing substation footprint to accommodate the proposed BESS.

Dudek was contracted to perform a Phase I cultural resource inventory for the Project. This cultural resources inventory report was conducted in compliance with the California Environmental Quality Act ("CEQA"). Due to permitting related to adjacent jurisdictional waters, the U.S. Army Corps of Engineers is the lead agency responsible for compliance with Section 106 of the National Historic Preservation Act ("NHPA").

The proposed Project is located in unincorporated San Joaquin County ("County"), approximately 15 miles east of the City of Stockton, California, and approximately 1.5 miles south of State Route 26 (Figure 1). The site is located adjacent to the western boundary of the PG&E Bellota substation along Flood Road. The site is located in Sections 19 and 20 of Township 2 North and Range 9 East of the "Linden, CA" U.S. Geological Survey 7.5-minute quadrangle. The approximate center of the Project Site corresponds to 38°44′59.82″ north latitude and 120°31′52.14″ west longitude.

The Project Area of Potential Effect ("APE") is approximately 84.14 acres. For the purposes of providing management recommendations, the vertical APE, as represented by the maximum depth of disturbance, is assumed to be 20 feet below the existing ground surface.

This report documents the negative findings of cultural resources inventory efforts conducted by Dudek for the Project. San Joaquin County is the lead agency responsible for compliance with CEQA. As the Project is anticipated to have U.S. Army Corps of Engineers permitting, work was also completed with the intent of compliance with Section 106 of the NHPA. All cultural resource fieldwork and reporting for this Project has been conducted by archaeologists meeting the Secretary of the Interior's Professional Qualifications Standards. Results from a Native American Heritage Commission ("NAHC") Sacred Lands File search results received July 28, 2020, were negative. Assembly Bill 52 consultation will be completed by the County. A Central California Information Center records search indicated that no cultural resources have been recorded within the APE. Intensive pedestrian survey conducted of the APE did not identify any new cultural resources.

Report Structure and Key Personnel

This report is divided into eight sections. Following this introduction, Section 2 discloses the site location. Section 3 provides a summary of the regulatory setting. Section 4 reviews the natural environment and the cultural context, and Section 5 provides the methods used to complete the current inventory. The records search, survey results, and tribal correspondence are discussed in Section 6. Section 7 summarizes the cultural resources work completed for this project to-date and provides recommendations for further treatment of the cultural resources consistent with CEQA and NHPA Section 106. Several appendices are attached to this report. Appendix A provides resumes of key personnel; Appendix B includes confidential records search results; and Appendix C contains NAHC and tribal correspondence documents.

Ross Owen, MA, RPA, conducted the intensive pedestrian survey and drafted the technical report. William Burns, MSc, RPA, contributed to the report. Adam Giacinto, MA, RPA, assisted with the report, reviewed recommendations, and acted as principal investigator; reviewed management recommendations; and finalized the technical report. All archaeologists meet Secretary of the Interior Standards for archaeology and have extensive experience working within local, state, and federal regulatory contexts (Appendix A).

2 Site Location

The approximately 84.14-acre Project APE is located in unincorporated San Joaquin County, approximately 15 miles east of the City of Stockton, California, and approximately 1.5 miles south of State Route 26 (Figure 1). The site is located adjacent to the western boundary of the PG&E Bellota substation along Flood Road. The site is located in Sections 19 and 20 of Township 2 North and Range 9 East of the "Linden, CA" U.S. Geological Survey 7.5-minute quadrangle. The approximate center of the Project APE corresponds to 38°44′59.82″ north latitude and 120°31′52.14″ west longitude.

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The APE consists of the 84.14-acre Project Site, the associated gen-tie line and the 27.44-acre area owned and operated by PG&E upon which the Bellota substation is located (Figure 2). While the Bellota substation lies within the APE, it will not be impacted by current Project designs. The vertical APE, as represented by the maximum depth of soil disturbance, is anticipated to be less than 20 feet below the existing ground surface.

In preparation for the Project, North Central Valley Energy Storage, LLC contracted Dudek to perform a Phase I cultural resource inventory for the Project. This Project was conducted in compliance with CEQA. Due to jurisdictional waters considerations and the involvement of the U.S. Army Corps of Engineers, this inventory is prepared in compliance with Section 106 of the NHPA.

3 Regulatory Setting

The current cultural resources investigation was completed to satisfy both CEQA and NHPA Section 106.

3.1 National Historic Preservation Act

The National Register of Historic Places ("NRHP") is the United States' official list of districts, sites, buildings, structures, and objects worthy of preservation. Overseen by the National Park Service, under the U.S. Department of the Interior, the NRHP was authorized under the NHPA, as amended. Its listings encompass all National Historic Landmarks, as well as historic areas administered by the National Park Service.

NRHP guidelines for the evaluation of historic significance were developed to be flexible and to recognize the accomplishments of all who have made significant contributions to the nation's history and heritage. Its criteria are designed to guide state and local governments, federal agencies, and others in evaluating potential entries in the NRHP. For a property to be listed in or determined eligible for listing, it must be demonstrated to possess integrity and to meet at least one of the following criteria:

The quality of significance in American history, architecture, archaeology, engineering, and culture is present in districts, sites, buildings, structures, and objects that possess integrity of location, design, setting, materials, workmanship, feeling, and association, and:

- A. That are associated with events that have made a significant contribution to the broad patterns of our history; or
- B. That are associated with the lives of persons significant in our past; or
- C. That 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. That have yielded, or may be likely to yield, information important in prehistory or history.

Integrity is defined in NRHP guidance, *How to Apply the National Register Criteria*, as "the ability of a property to convey its significance. To be listed in the NRHP, a property must not only be shown to be significant under the NRHP criteria, but it also must have integrity" (NPS 2009). NRHP guidance further asserts that properties must have been completed at least 50 years before evaluation to be considered for eligibility. Properties completed fewer than 50 years before evaluation must be proven to be "exceptionally important" (criteria consideration G) to be considered for listing.

A historic property is defined as "any prehistoric or historic district, site, building, structure, or object included in, or eligible for inclusion in, the NRHP maintained by the Secretary of the Interior. This term includes artifacts, records, and remains that are related to and located within such properties. The term includes properties of traditional religious and cultural importance to an Indian tribe or Native Hawaiian organization and that meet the NRHP criteria" (36 CFR Sections 800.16(i)(1)).

Effects on historic properties under Section 106 of the NHPA are defined in the assessment of adverse effects in 36 CFR Section 800.5(a)(1):

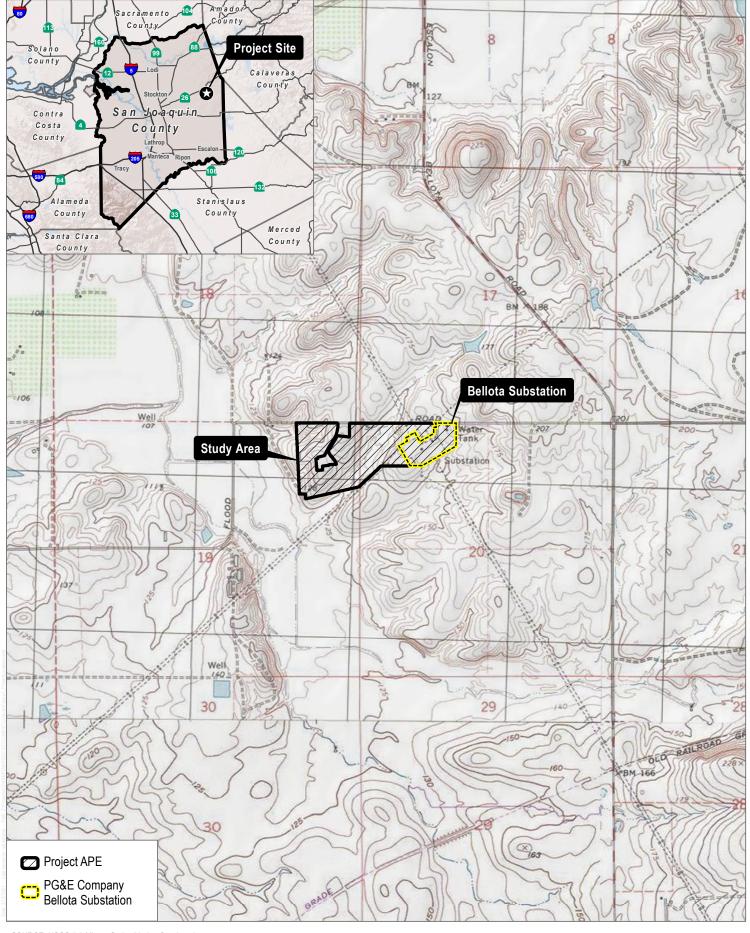
An adverse effect is found when an undertaking may alter, directly or indirectly, any of the characteristics of a historic property that qualify the property for inclusion in the National Register in a manner that would diminish the integrity of the property's location, design, setting, materials, workmanship, feeling, or association. Consideration shall be given to all qualifying characteristics of a historic property, including those that may have been identified subsequent to the original evaluation of the property's eligibility for the National Register. Adverse effects may include reasonably foreseeable effects caused by the undertaking that may occur later in time, be farther removed in distance or be cumulative.

Adverse effects on historic properties are clearly defined and include, but are not limited to:

- (i) Physical destruction of or damage to all or part of the property;
- (ii) Alteration of a property, including restoration, rehabilitation, repair, maintenance, stabilization, hazardous material remediation and provision of handicapped access, that is not consistent with the Secretary's Standards for the Treatment of Historic Properties (36 CFR Part 68) and applicable guidelines;
- (iii) Removal of the property from its historic location;
- (iv) Change of the character of the property's use or of physical features within the property's setting that contributes to its historic significance;
- (v) Introduction of visual, atmospheric or audible elements that diminish the integrity of the property's significant historic features;
- (vi) Neglect of a property which causes its deterioration, except where such neglect and deterioration are recognized qualities of a property of religious and cultural significance to an Indian tribe or Native Hawaiian organization; and
- (vii) Transfer, lease, or sale of property out of Federal ownership or control without adequate and legally enforceable restrictions or conditions to ensure long-term preservation of the property's historic significance (36 CFR 800.5 (2)).

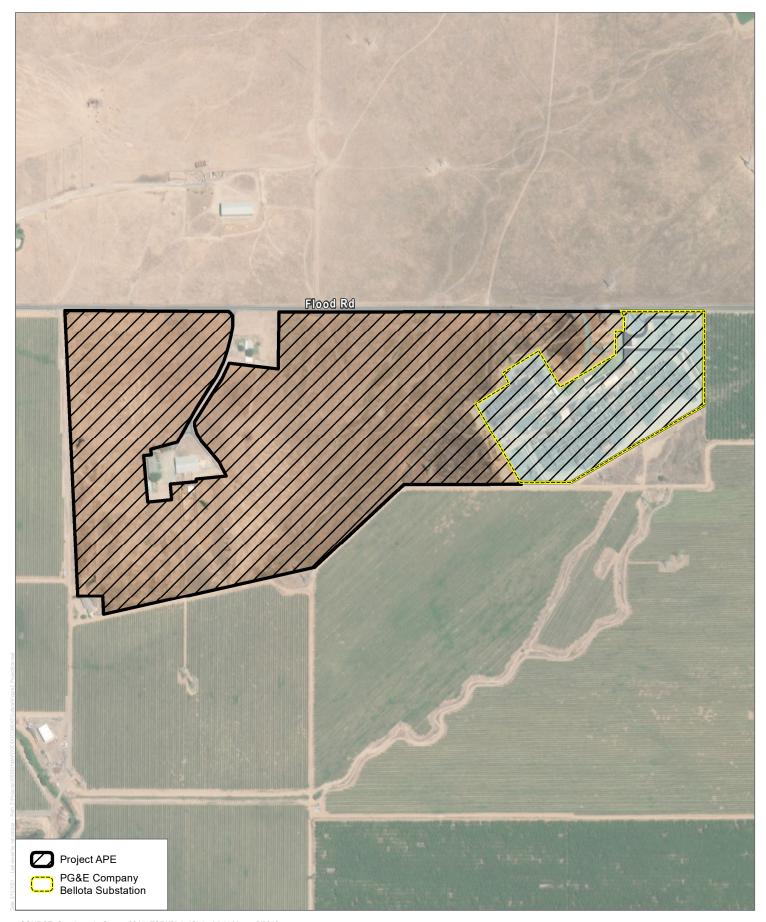
To comply with Section 106, the criteria of adverse effect are applied to historic properties, if any exist in a project APE, pursuant to 36 CFR Section 800.5(a)(1). If no historic properties are identified in the APE, a finding of "no historic properties affected" will be made for the proposed project. If there are historic properties in the APE, application of the criteria of adverse effect will result in project-related findings of either "no adverse effect" or of "adverse effect," as described above. A finding of no adverse effect may be appropriate when the undertaking's effects do not meet the thresholds in criteria of adverse effect, or if conditions were imposed to ensure review of rehabilitation plans for conformance with the Secretary of the Interior's Standards for the Treatment of Historic Properties (codified in 36 CFR Part 68).

If adverse effects findings were expected to result from the proposed project, mitigation would be required, as feasible, and resolution of those adverse effects by consultation may occur to avoid, minimize, or mitigate adverse effects on historic properties pursuant to 36 CFR Part 800.6(a).



SOURCE: USGS 7.5-Minute Series Linden Quadrangle

FIGURE 1 Project Location North Central Valley Energy Storage Project



SOURCE: San Joaquin County 2017; ESRI/DigitalGlobe/Vivid Maxar 8/2019

FIGURE 2 Project Site North Central Valley Energy Storage Project



3.2 California Register of Historic Resources and CEQA

In California, the term "historical resource" includes but is not limited to "any object, building, structure, site, area, place, record, or manuscript which is historically or archaeologically significant, or is significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political, military, or cultural annals of California" (California PRC Section 5020.1(j)). In 1992, the California legislature established the California Register of Historical Resources ("CRHR") "to be used by state and local agencies, private groups, and citizens to identify the state's historical resources and to indicate what properties are to be protected, to the extent prudent and feasible, from substantial adverse change" (California PRC Section 5024.1(a)). The criteria for listing resources on the CRHR were expressly developed to be in accordance with previously established criteria developed for listing in the NRHP, enumerated below (36 CFR 60). According to California Public Resources Code ("PRC") Section 5024.1(c)(1–4), a resource is considered historically significant if it (i) retains "substantial integrity," and (ii) meets at least one of the following criteria:

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

In order to understand the historic importance of a resource, sufficient time must have passed to obtain a scholarly perspective on the events or individuals associated with the resource. A resource less than 50 years old may be considered for listing in the CRHR if it can be demonstrated that sufficient time has passed to understand its historical importance (see 14 CCR, Section 4852(d)(2)).

The CRHR protects cultural resources by requiring evaluations of the significance of prehistoric and historic resources. The criteria for the CRHR are nearly identical to those for the NRHP and properties listed or formally designated as eligible for listing in the NRHP are automatically listed in the CRHR, as are the state landmarks and points of interest. The CRHR also includes properties designated under local ordinances or identified through local historical resource surveys.

California Environmental Quality Act

As described further below, the following CEQA statutes and CEQA Guidelines are of relevance to the analysis of archaeological, historic, and tribal cultural resources:

- California PRC Section 21083.2(g) defines "unique archaeological resource."
- California PRC Section 21084.1 and CEQA Guidelines Section 15064.5(a) defines "historical resources." In addition, CEQA Guidelines Section 15064.5(b) defines the phrase "substantial adverse change in the significance of an historical resource." It also defines the circumstances when a project would materially impair the significance of an historical resource.
- California PRC Section 21074(a) defines "tribal cultural resources."

• California PRC Section 5097.98 and CEQA Guidelines section 15064.5(e): Set forth standards and steps to be employed following the accidental discovery of human remains in any location other than a dedicated cemetery.

California PRC Sections 21083.2(b)-(c) and CEQA Guidelines Section 15126.4 provide information regarding the mitigation framework for archaeological and historic resources, including examples of preservation-in-place mitigation measures. Preservation-in-place is the preferred manner of mitigating impacts to significant archaeological sites because it maintains the relationship between artifacts and the archaeological context, and may also help avoid conflict with religious or cultural values of groups associated with the archaeological site(s).

More specifically, under CEQA, a project may have a significant effect on the environment if it may cause "a substantial adverse change in the significance of an historical resource" (California PRC Section 21084.1; CEQA Guidelines Section 15064.5(b).) If a site is either listed or eligible for listing in the CRHR, or if it is included in a local register of historic resources, or identified as significant in a historical resources survey (meeting the requirements of California PRC Section 5024.1(q)), it is a "historical resource" and is presumed to be historically or culturally significant for purposes of CEQA (California PRC Section 21084.1; CEQA Guidelines Section 15064.5(a)). The lead agency is not precluded from determining that a resource is a historical resource even if it does not fall within this presumption (California PRC Section 21084.1; CEQA Guidelines Section 15064.5(a)).

A "substantial adverse change in the significance of an historical resource" reflecting a significant effect under CEQA means "physical demolition, destruction, relocation, or alteration of the resource or its immediate surroundings such that the significance of an historical resource would be materially impaired" (CEQA Guidelines Section 15064.5(b)(1); California PRC Section 5020.1(q)). In turn, the significance of an historical resource is materially impaired when a project:

- Demolishes or materially alters in an adverse manner those physical characteristics of an historical resource that convey its historical significance and that justify its inclusion in, or eligibility for, inclusion in the California Register; or
- Demolishes or materially alters in an adverse manner those physical characteristics that account for its inclusion in a local register of historical resources pursuant to section 5020.1(k) of the PRC or its identification in an historical resources survey meeting the requirements of section 5024.1(g) of the PRC, unless the public agency reviewing the effects of the project establishes by a preponderance of evidence that the resource is not historically or culturally significant; or
- Demolishes or materially alters in an adverse manner those physical characteristics of a historical resource that convey its historical significance and that justify its eligibility for inclusion in the California Register as determined by a lead agency for purposes of CEQA [CEQA Guidelines Section 15064.5(b)(2)].

