Appendix D1

Archaeological Resources Inventory Report - Lassen Facility

ARCHAEOLOGICAL RESOURCES INVENTORY REPORT for the FOREST RESILIENCY PROGRAM PROJECT, LASSEN SITE, LASSEN COUNTY, CALIFORNIA

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National Archaeological Database (NADB) Information

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Table of Contents

FIGURES

TABLES

APPENDICES

Acronyms and Abbreviations

Acronym/Abbreviation	Definition
APE	Area of Potential Effect
CEQA	California Environmental Quality Act
CFR	Code of Federal Regulations
CRHR	California Register of Historical Resources
DPR	California Department of Parks and Recreation
NAHC	Native American Heritage Commission
NEIC	North Eastern Information Center
NHPA	National Historic Preservation Act
NRHP	National Register of Historic Places
PRC	California Public Resources Code
project	Forest Resiliency Program Project
USACE	U.S. Army Corps of Engineers

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Management Summary

The Golden State Finance Authority proposes redevelopment of a project site in Nubieber, Lassen County for the transport and production of wood fuel pellets produced from forest materials. The proposed Lassen wood pellet processing site is located in Nubieber, California in Lassen County. The applicant contracted Dudek to perform a Phase I cultural resource inventory for the project. This archaeological resources inventory report was conducted in compliance with the California Environmental Quality Act. Due to potential future permitting related to adjacent jurisdictional waters, the U.S. Army Corps of Engineers, as the lead federal agency, will also likely review the report for compliance with Section 106 of the National Historic Preservation Act.

The project is located within California's Modoc Plateau, a volcanic tableland bounded by the Cascade Range to the west. The project site is generally located in Nubieber, California, approximately 3 miles southwest of the census-designated place of Bieber in northwestern Lassen County. Specifically, the project site is located at 653-800 Washington Avenue, Nubieber, California and is situated in Township 38 North, Range 7 East, and Sections 28 and 33 of the U.S. Geological Survey Bieber, California 7.5-minute quadrangle.

The project's direct Area of Potential Effect (APE), as represented by areas that may be subject to direct disturbance by the project, is approximately 290 acres. For the purposes of providing management recommendations, the vertical APE, as represented by the maximum depth of disturbance, is assumed to be 15 feet below the existing ground surface. It is anticipated that this depth may change based on future Project design refinements.

The proposed project would include the construction and operation of a new wood pellet processing facility, including a woodyard, green processing area, drying area, pellet mill, project storage, and loadout area. New internal roads for truck access and facility personnel access will be added, including a new road for truck access from Babcock Road at the southwest corner of the site. A new rail spur connecting to the adjacent BNSF Railway line would be added for finished product load out as well as additional rail siding tracks on-site for the storage of full and empty railcars. Other improvements would include new truck scales and a graded area for overflow raw material storage.

This study consisted of a records search of the APE and a 0.5-mile radius, a Native American Heritage Commission Sacred Lands File search, and an intensive pedestrian survey of the APE. A Northeast Information Center records search identified no resources within the APE and 10 previously recorded cultural resources within a 0.5-mile radius. The results of the Native American Heritage Commission's Sacred Lands File search did not identify the presence of documented Native American resources within the APE. An intensive-level pedestrian survey was conducted of the entire APE; this survey did result in the identification of four newly recorded historic-era trash scatters. These sites were documented and evaluated by Dudek personnel as part of the present study and none are recommended not eligible for California Register of Historical Resources or National Register of Historic Places listing. Based on these results, no known significant cultural resources will be impacted by the project as currently designed. Management recommendations for addressing potential impacts related to the inadvertent discovery of cultural resources are provided. With these recommendations appropriately implemented, the project would result in a less-than-significant impact to cultural resources (No Historic Properties Affected).

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1 Introduction

1.1 Project Location and Description

The Golden State Finance Authority proposes redevelopment of a project site in Nubieber, Lassen County for the transport and production of wood fuel pellets produced from forest materials. The proposed Lassen wood pellet processing site is located in Nubieber, California (Lassen County), approximately 3 miles southwest of the census-designated place of Bieber in northwestern Lassen County (Figure 1, Project Location). The Lassen site is located at 653-800 Washington Avenue, Nubieber, California. The production facilities would be located on a parcel approximately 65 acres in size, Assessor's Parcel Number (APN) 001-270-086. Log decking (storage) would occur on approximately 51 acres of the ~225-acre property immediately south of the production site (APNs 001-270-26, 001-270-29, and 013-040-13) (the "woodyard"). The project site is situated in Township 38 North, Range 7 East, and Sections 28 and 33 of the U.S. Geological Survey Bieber, California 7.5-minute quadrangle (Figure 1, Project Location). Elevation on the Lassen site is approximately 4,120 feet above mean sea level.

The Lassen location is a brownfield that was formerly part of a wood processing sawmill. The buildings from the prior use are located north of the project site, and were separated from the main parcel through a lot line adjustment. The Burlington Northern Santa Fe (BNSF) Railroad forms the eastern boundary of the site. An agricultural chemical company (Helena Agri-Business) and scattered residences are located to the north and west of the site, and to the east of the woodyard property. Agricultural land is located to the east and south. Primary access to the site is from Babcock Road, which connects to State Route 299.

The proposed project would include the construction and operation of a new wood pellet processing facility, including a woodyard, green processing area, drying area, pellet mill, project storage, and loadout area. New internal roads for truck access and facility personnel access will be added, including a new road for truck access from Babcock Road at the southwest corner of the site. A new rail spur connecting to the adjacent BNSF Railway line would be added for finished product load out as well as additional rail siding tracks on-site for the storage of full and empty railcars. Other improvements would include new truck scales and a graded area for overflow raw material storage.

The Area of Potential Effect (APE) analyzed herein consists of all areas of potential ground disturbance within the approximately 290-acre project site (Figure 2, Project Site). For the purposes of providing management recommendations, the vertical APE, as represented by the maximum depth of disturbance, is assumed to be 15 feet below the existing ground surface.

In preparation for the project, Dudek was contracted to perform a Phase I cultural resource inventory. This inventory was conducted in compliance with the California Environmental Quality Act (CEQA). Due to jurisdictional waters considerations and anticipated review by the U.S. Army Corps of Engineers (USACE), this inventory has been completed to standards and requirements meeting compliance with Section 106 of the National Historic Preservation Act (NHPA).

1.2 Report Structure and Key Personnel

This report is divided into five chapters. Following this introduction, Chapter 2 reviews the natural environment and the cultural context, and Chapter 3 provides the methods used to complete the current inventory. The records

search, survey results, and tribal correspondence are discussed in Chapter 4. Chapter 5 provides a cultural resources effects analysis and evaluation of the newly identified sites. Chapter 6 summarizes the cultural resources work completed for this project to date, and provides recommendations for further management of cultural resources, consistent with CEQA and Section 106 of the NHPA. Chapter 7 provides a list of references cited throughout this report. Several appendices are attached to this report. Appendix A includes confidential records search results, Appendix B contains confidential Native American Heritage Commission (NAHC) correspondence documents, Appendix C contains confidential maps, site records and documentation of newly recorded cultural resources, and Appendix D contains the resumes of key personnel.

Nicholas Hanten, MA, Gregory Wada, MA, Elizabeth Sivell, and Michael Mendiola conducted the intensive pedestrian survey. Nicholas Hanten drafted the technical report. Ross Owen MA, RPA, assisted with the report. Adam Giacinto acted as principal investigator, prepared management recommendations, and finalized the technical report. All archaeologists meet the Secretary of the Interior's standards for archaeology, and have extensive experience working within local, state, and federal regulatory contexts.

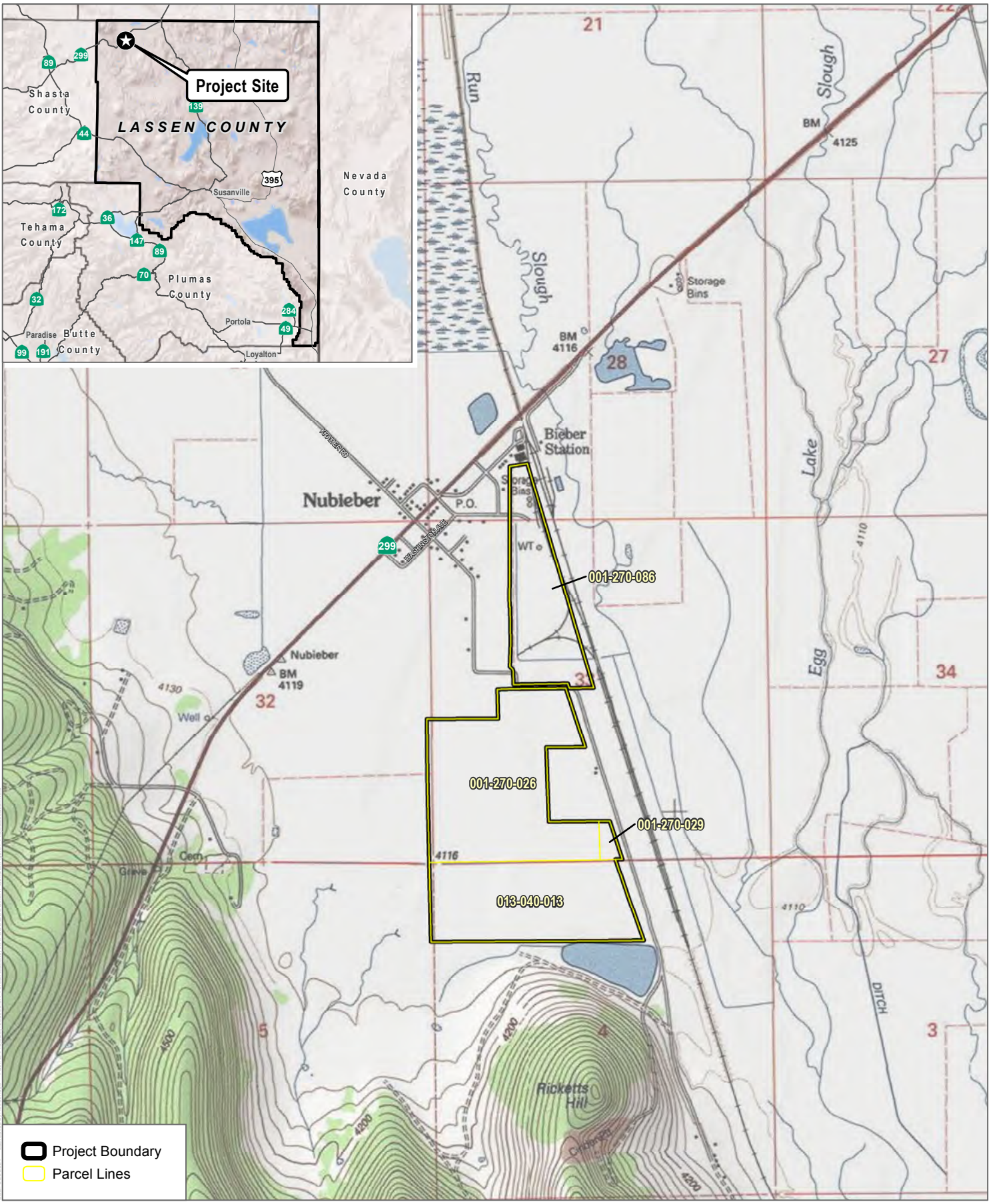
1.3 Regulatory Context

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

1.3.1 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 and 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:



SOURCE: Bing Maps 2020, Lassen County 2015

DUDEK

0 1,000 2,000 Feet

FIGURE 1

Project Location

Golden State Natural Resources, Gould Site, Lassen County, California

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SOURCE: Bing Maps 2020, Lassen County 2015

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0 500 1,000 Feet

FIGURE 2

Area of Potential Effect

Golden State Natural Resources, Gould Site, Lassen County, California

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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 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 Code of Federal Regulations (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 Sections 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 the following (36 CFR 800.5 [2]):

(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.