Pursuant to these sections, the CEQA inquiry begins with evaluating whether a project APE contains any "historical resources," then evaluates whether that project will cause a substantial adverse change in the significance of a historical resource such that the resource's historical significance is materially impaired.

If it can be demonstrated that a project will cause damage to a unique archaeological resource, the lead agency may require reasonable efforts be made to permit any or all of these resources to be preserved in place or left in an undisturbed state. To the extent that they cannot be left undisturbed, mitigation measures are required (California PRC Section 21083.2(a)-(c)).

Section 21083.2(g) defines a unique archaeological resource as an archaeological artifact, object, or site about which it can be clearly demonstrated that without merely adding to the current body of knowledge, there is a high probability that it meets any of the following criteria:

- Contains information needed to answer important scientific research questions and that there is a demonstrable public interest in that information.
- Has a special and particular quality such as being the oldest of its type or the best available example of its type.
- Is directly associated with a scientifically recognized important prehistoric or historic event or person.

Impacts to non-unique archaeological resources are generally not considered a significant environmental impact (California PRC Section 21083.2(a); CEQA Guidelines section 15064.5(c)(4)). However, if a non-unique archaeological resource qualifies as tribal cultural resource (California PRC Sections 21074(c) and 21083.2(h)), further consideration of significant impacts is required.

CEQA Guidelines section 15064.5 assigns special importance to human remains and specifies procedures to be used when Native American remains are discovered. As described below, these procedures are detailed in California PRC Section 5097.98.

California Health and Safety Code

California law protects Native American burials, skeletal remains, and associated grave goods, regardless of their antiquity, and provides for the sensitive treatment and disposition of those remains. Health and Safety Code Section 7050.5 requires that if human remains are discovered in any place other than a dedicated cemetery, no further disturbance or excavation of the site or nearby area reasonably suspected to contain human remains shall occur until the County coroner has examined the remains (Health and Safety Code Section 7050.5b). California PRC Section 5097.98 also outlines the process to be followed in the event that remains are discovered. If the coroner determines or has reason to believe the remains are those of a Native American, the coroner must contact the California NAHC within 24 hours (Health and Safety Code Section 7050.5c). The NAHC will notify the Most Likely Descendant ("MLD"). With the permission of the landowner, the MLD may inspect the site of discovery. The inspection must be completed within 48 hours of notification of the MLD by the NAHC. The MLD may recommend means of treating or disposing of, with appropriate dignity, the human remains and items associated with Native Americans.

4 Project Context

4.1 Environmental Setting

The Project is located on the eastern edge of the San Joaquin Valley geographic subdivision of the California Floristic Province (Jepson Flora Project 2020), where croplands of the valley floor transition to the rangelands of the inner Sierra Ranges to the west. The majority of the Project is currently used for grazing and is dominated by annual non-native grasses.

Elevations within the Project range from 135 to 175 feet above mean sea level, with low-lying hills and drainages that bisect the property from northeast to southwest. The region surrounding the Project receives approximately 14 inches of precipitation annually. Average temperatures range from approximate 49°F to 75°F (WRCC 2021. The nearest perennial water source, Duck Creek, is located approximately 1.9 miles northwest of the Project.

4.2 Cultural Context

Various attempts to parse out information provided through recorded archaeological assemblages throughout California for the past 12,000 years have led to the development of numerous cultural chronologies. Some of these are based on geologic time, most are interpreted through temporal trends derived from archaeological assemblages, and others are interpretive reconstructions. The spatial extent and detail of these chronologies is also highly variable, with detail chronologies developed in some areas based on substantial numbers of radiocarbon dates, while other areas rely on cross-dating of stylistically distinct artifact styles or cultural patterns. However, each of these chronologies describes essentially similar trends in assemblage composition and cultural succession, with varying degrees of detail. Chronologies are dated in 'calibrated years before Christ' (cal BC), denoting the raw radiocarbon dates are corrected with modern methods to account for varying atmospheric carbon levels over the millennia. California's archaeological assemblage composition is generally accepted as falling within the following overarching patterns: Paleoindian Period (11,550–8550 cal BC), Archaic Period (8550 cal BC – cal AD 1100), Emergent/Prehistoric Period (cal AD 1100–1750), and Ethnohistoric Period (post-AD 1769). The most broadly applicable chronology for the Central Valley follows a similar framework, further subdividing the Archaic Period into Upper, Middle, and Lower phases based on climatic and cultural variations (Bennyhoff and Fredrickson 1994; Groza 2002; Rosenthal et al. 2007).

4.2.1 Prehistoric Era

Paleoindian Period (11,550-8,550 cal BC)

Occupation of the Central Valley and Sierra Foothills is likely to have occurred at least 9,000 years ago, but only a handful of Paleoindian Period lithic bifacial points have been recorded. The nearest of these fluted points were found in Sierra Valley (west of Reno, Nevada) (Foster and Betts 1996), Ebbett's Pass (south of Lake Tahoe) (Dillon 2002), and at the Sailor Flat site (in the Tahoe National Forest) (Wohlgemuth 1984). Fluted points from this area have generally been recorded as isolated finds or recovered from contexts of mixed provenience. The primary examples of the Paleoindian pattern, to which such fluted and stemmed points are generally assigned, have been recorded east of the Sierra Nevadas. The typical assemblage includes large stemmed projectile points, high proportions of formal lithic tools, bifacial lithic reduction strategies, and relatively small proportions of groundstone

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tools. Some of the most pertinent of such sites were studied by Emma Lou Davis (Davis 1978) on China Lake Naval Air Weapons Station, near Ridgecrest, California. These sites contained fluted and unfluted stemmed points and large numbers of formal flake tools (e.g., shaped scrapers, blades). Other typical Paleoindian sites include the Komodo site (MNO-679)—a multicomponent fluted point site—and MNO-680—a single component Great Basined Stemmed point site (Basgall et al. 2002). At MNO-679 and MNO-680, groundstone tools were rare but finely made projectile points were common. Fluted points and other Paleoindian Period sites are particularly rare in the Central Valley due to the dearth of Late Holocene–age deposits in the region because of periodic episodes of erosion and deposition during the Holocene that have removed or deeply buried large segments of the Late Pleistocene landscape that would contain Paleoindian sites, although fluted points have been found in isolated contexts in the Sacramento and San Joaquin Valleys.

Archaic Period (8,550 cal BC- cal AD 1,100)

The Archaic Period in the Central Valley is subdivided into three phases: the Lower Archaic (8550–5550 cal BC), the Middle Archaic (5550–550 cal BC), and the Upper Archaic (550 cal BC – cal AD 1100). As with the Paleoindian Period, Lower Archaic deposits in the Central Valley tend to be isolated finds lacking stratigraphic context. Stemmed projectile points, flaked stone crescents, and other distinctive flaked stone artifact types are associated with this period, several of which have been found in the vicinity of Tulare Lake (Fenenga 1992).

The onset of the Middle Archaic in Central California marked a substantial change in the climate, with warmer, drier conditions resulting in the shrinking and eventual drying out of Tulare Lake, a phenomenon common among other Pleistocene Lakes throughout the western United States during this time. This also coincided with the formation of new wetland habitats as rising sea levels pushed inland, forming the Sacramento and San Joaquin Deltas. These climatic processes resulted in substantially more stable landforms as fans and floodplains stabilized within the delta, making buried Middle Archaic deposits much more common than those from the Early Archaic. Middle Archaic sites are typified by the distinct adaptive pattern of logistically organized subsistence practices and residential stability along river corridors (Rosenthal et al. 2007). The prevalence of groundstone tools, including early examples of mortars and pestles, suggest an increased reliance on vegetal resources, likely the result of greater residential stability driving resource intensification (e.g., Basgall 1987). Fishing was also an important component of subsistence, as new fishing technologies, including gorge hooks, composite bone hooks, and spears, along with abundant ichthyofaunal remains, have been identified at Middle Archaic sites in Contra Costa, Sacramento, and San Joaquin Counties (Heizer 1949; Rosenthal et al. 2007; Schulz 1981). Regional variations of the Middle Archaic pattern include the Windmiller Pattern, first identified on old levee ridges at the confluence of the Mokelumne and Cosumnes Rivers. The transition to the Upper Archaic Period coincides with the onset of late Holocene environmental conditions, during which time the climate was markedly cooler, wetter, and more stable.

The archaeological record from the Upper Archaic is better understood and represented, and is marked by an increase in cultural diversity, with numerous regional distinctions in burial posture, artifact styles, and other elements of material culture (Bennyhoff and Fredrickson 1994; Rosenthal et al. 2007). The Upper Archaic record is marked by the development and proliferation of numerous bone tools and implements, as well as widespread production and trade of manufactured goods, including *Olivella* shell beads, *Haliotis* ornaments, and obsidian bifacial roughouts and ceremonial blades (Bennyhoff and Fredrickson 1994; Moratto 1984). Subsistence economies during the Upper Archaic focused on seasonally structured resources that could be harvested and processed in bulk, including acorns, salmon, shellfish, deer, and rabbits. The proliferation of mortars and pestles and archaeobotanical remains indicate that the first widespread reliance on acorns occurred during this period

(Wohlgemuth 1996, 2004). Large mounded village sites also first occurred in the delta region during this period (Bennyhoff and Fredrickson 1994; Boey 1995; Rosenthal et al. 2007).

On the whole, the Archaic Period in the Central Valley is characterized by increasing residential stability, cultural diversity, and subsistence intensification though time.

Emergent Period (cal AD 1100-Historic Contact)

The archaeological record for the Emergent Period is the most substantial and well-documented of any period in the Central Valley, and the assemblages and adaptations represented therein are the most diverse. The Emergent Period also marks the onset of cultural traditions consistent with those documented at European contact and the disappearance of several previous archaeological traditions. Large villages developed in areas of the Sacramento Valley, and the number of mound villages and smaller hamlets increased across the region. Subsistence economies during the Emergent Period were increasingly reliant on fishing and plant gathering, with increased subsistence intensification evident in the increased reliance on small seeds and a more diverse assortment of mammals and birds (Broughton 1994; Rosenthal et al. 2007; Wohlgemuth 2004). Perhaps the most notable technological change during the Emergent Period is the introduction of the bow and arrow, which replaced atlatl technology as the favored hunting implement sometime between AD 1100 and AD 1300 (Bennyhoff and Fredrickson 1994). The material record during the Emergent Period is also marked by the introduction of new *Olivella* bead and *Haliotis* ornament types, and eventually the introduction of Clamshell Disk beads (Groza 2002; Moratto 1984; Rosenthal et al. 2007). The Emergent Period in general is marked by an increase in population size and the number of residential sites and villages throughout the region, with increasing regional variability and resource intensification.

4.2.2 Ethnohistoric Period (post-AD 1750)

Northern Valley Yokut

The region surrounding the Project area would have been within Northern Valley Yokut tribal territory during the ethnohistoric period (Wallace 1978). This group inhabited the lower San Joaquin River watershed and its tributaries extending from Calaveras River in the north to approximately the large bend of the San Joaquin River eastward near Mendota. The lower San Joaquin River meanders through the territory making bends, sloughs, and marshes full of tule reeds as it meanders. Farther from the rivers and marshes, the valley floor would have been dry and sparely vegetated (Wallace 1978; Kroeber 1925).

Northern Valley Yokut habitation areas were most commonly situated in close proximity to rivers and tributaries, more often on the east side of the river (Kroeber 1925). Yokut populations and habitation areas were generally concentrated near the San Joaquin River, and in the foothills to the east. This focus on waterways can also be seen in their dietary resources, which included various fish, waterfowl, antelope, elk, acorns, tule roots, and various seeds. In particular, salmon was an abundant food during the fall spawning and in springtime. A focus on fishing is also seen in the material culture consisting of net sinkers and harpoons, likely used from rafts constructed from tule reed bundles (Wallace 1978).

Traditional larger habitation areas were often situated upon mounds, on or near riverbanks. Northern Valley Yokut dwellings were constructed of tule reed woven mats placed over a pole frame oval or round structure. These structures were generally from 25 to 40 feet in diameter, and typically housed a single family (Wallace 1978). This is in contrast to the larger multifamily dwellings erected sometimes by the Southern Yokuts. In addition to dwellings, earth covered

ceremonial sweat lodges were constructed. While there were permanent, or semi-permanent, habitation areas in association with riverine resources, peripheral camps used when gathering, hunting, and processing resources such as acorns and seeds were common (Gayton 1948; Kroeber 1925).

The Northern Valley Yokuts saw sharp and devastating decline from disease and relocation to coastal missions nearly immediately after Spanish contact (Osbourne 1992). This served to further increase with the large influx of cattle ranching, agriculture, and Anglos Americans after the gold rush (Osbourne 1992, Cook 1976).

4.2.3 The Historic Period

Spanish Period (1769-1822)

Gaspar de Portolá entered what is now the San Francisco Bay in 1769. Additional explorations of the San Francisco Bay and the plains to the east were conducted by Father Pedro Fages in 1772 and Juan Bautista De Anza in 1776 (Grunsky 1989). In 1808, Lieutenant Gabriel Moraga led the first Spanish expedition into present-day Sacramento Valley. This group explored areas along the American, Calaveras, Cosumnes, Feather, Merced, Mokelumne, Sacramento, and Stanislaus River watersheds. The most recent Spanish expedition into this region was conducted by Luis Arguello in 1817. This group traveled up what is now the Sacramento River to the mouth of what is now the Feather River (Grunsky 1989).

Spanish missionization of Alta California was initiated in San Diego 1769. A total of 21 missions were constructed by the Dominican and Franciscan orders from 1769 through 1823. Missions in the region included San Francisco de Asís (1776), Santa Clara de Asís (1776), San José de Guadalupe (1797 in Alameda County), San Rafael Arcángel (1817 in Marin County), and San Francisco Solano (1823 in Sonoma County) (Grunsky 1989).

Mexican Period (1822-1848)

Mexico's separation from the Spanish empire in 1821 and the secularization of the California missions in the 1830s caused further disruptions to native populations. Following the establishment of the Mexican republic, the government seized many of the lands belonging to Native Americans, providing them as parts of larger land grants to affluent Mexican citizens and rancheros. Captain John Sutter was granted the two largest areas of land in the Sacramento Valley area. Sutter founded New Helvetia, a trading and agricultural empire, in 1839 (Grunsky 1989). The headquarters was located within Valley Nisenan territory at the confluence of the Sacramento and American Rivers. The 1833 Secularization Act passed by the Mexican Congress ordered half of all mission lands to be transferred to native populations, and the other half to remain in trust and managed by an appointed administrator. These orders were never implemented due to several factors that conspired to prevent Native Americans from regaining their patrimony.

American fur trappers and traders conducted a number of exploratory intrusions into west Sierra Nevada Mexican territory. Notably, in 1826, Jebediah Smith led a small party of trappers in an expedition along the Sierra Nevada range, eventually entering what is now the Sacramento Valley in 1827. This group covered the area along the American and Cosumnes Rivers. From these travels, maps of this terrain were created and disseminated, providing for the waves of European prospectors, ranchers, and settlers who would come in the following decades (Grunsky 1989).

American Period (Post-1848)

Portions of the following section were derived from *Cultural Resources Survey for the Closure of Eight Abandoned Mines in the Oregon Hill Area of Auburn State Recreation Area, Placer County, California* (Bureau of Reclamation 2010).

California has been shaped by the mining of precious metals and other minerals. The discovery of gold in January 1848 at Sutter's Mill in Coloma, on the South Fork of the American River, led to extensive and enduring changes to California's physical and cultural landscapes (Bureau of Reclamation 2010). The following historic context is restricted to the origins and effects of mining in the American River Basin, with a particular focus on the Auburn area, where the Project APE is located.

The California Gold Rush, prompted by news of the find at Sutter's Mill, led to what has been characterized as "the greatest mass migration in American history" (Costello and Marvin 2002:16). Within months of the initial discovery, gold was being collected in the gravel bars of the north, middle, and south forks of the American River, and extensive placer mining was occurring in nearly every adjacent gulch and ravine. The effects of these activities are still evident in the form of tailings, ditches, and other mining features scattered throughout these areas. Mining can also be credited for the location and names of most of the towns and communities in the region; the placement of early transportation and communication corridors among the western Sierra Nevada, Sacramento, and San Francisco areas; and the subsequent development of agriculture and ranching throughout the foothills (Costello and Marvin 2002; Homer 1988).

As the allure of gold mining declined, agriculture and ranching in the foothills, and the timber industry at higher elevations, became more prominent and productive economic pursuits in the region (Davis 1975). During the Great Depression, however, small-scale placer mining, using Gold Rush–era techniques and technologies, made a brief reappearance. Depression-era miners either reworked old diggings in formerly mined area or moved into previously unmined locations, often on public lands. The second all-time high of gold production in California, totaling some \$50.9 million, occurred during this period.

5 Research Methods

The Secretary of the Interior has issued Standards and Guidelines for Archeology and Historic Preservation (48 FR 44720–44726), which are used for the identification and evaluation of historic properties and to ensure that the procedures are adequate and appropriate. The identification and evaluation of historic properties are dependent upon the relationship of individual properties to other similar properties (NPS and ACHP 1998, pp. 18–20). Information about properties regarding their prehistory, history, architecture, and other aspects of culture must be collected and organized to define these relationships (NPS 2009), which is the intent of the current inventory.

This investigation consisted of a records search of the Project area and a 0.5-mile radius around the Project area at the Central California Information Center, California State University – Stanislaus. Following Bureau of Land Management precedents, which are appropriate for federal projects in general, survey techniques are loosely grouped into two categories: reconnaissance and intensive (BLM 2004; NPS 2009). The choice of survey category depends on the level of effort required for a particular project, which can vary depending on the nature of the properties or property types, the possible adverse effects on such properties, and agency requirements (NPS and ACHP 1998). The selection of field survey techniques and level of effort must be responsive to the management needs and preservation goals that direct the survey effort. For any survey, it is important to consider the full range of historic properties that may be affected, either directly or indirectly, and consider strategies that will minimize any adverse effects and maximize beneficial effects on those properties (BLM 2004; NPS 2009; NPS and ACHP 1998).

The current survey methods can be classified as intensive since short-interval transect spacing and full documentation of cultural resources was completed. Survey staff exceeded the applicable Secretary of Interior Professional Qualifications Standards for archaeological survey. Dudek archaeologist Ross Owen surveyed the entire Project APE with transects spaced no more than 15 meters apart and oriented along the Project alignment, except for the active creek channel where water was flowing, which was not surveyed, and the existing Bellota Substation facility, to which Dudek did not have access. Given the developed nature and obscured ground surface of the substation, survey for cultural resources is not warranted or required. A Global Positioning System ("GPS") receiver with sub-meter accuracy and loaded with a shapefile of the Project boundary was used to verify the accuracy of the survey coverage. Evidence for buried cultural deposits was opportunistically sought through inspection of natural or artificial erosion/excavation exposures and the spoils from rodent burrows. Field recording and photo documentation of resources, as appropriate, was completed.

Historic research was also performed to understand better the history of land use of the Project area. This research consisted of reviewing historic topographic map and aerials (NETR 2020).

Documentation of cultural resources complied with the Secretary of the Interior's Standards and Guidelines for Archeology and Historic Preservation (48 FR 44716-44740), and the California Office of Historic Preservation Planning Bulletin Number 4(a), December 1989, Archaeological Resource Management Reports: Recommended Contents and Format for the Preparation and Review of Archaeological Reports. All cultural resources identified during this inventory were recorded on California Department of Parks and Recreation Form DPR 523 (Series 1/95), using the Instructions for Recording Historical Resources (Office of Historic Preservation 1995), including updates to previously recorded resources.

6 Results

This section presents the results of the records search and the field survey of the current study.

6.1 Records Search Results

A records search was completed for the current APE and a 0.5-mile buffer by staff at the Central California Information Center on July 21, 2020. The records search identified six previous studies that have been performed within the records search area; of these, three have covered a least a portion of the APE (Table 1).

Report ID	Year	Author	Title		
Reports intersecting the APE					
00208	1978	Motz, L.	An Archaeological Survey of the Proposed Collierville Transmission Line.		
_	2019	Baloian, M., et al.	Cultural Resources Inventory and Evaluation for the Bellota-Warnerville 230 kV Reconductoring Project, San Joaquin and Stanslaus Counties, California		
_	2019	Stantec Consulting Services, Inc.	Historic Resource Inventory and Evaluation for PG&E's Bellota-Warnerville 230 kV Electric Power Line		
		Reports within 0.5	Miles of the APE		
00329	1987	Peak & Associates, Inc.	The Resurvey of the Collierville Transmission Line, Calaveras, Stanislaus, and San Joaquin Counties, California.		
00836	1980	True, D.L., and C. Slaymaker	Archaeological Surveys in San Joaquin County, California, Potter Creek Watershed Project.		
01543 1971 Ritter, E.		Ritter, E.	Archaeological Reconnaissance of the Folsom South Canal, Central Valley, California.		

Table 1. Previous Cultural Resource Studies within 0.5 Miles of APE

The records search did not identify any cultural resources within the APE. Two previously recorded cultural resources have been identified within 0.5 miles of the APE (Table 2; Confidential Appendix B).

Table 2. Previously Recorded Cultural Resources

Primary Number	Trinomial	Name	Туре	Age	Attributes	
Previously Recorded Sites intersecting the APE						
	None					
	Previously Recorded Sites within 0.5 Miles of the APE					
P-39-000313	CA-SJO-0197	M8	Site	Prehistoric	Lithic scatter; Habitation debris; Other	
_	—	Bellota Substation	Site	Historic	Substation	

PG&E Bellota Substation

The PG&E Bellota substation, originally referred to as the Bellota Junction, was constructed in 1926 by Great Western Power Company to transfer power between Great Western Power Company's Brighton substation and the San Joaquin Light and Power Company's Merced Substation. In 1930, PG&E expanded the substation, and a subsequent expansion was completed in 1961 with the addition of a larger control building. Presently the substation consists of three control buildings and an outdoor transmission and distribution yard with 115 kV and 230 kV power lines.

While the substation was important in the growth of California's energy infrastructure, it lacks association with the period of significance for the establishment of electrical transmission and its operating companies. It has been recommended ineligible for listing on the NRHP and CRHR (Stantec Consulting Service 2019). It is unconfirmed if this evaluation has not yet received State Historic Preservation Office concurrence (Baloian et al. 2019); additional information will be on file with PG&E.

Review of Historical Maps and Aerial Imagery

Dudek consulted historic maps and aerial photographs to understand development of the APE and surrounding properties (NETR 2020). Historic aerial photographs, available from 1941 to 2016, and historic maps, available from 1908 to 2018, were inspected to observe previous development on the Project APE. These maps and images indicate the Project area was undeveloped grassland savannah prior to the construction of the Bellota substation in the 1940s. Residential and ranching development on the western half of Project APE began between 1968 and 1982. An additional residence was constructed in the 1990s, along with improvements to the driveway access to both residences. No major alterations to the landscape have occurred since 1993, but the surrounding area has been increasingly developed for agricultural production.

6.2 Geomorphological Information

According to the U.S. Department of Agriculture Web Soil Survey (USDA 2020), there is one soil type within the Project APE: Redding gravelly loam, 1% to 30% slopes, dry, major land resource area 17. The U.S. Department of Agriculture does not consider this soil type to be a hydric soil (USDA 2020). Soils in this series are consist of alluvial fan remnants formed of loamy alluvium derived from igneous, metamorphic, and sedimentary rocks.

In general, the soils present in the APE are consistent with alluvial lands derived from an assortment of parent materials in the surrounding area underlain by Mesozoic granitic rocks. Sediment formation in this location would likely have occurred primarily since the Holocene, generally relating to increased water flows following Pleistocene glaciation (possibly 5,000–7,000 BP; Ritter 1972). While such low-slope locations are characteristically Late Holocene or younger, the distinction between depositional and non-depositional formations are more difficult to discern in the foothills when overlaying bedrock or where glacial deposits are erosional (Meyer et al. 2010). Regardless of the age of sediments in this area, reoccurring alluvial action and flooding would serve to support the development and presence of cultural deposits in the area.

The Project area has not been subject to substantial disturbances outside of the footprints of the Bellota substation and associated infrastructure, as well as the residences and ranching facilities in the western half of the Project

APE. Due to the undisturbed nature of large portions of the Project APE, and the presence of alluvial deposits along seasonal drainages, there remains moderate potential for archaeological deposits within the Project APE.

6.3 Field Survey Results

On July 13, 2020, Dudek Archaeologists Nick Hanten and Ross Owen, MA, RPA, conducted an intensive pedestrian survey of the APE, with the exception of Bellota substation due to access restrictions. Survey was consistent with Secretary of the Interior Standards. Surveyors used 10-meter spacing, intensively inspecting the ground surface and cut banks of intermittent waterways intersecting the Project area for cultural resources, including artifacts, features, and/or midden soils. Surface visibility within the Project area is low (<5% visibility) due to vegetation, primarily non-native grasses (Exhibit 1). Portions of the Project area appear to have been previously disturbed by disking or grading and by ranching activities and construction of infrastructure related to the existing PG&E Bellota substation (Exhibit 2). No cultural resources were identified during the survey.

6.4 Tribal Coordination

Dudek contacted the NAHC on July 27, 2020, to request a search of the Sacred Lands File. The NAHC responded on July 28, 2020, indicating that the search failed to identify any Native American resources in the vicinity of the Project and provided a list of individuals and organizations to contact that may have additional information. A record of the NAHC Sacred Lands File search and tribal outreach is included in Appendix C. San Joaquin County will be contacting the tribes listed by NAHC pursuant to Assembly Bill 52.



Exhibit 1. Overview of APE, facing southwest.



Exhibit 2. Overview of APE with Bellota substation in background, facing east.

7 Summary and Management Considerations

No archaeological resources were identified within the APE or immediate vicinity as a result of intensive pedestrian survey and the Central California Information Center records search. The PG&E Bellota substation, while not surveyed, has been completely developed and only minor improvements to the existing facility would occur as part of the proposed substation expansion effort. In addition, previous recording appropriately documented and evaluated the facility found it to be not eligible for the NRHP/CRHR (Stantec Consulting Service 2019). As such, because the substation is not classified as a historical resource/historic property, modification would not represent an impact/effect. Additional details relating to this study and the NRHP/CRHR eligibility of the Bellota Substation will be on file with PG&E. The NAHC Sacred Lands File search conducted on July 28, 2020, was negative. Based on review of the Project setting, the Project has a low potential to impact any known cultural resources; however, based on undisturbed conditions in much of the APE and geoarchaeological suitability, there is a moderate potential for the discovery of unanticipated cultural resources during initial Project-related ground disturbance. Management recommendations to reduce potential impacts to unanticipated archaeological resources and human remains during project construction are provided below.

Unanticipated Archaeological Resources

All construction crew members should be alerted to the potential to encounter archaeological material. In the unlikely event that cultural resources (sites, features, or artifacts) are exposed during creek bank stabilization activities, all construction work occurring within 100 feet of the find shall immediately stop and San Joaquin County contacted. A qualified specialist, meeting the Secretary of the Interior's Professional Qualification Standards, will be assigned to review the unanticipated find, and evaluation efforts of this resource for NRHP and CRHR listing will be initiated in consultation with San Joaquin County. Prehistoric archaeological deposits may be indicated by the presence of discolored or dark soil, fire-affected material, concentrations of fragmented or whole freshwater bivalves shell, burned or complete bone, non-local lithic materials, or the characteristic observed to be atypical of the surrounding area. Common prehistoric artifacts may include modified or battered lithic materials; lithic or bone tools that appeared to have been used for chopping, drilling, or grinding; projectile points; fired clay ceramics or non-functional items; and other items. Historic-age deposits are often indicated by the presence of glass bottles and shards, ceramic material, building or domestic refuse, ferrous metal, or old features such as concrete foundations or privies. Depending upon the significance of the find, the archaeologist may simply record the find and allow work to continue. If the discovery proves significant under CEQA/NRHP, additional work, such as preparation of an archaeological treatment plan, testing, or data recovery may be warranted.

Unanticipated Human Remains

Should human remains be discovered, work will halt in that area and procedures set forth in the California PRC (Section 5097.98) and State Health and Safety Code (Section 7050.5) will be followed, beginning with notification to the U.S. Army Corps of Engineers (if applicable) and County Coroner. No further excavation or disturbance of the site or any nearby area reasonably suspected to overlie adjacent remains shall occur until the County Coroner has determined, within 2 working days of notification of the discovery, the appropriate treatment and disposition of the human remains. If the County Coroner determines that the remains are, or are believed to be, Native American, he or she shall notify the NAHC in Sacramento within 24 hours. In accordance with California PRC, Section 5097.98, the NAHC must immediately notify those persons it believes to be the MLD from the deceased Native American.

The MLD shall complete his/her inspection within 48 hours of being granted access to the site. The designated Native American representative would then determine, in consultation with the property owner, the disposition of the human remains.

8 References

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Appendix A

Key Personnel Resumes

Adam Giacinto, MA, RPA

Archaeologist

Adam Giacinto is an archaeologist with more than 9 years' experience preparing cultural resource reports, site records, and managing archaeological survey, evaluation, and data recovery-level investigations. His research interests include prehistoric hunter-gatherer cultures and contemporary conceptions of heritage. His current research focuses on the social, historical, archaeological, and political mechanisms surrounding heritage values. He has gained practical experience in archaeological and ethnographic field methods while conducting research in the Southwest, Mexico, and Eastern Europe.

Mr. Giacinto brings specialized experience in cultural resources information processing gained while working at the South Coastal

EDUCATION

San Diego State University MA, Anthropology, 2011 Santa Rosa Junior College AA, Anthropology, 2004 Sonoma State University BA, Anthropology/Linguistics, 2006 **PROFESSIONAL AFFILIATIONS**

Register of Professional Archaeologists Society for California Archaeology American Anthropological Association Institute of Archaeomythology

American Anthropological Association

Information Center. He has worked as part of a nonprofit collaboration in designing and managing a large-scale, preservation-oriented, standardized database and conducting site and impact predictive Geographic Information Systems (GIS) analysis of the cultural resources landscape surrounding ancient Lake Cahuilla. He provides experience in ethnographic and applied anthropological methods gained in urban and rural settings, both in the United States and internationally.

Northern California Region

San Pablo Broadband Project, City of San Pablo, California. As Principal cultural investigator, Mr. Giacinto coordinated a Northwest Information Center (NWIC) records search, Native American Heritage Commission (NAHC) sacred lands file search, tribal outreach, and preparation of a constraints study and IS/MND under CEQA regulatory context for the entire City of San Pablo area. A mitigation strategy was prepared to meet City needs within in this area containing numerous sensitive NRHP/CRHR-listed archaeological and built environment resources.

California High Speed Rail, Fresno, California. As Co-Principal Investigator, Mr. Giacinto supervised, implemented, and reported upon cultural inventory and compliance efforts under Section 106 of the NHPA, Federal Rail Authority, CEQA, and local Guidelines for Fresno to Bakersfield section. General responsibilities included day-to day scheduling oversight of Native American monitors, built environment specialists and archaeologists, management of cultural monitoring implementation and site treatment, client reporting, meetings and report preperation. Mr. Giacinto was the lead in multiple trainings.

Royal Gorge Trails Project, Donner Summit, Donner Land Trust, Placer County, California. As Principal archaeological investigator, Mr. Giacinto coordinated and completed a Northwest Central Center (NCIC) records search, Native American Heritage Commission (NAHC) and Native American correspondence, archaeological survey, and preparation of a technical report. An appropriate mitigation strategy meeting federal, state, and local standards was developed and provided to the County of Marin for this negative cultural inventory.

Emergency Helipad Project, Tahoe-Truckee Airport District, South Lake Tahoe, Placer County, California. As Principal archaeological investigator, Mr. Giacinto coordinated a Northwest Central Center (NCIC) records search, Native American Heritage Commission (NAHC) and Native American correspondence, archaeological survey, and preparation of a technical report. An appropriate mitigation strategy meeting federal, state, and local standards was developed and provided to the County of Marin for this negative cultural inventory.

MCWRA Interlake Spillway Project, Monterey and San Luis Obispo Counties, California. As Co-Principal archaeological investigator, Mr. Giacinto provided oversight and management of Inventory and Evalutation. Project involved survey of Lake San Antonio and outflow at Lake Nacimiento, as well as evaluation of the Lake San Antonio historic-era dam.

Private Pier Project, City of Tiburon, Marin County, California. As Principal archaeological investigator, Mr. Giacinto coordinated a Northwest Information Center (NWIC) records search, Native American Heritage Commission (NAHC) and Native American correspondence, archaeological survey, and preparation of a technical report. An appropriate mitigation strategy was developed and provided to the County of Marin for this negative cultural inventory.

Water Tank Project, City of Rohnert Park, Sonoma County, California. As Principal archaeological investigator, Mr. Giacinto coordinated a Northwest Information Center (NWIC) records search, Native American Heritage Commission (NAHC) and Native American correspondence, archaeological survey, and preparation of a technical report. An appropriate mitigation strategy was developed and provided to the City of Ronert Park for this negative cultural inventory.

Auburn Recreation District Operations and Development Project, City of Auburn, California. As Principal archaeological investigator, Mr. Giacinto coordinated a North Central Information Center (NCIC) records search, Native American Heritage Commission (NAHC) and Native American information outreach, archaeological survey, and preparation of a technical report. An appropriate mitigation strategy was developed meeting Bureau of Reclamation, CEQA, and local requirements for this cultural inventory.

Oakmont Senior Living Facility, City of Novato, Marin County, California. As Principal archaeological investigator, Mr. Giacinto coordinated a Northwest Information Center (NWIC) records search, Native American Heritage Commission (NAHC) and Native American correspondence, archaeological survey, and preparation of a technical report. An appropriate mitigation strategy was developed and provided to the County of Marin for this negative cultural inventory.

Donner Trail Elementary School Project, Truckee, Placer and Nevada County, California. As archaeologist, Mr. Giacinto coordinated a Northwest Central Center (NCIC) records search, Native American Heritage Commission (NAHC) and Native American correspondence, archaeological survey, and preparation of a technical report. An appropriate mitigation strategy meeting state and local standards was developed and provided to the County of Marin for this negative cultural inventory.

Tahoe Lake Elementary School Project, South Lake Tahoe, California. As archaeological investigator, Mr. Giacinto assisted with report preparation and project coordination, as well as prepared geoarchaeological assessment for ACOE or project area.

Roberts' Ranch Project, Vacaville, California. As Principal archaeological investigator, Mr. Giacinto coordinated a Northwest Information Center (NWIC) records search, Native American Heritage Commission (NAHC) and Native American information outreach, archaeological and historic architectural

survey, and preparation of a technical report under CEQA regulatory context. An appropriate mitigation strategy was developed for this cultural inventory.