To comply with Section 106, the criteria of adverse effects are applied to historic properties, if any exist in the project's APE, pursuant to 36 CFR Sections 800.5(a)(1). If no historic properties are identified in the APE, a finding of "no historic properties affected" is made. 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 "adverse effect." A finding of no adverse effect may be appropriate when the undertaking's effects do not meet the thresholds in criteria of adverse effect found in 36 CFR Sections 800.5(a)(1), in certain cases when the undertaking is modified to avoid or lessen effects, 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 are expected to result from a 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).

1.3.2 California Register of Historic Resources and CEQA

In California, the term "historical resource" includes "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" (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" (PRC Section 5024.1[a]). The criteria for listing resources in the CRHR were expressly developed to be in accordance with previously established criteria developed for listing in the NRHP. 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:

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

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 California Code of Regulations, Title 14, 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 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:

- PRC Section 21083.2(g) defines "unique archaeological resource."
- 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.
- PRC Section 21074(a) defines "tribal cultural resources."
- 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.

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.

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" (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 PRC Section 5024.1[q]), it is a "historical resource" and is presumed to be historically or culturally significant for purposes of CEQA (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 (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]; PRC Section 5020.1[q]). In turn, the significance of a historical resource is materially impaired when a project does any of the following (CEQA Guidelines Section 15064.5[b][2]):

- 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.

Pursuant to these sections, the CEQA inquiry begins with evaluating whether a project site 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 (Section 21083.2[a], [b], and [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 (PRC Section 21083.2[a]; CEQA Guidelines Section 15064.5[c][4]). However, if a non-unique archaeological resource qualifies as a tribal cultural resource (PRC 21074[c]; 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 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 can occur

until the county coroner has examined the remains (Section 7050.5b). 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 (Section 7050.5c). The NAHC will notify the most likely descendant. With the permission of the landowner, the most likely descendant may inspect the site of discovery. The most likely descendant shall provide recommendations on next steps within 48 hours of being granted access to the site. The most likely descendant may recommend means of treating or disposing of, with appropriate dignity, the human remains and items associated with Native Americans.

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2 Project Context

2.1 Environmental Context

The APE is located in a rural setting, surrounded by widely scattered rural development and open space generally composed of cropland, sagebrush scrub, and wet meadow. The community of Nubeiber is immediately northwest of the project area. A majority of the APE is undeveloped, though several structures are present in the northern portion of the APE and a track yard and water tower are present just north of the center of the parcel. The Burlington Northern Santa Fe Railway Company railroad line parallels the eastern boundary of the project APE and several railroad spurs intersect the APE.

The project site is located within Big Valley at the eastern edge of the Big Valley Mountain range. Elevation on the project site is approximately 4,120 feet above mean sea level, and the topography of the APE is flat. The project site is located in a semi-arid climate where average annual temperatures range from 33.8°F to 63.4°F, and the average annual precipitation is 15.56 inches, with the highest average precipitation in the months of January and February, and the least precipitation in July (WRCC 2024).

2.2 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. California's archaeological assemblage composition is generally accepted as falling within the following overarching patterns: Paleoindian period, Archaic period, Emergent/Prehistoric period, and Ethnohistoric period. The most broadly applicable chronology for Northeastern California follows a similar framework, although elements of chronologies from the adjacent Plateau and Great Basin culture areas do play a more prominent role than elsewhere in California. Recent attempts to synthesize the various local and regional chronological schemes in the region (e.g. McGuire 2007, Delacorte 1997) have resulted in the following proposed cultural periods for northeastern California: Early Holocene (5000+ cal BC), Post-Mazama (5000-3000 cal BC), Early Archaic (3000-1500 cal BC), Middle Archaic (1500 cal BC – cal AD 700), Later Archaic (cal AD 700-1400), Terminal Prehistoric (cal AD 1400- contact).

2.2.1 Early Holocene and Post-Mazama Period (3000+ cal BC)

Occupation of the northeastern California is likely to have occurred more than 10,000 years ago, although evidence is scant. The primary examples of the Paleoindian pattern have been recorded east of the Sierra Nevada and typically include assemblage with large stemmed projectile points, high proportions of formal lithic tools, bifacial lithic reduction strategies, and relatively small proportions of groundstone tools. Most of the evidence for early Holocene habitation in California comes from a handful of Paleoindian Period lithic bifacial points, often recorded

as isolated finds or recovered from contexts with mixed provenience. In northeastern California, fluted points have been recorded at Samwel Cave, Mammoth Springs, Eagle Lake, Hat Creek and Sconchin Butte (McGuire 2007). Additional possible Paleoindian sites have been identified based on large obsidian hydration rims from artifacts recovered in the area of Honey Lake. The oldest radiocarbon date recovered from the region dates to 11,450 ± 340 BP recovered from a hearth feature in the vicinity of Tule Lake (Beaton 1991, Erlandson et al. 2007).

Post-Mazama occupation of the region is most evident from the presence of Northern side-notched projectile points across the region. In sites with good stratigraphic context, such as those found in the Surprise Valley (O'Connell 1971), Northern side-notched points post-date the 5000 cal BC Mazama ash fall and persist until ca. 3000-2500 cal BC (McGuire 2007). The distribution of the projectile point style across the Plateau and northern Great Basin suggests the point type spread to the region from the north along with other artifact types and subsistence practices.

2.2.2 Archaic Period (3000 cal BC– cal AD 1,400)

The Early Archaic period (3000-1500 cal BC) marks the beginning of increased archaeological visibility and presumably increased intensity of settlement in northeastern California. This is evident from both an increase in the number of sites with Early Archaic components, and in the nature of the assemblages. Early Archaic assemblages generally have an increased variety of tool forms and are the first regular occurrence of groundstone in the region, which suggests increased intensity of habitation and possibly decreased mobility (McGuire 2007). Projectile point forms are also more variable across the region suggesting an increase in regional cultural variation due to increased population and decreased mobility.

The trend of increased archaeological visibility and settlement differentiation continues into the Middle Archaic period (1500 cal BC – cal AD 700). In Secret Valley, for example, there is a proliferation of house structures, midden deposits, and features as well as increased richness and diversity of artifacts in Middle Archaic sites. Residential stability appears to have increased during this period and logistical mobility, particularly among male hunting parties appears to have greatly increased relative to earlier occupation in the region (McGuire 2007). Obsidian assemblages indicate decreasing source diversity during this period, suggesting that toolstone was acquired during logistical forays to high quality sources rather than opportunistic acquisition of variable quality raw material as a part of a seasonal round.

The transition to the Late Archaic period (cal AD 700-1400) is marked by major changes in the subsistence-settlement system and assemblage structure and composition, some of which may have resulted from climatic change as a result of the warmer and dryer conditions brought on by the Medieval Climatic Anomaly. Late Archaic assemblages are ubiquitous across the region and are typically marked by the presence of Rose Springs and Gunther barbed arrow points, indicating the introduction of bow and arrow technology to the region (McGuire 2007). The period appears to have been a time of resource intensification with the increased exploitation of harder to process and less calorically dense foods as well as the increased use of less productive areas including alpine zones and upland habitats of the Modoc Plateau, particularly after AD 1000.

2.2.3 Terminal Prehistoric Period

The archaeological record for the Terminal Prehistoric period (cal AD 1400–Historic Contact) marks the emergence of the ethnographic subsistence settlement system and increases cultural and ecological variation across the region. In the eastern portion of the region, settlements became more dispersed with the abandonment of large

seasonal or semipermanent sites in favor of smaller dispersed sites, possibly occupied by a single extended family unit as is the pattern among the Numic speaking groups in the Great Basin to the east. Conversely, westernmost areas, where the environment was more productive, are marked by the emergence of a strong village pattern and intensified occupation of settlements on major river margins (McGuire 2007). The hallmark of Terminal Prehistoric assemblages are Desert Side-notched and Cottonwood Triangular arrow points, and there is substantial variability in assemblage composition consistent with the ecological and cultural variation evident in the record of the later Ethnohistoric period.

2.2.4 Ethnohistoric Period (post-AD 1750)

The region surrounding the project site falls within the Achumawi tribal territory during the ethnohistoric period (Kroeber 1925, Olmsted and Stewart 1978, Nevin 1998). The Achumawi and their southern neighbors the Atsugewi—sometimes referred to together as the Pit River groups— occupied a large portion of northeastern California encompassing the Pit River drainage from the Big Bend and Montgomery Creek in the west to Goose Lake to the Warner Mountains in the east and from Mount Shasta and Goose Lake in the North to Mount Lassen and Eagle Lake in the south. The Auchumawi territory can be broadly broken into two distinct ecological zones. The western, downriver portion of the territory consists of wooded intermountain canyons and valley while the eastern, upriver portion of tribal territory consists of drier, higher elevation valleys with the plateau-basin ecology with the sagebrush and juniper, jackrabbit, and elk more associated with eastern Oregon and northwestern Nevada.