Collins Drive Project, City of Auburn, California. As Principal archaeological investigator, Mr. Giacinto coordinated a North Central Information Center (NCIC) records search, Native American Heritage Commission (NAHC) and Native American information outreach, archaeological survey, and preparation of a technical memo . An appropriate mitigation strategy was developed meeting CEQA and local reuirements for this cultural inventory.

Kitchell Santa Rosa Project, Granite Construction, City of Santa Rosa, California. As Principal archaeological investigator, Mr. Giacinto coordinated a Northwestern Information Center (NCIC) records search, Native American Heritage Commission (NAHC) and Native American information outreach, and preparation of a technical memo. An appropriate mitigation strategy was developed meeting CEQA and local reuirements for this cultural inventory.

Dorsey Marketplace Project, City of Grass Valley, California. As Principal archaeological investigator, Mr. Giacinto coordinated a North Central Information Center (NCIC) records search, Native American Heritage Commission (NAHC) and Native American information outreach, archaeological survey, and preparation of a technical report. An appropriate mitigation strategy was developed meeting CEQA and local reuirements for this cultural inventory, including recommendations relating to historicl mining features.

Penn Valley Project, SimonCre, County of Nevada, California. As Principal archaeological investigator, Mr. Giacinto coordinated a North Central Information Center (NCIC) records search, Native American Heritage Commission (NAHC) and Native American information outreach, archaeological survey, and preparation of a technical memo. An appropriate mitigation strategy was developed meeting Army Corps of Engineers, CEQA and local reuirements for this cultural inventory update.

Byron Airport Development Program, Contra Costa, California. As Principal archaeological investigator, Mr. Giacinto coordinated a Northwest Information Center (NWIC) records search, Native American Heritage Commission (NAHC) and Native American information outreach, archaeological survey, and preparation of a technical report. An appropriate mitigation strategy was developed for this cultural inventory.

Napa Roundabouts Project, City of Napa, California. As Principal archaeological investigator, Mr. Giacinto completed Native American coordination, preperation of an ASR and HRER, review of historical and geoarchaeological documentation, and successfully developed, implemented, and reported upon an XPI Investigation, including preperation of a XPI Proposal and technical report. Mr. Giacinto managed fieldwork, which included survey, the use of mechanical geoprobes and hand excavation with the intent of identifying the potential for both prehistoric and historical-era resouces within the NRHP-eligible West Napa Historic District. A successful mitigation strategy was developed for the City of Napa and Caltrans, within federal, state and local regulatory contexts.

El Dorado Irrigation District Emergency Tree Harvest, El Dorado, California. As Principal archaeological investigator, Mr. Giacinto coordinated a North Central Information Center (NCIC) records search, Native American Heritage Commission (NAHC) and Native American information outreach, archaeological survey, and preparation of a technical report for CalFire and EID under CEQA regulatory

context. An appropriate mitigation strategy was developed for this cultural inventory, including updates to the El Dorado Canal.

Combie Road Corridor Improvement Project, Auburn, California. As Principal archaeological investigator, Mr. Giacinto coordinated a North Central Information Center (NCIC) records search, Native American Heritage Commission (NAHC) and Native American information outreach, archaeological and historic architectural survey, DPR 523 building forms, and preparation of a technical report under CEQA regulatory context. An appropriate mitigation strategy was developed for this cultural inventory.

Dodge Flats Power Project, Pyramid Lake, Nevada. As archaeologist, Mr. Giacinto coordinated a the Nevada Cultural Resource Information System (NCRIS) records search and prepared a study of prehistoric and historical-era constraints for a proposed power project.

Lassen Substation Project, Mt Shasta., California. As Principal archaeological investigator, Mr. Giacinto coordinated and conducted a review of the archaeological and built-enviornment technical study and related sections of the Proponent's Environmental Assessment on behalf of the CPUC.

Meadowrock Vinyard Project, Napa, California. As Principal archaeological investigator, Mr. Giacinto coordinated a Northwest Information Center (NWIC) records search, Native American Heritage Commission (NAHC) and Native American information outreach, archaeological and historic architectural survey, and preparation of a technical report under CEQA regulatory context. An appropriate mitigation strategy was developed for this cultural inventory

Highway 101 Overcrossing Project Offsite Staging Area Project, City of Palo Alto, California. As principal investigator, Mr. Giacinto reviewed existing Historic Property Survey Reports and Archaeological Survey Reports; then prepared an addendum study to meet CEQA and Caltrans regulations and styles. He coordinated a records search, NAHC and Native American consultation, archaeological survey, and preparation of the technical report.

Park Boulevard Environmental Impact Report (EIR), City of Palo Alto, California. As Principal archaeological investigator, Mr. Giacinto coordinated a Northwest Information Center (NWIC) records search, Native American Heritage Commission (NAHC) and Native American consultation, archaeological survey, and preparation of a technical report and EIR section. An appropriate mitigation strategy was developed and provided to the City of Palo Alto for this negative cultural inventory.

Vacaville Center Campus Project, Solano Community College District, City of Vacaville, California. As principal archaeological investigator, Mr. Giacinto coordinated a Northwest Information Center (NWIC) records search, NAHC and Native American communication, archaeological survey, and preparation of a technical report. Recommendations were framed in compliance with CEQA regulations and submitted to the lead agency.

Makani Power Wind Turbine Pilot Program, Google Inc., Alameda, California. As principal investigator, Mr. Giacinto coordinated a NWIC records search, NAHC and Native American consultation, archaeological survey, and preparation of a negative technical memo a for this potential wind farm. The mitigation strategy did not require additional archaeological monitoring or other work based on the lack of archaeological sites, and the low potential for encountering unrecorded subsurface cultural resources. Recommendations were submitted as a categorical exemption to the reviewing agency.

Maidu Bike Path and Park Projects, City of Auburn, California. As principal investigator, Mr. Giacinto managed the survey, archival searches, tribal correspondence, and reported mangement recommendations for a cultural resources inventory. Considerations included compliance under CEQA and Section 106 of the NHPA.

Steephollow Creek and Bear River Restoration, Nevada County, California. As Principal investigator, Mr. Giacinto assisted with management of field efforts and preperation of a technical report for a cultural inventory. Resources were evaluated for significance under CEQA, and Section 106 of the NHPA.

Yokohl Ranch Development Project, The Yokohl Ranch Company, LLC, Tulare County, California. As coprincipal investigator and field director, Mr. Giacinto managed 15 archaeologists in conducting significance evaluation of 118 historical and prehistoric cultural resources throughout the 12,000 acre Yokohl Valley area. Operated as tribal interface, and facilitated the respectul handling and reburial of sensitive cultural material with the tribes, applicant, and NAHC.

Yokohl Ranch Cultural Resources, The Yokohl Ranch Company, LLC, Tulare, California. As Principal investigator and field director, Mr. Giacinto managed 15 archaeologists in conducting 1,900 acres of survey throughout the Yokohl Valley.

Hamilton Hospital Project, City of Novato, California. As principal investigator, Mr. Giacinto managed tribal and archaeological fieldwork and methodological reporting relating to the extended Phase I inventory geoprobe drilling and shovel test pit excavation. Considerations included compliance under CEQA and local regulations.

Southern California Region

Development

1836 Columbia Street Project, Parikh Properties, City of San Diego, California. As Co-Principal investigator, Mr. Giacinto coordinated a SCIC records search, NAHC, archaeological survey, and preparation of a negative technical report for this small residential development. The mitigation strategy did not require additional archaeological monitoring or other work based on the lack of archaeological sites, and the low potential for encountering unrecorded subsurface cultural resources. Recommendations were submitted to the City of San Diego.

Canergy - Rutherford Road Development Project, Ericsson-Grant, Inc., El Centro, California. As Principal investigator, Mr. Giacinto coordinated records searches, Native American contact, map preparation and fieldwork.

Oro Verde Development Project, Wohlford Land Co., LLC, Valley Center, California. As Principal investigator, Mr. Giacinto coordinated a SCIC records search, NAHC and Native American consultation, archaeological survey, and preparation of a negative technical letter report for this small residential development. The mitigation strategy did not require additional archaeological monitoring or other work based on the lack of archaeological sites, and the low potential for encountering unrecorded subsurface cultural resources. Recommendations were submitted to the County of San Diego.

Fifth Avenue Development Cultural Inventory, E2 ManageTech, Inc., Chula Vista, California. As Principal investigator, Mr. Giacinto coordinated the preparation of a paleontological, archaeological, and

historic resource inventory for a proposed residential project. Responsibilities included a SCIC records search, San Diego Natural History Museum (SDNHM) records search, archival research, agency and client communication, GIS, and compiling the technical report and appendices. Results were submitted as a technical report s to the City of Chula Vista.

Normal Street Evaluations, Darco Engineering, Inc., San Diego, California. As Principal investigator, Mr. Giacinto managed the preparation of a historic resource evaluation for a number of buildings located in the community of University Heights. Responsibilities included an SCIC records search, agency and client communication, archival research, GIS, and compiling the technical report and appendices. Results were submitted as a technical report and associated appendices to the City of San Diego.

Mapleton Park Centre Site Analysis, Kaiser Foundation Health Plan, Inc., Murrieta, California. As Principal archaeological consultant, Mr. Giacinto prepared a project constraints study for Kaiser Permanente, within the County of Riverside.

New Kaiser Permanente Medical Center EIR, Kaiser Foundation Health Plan, Inc., San Diego, California. As field director, Mr. Giacinto conducted a survey of the proposed medical center and reported negative findings to the City of San Diego.

St. John Garabed Church Environmental Services, St. John Garabed Armenian Apostolic Church Trust, San Diego, California. As field director and co-principal investigator, Mr. Giacinto conducted a survey of the proposed church facilities and reported findings to the City of San Diego. Additional responsibilities included preparation of the cultural and paleontological sections for the project EIR.

PMC Quarry Creek Project Phase II Cultural Evaluation, McMillin Land Development, Carlsbad, California. As field director, Mr. Giacinto managed and conducted archaeological testing, data analysis, report writing and mapping of existing cultural resources within the 60-acre Quarry Creek Project study area.

University Office and Medical Park Project Cultural Resource Study Survey, U.S. Army Corps of Engineers, San Marcos, California. As field director, Mr. Giacinto managed a team of archaeologists in conducting survey of the 49.5-acre study area in a general inventory of potentially impacted cultural resources and prepared maps and a report for the presentation of this information.

Education

Mission Beach Elementary School EIR, McKellar McGowan, San Diego, California. As principal archaeological investigator, Mr. Giacinto coordinated a Southern California Information Center (SCIC) records search, NAHC and Native American consultation, archaeological survey, and preparation of a technical report. The mitigation strategy did not require archaeological monitoring or other work based on the lack of archaeological sites, and the low potential for encountering unrecorded subsurface cultural resources. Recommendations were submitted to the City of San Diego.

San Diego State University (SDSU) West Campus Housing EIR/Tech Studies, Gatzke, Dillon and Balance, San Diego, California. As principal archaeological investigator, Mr. Giacinto coordinated a SCIC records search, NAHC and Native American consultation, archaeological survey, and preparation of a technical report and EIR section. An appropriate mitigation strategy was developed and provided to SDSU for this negative cultural inventory.

Orange Coast College Initial Study (IS), Coast Community College District, Orange, California. As principal archaeological investigator, Mr. Giacinto coordinated records search, NAHC and Native American consultation, archaeological survey, preparation of a technical report, and provided management and compliance recommendations relating to cultural resources on three Orange County College campuses.

Energy

McCoy Solar Energy Project, Blythe, California. As Principal Investigator, Mr. Giacinto supervised, implemented, and reported upon compliance efforts under Section 106 of the NHPA, BLM Guidelines, CEQA, and County of Riverside Guidelines. General responsibilities included day-to day scheduling oversight of Native American monitors and archaeologists, tribal interface, management of cultural monitoring implementation, and agency reporting. Worked with the Dudek Compliance team to provide cultural summaries for 14 variance requests. Reporting included preperation and submittal of daily cultural resource summaries to interested tribal parties and the BLM, monthly summaries of cultural compliance status and treatment of unanticipated finds, bi-weekly BLM-McCoy Solar, meetings and a montitoring summary report. Mr. Giacinto was the lead in two formal trainings with monitors and counsel members from the Colorado River Indian Tribes regarding federal and state regulations relating to human remains, County and BLM guiding documents, identification of cultural material, and the multiple understandings of "cultural resources".

Blythe Solar Power Project, Blythe, California. As Principal Investigator, Mr. Giacinto supervised, implemented, and reported upon cultural compliace and construction monitoring efforts under Section 106 of the NHPA, BLM Guidelines, California Energy Commission Guidelines, CEQA, and County of Riverside Guidelines. General responsibilities included day-to day scheduling oversight of Native American monitors and archaeologists, tribal interface, management of cultural monitoring implementation, and agency reporting to both the BLM and Energy Commission. Reporting included preperation and submittal of daily cultural resource summaries to interested tribal parties, Energy Commission, and the BLM, monthly summaries of cultural compliance status and treatment of unanticipated finds, bi-weekly BLM-McCoy Solar, meetings and a montitoring summary report. Mr. Giacinto was the lead in multiple trainings.

BayWa Granger Solar Site Survey, RBF Consulting, Valley Center, California. As Principal Investigator, Mr. Giacinto managed the inventory and prepared management recommendations for a proposed solar farm in Valley Center, California. A relationship of open dialogue between Mr. Giacinto and the client allowed for the project design to avoid significant direct and indirect impacts to cultural resources the proper the development of compliant mitigation and informed project design. Results were submitted to the County of San Diego Department of Planning and Landuse.

Valley Center Solar Site Survey, RBF Consulting, Valley Center, California. As Principal Investigator, Mr. Giacinto managed the inventory and prepared management recommendations for a proposed solar farm in Valley Center, California. A relationship of open dialogue between Mr. Giacinto and the client allowed for the project design to avoid significant direct and indirect impacts to cultural resources the proper the development of compliant mitigation and informed project design. Results were submitted to the County of San Diego Department of Planning and Landuse.

Data Collection for the Tierra Del Sol Solar Farm Project, Tierra Del Sol Solar Farm LLC, Tierra Del Sol, California. As field director, Mr. Giacinto managed a crew of 8 archaeologists in conducting the survey, surface mapping, surface collection, and excavation of 13 prehistoric and historical period sites

throughout the McCain Valley. Mr Giacinto prepared a invenetory and evaluation report for this project, completed to County of San Diego Standards.

Rugged Solar Farm Project, Rugged Solar LLC, Boulevard, California. As principal investigator and field director, Mr. Giacinto managed a crew of 12 archaeologists in conducting the survey, surface mapping, surface collection and excavation of 42 prehistoric and historical period sites throughout the McCain Valley. Mr Giacinto prepared an inventory and evaluation report and EIR section for this project, completed to County of San Diego Standards

Wind Energy Project, Confidential Client, Riverside, California. As principal cultural investigator, Mr. Giacinto prepared the cultural scope and schedule, coordinated the records search, NAHC and Native American consultation, archaeological survey, and preparation of a technical report for the County of Riverside that provided management and compliance recommendations relating to identified cultural resources. Additional responsibilities included coordination of paleontological and Native American monitor subconsultants.

Gas Line for Poway Pump Station, City of Poway, San Diego County California. As principal investigator, Mr. Giacinto conducted an inventory, coordinated survey, and provided amangement recommendations in technical report.

Sol Orchard Solar Farm, RBF Consulting, Ramona, California. As Principal Investigator, Mr. Giacinto coordinated archaeological and Native American monitoring and prepared management recommendations for a proposed solar farm in Ramona, California. All impacts to significant cultural resources in the vicinity were avoided. Results were submitted to the County of San Diego.

Solar Farm Cultural Resources Services, Confidential Client, San Diego, California. As project director, Mr. Giacinto managed a crew of 8 archaeologists in conducting the survey, surface mapping, surface collection, and excavation of 13 prehistoric and historical period sites throughout the McCain Valley.

As-Needed Environmental Analysis for Solar Project Road Access, Confidential Client, San Diego, California. As field director, Mr. Giacinto managed a crew of 12 archaeologists in conducting the survey, surface mapping, surface collection and excavation of 42 prehistoric and historical period sites throughout the McCain Valley.

East County Substation EIR/Environmental Impact Statement (EIS), California Public Utilities Commission (CPUC), San Diego County, California. As field archaeologist, Mr. Giacinto worked as part of a team to survey the possible impacts to exiting and newly recorded cultural resources.

Class III Cultural Resources Inventory for Meteorological Masts 1 and 4 and Access Roads, Iberdrola Renewables, Kern County, California. As field director, Mr. Giacinto managed a team of archaeologists in conducting surveys of the study area in a general inventory of potentially impacted cultural resources.

Wood to Steel Pole Conversion Survey, San Diego Gas and Electric (SDG&E), San Diego County, California. As crew chief, Mr. Giacinto managed a team of archaeologists in conducting a survey of Circuit 75 in a general inventory of potentially impacted cultural resources.

Sunrise Powerlink Project Monitoring, SDG&E, Imperial and San Diego Counties, California. As a field director, Mr. Giacinto assisted in managing an archaeological field crew, aided in data collection, and conducted monitoring by facilitating planned mitigation strategies of construction and pre-construction activities associated with a 500-kilovolt (kV) transmission line, access roads, and work areas.

Cal Valley Solar Ranch-Switchyard Site No. 3 Archaeological Testing, Ecology & Environment Inc., San Luis Obispo County, California. As part of a team of archaeologists, conducted excavations and general testing of a middle prehistoric site.

Wood to Steel Pole Conversion, SDG&E, Cleveland National Forest (CNF), San Diego County, California. As crew chief, Mr. Giacinto managed a team of archaeologists in conducting a survey of Circuit 440 in a general inventory of potentially impacted cultural resources.