Together, Achumawi and Atsugewi make up the Palaihnihan language family, which is in turn a part of the larger Hokan language phylum (Golla 2011, Nevin 1998). Achumawi is comprised a total of nine local dialects spoken along the Pit River (Golla 2011, Kniffen 1928). The nine dialects form two dialectical clusters which conform more or less with the division between the ecological zones encompassed by the Achumawi tribal territory,. Groups speaking the "downriver" dialects—*Madesiwi, Itsatawi, Ilmawi,* and *Achumawi* (proper)—occupy the intermountain canyons and valleys in the western portion of Achumawi territory and "upriver" dialects—*Atwamsini, Astariwawi, Kosalektawi, Hammawi,* and *Hewisedawi*—occupy the drier and higher elevation valleys to the east (Golla 2011, Nevin 1998). The dialect spoken in the immediate vicinity of the project area, was *Atwamsini* (also referred to as *Atwamwi*) spoken by the Big Valley Achumawi living in Big Valley which includes the areas surrounding Beiber and Nubeiber (Kniffen 1928, Golla 2011).

Although the area encompassed by the Achumawi tribal territory is quite large, habitation was concentrated in productive areas along streams and drainages, lakes, meadows, and marshes with much of the surrounding areas only occasionally visited for hunting or gathering but not settled (Kroeber 1925). Seasonal transhumance was commonplace, with winters spent in more densely populated settlements along rivers or valleys followed by dispersal in pursuit of various resources during the summer months (Kniffen 1928). Traditional features of the winter villages were small houses were constructed from bark with sloping roofs over shallow excavations, and one or more larger semi-subterranean "sweat houses" (Olmsted and Stewart 1978).

The Achumawi subsistence strategy was centered on fishing, hunting, and collecting vegetative resources, although the focal resources varied according to the local ecology. In the west-central portion of the territory, along the Pit River, the population was at its most dense and subsistence practices were most like the typical California pattern with a reliance on acorns, salmon, and deer as the staple foods. Further east— where oaks and salmon were scarce— the subsistence pattern was more similar to that of the plateau basin groups; root crops, particularly epos and cams, were the primary gathered food, non-anadromous fish were taken from local waterways, and the

seasonally available waterfowl were a more substantial portion of the diet (Kroeber 1925, Olmsted and Stewart 1978). Common material goods included the sinew-backed bows and arrows, ground stone tools for processing vegetal foods, twined basketry, nets for fish and game, and many goods made from fibrous plants (Kroeber 1925, Olmsted and Stewart 1978). One practice unique to the region was the extensive use of pit traps for the taking of animals, particularly deer. Deer were caught with concealed pits excavated to a depth of two to three yards along deer trails (Kroeber 1925).

Sociopolitical organization also varied geographically, with western groups organized into autonomous tribelets while eastern groups formed hereditary bands (Golla 2011). In both cases the basic social unit functioned as an autonomous political unit but were socially connected with neighboring groups through intermarriage and common languages and dialect.

2.2.5 The Historic Period

The post-contact period in California is generally divided into the Spanish period (1769–1822), Mexican period (1822–1848), and American period (1848–present). Although European explorers visited parts of California for brief periods, the beginning of the historic period is generally marked by the establishment of a Spanish settlement at San Diego and the founding of Mission San Diego de Alcalá, the first of the 21 California missions, in 1769. Independence from Spain in 1821 marks the beginning of the Mexican Period, and the signing of the Treaty of Guadalupe Hidalgo in 1848, ending the Mexican–American War, begins the American period. This section briefly outlines the historic-era context of the region; for additional detail please refer to the Build Environment Impact and Evaluation Report (Donovan-Boyd et al. 2022)

European settlement in Lassen County was very limited during the Spanish and Mexican Periods. Most Spanish period settlement occurred in coastal areas, in Central and Southern California and while extensive land grants were established in the interior areas of California during the Mexican period, there is no indication any Mexican Ranchos were established in Lassen County, and even the early American period saw little Euro-American settlement. One notable early Euro-American settler in the region was the eponymous Peter Lassen, who was granted a 22,206 acre Bosquejo Rancho in Tehama County by the Mexican governor in 1844 (State Lands Commission 1982:22) and later relocated to Honey Lake, within the current boundaries of Lassen County.

Euro-American settlement of Lassen County was slow, with fewer than forty General Land Office land patents issued between 1860 and 1880 (GLO 1868). By the 1870s and 1880s several small towns began to establish themselves, including Beiber—located approximately 2 miles northeast of the APE—which was founded in 1877. Closer to the APE itself, the town of Nubeiber was establish 1931 and developed rapidly with completion of the adjacent Great Northwestern and Western Pacific railways and Beiber Station. Despite the initial development and business generated by the railroad and lumber industry, Nubeiber was unable to sustain or maintain its growth and population of the town eventually contacted significantly.

3 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 at the North East Information Center (NEIC), at California State University Chico of the project site and a 0.5-mile radius around the project site. Following Bureau of Land Management precedents, which are appropriate for federal projects, 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 because short-interval transect spacing and full documentation of cultural resources were completed. Survey staff exceed the applicable Secretary of Interior's Professional Qualifications Standards for archaeological survey. Dudek archaeologists surveyed the entire project APE with transects spaced no more than 15 meters apart and oriented along the project alignment. A 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. After completion of pedestrian survey, limited subsurface sampling was performed using a 5-centimeter-diameter auger to probe for buried cultural deposits and reveal soil stratigraphy in several areas of the APE. Field recording and photo documentation of resources were completed as appropriate.

Historic research was also performed to better understand the history of land use of the project area. This research consisted of reviewing historic topographic maps and aerials (NETR 2024a, 2024b; UCSB 2024). Documentation of cultural resources complied with the Secretary of the Interior's Standards and Guidelines for Archaeology 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 (DPR) Form DPR 523 (Series 1/95), using the Instructions for Recording Historical Resources (Office of Historic Preservation 1995), including updates to previously recorded resources.

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4 Results

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

4.1 Records Search Results

A records search was completed for the project APE and a 1-mile buffer by staff at the NEIC at California State University Chico on September 30, 2021. The records search identified 3 previous studies performed within the records search area, none of which intersect the APE (Table 1 and Confidential Appendix A).

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

Report ID	Year	Author	Title
Reports Intersecting the APE			
None			
Reports Within 1 Mile of the APE			
NEIC-008466	2005	Brunmeier, Patrick	Archaeological Reconnaissance for Housing and Urban Development Department Compliance of the Barnes Parcel, Nubieber, Lassen County, California
NEIC-014452	2018	Cole, Clint	Archaeological Survey Report and Historic Property Report for the District Wide Scour Countermeasures Project, Lassen, Shasta, And Tehama Counties, California
NEIC-014453	2018	Zalarvis-Chase, Dimitra and Elizabeth Truman	Archaeological Survey Report for the Trinity 3 Drainage Improvement Project, Trinity County, California

The records search did not identify any previously recorded cultural resources within the APE. Ten cultural resources have been recorded within 1 mile of the APE (Table 2 and Confidential Appendix A).

Table 2. Previously Recorded Cultural Resources

Primary Number	Trinomial	Type	Age	Attributes
Previously Recorded Sites Intersecting the APE				
None				
Previously Recorded Sites Within 1 Mile of the APE				
P-18-004082		Site	Prehistoric	Lithic scatter
P-18-005046	CA-LAS-005046	Site	Prehistoric	Lithic scatter
P-18-005047	CA-LAS-005047	Site	Prehistoric	Lithic scatter
P-18-005048	CA-LAS-005048	Site	Prehistoric	Lithic scatter
P-18-005050		Site	Prehistoric	Lithic scatter
P-18-005051		Site	Prehistoric	Lithic scatter
P-18-005052		Site	Prehistoric	Lithic scatter
P-18-005053		Site	Prehistoric	Lithic scatter

Table 2. Previously Recorded Cultural Resources

Primary Number	Trinomial	Type	Age	Attributes
P-18-005328	CA-LAS-005328H	Site	Historic-era	Foundations/structure pads; Trash scatters; Well
P-18-005329	CA-LAS-005329	Site	Prehistoric	Lithic scatter; Bedrock milling feature; Hearths/pits
P-18-005330		Site	Prehistoric	Lithic scatter

Historic-Period Map Review

Historic aerial photographs of the project area were available for the years 1939 1960, 1981, 1993, 1998, 2005, 2009, 2010, 2012, 2014, 2016, and 2018 (UCSB 2024, NETR 2024a). Topographic maps including the project area were available for the years 1963, 1967, 1990, 1996, 2012, 2015, and 2018 (NETR 2024b). Two structures currently at the northern corner of the APE appear to have replaced two smaller buildings comprising the Big Valley Lumber Company Site visible on the 1960 aerial. These same structures are visible on the 1963 and 1967 topographic maps—represented as a single structure—and are replaced by two structures on the 1990 topographic map. The water tower in the center of the APE is visible on all the aerial images and is represented on the 1963, 1967, 1990, and 1996 topographic maps. Similarly, the track yard adjacent to the railroad tracks—at the end of Washington Ave, in the center of the APE— is evident on all the topographic maps and aerial photographs, but appears to have been expanded and improved to its present dimension between 1998 and 2005. The remainder of the APE appears relatively unchanged for the past 60 years. The only notable change to the immediate vicinity of the APE is the construction several buildings on the east side of the railroad tracks immediately northeast of the APE and the development of the area immediately west of the southern portion of the APE sometime between 1981 and 1993.

4.2 Review of Geomorphological Context

The project APE is within California's Modoc Plateau Geomorphic Province, a volcanic tableland with elevations ranging between 4,00 and 6,000 feet above sea level bounded by the Cascade Range to the west (CaDC 2002). The underlying geology of the APE is Quaternary Alluvium (Jennings et al. 1977), with two soil types are mapped within the APE (USDA 2024). The majority of the APE (88%) is comprised of Pit silty clay, with mapped deposits of Cupvar silty clay located along the southwestern edges of the APE. In general, the soils within the APE are consistent with alluvium derived from igneous parent material, forming on toeslops along basin floors. Slopes within the APE are flat (0-2% slope). These soil types are consistent with both the topography and hydrogeography of the area. The APE sits approximately 2.25 kilometers east of the foot of the Cascade Range and is bordered to the east by numerous waterways, the closest of which—the Bull Run Slough—is approximately 150 meters east of the APE.

Based on this information, sediment formation in this location would likely have occurred primarily during the Holocene, possibly relating to increased water flows following Pleistocene glaciation (possibly 5,000–7,000 BP) (Ritter 1972). 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 and the riparian resources available in the area would have been attractive to past peoples.