Devers to Palo Verde 2 (DPV2) Colorado River Substation Project Monitoring, Southern California Edison (SCE), Blythe, California. As project archaeologist, Mr. Giacinto monitored the geotechnical testing of soils along access road leading into Colorado River Substation from the west.

Sunrise Powerlink Pole Fielding and Environmental Monitoring, SDG&E, Imperial and San Diego Counties, California. As the archaeological representative, Mr. Giacinto worked with SDG&E-contracted engineers, surveyors, and biologists to assess proposed work areas, access roads, and structure locations for possible impacts upon existing cultural resources.

Wood to Steel Pole Conversion Pole Fielding, SDG&E and CNF, San Diego County, California. As the archaeological representative, Mr. Giacinto worked with SDGE-contracted engineers, surveyors, and biologists to assess proposed pole transmission pole locations for possible impacts upon existing cultural resources.

Wood to Steel Pole Conversion, SDG&E and CNF, San Diego County, California. As field archaeologist, Mr. Giacinto worked as part of a team to survey segments of Circuit 449, Circuit 78, TL 625, and TL 629 for possible impacts to existing cultural resources.

Guy Pole and Stub Pole Removal Monitoring, SDG&E, Carlsbad, California. As archaeological representative, Mr. Giacinto monitored activities associated with the removal of existing unused energy transmission infrastructure in an area near recorded cultural resources of noted significance.

DPV2 500 kV Transmission Line Survey, SCE, Riverside County, California. As field archaeologist, Mr. Giacinto worked as part of a team to survey more than 45 miles of linear proposed project area. Conducted an intensive inventory of prehistoric and historical period cultural resources from Desert Center to Thousand Palms.

DPV2 Colorado Switchyard Survey, SCE, Riverside County, California. As project archaeologist, Mr. Giacinto prepared the site records gathered through a pre-field records search and created project area maps in GIS illustrating the location and type of preexisting cultural resources prior field survey for a fiber-optic ground wire project for DPV2 Colorado switchyard in Blythe.

Pole Replacement Projects Surveying, SCE, Orange and Riverside Counties, California. As project archaeologist, Mr. Giacinto prepared the site records gathered through a pre-field records search and created project area maps in GIS illustrating the location and type of preexisting cultural resources prior to

fieldwork for the deteriorated pole project within the CNF, and deteriorated pole and pole replacement on private property.

Sunrise Powerlink Environmentally Superior Southern Alternative Survey, SDG&E, San Diego and Imperial Counties, California. As project archaeologist, Mr. Giacinto assisted in preparing the site records gathered through a pre-field records search and digitized the boundaries if archaeological sites in GIS illustrating the location and type of preexisting cultural resources, and a records search of existing site data for alternative route.

Military

Cultural Resources Inventory, March Joint Powers Authority, Riverside County, California. As Principal investigator, Mr. Giacinto managed the field efforts, reporting, and facilitated tribal consultation for cultural inventory. The report included prepration of a cultural context for WW-I and WW-II era history o fthe air fields and camp in the vicinity. Resource considerations were compliant with CEQA and Section 106 of the NHPA.

Utility Corridor Survey at Edwards Air Force Base, U.S. Air Force, California. As Archaeologist, Mr. Giacinto guided the design and preperatio of digital field forms to assist in the recordation of archaeological resources at archaeological sites throughout the EAFB, including the Pancho Barnes site.

Infill Survey Project at Edwards Air Force Base, U.S. Air Force, California. As Field Director, Mr. Giacinto managed a team of five archaeologists in conducting a general pedestrian inventory of cultural resources within a 7,650-acre study area

Desert Warfare Training Facility Cultural Resources Inventory Project, U.S. Navy Southwest, Imperial County, California. As field archaeologist, Mr. Giacinto worked as part of a team to conduct an intensive inventory of prehistoric and historical period cultural resources in selected areas within the Chocolate Mountains Gunnery Range in Niland.

Morgan/Bircham 55 to 12 kV Project Survey, U.S. Navy-Naval Air Weapons Station (NAWS)-China Lake, Inyo County, California. As project archaeologist, Mr. Giacinto prepared the site records gathered through a pre-field records search and created project area maps in GIS illustrating the location and type of preexisting cultural resources prior to field survey at NAWS China Lake.

Resource Management

Pure Water Project Constraints Study and PEIR, City of San Diego, California. As Principal investigator and field director, Mr. Giacinto managed preperation of a constraints study for the Pure Water Project. Work involved a records search of over 100 mile linear miles of San Diego. Site record information from more than 1,236 cultural resources was processed, coded, and integrated within a geospatial sensitivity model to identy archaeological and built environment constraints throughout the proposed alignment. This information was integrated within a PEIR and is currently being used to assist with management planning through the project alignment. Maps were then generated using generalized grid units (1000 x 1000 meters in size) to provide a visual model of relative archaeological resource sensitivity while maintaining the appropriate level of confidentiality for public dissemination to assist in planning.

Lake Morena Dam Project, Lake Morena, City of San Diego, California. As Principal investigator, Mr. Giacinto managed a SCIC records search, NAHC and Native American correspondence, archaeological

survey, agency correspondence, and preparation of a archaeological and built environment technical report work related to dam improvements.

Hanson El Monte Pond Restoration, Lakeside's River Park Conservancy, San Diego, California. As Principal investigator, Mr. Giacinto managed the field efforts, reporting, and agency interface for a cultural inventory. Resources were evaluated for significance under county guidelines, CEQA, and Section 106 of the NHPA. Worked with the Army Corps for submittal of documents to SHPO.

Peter's Canyon Regional Park CEQA Study, Orange County Fire Authority, Orange, California. As principal investigator, Mr. Giacinto conducted a cultural resources inventory of all cultural resources within Peters Canyon planned fuel reduction areas. Mr. Giacinto coordinated a SCIC records search, NAHC and Native American consultation, archaeological survey, and preparation of a technical report. Recommendations were provided to agency personnel to assist in mitigating any possible adverse effects to cultural resources in the project vicinity.

Lake Cahuilla Cultural Resources Management Plan, ASM PARC, Riverside County, California. As project archaeologist and lead analyst, Mr. Giacinto developed a standardized database associated with ancient Lake Cahuilla and the surrounding archaeological and ecological landscape. Performed GIS data integration and predictive analysis, data entry of site record information, and completed multi-day, multiperson record search covering 17 USGS quadrangle in Riverside County. The project was finalized with the prepreation of a management document submitted to the the Friends of the San Jacinto Mountains with the intent of identifying known and potential areas for preservation.

Third Party Review and Monitoring

Ocotillo Wind Energy Facility Third Party Compliance Monitoring, Bureau of Land Management (BLM), Imperial County, California. As third party observer, Mr. Giacinto collaborated with the BLM in maintaining cultural compliance with federal environmental policies. In addition, processed archaeological and Native American comments for BLM attention.

Rio Mesa Solar Electric Generating Facility CEQA Studies, BrightSource Energy, Inc., Riverside, California. As third party reviewer, Mr. Giacinto collaborated with the BLM, the California Energy Commission, and Brightsource to review URS Corporation's cultural report content, quality, and environmental compliance.

Tribal

South Palm Canyon West Fork Flood Emergency Work, Agua Caliente Band of Cahuilla Indians, Palm Springs, California. As principal investigator, Mr. Giacinto worked with the Agua Caliente Band of Cahuilla Indians Tribal Historic Preservation Office to conduct archaeological monitoring on tribal lands of emergency repairs within Andreas Canyon National Register of Historic Places listed district. A monitoring report with a summary of findings and implemented mitigation activities, daily monitoring logs and photos, and confidential figures was provided to the tribe.

South Palm Canyon Improvements, Agua Caliente Band of Cahuilla Indians, Palm Springs, California. As principal investigator, Mr. Giacinto worked with the Agua Caliente Band of Cahuilla Indians Tribal Historic Preservation Office to conduct archaeological monitoring on tribal lands of facility improvements within Andreas Canyon National Register of Historic Places listed district. A monitoring

report with a summary of findings and implemented mitigation activities, daily monitoring logs and photos, and confidential figures was provided to the tribe.

Shu'luuk Wind Project Cultural Resource Study Survey, Campo Environmental Protection Agency and Invenergy LLC, Campo Indian Reservation, California. As field director, Mr. Giacinto managed two teams of archaeologists, consisting of seven total practitioners, in conducting a survey of the 2,400-acre study area in a general inventory of potentially impacted cultural resources. Worked with Campo Environmental Protection Agency, of the Campo Kumeyaay Nation, in forming management objectives and integrating six Native American Monitors into daily survey activities.

Water/Wastewater

Auburn Recycled Wastewater Treatment Plant Secondary Process Upgrade Improvement Project, City of Auburn, California. As principal investigator, Mr. Giacinto managed the survey, archival searches, tribal correspondence, and reported mangement recommendations for a cultural resources inventory. Considerations included compliance under CEQA and Section 106 of the NHPA.

Recycled Water Pipeline Project, City of Woodland, California. As principal investigator, Mr. Giacinto managed the survey, archival searches, tribal correspondence, and reported mangement recommendations for a cultural resources inventory. Considerations included compliance under CEQA and Section 106 of the NHPA.

Carlsbad Desalination Third Addendum to EIR Biological Survey and Monitoring, Poseidon Water LLC, Carlsbad, California. As archaeological consultant, Mr. Giacinto conducted archaeological monitoring and consultation on an as-needed basis.

Old Mission Dam, City of San Diego, California. As principal investigator, Mr. Giacinto conducted an inventory, coordinated survey, and prepared recommendations for the maintenance of the National Register of Historic Places listed resource, Old Mission Dam.

Otay River Wetland Mitigation, Poseidon Water LLC, San Diego, California. As field director, Mr. Giacinto conducted a cultural resources survey of a mitigation property, managed by the U.S. Fish and Wildlife Service (USFWS), to be used for estuary restoration.

Vallecitos Water District Rock Springs Sewer, Infrastructure Engineering Corporation, San Diego, California. As principal investigator, Mr. Giacinto coordinated a SCIC records search, NAHC and Native American consultation, archaeological survey, and preparation of a negative technical letter report for this small residential development. The mitigation strategy did require additional archaeological monitoring based on the potential to encounter subsurface cultural resources. Recommendations were submitted to the Vallecitos Water District.

Relevant Previous Experience

Guest Lecturer in Cultural Resources for Upper Division CEQA Course, University of San Diego, California. As Cultural Resources Lecturer, Mr. Giacinto was invited to present on Cultural Resources history and management under CEQA for an upper devision USD course in April, 2015.. A presentation was created with the intention of poviding a contextual and technical understanding of how culture aresources are interpreded and evaluatued under CEQA. The implications relating to the Friends of Mamoth (1972) decision and other cases were outlined in detail. AB-52 considerations and timing were summarized, and implications of Tribal Cultural Resources as a class of resource discussed.

Investigation of Emergent Trends of San Diego Cultural Resource Management, San Diego County, California. As ethnographic researcher, conducted verbal, semi-structured interviews with 17 archaeologists, policy makers, and Native American monitors and curators regarding the history and current practice of Cultural Resource Management. Information was contextualized through extensive background research using legal, academic, specialized, and archival sources. Analysis employed a synthesis of cultural anthropological and archaeological theory and practice. Results were published as *M.A. thesis in Anthropology* at San Diego State University (2012).

Needs Assessment/Diagnostic for the Community of La Sierra de San Francisco, Baja California Sur, Mexico. As ethnographic researcher, worked for San Diego State University through a grant provided by the International Community Foundation to conduct a general needs assessment in a UNESCO protected community within a UNESCO defined region of World Heritage, la Sierra de San Francisco. Resolved to help with improving the infrastructure of potable water, assisting in the construction of a system of telecommunications for education, and conducting workshops aimed at the preservation of local prehistoric and historical cultural and archaeological resources (2009-2011).

Ethnographic Field School, Zimatlan, Oaxaca, Mexico. As ethnographic student/researcher for San Diego State University, lived with local family and conducted interviews with local population regarding microcredit, sustainable/traditional agriculture and husbandry. Additionally, compiled audio/visual digital stories with local youth and conducted training in research and appropriate documentation. Emphasis was placed on dietary and generational cultural changes (2008).

Research Assistant, San Diego State University Collections Management. As graduate student at SDSU, worked in Collections Management under the instruction of Dr. Lynn Gamble (2007). Responsibilities included laboratory analyses, data entry, record processing, and collections curation management.

Research Assistant, South Coastal Information Center, San Diego State University. As graduate student at SDSU, worked at SCIC under the instruction of Dr. Seth mallios (2008). Responsibilities included site record and report processing and resource mapping.

Archaeological Field School, San Diego State University. As graduate student at SDSU, attended an archaeological fieldschool at Cuyamaca Complex Type Site under the instruction of Dr. Lynn Gamble (2007).

Archaeological Researcher, Institute of Archaeomythology. As as researcher and photographer, attended lectures and assissted with symposiums in Bulgaria, Serbia and Romania (2004,2008)

Archaeological Field School, Sonoma State University. As undergraduate student at SSU, attended an archaeological fieldschool under the instruction of Dr. Adrian Praetzellis (2005).

Publications

Emergent Trends of Cultural Resource Management: Alternative Conceptions of Past, Present and Place. M.A. thesis in Anthropology, San Diego State University. 2012. A Qualitative History of "Cultural Resource" Management. anthropologiesproject.org. May 15, 2011.

Lake Cahuilla Cultural Resources Management Plan. ASM PARC. April, 2011.

- A Qualitative Investigation of "Cultural Resource" Management In San Diego. The Society for the Anthropology of North America. April 2010.
- A Qualitative History of "Cultural Resource" Management. ethnographix.org. May 15, 2010.
- Conway, F., R. Espinoza, and A. Giacinto. 2010 Results of Needs Assessment Conducted with Communities of La Sierra de San Francisco, 2009-2010. Submitted to the International Community Foundation.

Selected Technical Reports

- Giacinto, A. and A. Pham 2015. *Phase I Archaeological Inventory Report for the El Toro Recycled Water Project, Orange County, California.* Prepared for the El Toro Water District and submitted to the City of Laguna Niguel.
- Giacinto, A. 2015. Negative Cultural Resources Inventory for the Vacaville Center Campus Project, City of Vacaville, California. Prepared for and submitted to the Solano Community College District
- Giacinto, A. 2015. Archaeological, Built-Environment, and Paleontological Resources Inventory for the 8777 Washington Blvd. Culver City Project, Los Angeles County, California. Submitted to the City of Culver.
- Giacinto, A. 2015. *Phase I Archaeological Inventory Report for the Santa Margarita Recycled Water Project, Orange County, California.* Prepared for the Santa Margarita Water District and submitted to the City of Laguna Niguel.
- Wolf S. and A. Gicinto 2015. *Cultural Resources Survey for the Otay Village IV Project, San Diego County, California.* Submitted to the County of San Diego.
- Wolf S. and A. Gicinto 2015. *Cultural Resources Survey for the BayWa Granger Solar Project, San Diego County, California.* Submitted to the County of San Diego.
- Wolf S. and A. Gicinto 2015. *Cultural Resources Survey for the Covert Canyon Project, San Diego County, California.* Prepared for Michael Baker International. Submitted to the NPS Cleveland National Forrest.
- Giacinto, A. 2015. *Phase I Archaeological Inventory Report for the San Juan Creek Outfall Project, Dana Point, California.* Prepared for and submitted to the South Oarnge County Water Authority.
- Giacinto, A. and N. Hanten 2015. Wastewater Treatment Plant Secondary Process Upgrade Improvement Project, City of Auburn, Placer County, California. Prepared for and submitted to the City of Auburn.
- Giacinto, A. 2014. Data Recovery for CA-RIV-3419 (Locus-14), A Multi-Component Site located within the McCoy Solar Energy Project Right of Way. Submitted to the Bureau of Land Management.

- Giacinto, A. 2014. Work Plan to Complete Mitigation Requirement for CA-RIV-3419, A Multi-Component Site located within the McCoy Solar Energy Project (MSEP) Right of Way. Submitted to the Bureau of Land Management.
- Giacinto, A. 2014. Summary of Data Recovery for CA-RIV-10225, A World War II site located within the McCoy Solar Energy Project (MSEP) Right-of-Way. Submitted to the Bureau of Land Management.
- Giacinto, A. 2014. Phase I Archaeological Inventory Report for the Mission Beach Residences Project, San Diego County, California. Prepared for McKellar-Ashbrook LLC. Submitted to the City of San Diego Development Services Department.
- Giacinto, A. 2014. Negative Cultural Resources Inventory for the Coast Hwy 101 Pump Station Project, City of Encinitas, California. Prepared for and submitted to the City of Encinitas.
- Giacinto, A. 2014. Phase I Archaeological Inventory Report for the Santa Barbara Place Residences Project, San Diego County, California. Prepared for McKellar-Ashbrook LLC. Submitted to the City of San Diego Development Services Department.
- Giacinto, A. 2014. *Negative Cultural Resources Phase I Survey Report for the Oro Verde Project, San Diego County, California.* Submitted to County of San Diego Department of Planning and Landuse.
- Giacinto, A. 2014. *Cultural Resources Technical Report for the West Campus Student Housing Complex Project, San Diego County, California.* Submitted to County of San Diego Department of Planning and Landuse.
- Hale, M. and A. Giacinto 2014. *Negative Cultural Resources Phase I Inventory for the Canergy Project, Brawley, Imperial County, California.* Prepared for Ericsson-Grant Inc. Submitted to Imperial County Planning and Development.
- Castells, J. and A. Giacinto 2014. Historic Resources Inventory for the Normal Street Project, City of San Diego, California. Submitted to City of San Diego..
- Giacinto, A. 2013. *Phase I Cultural Resources Assessment Report for the Smoke Tree Wind Project, Riverside County, California.* Prepared for Ogin, Inc. Submitted to County of Riverside Planning Department.
- Castells, J. and A. Giacinto 2013. Archaeological, Historical, and Paleontological Resources Inventory for the 5th Avenue Chula Vista Development Project, City of Chula Vista, California. Prepared for E2 ManageTech, Inc. Submitted to City of Chula Vista.
- Giacinto, A. 2013. Archaeological Monitoring Summary Memo for the South Palm Canyon Improvements Project, Agua Caliente Band of Mission Indians Reservation, California.
- Giacinto, A. 2013. Cultural Resources *Phase I Survey Report for the NorthLight Power Valley Center Solar Power Project, San Diego County, California.* Prepared for RBF Environmental. Submitted to County of San Diego Department of Planning and Landuse.

- Giacinto, A. and M. Hale 2013. *Phase I Cultural Resources Assessment Report for the WCSS0011R1 and WCS00012R1 Project, Riverside County, California.* Prepared for FloDesign Wind Turbine Corp. Submitted to County of Riverside Planning Department.
- Giacinto, A., and M. Hale. 2013. *Cultural Resources and Paleontological Survey Report for the St. John Garabed Church Project, San Diego County, California.* Submitted to the City of San Diego, California.
- Giacinto, A. 2013. Cultural Resources Phase I Addendum Report for the Old Mission Dam Maintenance Project, San Diego County, California. Prepared for the City of San Diego.
- Giacinto, A. 2013. Archaeological Reconnaissance for Categorical CEQA Exemption for the Makani/Google Airborne Wind Turbine Pilot Project, Alameda County, California.
- Giacinto, A. 2013. Negative Findings Letter Report for a Phase I Cultural Resources Study Conducted for the VWD Rock Springs Project, San Diego County, CA. Submitted on behalf of IEC Corporation to the Vallecitos Water District.
- Hale, M., A. Giacinto, and N. Hanten, edt. 2013. *Cultural Resources Inventory and Evaluation for the Yokohl Ranch Project, Tulare County, California.* Contributions by S. Hector, A. Garcia-Herbst, L.. Akyüz, M. Becker, S. Ní Ghabhláin, and S. Stringer-Bowsher
- Hale, M., and A. Giacinto 2013. Yokohl Ranch Project EIR, Chapter 4.6, Yokohl Valley, Tulare County, California
- Giacinto, A., and M. Hale 2012. Cultural Resources Survey Report for the St. John Garabed Church Project, San Diego County, California
- A. Giacinto and M. Hale, 2012. Cultural Resources Inventory for the U.S. Fish and Wildlife Service Otay River Estuary Restoration Project, Otay Mesa, San Diego County, California
- Giacinto, A. 2012. Negative Cultural Resources Survey Report for the Kaiser Permanente San Diego Central Medical Center, San Diego County, California
- Hale, M., and A. Giacinto 2012. Cultural Resources Inventory for the Orange County Fire Authority Project, Peters Canyon, Orange County, California
- Hale, M., and A. Giacinto 2012. North Embarcadero Port Master Plan Amendment (NE-PMPA) EIR, Chapter 4.9, Port of San Diego, San Diego, California.
- Hale, M., and A. Giacinto 2012. Rio Mesa Solar EIS, Chapter 4.6, Brightsource, Riverside County, California.
- Giacinto, A., J. Daniels,, I. Scharlotta, ,M.J. Hale 2012. *Archaeological Evaluation for the Rugged Solar Project.* San Diego County, California.
- Giacinto, A., J.T. Daniels, M.J. Hale, 2012. Archaeological Evaluation for the Tierra Del Sol Project. San Diego County, California.

- Hale, M., S. Andrews, M. Dalope, A. Giacinto, and N. Hanten 2012. *Phase I Cultural Resources Inventory of* 7,650 acres in Management Areas 1B, 3D, and 3E Edwards Air Force Base, Kern County, California. Prepared for Richard Bark, JT3 LLC, Subcontract Number 1A10000101.
- Hale, M., A. Giacinto, and J. Schaefer 2012. Class III Cultural Resources Inventory for the Campo Invenergy Project, Campo Indian Reservation, San Diego California.
- Giacinto, A., and M. Becker 2012. *Padre Dam Eastern Service Area Secondary Connection-Alternative Site Location*. Letter Report. San Diego County, California.
- Giacinto, A., and J. Cook 2011. *Cultural Resource Study for the UOMP Project*. Letter Report.San Diego County, California.
- Ghabhláin, S., A. Giacinto, and T. Quach 2011. *Cultural Resources Evaluation for the Quarry Creek Project.* City of Carlsbad, California.
- DeCarlo, M.M., A. Giacinto, and W.T. Eckhardt 2010. Cultural Resources Inventory for the *Proposed Colorado River Substation Expansion Project*. Riverside County, California.
- Cook, J.R., A. Garcia-Herbst, A. Giacinto, and M. Dalope 2010. Addendum to HDR|e²M Final Report: Prehistoric Artifact Scatters, Bedrock Milling Stations and Tin Can Dumps: Results of a Cultural Resources Study for the SDG&E East County Substation Project. San Diego County, California.

Presentations

- *Shifting Concepts of "Cultural Reousource" in CRM.* Presented by Adam Giacinto during Renewable Energy Symposium for Society for California Archaeology Conference. Ontario, CA. 2016.
- *Shifting Concepts of Non-Significant Cultural Resources.* Presented by Giacinto, Comeau, and Hale for Zzyzx Conference. Zzyzx, CA. 2015.
- Managing California's Cultural Resources on Public Lands: A Third Party Consultant Perspective. Presented Hale and Giacinto for Society for California Archaeology, San Diego, 2015.
- Invited Guest Lecture on Cultural Resources in CEQA. University of San Diego, CA. 2015.
- A GIS Analysis of Ancient Lake Cahuilla Archaeological Sites, Riverside County, CA, United States. For Society for California Archaeology, San Diego, 2012.
- *Emergent Trends of San Diego Cultural Resource Management.* For Society for California Archaeology, San Diego, 2012.
- A GIS Analysis of Ancient Lake Cahuilla Archaeological Sites, Riverside County, CA, United States. For Balancias y Perspectivas, National Institute of Archaeology and History (NIAH), Mexicali, MX, 2011.

William Burns, RPA

Project Archaeologist

William Burns is an archaeologist with over 15 years' experience in cultural resource management. He is highly knowledgeable about the California Environmental Quality Act, the National Environmental Policy Act, the Native American Graves Protection and Repatriation Act, and the National Historic Preservation Act, particularly the Section 106 process. Mr. Burns evaluates buildings and districts for archaeological sensitivity and possible inclusion on the National Register of Historic Places. He assesses project and building plans for archaeological sensitivity and reviews archaeological reports on the state government regulatory end of the process.

Mr. Burns possesses expertise about Pre-contact archaeological sites, paleocoastline reconstruction, and artifact identification and analysis. He applies this expertise to archaeological report writing and editing for Section 106 projects. He also serves on field crews and as a supervisor on archaeological projects,

EDUCATION

MS, Coastal and Marine Archaeology, 2010, University of York, Department of Archaeology, York, United Kingdom BA, Anthropology, Minor in Mathematics, 2004, University of Massachusetts at Amherst, Massachusetts **CERTIFICATIONS** Register of Professional Archaeologists (RPA) Divemaster (National Association of Underwater Instructors) OSHA HAZWOPER (40-hour) Basic First Aid/BBP (American Heart Association)

Adult CPR/AED (American Heart Association)

overseeing surveys, site examinations, data recoveries, and artifact database creation and maintenance. For precise site mapping, Mr. Burns uses GPS devices, primarily Trimble GEO XH, ArcGIS, and Maptitude.

Project Experience

Woodland Community College Performing Arts and Culinary Services Facility, Woodland, CA. Conducted records search, performed pedestrian survey, and prepared cultural resources report for school project.

Jefferson Elementary School Project, Sonoma County, CA. Conducted records search, performed pedestrian survey, and prepared cultural resources report for school project.

Washington Middle School Project, Sonoma County, CA. Conducted records search, performed pedestrian survey, and prepared cultural resources report for school project.

Cloverdale Unified School District Project, Sonoma County, CA. Conducted records search, performed pedestrian survey, and prepared cultural resources report for school project.

Alamo Mixed-Use Project, Vacaville, CA. Conducted tribal consultation, performed extended Phase I testing, and prepared cultural resources report for residential development project.

Heartland Solar Project, Mendota, CA. Conducted records search, performed cultural survey, and prepared cultural resources report for solar project.

Cascade Battery Energy Storage Project, Stockton, CA. Conducted records search, performed cultural survey, and prepared cultural resources report for school project.

Foothill High School Portable Replacement and New Science Classrooms Project, Pleasanton, CA. Conducted records search, performed cultural survey, and prepared cultural resources report for school project.

Amador Valley High School Portable Replacement and New Science Classrooms Project, Pleasanton, CA. Conducted records search, performed cultural survey, and prepared cultural resources report for school project.

Alameda County Water District Advance Metering Infrastructure Project, Alameda County, CA. Conducted records search, and prepared cultural resources inventory, monitoring plan, sensitivity study report for utilities project.

Spectrum Charter Communications Alturas Project, Modoc County, CA. Conducted records search, performed survey, and prepared cultural resources report for utilities project.

Bowman Charter School Field Project, Auburn, CA. Conducted records search and prepared cultural resources report for school project.

San Geronimo Treatment Plant Emergency Generator Project, Woodacre, CA. Performed cultural survey, conducted records search and prepared cultural resources report for treatment plant improvements project.

Palm Villas Senior Center, Saratoga, CA. Performed cultural and paleontological survey, conducted records search and prepared cultural resources report for senior care facility.

CSU Maritime Academy Faculty Road Repairs, Vallejo, CA. Conducted records search, preformed pedestrian survey, and prepared cultural resources report for university upgrades project.

CSU Maritime Academy Dining Center Patio Project, Vallejo, CA. Conducted records search, preformed pedestrian survey, and prepared cultural resources report for university upgrades project.

San Carlos Fuel Management Project, San Carlos, CA. Performed cultural survey, conducted records search and prepared cultural resources report for vegetation management project.

CSU Maritime Academy Basin Dredging, Vallejo, CA. Performed biological survey for basin dredging project.

Mission Bay Restoration Project, San Diego, CA. Performed biological survey for eelgrass restoration project.

Eaton Road Improvements, Chico, CA. Contributed to cultural resources report for Caltrans highway Improvement Project.

Centennial Flats Solar Project, La Paz County, AZ. Organized crew to perform pedestrian survey, and prepared cultural resources report for large solar farm project.

Reedley Field DMV Office, Reedley, CA. Performed cultural survey, conducted records search and prepared cultural resources report for state office project.

Byron Airport Improvements Project, Byron, CA. Performed cultural survey for airport improvements project.

Spectrum Charter, Highways 1 and 68, Monterey, CA. Conducted records search and prepared cultural resources report for fiber optic installation project.

Roblar Road Quarry, Sonoma County, CA. Performed cultural and paleontological survey, performed extended Phase I testing, performed tribal outreach, and prepared cultural resources report for quarry project.

El Dorado Hills Wastewater Treatment Plant, El Dorado County, CA. Conducted records search and prepared cultural resources report for water treatment plant.

Fairgrounds Drive Subdivision, Sacramento, CA. Conducted records search and prepared cultural resources report for residential subdivision project.

Fresno State Student Union, Fresno, CA. Conducted records search, preformed pedestrian survey, and prepared cultural resources report for university project.

Hunter Subdivision Project, St Helena, CA. Conducted records search, preformed pedestrian survey and extended Phase 1 testing, and prepared cultural resources report for residential subdivision project.

Daylight Solar Project, Kings County, CA. Conducted records search, preformed pedestrian survey, and prepared cultural resources report for solar farm project.

Tres Amigos Solar Project, Los Banos, CA. Conducted records search, preformed pedestrian survey, and prepared cultural resources report for solar farm project.

North 16th Street Streetscape, Sacramento, CA. Prepared cultural resources report for street revitalization project.

Wheeler North Reef Restoration Project, San Clemente, CA. Performed cultural survey, conducted records search and prepared tribal cultural resources report for underwater reef restoration project.

Delano Field DMV Office, Delano, CA. Performed cultural survey, conducted records search and prepared cultural resources report for state office project.

Auburn Interfaith Food Closet Project, Placer County, CA. Conducted records search and prepared cultural and paleontological resources report for commercial development project.

University of California, Davis Emerson Hall Replacement Project, Davis, CA. Conducted records search for university development project.

Proxima Solar Energy Center Project, Stanislaus County, CA. Performed cultural and paleontological survey, conducted records search and prepared cultural and paleontological resources report for solar farm project.



South Lake Solar and Energy Project, Fresno County, CA. Performed cultural and paleontological survey, conducted records search and prepared cultural and paleontological resources report for solar farm project.

Gonzaga Ridge Wind Farm, Merced County, CA. Conducted records search, performed survey, and prepared cultural resources report for wind farm project.

Marin Country Club Steam Restoration Project, Novato, CA. Conducted records search and prepared cultural resources report for stream restoration project.

North Natomas Aquatic Center Project, Sacramento, CA. Conducted records search and prepared cultural resources report for community center project.

Lakeville Highway Dock Project, Petaluma, CA. Conducted records search and assisted in cultural resources report preparation for dock construction project.

Press Democrat Project, Rohnert Park, CA. Conducted records search for cultural resources report for commercial development.

Orchard Creek Apartments, Rocklin, CA. Conducted field survey, prepared cultural resources report for housing development.

Los Angeles Department of Water and Power, Bishop, CA. Conducted cultural monitoring of power line clearing.

California High-Speed Rail Project, Construction Package 2-3, Fresno to Bakersfield, Dragados / Flatiron Joint Venture, Fresno, Kings, Counties of Tulare and Kern, California. Conducted field survey, organize and manage cultural, tribal, and paleontological monitors, prepared cultural resources survey reports and monthly summaries.

Edwards Air Force Base Solar Project, Terra-Gen, Kern County, California. Conducted records search for large solar project.

Little Bear Solar Project, First Solar, Inc., Mendota, California. Conducted field survey, prepared cultural resources report for solar energy development.

Siskiyou Hall Project, California State University, Chico, Butte County, California. Prepared cultural resources report for campus construction project.

McCown Minor Land Division Project, Davenport Construction, Placer County, California. Prepared cultural resources report for land division project.

Castilleja School Project, City of Palo Alto, California. Prepared cultural resources report for school improvements.

Roberts' Ranch Project, City of Vacaville, California. Conducted field survey for residential development.

Bellevue 7 Ranch Project, Ryder Homes of California, Inc., City of Santa Rosa, California. Conducted

field survey, prepared cultural resources report for residential development.

Rohnert Park Water Tank Project, City of Rohnert Park, California. Conducted extended phase I field survey, prepared cultural resources report for water tank construction.

Peach Tree Solar Project, Sunworks, Inc., Yuba County, California. Conducted field survey, performed records search, prepared cultural resources report for solar installation at country club.

River Bluff Lower Terrace Project, O'Dell Engineering., City of Ceres, California. Conducted field survey, prepared cultural resources report for city park improvements.

El Dorado Irrigation District Flume Replacements, El Dorado Irrigation District, El Dorado County, California. Conducted field survey, prepared site forms, prepared cultural resources report for flume replacements and canal improvements.

Las Gallinas Valley Sanitary District Secondary Treatment Upgrade Project, Las Gallinas Valley Sanitary District, Marin County, California. Conducted field survey, prepared cultural resources report for water treatment plant improvements.

Auburn Riparian Vegetation Management Project, Auburn Area Recreation and Parks District, City of Auburn, California. Conducted field survey, prepared site forms, prepared cultural resources report for vegetation management recreation areas.

Arden Gateway Project, Fulcrum Property, Placer County, California. Prepared cultural resources report for commercial and residential development.

California Boulevard Roundabouts Project, Caltrans, City of Napa, California. Conducted extended phase I field survey, monitored geotechnical borings.

University Village Housing Project, City of Merced, Merced, California. Conducted field survey, prepared cultural resources report for housing development.

Yokohl Ranch Housing Development Project, The Yokohl Ranch Company LLC, Tulare County, California. Conducted field survey, performed site evaluation for large housing development.

Aera Energy Cultural Resources Inventory, Aera Energy LLC, Kern County, California. Conducted field survey, performed site evaluation, prepared cultural resources report for inventory existing cultural resources present for planning purposes.

Aera Energy Waterline Installation Project, Aera Energy LLC, Kern County, California. Conducted field survey, performed site evaluation, prepared cultural resources report for proposed waterline installation.

Granite Construction Clovis Site Development, Granite Development LLC, Clovis, California. Conducted field survey, prepared cultural resources report for business development.

Little Lake Line B Town Drain System Construction Project, Riverside County Flood Control and Water Conservation District, Riverside County, California. Served as cultural and paleontological

monitor.

Parking Structure Project, Academy of Our Lady of Peace, San Diego, California. Provided artifact analysis and report preparation.

Yorba Avenue Warehouse Project, Pacific Industrial Inc., Long Beach, California. Prepared a cultural resources letter report based on a records search and field survey for construction of a warehouse and office facility with parking lots and retention basins.

Proctor Valley Village 14 and Preserve Project, County of San Diego, California. Conducted field survey and site evaluation, prepared cultural resources report, and provided artifact analysis for a component of the Otay Ranch master-planned community.

Vista Canyon Ranch Sewer Line Project, Vista Canyon Ranch LLC, City of Santa Clarita, California. Provided field survey, site evaluation, and artifact analysis for a mixed-use residential and commercial development.

Rancho Cucamonga Northeastern Sphere Annexation Area, Sargeant Town Planning, Rancho Cucamonga, California. Conducted field survey and site evaluation of a potential annexation area.