4.3 Survey Results

Dudek archaeologists Nicholas Hanten and Gregory Wada conducted an intensive-level pedestrian survey of the northern, approximately 65-acre, portion of the project APE on October 15, 2021. Dudek archaeologists Elizabeth Sivell and Michael Mendiola conducted an intensive-level pedestrian survey of the remaining portion of the APE on April 24, 2024. Both surveys used standard archaeological procedures and techniques, as outlined in Chapter 3, Research Methods. Four previously unrecorded historic-era resource (LG-NH-1, GSNR-ES-001, GSNR-ES-002, and GSNR-ES-003) was discovered and recorded during the pedestrian survey (See Appendix C, Figure A).

During the 2021 survey, ground surface visibility was low (approximately 5%–20%) over much of the API due to vegetation ranging from 10 to 40 centimeters in height. Photos 1 and 2 show representative conditions within the API during the 2021 survey. Several areas within the APE have been previously disturbed by development of the Big Valley Lumber Company Site and the adjacent Great Northern and Western Pacific railway. Soils outside of the developed portion of the API appeared to be relatively undisturbed, although some areas exhibited signs of cracking from alternating wet and dry conditions that could have caused mixing in the upper levels of the soil. Surface visibility was also low (varying from approximately 0%–50%) during the 2024 survey due to dense vegetation and standing water. Photos 3 and 4 show representative conditions during the 2024 survey.

Several portions of the APE have been previously disturbed by development of the Big Valley Lumber Company Site and the adjacent Great Northern and Western Pacific railway. Development and disturbance evident within the APE includes several structures in the northern portion of the APE, including a water tower, dirt and gravel track yard, railroad spurs, dirt roads, and ditches. These elements are discussed in detail in the Built Environment report (Donovan-Boyd et al. 2022). Soils outside of the developed portion of the APE appeared to be relatively undisturbed, although some areas exhibited signs of cracking from alternating wet and dry conditions that could have cause mixing in the upper levels of the soil.

4.3.1 Newly Recorded Resources

LG-NH-1

Discovered and recorded during the 2021 survey, LG-NH-1 is a moderately dense historic-era refuse scatter comprised of more than 200 cans of various types, 100 clear and green glass bottle fragments, several bricks, concrete pipe fragments, a metal post set in a concrete base, and other miscellaneous refuse. The site is located to the south and west of a small bank at the southern extent of a graded area adjoining the track yard, approximately 60m south of the water tower. Artifacts are generally concentrated close to the bank; however, artifacts are also scattered over the field to the south and east suggesting some degree of secondary dispersion of the deposit. In total, the site covers an area of approximately 65m by 35m in size, with an area of 2100 m^2.

The most common types of can in the assemblage are sanitary cans of various sizes (corrugated and smooth-sided) and flat-top beverage cans, however several oval and rectangular meat and fish cans, one tobacco can, and one cone-top beverage can were also recorded. Several of the fish cans are embossed “NORWAY/NORVEGE” or “MONERE_/CAL USA”. In addition to non-diagnostic glass fragments, glass bottle necks, bases, and several complete or nearly complete bottles and jars were recorded, including several wine and liquor bottles. Six maker’s marks were identified on complete bottles or sufficiently intact bottle base fragments including marks from the Owens Illinois Glass Co., Hazel-Atlas Glass Co,, W.J. Latchford Co., and what is possibly a Thatcher Glass

Manufacturing Co. mark. In addition, three bottles were recorded with embossed "Gallo Flavor Guard" branding of various forms as was a sidewall fragment of a clear glass Coca-Cola bottle. Several other cans and bottles were also embossed with text (See Appendix C for details).

Diagnostic artifacts in the assemblage suggest that the site likely results from multiple depositional events, with the earliest deposit of materials dating to the late 1930s or early 1940s and later material dating to the early 1960s. The earlier component is evident from the presence of three Owens-Illinois Glass Co. "Diamond-OI" maker's marks, which was adopted in 1929 and phased out between 1954 and 1966 (Toulouse 1971, Lockhart and Heonig 2018). Single digit manufacturing codes on two of these bottles indicate production dates of 1936 and 1937. The W.J. Latchford Co. maker's mark is also consistent with this timeframe, as the "L-in-oval" mark was used 1925-1939 (Lockhart et al. n.d.), and the bottle is embossed "WINE OVAL" at the heel, indicating production after the end of Prohibition in 1933. Evidence for a post-1958 component is provided by two green-glass Gallo "Flavor Guard" bottle bases. The Gallo Glass company began using the "Flavor-Guard" embossing after 1958, and the format of embossing on one of the bottles is consistent with the earliest configuration produced by the Gallo Glass Co. (Lockhart et al. n.d.). Several other green glass wine bottle fragments are present in the assemblage, suggesting that additional Gallo bottles are in the assemblage although additional maker's marks were not discovered during survey. The character of the can assemblage is also consistent with these dates as sanitary cans and flat-top beverage cans would have been common during this same period and the assemblage lacks can types that would have been indicative of earlier or later periods, such as pull-tab cans.

GSNR-ES-001

Discovered and recorded during the 2024 archaeological survey, GSNR-ES-001 is a small historic-era refuse scatter consisting of five cans and one clear glass bottle. This resource located at the top of the southwest side of an earthen mound, covering an area of approximately 70 m^2. The artifact assemblage includes five cans with interlocking seams including three sanitary cans and two round food cans. The glass bottle is complete with an intact metal screw top lid. The bottle base includes an Anchor Hocking maker's mark ("anchor-H") which was in use from 1937 to 1968, although its use may have persisted until as late as 1980 (Lockhart et al. 2021)

Sufficient documentation was gathered through archaeological inventory efforts to evaluate this resource for NRHP and CRHR listing, for which the site was assessed to be not eligible. To be eligible for listing in the CRHR/NRHP, a site must have "yielded, or [have] the potential to yield, information important to the prehistory or history of the local area, California, or the nation" (PRC Section 5024.1; 14 CCR 4852). The site is not substantially associated with any specific significant events locally, regionally, or nationally (Criterion A/1); is not directly associated with the lives of any important people locally, regionally, or nationally (Criterion B/2); does not contain architecture (Criterion C/3); and, beyond the attributes captured through recordation, does not have the potential to yield information locally, regionally, or nationally (Criterion D/4). Refuse scatters of this type are common throughout the region, and the site does not represent a "unique" resource as defined under CEQA. Any data potential associated with site intersecting the API has been exhausted through recordation. As such, this resource is not eligible for listing in the NRHP/CRHR, and impacts/effects that would occur through planned project disturbances would be less than significant.

GSNR-ES-002

Discovered and recorded during the 2024 archaeological survey, this resource consists of a historic-era refuse scatter comprised of two concentrations (C1 and C2) of cans, glass and ceramic fragments. The resource covers

an area of approximately 938 m^2 situated in an open field. Each concentration contains more than 50 artifacts including sanitary cans with church key opening, food cans with key-wind openings, clear, amber, and opalescent milk glass fragments, and ceramic fragments. Two diagnostic artifacts were identified during survey, a complete clear glass bottle with a marker's mark of an "S" inside a circle and a complete wide mouth amber glass bottle with an Owens-Illinois maker's mark and "Abbot Lab, Made in U.S." embossed on the base. The maker's marks indicate that the assemblage dates between 1929 to 1960 (Toulouse 1971, Lockhart and Heonig 2018).

Sufficient documentation was gathered through archaeological inventory efforts to evaluate this resource for NRHP and CRHR listing, for which the site was assessed to be not eligible. To be eligible for listing in the CRHR/NRHP, a site must have "yielded, or [have] the potential to yield, information important to the prehistory or history of the local area, California, or the nation" (PRC Section 5024.1; 14 CCR 4852). The site is not substantially associated with any specific significant events locally, regionally, or nationally (Criterion A/1); is not directly associated with the lives of any important people locally, regionally, or nationally (Criterion B/2); does not contain architecture (Criterion C/3); and, beyond the attributes captured through recordation, does not have the potential to yield information locally, regionally, or nationally (Criterion D/4). Refuse scatters of this type are common throughout the region, and the site does not represent a "unique" resource as defined under CEQA. Any data potential associated with site intersecting the API has been exhausted through recordation. As such, this resource is not eligible for listing in the NRHP/CRHR, and impacts/effects that would occur through planned project disturbances would be less than significant.

GSNR-ES-003

Discovered and recorded during the 2024 archaeological survey, this resource is a historic-era refuse scatter comprised of cans and clear and amber glass fragments covering an area of approximately 282 m^2. There are no diagnostic artifacts within the site, however the cans show a significant weathering and are consistent with the other historic-era assemblages nearby. Notable non-diagnostic artifacts in the assemblage include a clear glass bottle base with a circular suction scar at its center. There is also a ceramic fragment with rounded edge with holes on one side and a swirling/petal shaped pattern on the opposite side. Sufficient documentation was gathered through archaeological inventory efforts to evaluate this resource for NRHP and CRHR listing, for which the site was assessed to be not eligible. To be eligible for listing in the CRHR/NRHP, a site must have "yielded, or [have] the potential to yield, information important to the prehistory or history of the local area, California, or the nation" (PRC Section 5024.1; 14 CCR 4852). The site is not substantially associated with any specific significant events locally, regionally, or nationally (Criterion A/1); is not directly associated with the lives of any important people locally, regionally, or nationally (Criterion B/2); does not contain architecture (Criterion C/3); and, beyond the attributes captured through recordation, does not have the potential to yield information locally, regionally, or nationally (Criterion D/4). Refuse scatters of this type are common throughout the region, and the site does not represent a "unique" resource as defined under CEQA. Any data potential associated with site intersecting the API has been exhausted through recordation. As such, this resource is not eligible for listing in the NRHP/CRHR, and impacts/effects that would occur through planned project disturbances would be less than significant.

4.4 Tribal Coordination

The NAHC was contacted by Dudek staff on September 28, 2021 to request a search of its Sacred Lands File. The NAHC responded on November 4, 2021 indicating that no Native American resources on file with the NAHC fall within the project APE (Confidential Appendix B). The NAHC provided a list of Native American tribal contacts who may have additional knowledge relating to cultural resources in the area. Because this report will be subject to USACE review for Section 106 compliance and Assembly Bill 52, consultation with the NAHC-listed tribal representatives will be conducted by the lead agencies responsible for CEQA and Section 106 Compliance. Similarly, coordination and consultation with the State Historic Preservation Officer will be required to comply with Section 106. It is expected that tribal consultation effort will be documented within the final version of, or an addendum to, the present report.

5 Review of Effects

According to CEQA and the National Environmental Policy Act, a project with an effect that may cause a substantial adverse change in the significance of a historical resource (historic property) is a project that may have a significant effect (adverse effect) on the environment and the cultural resource itself. A substantial adverse change in the significance of a historical resource/historic property would be constituted by physical demolition, destruction, relocation, or alteration of the resource or its immediate surroundings such that the significance of the resource would be materially impaired. Significance, under these conditions, is to be interpreted in terms of the resource's eligibility for listing in the CRHR and/or NRHP. To best mitigate the effects of a project on cultural resources, a reasonable, good faith effort must be applied to determining those resources' archaeological character and eligibility for CRHR/NRHP listing.

5.1 Thresholds of Significance

The significance criteria used to evaluate a project's impacts to cultural resources under CEQA are based on Appendix G of the CEQA Guidelines. According to Appendix G of the CEQA Guidelines, a significant impact related to cultural resources would occur if the project would:

a. Cause a substantial adverse change in the significance of a historical resource pursuant to §15064.5.
b. Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5.
c. Disturb any human remains, including those interred outside of dedicated cemeteries.

5.2 Effects/Impacts Analysis

Threshold a. Would the project cause a substantial adverse change in the significance of a historical resource pursuant to §15064.5?

Impacts to historic built-environment resources are addressed in a separate technical study. Please see Donovan-Boyd et al. 2022 for additional details.

Threshold b. Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?

A records search was completed for the current APE and a 1-mile buffer by staff at the NEIC at California State University Chico on September 30, 2021. The NEIC records search did not identifty any archaeological resources within the APE.

The NAHC was contacted by Dudek staff on September 28, 2021 to request a search of its Sacred Lands File. The NAHC responded on November 4, 2021 indicating that no Native American resources on file with the NAHC fall within the project APE. Tribal coordination pursuant to Assembly Bill 52 will be completed by the CEQA lead agency. Consultation pursuant to Section 106 of the NHPA, should this be required, will be completed by the federal lead agency.

As previously discussed, four newly identified historic-era sites (LG-NH-1, ES-001, ES-002, and ES-003) were identified within the project APE during Dudek's pedestrian survey. These sites consist of historic-era trash scatters

of cans, glass, and other miscellaneous refuse. Based on the character of assemblages and diagnostic artifacts identified, the sites appears to date from the late 1930s to the 1960s. The sites have no known specific associations with significant individuals, important regional applications, or historical trends of note that are apparent or otherwise documented.

To be eligible for listing in the CRHR/NRHP, a site must have "yielded, or has the potential to yield, information important to the prehistory or history of the local area, California, or the nation" (PRC Section 5024.1; 14 CCR 4852). The sites appear to be opportunistic dumping locations, and not substantially associated with any specific significant events locally, regionally, or nationally (Criterion 1/A); are not directly associated with the lives of any important people locally, regionally, or nationally (Criterion 2/B); do not contain architecture (Criterion 3/C); and, beyond the attributes captured through recordation, do not have the potential to yield information locally, regionally, or nationally (Criterion 4/D). Historic-era refuse scatters of this type are found throughout the region and none of the sites represent a "unique" resource as defined under CEQA. Any data potential associated with site intersecting the APE has been exhausted through recordation. As such, none of these resources are recommended to be eligible for listing in the CRHR/NRHP, and impacts/effects that would occur through planned project disturbances would be less than significant (no adverse effect to historic properties).

The NEIC records search did identify a number previously recorded sites within 1-mile of the project site. However, most of these resources are prehistoric sparse lithic scatters with simple archaeological assemblages, that lack substantial deposits, and are located near waterways. These characteristics are consistent with opportunistic and temporary use of the surrounding area, rather than intensive use or habitation. Given these findings, while portions of the APE remain relatively undisturbed, the potential of encountering and impacting unknown and/or significant (as defined under regulatory conditions) archaeological resources during project implementation is considered low.

This observed, If such unanticipated discoveries were encountered, impacts to encountered resources could be potentially significant. However, recommended management strategies intended to address potential impacts to unanticipated cultural resources are provided in detail below, and should be added as mitigation measures for the Project. In the event that archaeological resources (sites, features, or artifacts) are exposed during construction activities for the proposed Project, all construction work occurring within 100 feet of the find shall immediately stop until a qualified archaeologist, meeting the Secretary of the Interior's Professional Qualification Standards, can evaluate the significance of the find and determine whether or not additional study is warranted. Recommendations will be dependent upon the potential for the find to be considered significant under CEQA or Section 106. Avoidence and/or other methods of preservation in place should be considered the preferred management strategy. Should avoidance be infeasible, additional work such as preparation of an archaeological treatment plan, testing, or data recovery may be warranted and should be developed based on the conditions and nature of the find.

Through implementation of recommended management strategies, potentially significant impacts to archaeological resources would be reduced to a less than significant level. Therefore, impacts would be less than significant with the management strategies recommended below incorporated.

Threshold c. Disturb any human remains, including those interred outside of dedicated cemeteries?

No prehistoric or historic-era burials were identified within the APE as a result of the records search or survey. The project is not part of a dedicated cemetery. The NEIC records search did not indicate that burials of prehistoric Native American origin have been identified within 0.5 miles of the APE. The recommended management strategies outlined below pertaining to unanticipated discovery of human remains would ensure that any human

remains would be appropriately respected and treated in compliance with regulatory requirements. Recommended management strategies below also include appropriate implementation of California Health and Safety Code Section 7050.5, PRC Section 5097.98, and other pertinent regulatory requirements. Compliance with applicable state regulations related to the potential disturbance of human remains and remains of potential Native American origin would be adequate to address any potential impacts.

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6 Summary and Management Considerations

The current archaeological resources inventory was completed to satisfy the requirements of CEQA and Section 106 of the NHPA. Dudek's cultural resources inventory of the APE suggests that there is low potential for the inadvertent impact to unanticipated cultural resources located on the surface and/or related subsurface deposits. The NEIC records search identified no previously recorded resources within the APE. Four newly recorded historic-era cultural resources were documented as a result of pedestrian survey. These archaeological sites were recorded to practice standards within the present report and using DPR forms. These sites were evaluated and found to not meet the significance criteria under CRHR (criteria 1, 2, 3, or 4) or NRHP (criteria A, B, C, or D). All data potential has been exhausted through the process of recordation. As such, impacts to these sites would not represent a significant impact under CEQA or adverse effect under the NHPA.

Some soils within the APE appear relatively undisturbed and represent suitable conditions to support the presence of cultural deposits in the area. Waterways and riverine communities were attractive resources for prehistoric people and generally have a higher potential for buried deposits. However, archaeological survey and records search information do not indicate that there are likely to be unanticipated, complex archaeological sites in the APE. Based on these considerations, the following management recommendations have been provided to ensure that the project will not impact unanticipated significant cultural resources.

6.1 Recommendations

No potentially sensitive archaeological resources were identified during field efforts in support of the project. However, there is low to moderate potential for encountering unanticipated significant cultural resources and human remains during project implementation. With implemented of the below recommendations, impacts to archaeological resources and human remains would be less than significant.

Unanticipated Discovery of Archaeological Resources

In the event that archaeological resources (sites, features, or artifacts) are exposed during construction activities for the proposed Project, all construction work occurring within 100 feet of the find shall immediately stop until a qualified archaeologist, meeting the Secretary of the Interior's Professional Qualification Standards, can evaluate the significance of the find and determine whether or not additional study is warranted. Recommendations will be dependent upon the potential for the find to be considered significant under CEQA (14 CCR 15064.5(f); PRC Section 21082). If the discovery proves potentially significant under CEQA or Section 106, coordination with the lead agency and other designated parties is likely to be required. Additional work such as preparation of an archaeological treatment plan, testing, or data recovery may be warranted and should be developed based on the conditions and nature of the find.

Unanticipated Discovery of Human Remains

In accordance with Section 7050.5 of the California Health and Safety Code, if human remains are found, the County Coroner and USACE, if applicable, shall be immediately notified of the discovery. 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, if the potential remains are

human in origin. If the County Coroner determines that the remains are, or are believed to be, Native American, the County Coroner shall notify the NAHC in Sacramento within 24 hours. In accordance with California Public Resources Code, Section 5097.98, the NAHC must immediately notify those persons it believes to be the most likely descendant (MLD) from of the deceased Native American. The MLD shall provide recommendations on next steps 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 and/or related burial goods.

7 References

Beaton, J. 1991. Paleoindian occupation greater than 11,000 years BP at Tule Lake, Northern California. Current Research in the Pleistocene, 8, 5-7.

BLM (Bureau of Land Management). 2004. "The Foundations for Managing Cultural Resources." Section 8100 in the *BLM Manual*. Release no. 8-72. December 3, 2004.

California Department of Conservation (CaDC), 2002. California Geological Survey.

Delacorte, M. G. 1997. *Culture Change Along the Eastern Sierra Nevada/Cascade Front*

Donovan-Boyd, A., E. Jones, F. Steffen, and K. Haley. 2022. *Built Environment Inventory and Evaluation Report for Golden State Natural Resources Gould Site, Lassen County, California.*

Erlandson J. M., T. C. Rick, T. L. Jones, and J.F. Porcasi., 2007 "One if by Land, Two If by Sea: Who were the First Californians." In *California Prehistory: Colonization, Culture, and Complexity,* edited by T.L. Jones and K.A. Klar, 53-62. New York, New York: Altamira Press.

Golla, V. 2011. *California Indian Languages*. University of California Press, Berkeley, California.

GLO (General Land Office). 1868. "DM ID: 293081." Accessed November 30, 2021. https://glorecords.blm.gov

Kniffen, A. B. 1928 *"Achomawi Geography" University of California Publications in American Archaeology and Ethnology.* 23 (5), *297–332.*

Kroeber, A. 1925. *Handbook of the Indians of California.* Washington D.C.: Smithsonian Institution.

McGuire, K. R. 2007. "Models Made of Glass: A Prehistory of Northeast California." In *California Prehistory: Colonization, Culture, and Complexity,* edited by T.L. Jones and K.A. Klar, 165-176. New York, New York: Altamira Press.