Southern California Edison Bishop Service Center, Elements Architecture, Inc, City of Bishop, California. Conducted field survey and site evaluation, analyzed artifacts, and prepared report for construction of an electrical line service center facility.

Palm Avenue Distribution Center, IDS Real Estate Group, San Bernardino, California. Conducted field survey and site evaluation, and assisted with preparation of a cultural and paleontological resources monitoring report for warehouse/distribution center construction.

Newhall Homestead South Project, Newhall Land and Farming Company, Los Angeles County, California. Participated in intensive-level field survey of a 2,535 project site for a residential and commercial development.

Five Lagunas, Merlone Geier Management LLC, Laguna Hills, California. Completed a records survey for redevelopment of a mall property.

8777 Washington Boulevard Project, Guild GC (VCN LP), Culver City, California. Conducted a field survey and building evaluation for a commercial building remodel of a two-story, mixed-use building.

San Onofre to Pulgas Double Track, PGH Wong Engineering, San Diego County, California. Analyzed artifacts and prepared report for a railroad construction project.

Relevant Previous Experience

Archaeologist, Duke Cultural Resource Management, Rancho Santa Margarita, California. Participated in archaeological monitoring in Riverside County.

Co-owner and Principal Invesitgator, Archaeological Response Consultants. Prepared and wrote reports for archaeological projects.

Field Director/Crew Chief, Tetratech Inc., Pittsburgh, Pennsylvania. Supervised archaeological field crews (up to 25 people); managed archaeological projects for pipeline/energy projects; coordinated/contacted monitors, landowners, and land agents; and wrote site summaries. Supervised archaeological field crew of 20 on a multi-state gas pipeline survey (Pennsylvania Pipeline Project, Sunoco).

Field Supervisor, Public Archaeology Laboratory, Pawtucket, Rhode Island. Supervised archaeological field crews of up to 20 people. Assessed archaeological sensitivity and prepared archaeological technical reports.

Archaeologist, Public Archaeology Laboratory, Pawtucket, Rhode Island. Performed archaeological field work.

Rhode Island Marine Archaeology Project, Newport Rhode Island. Created an artifact analysis/tracking database.

Archaeological Field Supervisor, University of Massachusetts, Archaeological Services, Amherst, Massachusetts. Performed archaeological field work, mapped and laid in units, and supervised six-member crew. Projects included:

- Turner Falls Airport, Massachusetts—Field worker and lithic analyst for Paleo-Indian camp.
- Cohasset Roundhouse, Massachusetts—Monitored machine excavated nineteenth century railroad roundhouse.
- Tappan Zee Bridge Replacement, Hudson River, New York—Surveyed and mapped nineteenth century coal barge.

Technical Services Division Assistant, Massachusetts Historical Commission, Boston, Massachusetts. Reviewed projects for historic assessment and archaeological sensitivity. Processed archaeological reports and managed report collection. Processed archaeological site forms for State Inventory. Communicated with public and various agencies about Commission policies. General clerical work.

Lab Assistant, Rhode Island Marine Archaeology Project, Newport, Rhode Island. Analyzed and conserved artifacts.

Artifact Curations Assistant/Analyst, Massachusetts Historical Commission, Boston, Massachusetts. Identified and analyzed pre-contact and historic artifacts for the Southwest Corridor and Central Artery Massachusetts Department of Transportation projects in and around Boston. Installed museum exhibits at the Massachusetts Historical Commission Museum.

Vice President and Board Member, The James Cook Foundation, Newport, Rhode Island. Oversee annual meeting. Attend fundraising workshops given by Rhode Island Foundation Seminar. The foundation is dedicated to the preservation of James Cook's shipwrecks in Rhode Island.

Pre-contact Analyst, Historic Artifact Analyst, University of Massachusetts Archaeological Services, Amherst, Massachusetts. Analyzed primarily lithics, aboriginal ceramics, historic bottles and ceramics.

Volunteer, Hadley Historical Society, Hadley, Massachusetts. Identified and recorded Pre-contact artifacts.

Student, University of Massachusetts Archaeological Services, Amherst, Massachusetts. Cleaned historic and Pre-contact artifacts, data entry, photo labeling.

Student, University of Massachusetts Field School & Lab, Amherst, Massachusetts. Participated in Phase II excavation of W.E.B. DuBois boyhood homesite. Cleaned and identified historic artifacts, data entry, photo labeling, site map creation w/ AutoCad, ceramics research.

Volunteer, Rhode Island Marine Archaeology Project, Newport, Rhode Island. Summer/Fall 2003 – Present. As field worker, assisted with mapping and excavation of eighteenth century Revolutionary War British shipwrecks. Contributed to artifact identification and conservation in the lab.

Instructor, Rhode Island Marine Archaeology Project. As instructor, taught techniques for mapping underwater archaeological sites.

Publications and Conference Presentations

- Burns, William. 2019. Cultural Resources Inventory Report: Heartland Solar Project, Kings County, California. Dudek and Associates #11021, Fresno County, California.
- Burns, William and Adam Giacinto. 2019. *Cascade Battery Energy Storage Project, Stockton, California.* Dudek and Associates #12030, Stockton, California.
- Giacinto, Adam, Burns, William, Hanten, Nicholas, Steffen, Fallin, and Kathryn Haley. 2019. *Cultural Resources Inventory Report and Monitoring Plan for the Alameda County Water District Advanced Metering Infrastructure Project*. Dudek and Associates #11046, Alameda County, California.
- Burns, William. 2019. Cultural Resources Letter Report for the Amador Valley High School Portable Replacement and New Science Classrooms Project, Pleasanton, California. Dudek and Associates #11879, Woodacre, California.
- Burns, William. 2019. Cultural Resources Letter Report for the Foothill High School Portable Replacement and New Science Classrooms Project, Pleasanton, California. Dudek and Associates #11879, Woodacre, California.
- Giaconto, Adam, Hale, Micah, and William Burns. 2019. *Cultural Resources Inventory Report for the Spectrum Charter Communications Alturas Project, Modoc County, California.* Dudek and Associates #11800, Modoc County, California.
- Burns, William. 2019. Cultural Resources Inventory Report for the Bowman School Field Project, Auburn, California Negative Findings. Dudek and Associates #11799, Auburn, California.
- Burns, William and Adam Giacinto. 2019. *Cultural Resources Inventory Report for the San Geronimo Treatment Plant Emergency Generator Project, Woodacre, California Negative Findings.* Dudek and Associates #11811, Woodacre, California.
- Burns, William and Adam Giacinto. 2019. *Cultural Resources Inventory Report for the Dining Center Patio Project at the California Maritime Academy Campus, Vallejo, California – Negative Findings*. Dudek and Associates #11779, Vallejo, California.

- Burns, William and Adam Giacinto. 2019. *Cultural Resources Inventory Report for the Faculty Drive Rehabilitation Project at the California Maritime Academy Campus, Vallejo, California Negative Findings*. Dudek and Associates #11763, Vallejo, California.
- Burns, William, Ryan Brady and Michael Williams. 2019. *Cultural and Paleontological Resources Assessment for the Palm Villas Saratoga Project, City of Saratoga, California Negative Findings*. Dudek and Associates #10738, Saratoga, California.
- Burns, William and Adam Giacinto. 2019. *Cultural Resources Inventory Report for the San Carlos Fuel Management Project, City of San Carlos, California Negative Findings*. Dudek and Associates #11719, San Carlos, California.
- Pham, Angela, Adam Giacinto, and William Burns. 2019. *Cultural Resources Inventory Report for the Byron Airport Project, Contra Costa County, California.* Dudek and Associates #9269, Contra Costa County, California.
- Burns, William, Sarah Siren, Michael Williams, and Adam Giacinto. 2019. *Cultural and Paleontological Resources Letter Report for the Department of Motor Vehicle Reedley Field Office Replacement Project, City of Reedley, California – Negative Findings*. Dudek and Associates #11574, Reedley, California.
- Giacinto, Adam and William Burns. 2019. *Cultural Resources Inventory and Extended Phase I Report for the Hunter Subdivision Project, Napa County, California.* Dudek and Associates #10839, Napa County, California.
- Burns, William and Adam Giacinto. 2019. *Cultural Resources Inventory Report: Daylight Legacy Solar Project, Kings County, California.* Dudek and Associates #11047, Kings County, California.
- Giacinto, Adam, Kate Kaiser, and William Burns. 2019. Archaeological Survey Report: State Route 99/Eaton Road Interchange Improvements. Dudek and Associates #11229, Chico, California.
- Hale, Micah, Adam Giacinto, Jessica Colston, and William Burns. 2019. *Cultural Resources Inventory for the Centennial Flats Project, La Paz County, Arizona.* Dudek and Associates #11557, La Paz County, Arizona.
- Giacinto, Adam and William Burns. 2019. *Cultural Resources Inventory Report for the El Dorado Hills Wastewater Collection Facility Relocation Project, El Dorado County, California.* Dudek and Associates #8858, El Dorado County, California.
- Burns, William and Adam Giacinto. 2018. *Cultural Resources Inventory Report for the Fairgrounds Drive Subdivision Project, City of Sacramento, California Negative Findings*. Dudek and Associates #11482, Sacramento, California.
- Steffen, Fallin, Nicole Frank, William Burns, and Samantha Murray. 2018. *Cultural Resources Technical Report for the Keats Building and Amphitheater, California State University, Fresno*. Dudek and Associates #11446, Fresno, California.

- Burns, William and Adam Giacinto. 2018. *Cultural Resources Inventory Report: Tres Amigos Solar Project.* Dudek and Associates #10857, Los Banos, California.
- Burns, William. 2018. Archaeological Survey Report for the North 16th Street Streetscape, City of Sacramento, California. Dudek and Associates #10392, Sacramento, California.
- Giacinto, Adam, Burns, William, Brady, Ryan, and Micah J. Hale. 2018. *Cultural Resources Inventory Report* for the Gonzaga Ridge Wind Repowering Project, Merced County, California. Dudek and Associates #10506, Merced County, California.
- Burns, William. 2018. Underwater Cultural Resources Investigation Report for the Wheeler North Reef Expansion Project, City of San Clemente, California. Dudek and Associates #10831, San Clemente, California.
- Burns, William, Sarah Siren, Michael Williams and Adam Giacinto. 2018. *Cultural and Paleontological Resources Inventory Report for the South Lake Solar Energy Project, Fresno County, California.* Dudek and Associates #9755, Fresno County, California.
- Burns, William. 2018. Cultural Resources Letter Report for the North Natomas Aquatics and Community Center Project, City of Sacramento, California. Dudek and Associates #10626, Sacramento, California.
- Burns, William. 2018. Cultural Resources Inventory Report for the Orchard Creek Apartments Project, City of Rocklin, California Negative Findings. Dudek and Associates #10696, Rocklin, California.
- Burns, William, Jennifer DeAlba, Michael Williams and Adam Giacinto. 2018. *Cultural and Paleontological Resources Inventory Report for the Auburn Interfaith Food Closet Project, Placer County, California.* Dudek and Associates #11099, Placer County, California.
- Burns, William and Angela Pham. 2018. *Cultural Resources Letter Report for the Delano DMV Field Office Replacement Project, City of Delano, California*. Dudek and Associates #9002, Delano, California.
- Burns, William and Adam Giacinto. 2018. *Cultural Resources Inventory Report for the Tres Amigos Solar Project, Merced County, California.* Dudek and Associates #10857, Merced County, California.
- Giacinto, Adam and William Burns. 2018. *Cultural Resources Inventory Report for the Marin Country Club Stream Restoration Project, Novato, California.* Dudek and Associates #8569, Novato, California.
- Giacinto, Adam, Angela Pham and William Burns. 2018. *Cultural Resources Inventory for the 6500 Lakeville Highway Dock Project, Sonoma County, California.* Dudek and Associates #10673, Sonoma County, California.
- Dotter, Kara, Sarah Corder, William Burns, and Adam Giacinto. 2017. *Historical Resources Technical Report* for Siskiyou Hall, California State University, Chico Campus. Dudek and Associates #10174, Encinitas, California.

- Burns, William and Adam Giacinto. 2017. *Cultural Resources Inventory Report for the River Bluff Lower Terrace River, City of Ceres, California.* Dudek and Associates #10083, Encinitas, California.
- Burns, William, Kara Dotter, and Adam Giacinto. 2017. *Cultural Resources Inventory Report for the Bellevue 7 Ranch Project, City of Santa Rosa, California.* Dudek and Associates #9931, Encinitas, California.
- Corder, Sarah, Samantha Murray, William Burns, and Adam Giacinto. 2017. *Cultural Resources Study for the Castilleja School Project, City of Palo Alto, Santa Clara County, California*. Dudek and Associates #10056, Encinitas, California.
- Giacinto, Adam and William Burns. 2017. *Cultural and Paleontological Resources Inventory for the McCown Minor Land Division Project, Placer County, California.* Dudek and Associates #9985, Encinitas, California.
- Giacinto, Adam, William Burns, and Micah Hale. 2017. *Cultural Resources Inventory Report for the 2017 Flume Replacement Project, El Dorado County, California*. Dudek and Associates #8858, Encinitas, California.
- Burns, William, Micah Hale, and Adam Giacinto. 2016. *Cultural Resources Inventory Report for the Peach Tree Solar Project, Yuba County, California*. Dudek and Associates #10037, Encinitas, California.
- DeCarlo, Matthew, William Burns, and Adam Giacinto. 2016. *Cultural Resources Inventory Report for the Auburn Area Recreation and Parks District's Riparian Vegetation Management Project, Placer County.* Dudek and Associates #9798, Encinitas, California.
- Burns, William. 2016. Cultural Resources Report for the Proposed Las Gallinas Sanitary District Secondary Treatment Upgrade Project, Marin County. Dudek and Associates #9279, Encinitas, California.
- Burns, William. 2016. *Cultural Resources Letter Report for the Arden Gateway Project, City of Sacramento, California*. Dudek and Associates #9805, Encinitas, California.
- Giacinto, Adam, William Burns, and Angela Pham. 2016. *Cultural Resources Inventory and Extended Phase I Report for the Rohnert Park Water Tank Project, Sonoma County.* Dudek and Associates #9810, Encinitas, California.
- Burns, William and Brad Comeau. 2015. *Negative Cultural Resources Report for the Yorba Avenue Commerce Center, Chino, California.* Dudek and Associates #9105, Encinitas, California.
- Comeau, Brad, William Burns, and Micah Hale. 2015. *Cultural Resources Monitoring Report for the SCE Bishop Service Center Project, Inyo County, California*. Dudek and Associates #8392, Encinitas, California.
- Comeau, Brad, William Burns, and Micah Hale. 2015. *Cultural Resources Monitoring Report for the Palm Avenue Commerce Center, San Bernardino, California*. Dudek and Associates #8830, Encinitas, California.

- Comeau, Brad, William Burns, and Micah Hale. 2015. *Cultural Resources Monitoring Report for the LOSSAN San Onofre to Pulgas Double Track Project, San Diego County, California*. Dudek and Associates #6518, Encinitas, California.
- Comeau, Brad, Scott Wolf, Adriane Dorrler, and William Burns. 2015. *Cultural Monitoring and Site Evaluation for the Academy of Our Lady of Peace Parking Lot, San Diego, California*. Dudek and Associates #8407, Encinitas, California.
- Wolf, Scott, Brad Comeau, William Burns, and Micha Hale. 2015. *Cultural Resources Report for the Proctor Valley Village 14 & Preserve Project, San Diego County, California*. Dudek and Associates #8447, Encinitas, California.
- Burns, W. and H. Hebster. 2014. Intensive (Locational) Survey of Long Pond Wastewater Treatment Plant, Falmouth, Massachusetts. Public Archaeology Laboratory Report, Pawtucket, Rhode Island.
- Burns, W. and A. Leveillee. 2014. *Site Examination of New London Quartzite Quarry, Warwick, Rhode Island.* Public Archaeology Laboratory Report. Pawtucket, Rhode Island.
- Burns, W. and A. Leveillee. 2014. *Intensive (Locational) Survey of Narragansett Longhouse Trail Improvements*. Charlestown, Rhode Island. Public Archaeology Laboratory Report, Pawtucket, Rhode Island.
- Burns, W. 2010. "Getting Their Bearings: A Comparative Study of the First Seafarers in Australasia and the Aegean Sea." Master's thesis; University of York, United Kingdom.
- Burns, W. 2010. "Quartz Clues: What Lithics Can Reveal About Migration Routes in Scandinavia." Paper presented at the Eighth Annual Mesolithic in Europe Conference, Santander, Spain.
- Burns, W., A.E. Lewis, E.L. Bell, and T. Hollis, eds. 2009. "Bibliography of Archaeological Survey and Mitigation Reports: Massachusetts. 2009." 2006-2007 Annual Supplement. Massachusetts Historical Commission, Boston, Massachusetts.
- Burns, W., R. Paynter, K. Lynch, B. Comeau, T. Ostrowski, R. Morales, M. Garber, E. Norris, and Q. Lewis.
 2005. "The Burghardts of Great Barrington: The View from the W.E.B. DuBois Boyhood Homesite."
 Paper presented to the Society for Post-Medieval Archaeology and Society for Historical Archaeology Joint Meeting, York, United Kingdom.
- Burns, W. 2004. "Newport's Infamous Slaver Wreck." Paper presented at the 44th Annual Northeastern Anthropological Association Conference, Dartmouth College, Hanover, New Hampshire.
- Burns, W. 2004. "Investigations of Reputed Slave Ship, The Gem." Bachelor's thesis; University of Massachusetts, Amherst, United States.

Ross Owen, M.A., RPA

Archaeologist

Ross Owen is an Archaeologist with five years of experience conducting Phase I and II archaeological surveys. Working on identification-level surveys Mr. Owen has acclimated to working on a diverse range of site types and landforms which has contributed to his knowledge of material culture, site formation processes, and soil development – primarily in the mid-Atlantic region, California and Nevada.