Lockhart, B., N. Briggs, B. Schriever, C. Serr, and B. Lindsey. n.d. *The Latchford Glass Factories* Historic Glass Bottle Identification & Information Website. Society for Historic Archaeology and Bureau of Land Management. https://sha.org/bottle/pdffiles/LatchfordGlass.pdf

Lockhart, B. and R. Hoenig. 2018. *Owens-Illinois Glass Co. – Part 2: The Bewildering Array of Owens-Illinois Glass Co. Logos and Codes.* Historic Glass Bottle Identification & Information Website. Society for Historic Archaeology and Bureau of Land Management. https://sha.org/bottle/pdffiles/OwensIllinois2018Part2.pdf

Lockhart, B., B. Shreiver, B. Lindsey, and C. Serr. 2021. *Anchor Hocking Glass Corp* Historic Glass Bottle Identification & Information Website. Society for Historic Archaeology and Bureau of Land Management. https://sha.org/bottle/pdffiles/AnchorHocking.pdf

Lockhart, B., B. Schriever, C. Serr, and B. Lindsey. n.d. *Other G Marks* Historic Glass Bottle Identification & Information Website. Society for Historic Archaeology and Bureau of Land Management. https://sha.org/bottle/pdffiles/GOther.pdf

NETR (Nationwide Environmental Title Research). 2024a. Historical Aerial Photographs of the APE, Lassen County, California, dating from 1960, 1981, 1993, 1998, 2005, 2009, 2010, 2012, 2014, 2016, and 2018. Accessed June 2024. https://www.historicaerials.com/viewer.

NETR. 2024b. Historical Topographical Maps of the APE, Lassen County, California, dating from 1963, 1967, 1990, 1996, 2012, 2015, and 2018. Accessed June, 2024. https://www.historicaerials.com/viewer.

Nevin, B. E., 1998 *Aspects of Pit River Phonology*. Unpublished PhD Dissertation. University of Pennsylvania

NPS (National Park Service). 2009. *Archeology and Historic Preservation: Secretary of the Interior's Standards and Guidelines*. As Amended and Annotated. Accessed March 19, 2009. http://www.nps.gov/history/local-law/arch_stnds_0.htm.

NPS and ACHP (National Park Service and the Advisory Council on Historic Preservation). 1998. *The Secretary of the Interior's Standards and Guidelines for Federal Agency Historic Preservation Programs Pursuant to the National Historic Preservation Act*. Published jointly by the National Park Service of the U.S. Department of the Interior and the Advisory Council on Historic Preservation.

O'Connel, J. F., 1971. *The archeology and cultural ecology of Surprise Valley, Northeast California*. Unpublished PhD Dissertation. University of California, Berkeley

Olmsted D. L. and O.C. Stewart 1978. Achumawi. In *Handbook of North American Indians*, 8: 225-235.

Office of Historic Preservation. 1995. "Instructions for Recording Historical Resources." California State Parks, Office of Historic Preservation. March 1995. http://ohp.parks.ca.gov/pages/1054/files/manual95.pdf.

State Lands Commission. 1982. Grants of Land in California Made by Spanish or Mexican Authorities. Accessed September 20, 2021. https://slcprdwordpressstorage.blob.core.windows.net/wordpressdata/2019/09/1982-GrantsSpanishMexican.pdf

Toulouse, J.H., 1971. *Bottle makers and their marks*. Blackburn Press.

UCSB (University of California, Santa Barbara). 2024. Historic Aerial Photographs of the Project Area from 1939. Map & Imagery Laboratory (MIL) UCSB Library. Accessed June 2024. http://mil.library.ucsb.edu/ap_indexes/FrameFinder.

USDA (United States Department of Agriculture). 2024. Web Soil Survey. Survey Staff, Natural Resources Conservation Service, United States Department of Agriculture. Accessed November 10, 2020. http://websoilsurvey.sc.egov.usda.gov/.

WRCC (Western Regional Climate Center). 2024. Historical Climate Information: Adin RS, California (040029). Accessed June 2024. https://wrcc.dri.edu/cgi-bin/cliMAIN.pl?ca0029

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Appendix A (Confidential)

Records Search Maps and Information

Appendix B (Confidential)

NAHC Sacred Lands File Search

Appendix C (Confidential)

APE Maps and Site Records

Appendix D

Resumes for Key Cultural Personnel

Nicholas Hanten

ARCHAEOLOGIST

Nicholas Hanten (*NIK-o-luss HAN-ten; he/him*) is an archaeologist with 16 years' experience conducting and leading archaeological projects throughout California, including archaeological survey, evaluation, and data recovery investigations; construction monitoring; and laboratory procedures, including artifact cataloging, analysis, and curation preparation. Mr. Hanten also has experience with technical report writing for compliance with local, state, and federal regulations.

Mr. Hanten's research interests include prehistoric hunter-gatherer subsistence and settlement systems, prehistoric land use, and human behavioral ecology. His PhD dissertation research focuses on modeling changing subsistence and settlement patterns in the Central Sierra Nevada, combining ecological models with spatial data analysis of resource availability and other factors.

Education

University of California, Davis
PhD, Anthropology, in progress (advanced to candidacy, 2018)
MA, Anthropology, 2016
BS, Anthropology, 2011

Professional Affiliations

Society for California Archaeology

Society for American Archaeology

Project Experience

Development

Hunter Subdivision Project, City of St. Helena, California. As archaeologist, assisted with field excavations and coauthored the technical report for a housing development project. (2020)

Yokohl Ranch Housing Development Project, The Yokohl Ranch Company, LLC, Tulare County, California. As field director, managed and conducted surface mapping, surface collection, and excavation of 95 prehistoric and historical period sites throughout the Yokohl Valley. As lab director, managed and conducted the cataloging and analysis of all material recovered during excavation and authored laboratory portions of the technical report for a large housing development project. (2012–2014)

Winchester 1800–Saba Property, French Valley Acres LLC, Riverside, California. As field director, conducted a pedestrian survey of 40 acres for a proposed housing development and prepared a letter report of findings for a housing development project. (2014)

Poseidon Wetland Mitigation Area, Poseidon Water LLC, San Diego, California. As lab director, managed the cataloging and analysis of artifacts recovered from excavations and assisted in authoring the final report of findings. (2013)

Alessandro Business Park, Western RealCo, Riverside, California. As archaeological monitor and crew chief, monitored the excavation of potholes and trenches in collaboration with Native American monitors. Also, recorded and excavated five prehistoric archaeological sites. (2014)

St. John Garabed Church Environmental Services, St. John Garabed Apostolic Church Trust, San Diego, California. As crew chief and lab director, assisted in conducting test excavations for one prehistoric site, managed the cataloging and analysis of recovered artifacts, and assisted in preparing a report of findings. (2013)

Education

Emerson Hall Replacement Project, University of California, Davis, California. As field archaeologist, conducted pedestrian survey and built environment documentation for the university development project. (2017)

Cultural Resources Study for Kings Beach Elementary School Modernization, Kings Beach Elementary School, Placer County, California. As field archaeologist, conducted pedestrian survey and resource documentation for archaeological and built environment studies for the campus improvement project. (2016)

Track and Field Improvements Project, Truckee High School, Nevada County, California. As archaeologist, conducted pedestrian survey and resource documentation and coauthored the technical report for the campus improvement project. (2015)

Lady of Peace Academy Parking Structure Cultural Monitoring, T.B. Penick & Sons Inc., San Diego, California. As crew chief and lab director, assisted in conducting test excavations for one historic site during project monitoring. Also, managed the cataloging and analysis of recovered artifacts. (2014)

Cultural Resource Study for the Kearny High School Athletic Field Redevelopment, BRG Consulting, San Diego, California. As crew chief, conducted pedestrian survey and wrote report. (2012)

Significance Evaluation of SDI-20363 for the San Marcos High School Expansion Project, San Marcos Unified School District, San Diego County, California. As crew chief, assisted in test excavations and GPS data collection for a buried prehistoric site for the campus construction project. (2012)

Energy

Strategic Reliability Reserve, Self-Certification Environmental Support, California Department of Water Resources, Santa Barbara, Merced, and San Joaquin Counties, California. As archaeologist, authored technical reports for four proposed energy generation facilities. Coordinated archaeological monitoring and authored cultural resource monitoring plan for location in San Joaquin County. (2022–2023)

Energy Storage Project, Sonoma County, California. As archaeologist, assisted with record search request and testing for energy storage project. (2022)

Solar Energy Project, Washoe County, Nevada. As archaeologist, assisted with site recordation and cultural resource monitoring for large solar project. (2021–2022)

Solar Energy Project, Sacramento, California. As field director, conducted record search, led intensive pedestrian survey, recorded and evaluated sites, and coauthored technical report for 2,555-acre proposed solar energy project. (2021–2023)

Vegetation Management Program, Pacific Gas and Electric, Multiple Counties, California. As archaeologist, performed archaeological survey and monitoring, and authored technical reports and memos in support of Pacific Gas and Electric's vegetation management program on lands administered by multiple agencies, including the Bureau of Land Management and U.S. Forest Service. Individual projects are in Amador, Calaveras, Fresno, Mariposa, Madera, Stanislaus, San Joaquin, and Santa Clara Counties. (2021–Ongoing)

Ceres Energy Storage Project, Viridity Energy Solutions Inc., San Joaquin County, California. As archaeologist, conducted record search, performed pedestrian survey, and authored the technical letter report for the renewable energy storage project. (2021)

Solar Energy Project, Sacramento, California. As field director, conducted record search, led pedestrian survey, and coauthored technical report for proposed 740-acre solar project. (2020–2023)

Energy Storage Project, San Joaquin County, California. As archaeologist, conducted intensive pedestrian survey for an energy storage project. (2020)

Avenal Energy Storage Project, Jupiter Power LLC, Kern County, California. As archaeologist, conducted record search, performed pedestrian survey, and authored the technical letter report for the energy storage project. (2020)

Solar Energy Project, Sacramento County, California. As archaeological monitor, monitored the installation of a solar energy facility in collaboration with Native American monitors for the solar farm project. (2019)

Wind Energy Project, Santa Barbara County, California. As archaeologist, assisted with testing and data recovery excavations, served as lab director and primary lithic analyst for testing phase, and coauthored the technical report for the large wind farm project. (2019)

Wind Energy Project, Bureau of Land Management, Imperial County, California. As third-party monitor, monitored construction activities and archaeological monitors to ensure that all activities were in compliance with Bureau of Land Management regulations. (2012)

Oil Field Project, Bakersfield, California. As field director, conducted a pedestrian survey of 32 acres for a proposed oil field expansion and prepared a letter report of findings. (2013)

Solar Energy Project, San Diego, California. As field director, conducted pedestrian survey of 12 acres for a proposed solar generation facility. (2013)

Archaeological Evaluation for the Rugged Solar Project, County of San Diego, California. As crew member, assisted in test excavation, pedestrian survey, and GPS data collection with a Trimble GPS unit. (2012)

Gold Basin Project Meteorological Mast Construction, LH Renewables, San Diego County, California. As monitor, conducted pedestrian survey of the project area and monitored construction activities. (2012)

Significance Evaluation of Four Prehistoric Archaeological Sites for the GCL/Rosendin Sol Focus Project, RBF Consulting, Borrego Springs, California. As crew chief, assisted in test excavations at prehistoric temporary camps. (2012)

Sol Orchard Solar Project, RBF Consulting, San Diego County, California. As crew chief, conducted intensive pedestrian survey of multiple parcels for the solar development. (2010)

Sunrise Powerlink Project, San Diego Gas & Electric, San Diego County, California. As crew chief, conducted small pedestrian surveys and monitoring for utility pole replacement. (2009)

Military

Utility Corridor Survey at Edwards Air Force Base, U.S. Air Force, JT3, Riverside, California. As field director, conducted pedestrian survey and site recordation throughout the base. Also, coauthored the technical report. (2014)

Phase I Cultural Resources Inventory of 7,650 Acres on Edwards Air Force Base, CH2M HILL/JT3, Kern County, California. As crew chief, assisted in pedestrian survey and GPS data collection with a Trimble GPS unit and authored portions of the technical report. (2011–2012)

Cultural Resource Monitoring for the Red Beach Mobile Mount Project, Marine Corps Base Camp Pendleton, San Diego County, California. As monitor, conducted a small pedestrian survey and monitored construction activities. (2010)

Archaeological Investigations at SDI-9824, Marine Corps Base Camp Pendleton, San Diego County, California. As crew chief, assisted in archaeological excavation, ground-penetrating radar, and x-ray fluorescence study of a late prehistoric archaeological site. (2010)

Phase II Evaluation of 85 Archaeological Sites on Edwards Air Force Base, CH2M HILL/JT3, Kern and Los Angeles Counties, California. As crew chief, assisted in test excavations, pedestrian survey, and GPS data collection. Also, assisted with laboratory analysis and curation preparation. (2009–2010)

Section 106 Evaluations of Two Prehistoric Sites for Firebreak Maintenance, Vandenberg Air Force Base, Santa Barbara County, California. As student assistant, assisted in test excavations at complex prehistoric habitation sites for the University of California (UC), Davis, Archaeological Field School. (2008)

Municipal

2040 General Plan Master Environmental Impact Report, City of Sacramento, California. Assisted with preparation of cultural resources section and coauthored technical background report for environmental impact report. (2021, 2023)

Fiber Optic Project, County of El Dorado, California. As archaeologist, assisted with technical report and tribal outreach for proposed fiber optic install project. (2021)

Neal Road Recycling Facility Project, County of Butte, California. As archaeologist, conducted record search, performed pedestrian survey, and authored report for the waste management facility construction project. (2020)

Sacramento International Airport Cargo Facility Project, Landrum & Brown, Sacramento County, California. As field lead, coordinated and performed pedestrian survey and coauthored the technical report for the airport improvements project. (2020)

North 16th Street Streetscape, City of Sacramento, California. As field technician, assisted with resource documentation for the street revitalization project. (2018)

North Natomas Aquatic Center Project, City of Sacramento, California. As archaeologist, conducted pedestrian survey and assisted with report production for the development project. (2017)

Maidu Bike Park Project, Auburn Area Recreation and Park District, California. As archaeologist, conducted record search and pedestrian survey for the construction project. (2014)

Cultural Resources Testing for the Silver Strand State Beach Project, California State Parks, San Diego County, California. As crew chief, conducted pedestrian survey and test excavations and assisted in report production. (2012)

Archaeological Survey and Evaluations for the Star Ranch Project, County of San Diego Department of Planning and Land Use, California. As lab technician, cataloged and analyzed the assemblage recovered from a previous testing of the project area. (2011)

Resource Management

Martis Wildlife Area Restoration Project, Truckee River Watershed Council, Placer County, California. As archaeologist, conducted construction monitoring and assisted with field excavations and laboratory analysis. Coauthored the technical report/site impacts assessment for the habitat restoration project. (2019–2020)

Camp 5 Notice of Emergency Timber Operations Project, El Dorado Irrigation District, El Dorado County, California. As archaeologist, conducted pedestrian survey of the project area and coauthored the technical report for the resource management project. (2015)

Water/Wastewater

Sisk Dam Safety of Dams Modification Project, California Department of Water Resources, Merced County, California. As archaeologist, coordinated cultural resource monitoring and compliance for safety modifications for B.F. Sisk Dam. (2022–2023)

Zone 4 Tank and Pump Station, Tuolumne Utility District, Tuolumne County, California. As archaeologist, authored technical report for water tank and pump replacement project. (2022)

Delta Dams Safety of Dams California Environmental Quality Act and Permitting, California Department of Water Resources, Stanislaus and Santa Clara Counties, California. As archaeologist, performed pedestrian survey and coauthored the technical report. (2021)

Upper Feather River Spillway Underdrains Project, California Department of Water Resources, Plumas County, California. As archaeologist, conducted record search and performed pedestrian survey. Also, coauthored the technical report. (2020–2021)

Castaic Office Environmental Technical Services, California Department of Water Resources, Kern County, California. As archaeologist, conducted record search and performed pedestrian survey for a portion of the California Aqueduct. (2020–2021)

Bear River Debris Removal Project, Calaveras County Water District, Calaveras County, California. As archaeologist, assisted with record search and tribal consultation. (2020)

El Dorado Hills Wastewater Collection Facility Relocation Project, El Dorado Irrigation District, El Dorado County, California. As archaeologist, conducted pedestrian survey and resource documentation for the project. (2017)

Cultural Resources Inventory for Woodland Recycled Water Project, City of Woodland, California. As archaeologist, conducted pedestrian survey and resource documentation for the project and coauthored the technical letter report. (2014)

Carlsbad Desalination Plant Cultural and Biological Monitoring, Poseidon Resources, California. As archaeological monitor, monitored the trenching, grading, and installation of water lines. (2013)

Relevant Previous Experience

Teaching Assistant, UC Davis, California. Taught discussion sections, labs, and lectures for human evolution, archaeology, and social anthropology courses. (2014–2020)

Instructor/Principal Investigator, UC Davis Archaeological Field School, California. Led excavations in Calaveras County. (2018)

Instructor/Principal Investigator, UC Davis Archaeological Field School, California. Led excavations and surveys in Mariposa and Mono Counties. (2017)

Co-Instructor/Co-Field Director, UC Davis Archaeological Field School, California. Led excavations in Santa Clara and Solano Counties. (2016)

Publications

Hanten, N., and N. Stevens. 2010. "The Reliability of Microscopic Use-Wear Analysis on Monterey Chert Tools." *Proceedings of the Society of California Archaeology* 24.

Presentations

Hanten, N. 2019. "When and Where: Modeling the Spread of the Ethnographic Subsistence Pattern in the Prehistoric Central Sierra Nevada." Presented at the SCA Annual Meeting, Sacramento, California, 2019.

Hanten, N.J., A. Booth, K. Burkett, A. Fuchs, I. Araujo, and B. Witzel. 2019. "Preliminary Results from the 2018 UC Davis Field School, Excavations at CA-CAL-242 near Murphys, CA." Presented at the SCA Annual Meeting, Sacramento, California, 2019.

Chen, J., S. Crocker, K. Vorsheim, N.J. Hanten, and B. Hull. 2018. "Survey Results from the 2017 University of California, Davis Archaeological Field School: Site Composition in the Sagebrush and Pinyon Juniper Zones, Southern Mono County, California." Presented at the SCA Annual Meeting, San Diego, California, 2018.

Diaz, L., C.E. Beckham, W. England, Z. Thomas, N.J. Hanten, and B. Hull. 2018. "Preliminary Results from the 2017 University of California, Davis Field School, Excavations at the Lower Merced River, Mariposa County, CA." Presented at the SCA Annual Meeting, San Diego, California, 2018.

Hanten, N. 2017. "Settlement Patterns and the Ideal Free Distribution in the Archaeology and Ethnography of the Sierra Nevada of California." Presented at the SAA Annual Meeting, Vancouver, British Columbia, 2017.

Hanten, N. 2017. "Settlement Patterns and the Ideal Free Distribution in the Archaeology and Ethnography of the Sierra Nevada of California." Presented at the SCA Annual Meeting, Fish Camp, California, 2017.

Hanten, N., J.W. Eerkens, and S.D. Talcott. 2016. "Stable Isotope Analysis of Canis Remains from Central California." Presented at SCA Annual Meeting, Ontario, California, 2016.

Hanten, N. 2010. "The Reliability of Microscopic Use-Wear Analysis on Monterey Chert Tools." Presented at "Other sides of the Trowel: Perspectives on Student Research and Fieldwork," a symposium at the SCA Annual Meeting, Riverside, California, 2010.

Awards

Evolutionary Anthropology Summer Fellowship. Awarded by the UC Davis Department of Anthropology for the research project "Resource Distribution and Settlement Patterns in the Central Sierra Nevada." (2017)

Evolutionary Anthropology Summer Fellowship. Awarded by the UC Davis Department of Anthropology for the research project "Stable Isotope Analysis of Prehistoric Dogs in Central California." (2015)

UC Los Angeles Undergraduate Student Research Award. Won 1st Place at the SCA Annual Meeting for the presentation "The Reliability of Microscopic Use-Wear Analysis on Monterey Chert Tools." (2010)

UC Davis Regents Scholarship. Received a 4-year scholarship awarded to the top 0.5% of applicant class. (2006–2010)

Ross Owen, MA, RPA

Archaeologist

Ross Owen is an archaeologist with 9 years' experience working in cultural resource management. Mr. Owen conducts identification-level surveys and site evaluation field studies and reporting throughout California, Nevada, and the Mid-Atlantic. Working with a diverse range of site types and landforms has contributed to his knowledge of material culture, site formation processes, and soil development in these and adjacent regions.

In his role as a field/lab technician and field director, Mr. Owen has been involved in all stages of completing Phase I (Class III) and II surveys and evaluation for compliance with the California Environmental Quality Act and Section 106 of the National Historic Preservation Act. He also has experience in records searches and archival work, tribal consultation, data management, field excavation, laboratory processing, and archaeological monitoring. Outside of work, he has sought out opportunities to present research in academic settings, speak about archaeology to better communicate archaeological significance to the public, and utilize new technologies to aid in archaeological research.