In his role as a field/lab technician and as a field director, Mr. Owen has been involved in all stages of completing Phase I and II surveys and evaluation for compliance with Section 106 of the NHPA as well as CEQA. He also carries experience in records searches and archival work, tribal consultation, data management, field excavation, and laboratory processing. Outside of work he has sought out opportunities to present research in academic settings, speak with the public about archaeology to better communicate archaeological significance to the public.

Education

Indiana University of Pennsylvania M.A., Applied Archaeology, 2019 Boston University B.A., Archaeology, 2014 **Certifications**

Register of Professional Archaeologists #18014

Professional Affiliations Society for American Archaeology

Project Experience

Development

Worldview SpaceX Class III Cultural resource Inventory, Nye County, NV, 2019. Preparation and review of BLM submission packet containing final drafts of report and BLM-required digital data. Submitted to Nevada BLM Tonopah Field Office.

J. Chen Stone Ave Tech Studies 4050 Grange Road, Sonoma County, CA, 2019. Conducted in-person records search and review at the Northwest Information Center and compiled results in report. Pedestrian archaeological survey of project area. Preparation of report documenting negative findings. Tribal correspondence soliciting information on known resources within project area and project-related concerns.

Martis Valley Trail Segment 3F, Placer County, CA, 2019. Conducted in-person records search and review at the North Central Information Center and compiled results in report. Pedestrian archaeological survey of project area. Preparation of report documenting negative findings. Tribal correspondence soliciting information on known resources within project area and project-related concerns.

Hunter Subdivision Phase II Evaluation, Napa County, CA, 2020.

Gateway Village Part 2, Placer County, CA, 2020.

Education

Cloverdale Unified School District Project, Sonoma County, CA, 2019. Conducted archaeological survey and reporting for proposed athletic facilities for the Cloverdale Unified School District. Tribal correspondence soliciting information on known resources within project area and project-related concerns.

California State University – Chico Master Plan EIR, Butte County, CA, 2019. Conducted archaeological survey and reporting of survey results. Assisted in compilation of archaeological report for Master Plan EIR document.

Woodland Community College Performing Arts and Culinary Services Facility Project, Yolo County, CA, 2019. Conducted archaeological survey and reporting for a proposed university facilities expansion in Yolo County.

Energy

Arlington Solar Energy Project, Riverside County, CA, 2019. Assisted in re-locating, sketching and sub-meter accuracy GPS recording of WWII-era military training features as required by a Historic Preservation Treatment Plan drafted to mitigate adverse effects on National Register-eligible archaeological resources.

Fish Springs Ranch Solar Energy Center Project, Washoe County, NV, 2019-2020. Survey and recordation of archaeological sites. Attribute analysis in field of prehistoric and historic resources. Conducted records search review and compilation for report. Reporting of field survey results for Nevada Bureau of Land Management, and preparation of Intermountain Antiquities Computer System (IMACS) forms documenting new sites and updates to previously recorded sites. Guided field view of resources recorded on private lands with Next Era and Pyramid Lake Paiute Tribal Historic Preservation Officer.

Round Mountain Area Project – Table Mountain Site, Butte County, CA, 2019. Conducted archaeological survey and reporting for a proposed power generation facility in Butte County.

Heartland Solar Development Project, Fresno County, CA, 2019. Led crew for survey of 2,000+ acre archaeological survey of a proposed solar energy project.

Gonzaga Wind Repowering Project, Merced County, CA, 2019. Archaeological survey for California Department of Parks and Recreation Four Rivers District proposed wind farm, associated access roads and transmission lines.

Dodge Flat Solar Energy Center, Washoe County, NV, 2019. Preparation and review of BLM submission packet containing final drafts of report and BLM-required digital data. Submitted to Nevada BLM Sierra Front Field Office.

Blythe Solar Power Project, Riverside County, CA, 2019-2020. Compilation of monitoring logs and weekly monitoring summaries to submit to client.

Sonrisa Solar Park, Fresno County, CA, 2020. Led crew for survey of 2,000+ acre archaeological survey of a proposed solar energy project.

Sloughhouse Solar Energy Project, Sacramento County, CA, 2020. Conducted archaeological survey and reporting for a proposed power generation facility.

Infrastructure

Nevada Street Phase II, City of Auburn, Placer County, CA, 2019. Archaeological monitoring of intersection realignment and utility work along Nevada Street in Auburn, CA. Reported monitoring actions and results to City of Auburn and NexGen.

AT&T Cell Tower Project, Sierra County, CA, 2020.

Municipal

SOMO Village Project, City of Rohnert Park, Sonoma County, CA, 2019. Preparation of Phase I archaeological letter report.

Dowdell Industrial Park, City of Rohnert Park, Sonoma County, CA, 2019. Conducted records search review and integrated results into report meeting United States Army Corps of Engineers standards for Section 106 and CEQA compliance.

Resource Management

Robinson Mine Conditional Use Permit Modification, Placer County, CA, 2019. Conducted in-person records search and review at the North Central Information Center and compiled results in report. Pedestrian archaeological survey of project area.

Restoration

Martis Wildlife Area Restoration Project, Placer County, CA, 2019. Demarcation of Environmentally Sensitive Areas (ESAs) in advance of construction association with wetland restoration efforts for the U.S. Army Corps of Engineers, Sacramento District and Truckee River Watershed Council. Archaeological monitoring during construction. Fieldwork to prepare a Performance Work Statement (PWS) for the Army Corps of Engineers to assess impacts to CA-PLA-5. Preparation of reports documenting monitoring and PWS efforts and results.

Water/Wastewater

Ebbetts Pass Reach 1 Water Transmission Pipeline Capital Improvement Project, Calaveras County, CA, 2019. Archaeological monitoring during construction of waterline by Calaveras County Water District. Conducted an evaluation for eligibility for the National Register of Historic Places for an unanticipated discovery found during construction. Prepared DPR site form and report documenting the site and site evaluation efforts. Consultation with the Calaveras Band of Mi-Wuk Indians and CalTrans District 10 throughout monitoring and site evaluation efforts.

El Dorado Irrigation District Pacific Tunnel Rehabilitation, El Dorado County, CA, 2019. Conducted in-person records search and review at the North Central Information Center and compiled results in report. Pedestrian archaeological survey of project area. Preparation of report documenting negative findings, and DPR update to portion of the Mormon-Carson Emigrant Trail re-located but not impacted by project design. Tribal correspondence soliciting information on known resources within project area and project-related concerns.

Relevant Previous Experience

Pennsylvania Department of Transportation Highways Archaeological Survey Team, Indiana, PA, 2017-2019. Managed a survey crew performing Phase I & II surveys throughout Pennsylvania. Conducted pre-field logistics including background research and development of GIS mapping for use with handheld GPS unit in field. Field duties included project scoping and the identification of intact soils with potential for cultural remains. Lab and office duties included the supervision of artifact processing for submission to the Pennsylvania Historical and Museum Commission, the completion of site forms and other documentation required by Pennsylvania's State Historic Preservation Office, and GIS mapping of sites, survey areas, and testing locations for Pennsylvania's Cultural Resource GIS database. Additional duties including co-authoring of reports in accordance with state standards, and the completion of an ARPA permit application for work on National Park Service land.

McCormick Taylor, Inc., Harrisburg, PA, 2015-2017. Performed controlled surface survey and shovel testing for Phase I identification-level archaeological surveys. Excavated test units stratigraphically in urban, rural, floodplain, and upland setting throughout Pennsylvania and Delaware. Edited select portions of compliance reports.

DUDEK

Johnson, Mirmiran, & Thompson, York, PA, 2015. Performed controlled surface survey and shovel testing. Completed daily paperwork and organized daily schedule and testing procedures. Delineated site boundaries and collected artifacts for lab processing. Supervised crew on a daily basis including instruction on archaeological field survey methods.

Archaeological Exploration of Sardis, Harvard University, 2013. Grant-funded research as a pXRF specialist to conduct analyses of ceramic and metallic artifacts associated with ongoing archaeological excavations of Sardis near present-day Salihli, Turkey. Analysis included a study of the effects of post-depositional processes in the environment and conservation treatments on the chemical signature of ceramics, and an attempt to source ceramics to specific geographic locations. Qualitative analysis of metals and paint pigments was also performed. Data and analyses were compiled into final reports submitted to research specialists and the expedition director.

Preservation Pennsylvania, Harrisburg, PA, 2012. Organized a press release and several email campaigns to promote the 2012 Preservation Combination State Byways Conference in Lancaster, PA. Web-page design and social media outreach for <u>www.paprojectpath.org</u> and preservationpa.org. Research and design of ProjectPATH calendar highlighting important efforts combining transportation and preservation throughout Pennsylvania.

Specialized Training

- Creating Python Scripts for Raster Analysis, Esri Academy online course. 2019.
- Python Scripting for Geoprocessing Workflows, Esri Academy online course. 2019.
- Python for Everyone, Esri Academy online course. 2019.
- Creating and Editing Metadata in ArcGIS, Esri Academy online course. 2019.
- Building Models for GIS Analysis Using ArcGIS, Esri Academy online course. 2019.
- Georeferencing Raster Data Using ArcGIS Esri Academy online course. 2019.
- Distance Analysis Using ArcGIS, Esri Academy online course. 2019.
- Preparing for Network Analysis, Esri Academy online course. 2019.
- Telling Stories with GIS Maps, Esri Academy online course. 2019.
- Getting Started with the Geodatabase, Esri Academy online course. 2019.
- Working with Coordinate Systems in ArcGIS, Esri Academy online course. 2019.
- Basics of Geographic Coordinate Systems, Esri Academy online course. 2019.
- Foundations of Interpretation, Eppley Institute for Parks and Public Lands Certificate of Completion, 2017
- Park Assets: Asset Prioritization API, Eppley Institute for Parks and Public Lands Certificate of Completion, 2017
- Section 106: Principles and Practice, SRI Foundation. 2012.



Publications

Owen, Ross. 2019. Scratching the Surface: An Interdisciplinary Approach to Interpreting and Managing Prehistoric Quarries in Michaux State Forest, Pennsylvania. A thesis submitted to the School of Graduate Studies and Research, Indiana University of Pennsylvania. May, 2019.

Presentations

"Managing Quarried Landscapes – Developing Preservation Priorities and Best Practices", 2019, Chaired session at Society for American Archaeology Annual Meeting. Albuquerque, New Mexico.

"Assessing the Potential of pXRF Analysis of Metarhyolite to Relate Artifacts with Geological Sources", 2019. Presented at Society for Pennsylvania Archaeology Meeting. Uniontown, Pennsylvania.

"PennDOT Highway Archaeological Survey Team: Providing an Immersive CRM Work Experience to Students", 2018. Presented at Society for American Archaeology Annual Meeting. Washington, D.C.

Appendix B (Confidential)

Records Search Maps and Information

Appendix C

NAHC and Tribal Correspondence

Sacred Lands File & Native American Contacts List Request

NATIVE AMERICAN HERITAGE COMMISSION

1550 Harbor Blvd., Suite 100 West Sacramento, CA 95691 (916) 373-3710 (916) 373-5471 – Fax nahc@nahc.ca.gov

Information Below is Required for a Sacred Lands File Search

Project: North Central Valley Energy Storage (10593.0003)

County: San Joaquin

USGS Quadrangle Name: Linden, CA

Township: 2 North Range: 9 East Section(s): 17, 18, 19, 20

Company/Firm/Agency: Dudek

Contact Person: Ross Owen, M.A., RPA

Street Address: 853 Lincoln Way, Suite 208

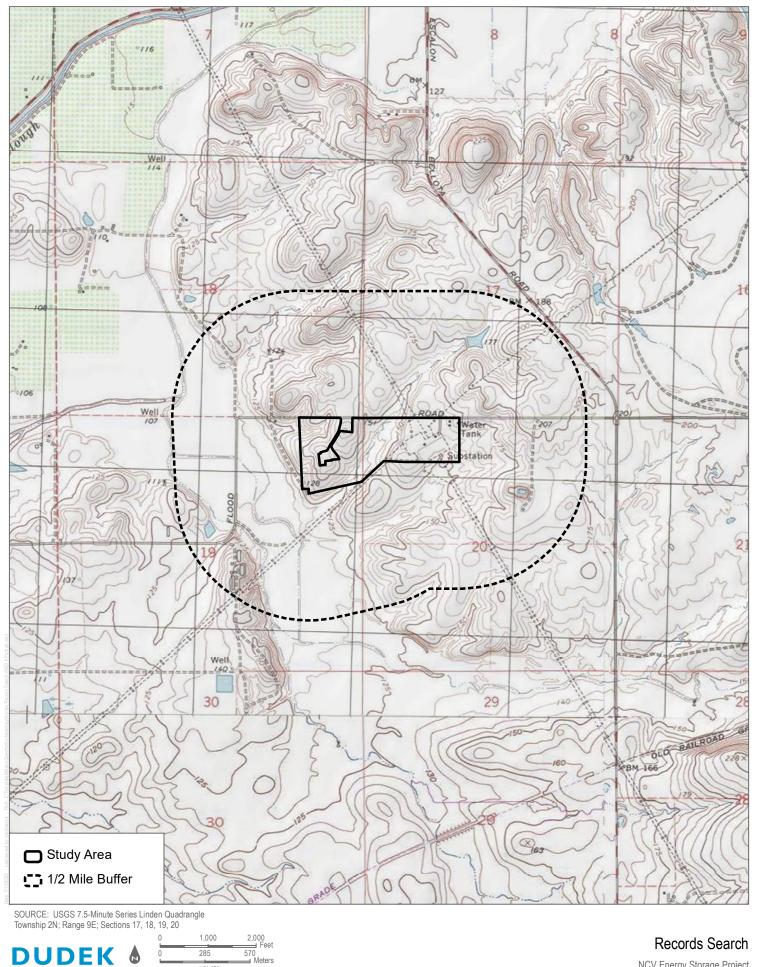
City: Auburn Zip: 95603

Phone: 916.531.8654 **Fax:** 530.887.1250

Email: rowen@dudek.com

Project Description: In preparation of a cultural resources assessment for the North Central Valley Energy Storage Project in San Joaquin County, CA, Dudek is requesting a Sacred Lands File search as part of the cultural resources Inventory process. Please provide contacts for appropriate traditionally geographically affiliated Native American representatives and/or organizations from whom this information may be also requested.

(See attached Project Location Map)



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Records Search

NCV Energy Storage Project

STATE OF CALIFORNIA



Chairperson Laura Miranda Luiseño

VICE CHAIRPERSON Reginald Pagaling Chumash

Secretary Merri Lopez-Keifer Luiseño

Parliamentarian Russell Attebery Karuk

Commissioner Marshall McKay Wintun

COMMISSIONER William Mungary Paiute/White Mountain Apache

COMMISSIONER Julie Tumamait-Stenslie Chumash

Commissioner

[Vacant]

Commissioner [Vacant]

Executive Secretary Christina Snider Pomo

NAHC HEADQUARTERS

1550 Harbor Boulevard Suite 100 West Sacramento, California 95691 (916) 373-3710 nahc@nahc.ca.gov NAHC.ca.gov

NATIVE AMERICAN HERITAGE COMMISSION

July 28, 2020

Ross Owen

DUDEK

Via Email to: rowen@dudek.com

Re: North Central Valley Energy Storage (10593.0003), San Joaquin County

Dear Mr. Owen:

A record search of the Native American Heritage Commission (NAHC) Sacred Lands File (SLF) was completed for the information you have submitted for the above referenced project. The results were <u>negative</u>. However, the absence of specific site information in the SLF does not indicate the absence of cultural resources in any project area. Other sources of cultural resources should also be contacted for information regarding known and recorded sites.

Attached is a list of Native American tribes who may also have knowledge of cultural resources in the project area. This list should provide a starting place in locating areas of potential adverse impact within the proposed project area. I suggest you contact all of those indicated; if they cannot supply information, they might recommend others with specific knowledge. By contacting all those listed, your organization will be better able to respond to claims of failure to consult with the appropriate tribe. If a response has not been received within two weeks of notification, the Commission requests that you follow-up with a telephone call or email to ensure that the project information has been received.

If you receive notification of change of addresses and phone numbers from tribes, please notify me. With your assistance, we can assure that our lists contain current information.

If you have any questions or need additional information, please contact me at my email address: <u>Nancy.Gonzalez-Lopez@nahc.ca.gov</u>.

Sincerely

Nancy Gonzalez-Lopez

Cultural Resources Analyst

Attachment

Native American Heritage Commission Native American Contact List San Joaquin County 7/28/2020

North Valley Yokuts Tribe

Katherine Perez, Chairperson P.O. Box 717 Linden, CA, 95236 Phone: (209) 887 - 3415 canutes@verizon.net

Costanoan Northern Valley Yokut

North Valley Yokuts Tribe

Timothy Perez, MLD Contact P.O. Box 717 Linden, CA, 95236 Phone: (209) 662 - 2788 huskanam@gmail.com

Costanoan Northern Valley Yokut

The Confederated Villages of

Lisjan Corrina Gould, Chairperson 10926 Edes Avenue Oakland, CA, 94603 Phone: (510) 575 - 8408 cvltribe@gmail.com

Bay Miwok Ohlone Delta Yokut

This list is current only as of the date of this document. Distribution of this list does not relieve any person of statutory responsibility as defined in Section 7050.5 of the Health and Safety Code, Section 5097.94 of the Public Resource Section 5097.98 of the Public Resources Code.

This list is only applicable for contacting local Native Americans with regard to cultural resources assessment for the proposed North Central Valley Energy Storage (10593.0003), San Joaquin County.