Education

Indiana University of Pennsylvania
MA, Applied Archaeology, 2019
Boston University
BA, Archaeology, 2014

Certifications

Registered Professional Archaeologist (RPA), No. 18014
National Outdoor Leadership School - Wilderness First Aid
Pacific Gas and Electric Gold Shovel Standard

Professional Affiliations

Society for American Archaeology
Society for California Archaeology

Project Experience

Energy

Gonzaga Wind Repowering Project, Gonzaga Ridge Wind Farm, LLC, Merced County, California. Performed an archaeological survey for a California DPR Four Rivers District–proposed wind farm, associated access roads, and transmission lines. Submitted for review to the United State Bureau of Reclamation. (2019)

Confidential Agrivoltaic Ranch, Sacramento County, California. Conducted an archaeological survey for a proposed power generation facility. Documented a nineteenth- and twentieth-century gold mining district, domestic sites, habitation sites, and bedrock milling features. Assisted in DPR form and report preparation. (2022–Present [Ongoing])

Sloughhouse Solar Energy Project, Sacramento County, California. Conducted archaeological survey and reporting for a proposed power generation facility. Documented a twentieth-century domestic site. (2020)

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

Heartland Solar Development Project, Fresno County, California. Led a crew for an archaeological survey of more than 2,000 acres for a proposed solar energy project. (2019)

Confidential Solar Energy Project, Sacramento County, California. Conducted an archaeological survey and completed an inventory report for a proposed 740-acre solar project. Recorded a twentieth-century domestic site and irrigation features. (2020–2022)

Confidential Wind Energy Project, Santa Barbara County, California. Assisted in data-recovery excavation of prehistoric sites and wet-screening of excavated soils. (2020)

Municipal

SOMO Village Project, City of Rohnert Park, California. Prepared a Phase I archaeological letter report.

Dowdell Industrial Park, City of Rohnert Park, California. Conducted a records-search review and integrated results into a report that meets U.S. Army Corps of Engineers standards for Section 106 and California Environmental Quality Act compliance. (2020)

Recreation

Pines 2 Mines Trail, Nevada and Placer Counties, California. Conducted an archaeological survey in Tahoe National Forest, prepared updated DPR documentation for relocated nineteenth- and twentieth-century resources, and prepared a heritage resources inventory report. (2022–2023)

Martis Valley Trail Segment 3F, Placer County, California. Conducted an in-person records search and review at the North Central Information Center and compiled results in a report. Conducted a pedestrian archaeological survey of the project area. Prepared a report documenting negative findings. Conducted tribal correspondence, soliciting information on known resources within the project area and project-related concerns. (2019–2020)

Trail to Crane Creek, City of Rohnert Park, California. Conducted exploratory subsurface testing and monitoring of excavator-exposed topsoil to assess cultural resource sensitivity. Prepared a letter report documenting results of testing and monitoring. (2020)

Resource Management

Vegetation Management, Pacific Gas and Electric, Tulare, Madera, Fresno, Merced, San Joaquin, and Mariposa Counties, California. Conducted cultural resources inventories, monitoring, and reporting for Pacific Gas and Electric vegetation management work on Bureau of Land Management, National Forest Service, Bureau of Reclamation, and California State Parks lands throughout Central and Northern California. Conducted staffing and field coordination for monitoring. (2021–Present [Ongoing])

Malheur National Forest Heritage Survey, Oregon Department of Forestry, Harney County, Oregon. Conducted archaeological survey and recorded lithic scatters, obsidian quarries, and refuse scatters. (2022)

Robinson Mine Conditional-Use Permit Modification, Placer County, California. Conducted an in-person records search and review at the North Central Information Center and compiled results in a report. Conducted a pedestrian archaeological survey of the project area. (2019–2020)

Adam Giacinto, MA, RPA

Archaeologist

Adam Giacinto is an archaeologist and ethnographic specialist with 18 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 throughout the southwestern US.

Adam Giacinto

Selected Project Experience

California High Speed Rail, Fresno-Bakersfield, California. As principal investigator, oversees, implements, and reports upon cultural inventory, evaluation, data recovery and compliance efforts under Section 106 of the NHPA, Federal Rail Authority, CEQA, and local Guidelines for Fresno to Bakersfield section. Oversight of Native American monitors, built environment specialists and archaeologists, management of cultural monitoring implementation and site treatment, client reporting, meetings and report preparation. Implementation of mitigation included exploratory archaeological investigations at multiple NAHC-eligible resources.

El Dorado Irrigation District Pacific Tunnel Replacement Project, Riverton, El Dorado County, California. Oversaw background research,survey, resource documentation, tribal consultation, and preparation of a technical report under CEQA and Section 106 regulatory context. An appropriate mitigation strategy was developed for this cultural inventory, including management of historical EID components and segments of the Mormon-Carson Emigrant Trail.

Sacramento International North 16th Street Improvement Project, Sacramento, California. Oversaw ASR preparation, inventory efforts, and other archaeological and tribal resources efforts

SMF Master Plan Support, Sacramento, California. Oversaw background research, survey, effects analysis and preparation of a technical report under CEQA and Section 106 regulatory context.

Glenn County Boat Ramps Project, California. As principal archaeological investigator coordinated records searches, tribal coordination, APE map preparation, fieldwork, resource review, report preparation. Work was performed to meet USACE review for Section 106 compliance.

Eaton Road Overpass Project, Sacramento, California. As principal archaeological investigator coordinated records searches, APE map preparation, fieldwork, resource review, ASR preparation, and management recommendations for this City of Sacramento and Caltrans compliance project.

Chico State University, Butte County, California. As principal investigator, as overseen archaeological research, fieldwork, and reporting on three projects on the university campus.

Vacaville Center Campus Project, Solano Community College District, City of Vacaville, California. As principal archaeological investigator, coordinated a NWIC records search, NAHC and Native American communication,

archaeological survey, and preparation of a technical report. Recommendations were framed in compliance with California Environmental Quality Act (CEQA) regulations and submitted to the lead agency.

Lassen Substation Project EIR, Siskiyou County, California. As cultural resources specialist, integrated results of technical studies into cultural resources section. Facilitated consultation with tribes on behalf of the CPUC.

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.

Donner Trail Elementary School Project, Truckee, Placer and Nevada County, California. As archaeologist, Mr. Giacinto coordinated a North Central Information 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 client for this negative cultural inventory.

Placer County Government Center Master Plan Update, North Auburn, California. As principal archaeological investigator, Mr. Giacinto coordinated NCIC records search, NAHC and Native American information outreach, archaeological survey, and preparation of a technical report. Coordinated UAIC consultation and site visit. Documented and evaluated NID ditch segment. An appropriate mitigation strategy was developed meeting CEQA, County, and local requirements for this cultural inventory.

Spectrum Alturas, Modoc County, California. As Principal archaeological investigator, Mr. Giacinto coordinated and completed a Northeastern Information Center (NEIC) records search, Native American Outreach, coordinated archaeological survey, archaeological report preperation. Recorded and updated more than 50 archaeological resources. Drafted PAL Map and report for CEQA and Section 106 compliance.

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 requirements for this cultural inventory, including recommendations relating to historical mining features.

Martis Creek Restoration Project, Truckee River Watershed Council, Truckee, California. As ethnographic researcher and principal archaeological investigator, managed archaeological monitoring and investigations at Martis Type Site CA-PLA-5, conducted verbal, semi-structured interviews with four elders from the Washoe Tribe of California and Nevada, synthesized transcriptions of themes expressed concerning tribal histories and values within larger investigation

Operations and Maintenance On-Call, Department of Water Resources. As primary Dudek archaeological and tribal resources consultatant, Mr Giacinto manages cultural resources projects for DWR. These inlude the Cultural Resources Inventory for the B.F. Sisk Dam Safety of Dams Modification Project, Delta Dams Raise Project (three reservoirs), MP 230 Project, and Upper Feather River Projects (three dam locations) and preperation of a Programattic Agreement for Cultural resources for DWR. Mr Giacinto is familiar with the DWR Tribal Engagement and AB 52 processes.

Alameda County Water District Project, California 2019-present. As principal cultural investigator, coordinated a records search, NAHC sacred lands file search, tribal outreach, and preparation of a constraints study, report and monitoring plan, and IS/MND under CEQA and Section 106. Included 100 square mile sensitivity model of known and buried cultural resources by applying a weighted geologic, soils, geotechnical, slope, landscape, and previous technical study information.

Pure Water Plan 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.

Cloverdale Unified School District On-Call Projects, Sonoma County, California. As Principal archaeological investigator, Mr. Giacinto coordinated NWIC, NAHC, and Native American correspondence, archaeological survey, and preparation of a technical report for 5 Cloverdale unified school district projects. Projects involved CEQA considerations and Section 106 compliance for USACE review.

Yokohl Ranch Development Project, The Yokohl Ranch Company, LLC, Tulare County, California. As co-principal investigator and field director, 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.

City of Rohnert Park On-Call Cultural Resources Services, Sonoma County, California. As Principal archaeological investigator, Mr. Giacinto has provided recommendations, attended AB 52 consultation meetings, and overseen work for more than a half-dozen projects throughout the City of Rohnert Park. Has strong working relationships with the Graton Rancheria Federated Indian Tribe and other tribes in the surrounding region.

City of Saint Helena On-Call, Napa County, CA. On contract to provide cultural support. One project of note, the Hunter Subdivision, included Dudek records search, pedestrian survey, extended Phase I testing, ground penetrating radar, and prepared cultural resources report for residential subdivision project proposed within NRHP eligible archaeological district.

SFO Rental Car Center/Air Train Project/Runway Improvements/Habitat Restoration Projects, San Francisco, California. As Principal archaeological investigator, Mr. Giacinto managed and completed archaeological work for the SFO Rental Car Center/Air Train and Runway Improvements Projects included a NWIC records search, NAHC sacred lands file search, tribal outreach, and preparation of a constraints study, ARMR-style technical report for compliance with CEQA and Section 106. Work included an assessment of known resources and potential for unanticipated buried cultural resources by consulting geologic, soils (including marine resources), historical map, geotechnical, slope, landscape, and previous technical study information. Preparation of a report and maps that met State Historic Preservation Office, FAA and Airport staff needs was completed.

Wildlife Services Program EIR-EIS, CDFA/USDA. Dudek has developed template letters to be used for tribal notification, follow up, and consultation for this project. Dudek drafted, and mailed letters on behalf of CDFA, letters to all 216 NAHC-listed contacts in the state of California. Responses received are tracked, reviewed with the agency, and responded to. In addition, outreach letters prepared by the USDA were reviewed and modified for the purposes of Section 106 consultation.

AB 52 Support. Mr Giacinto has been contracted to prepare dozens of TCR reports. The goal of these investigations is to review the archaeological, historical, academic, and ethnographic record for potential TCR information, then gound contemporary AB 52 consultation information in this context while providing recommendations related to reasonable approaches for Management. In addition, Mr. Giacinto provides on-call suppport for helping a number of agencies work through challenginf AB 52 issues.