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## **Appendix D3**

### Cultural Resources Inventory Report - Tuolumne Facility



**CULTURAL RESOURCES INVENTORY REPORT**  
**for**  
**GOLDEN STATE NATURAL RESOURCES, KEYSTONE,**  
**TUOLUMNE COUNTY, CALIFORNIA**

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**FEBRUARY 2024**

# Cultural Resources Inventory Report for Golden State Natural Resources, Keystone, Tuolumne County, California

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## NATIONAL ARCHAEOLOGICAL DATABASE (NADB) INFORMATION

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**Project Proponent:** Golden State Financial Authority

**Report Date:** February 2024

**Report Title:** Cultural Resources Inventory Report for the Forest Resiliency Program  
Project SPI Keystone, Tuolumne County, California

**Type of Study:** Archaeological Inventory

**Resources:** P-55-000347

**USGS Quads:** Keystone, California 1:24,000; T 1S, R 13E, Sections 14 and 23

**Acreage:** 65.5

**Permit Numbers:** Pending

**Keywords:** Keystone USGS 7.5-Minute Quadrangle; Intensive Pedestrian Survey

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## MANAGEMENT SUMMARY

The Golden State Finance Authority (Client) retained Dudek to complete a cultural resources inventory and evaluation report for a project that proposes construct a wood pellet manufacturing facility, using material from sustainable forest management projects (including unmerchantable trees and residuals). The forest material would be delivered via truck, and then sent via rail to the Port of Stockton for export. The Project may require a federal permit through the U.S. Army Corps of Engineers (USACE). The USACE is required to comply with Section 106 of the National Historic Preservation Act (NHPA).

This study consisted of a records search of the APE and a one mile radius, a Native American Heritage Commission (NAHC) Sacred Lands File (SLF) search, and an intensive pedestrian survey of the APE. A Central California Information Center (CCaIC) records search identified one previously recorded cultural resource within the APE, a segment of the Sierra Railroad Mainline (P-55-000347) intersects the northwestern corner of the APE. Three additional cultural resources were identified within a one mile area. A NAHC SLF search was negative for the presence of any Native American cultural resources within the half-mile search area. An intensive-level pedestrian survey conducted of the APE resulted in an update to the previously recorded segment of the Sierra Railroad Mainline (P-55-000347), and the recordation of a new resource, consisting of the SPI Keystone sawmill and support facilities (Property 1, Frank et al. 2021). As these two resources are built environment historic resources and not archaeological resources, these resources and any potential Project-related effects to them are fully discussed in the historic built environment technical report for the Project (Frank et al. 2021).

Based on these results, no cultural resources will be impacted (No Historic Properties Affected) by the project as currently designed and no additional archaeological work, including monitoring, is recommended beyond standard archaeological measures in the event of an unanticipated discovery



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# **Cultural Resources Inventory Report for Golden State Natural Resources, Keystone, Tuolumne County, California**

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## **1 INTRODUCTION**

### **1.1 Project Location and Description**

The Golden State Finance Authority proposes to improve the site to facilitate the bringing of forest material (such as trees or underbrush that have no lumber value) in by truck, conversion of such material into wood fuel pellets, and then shipment of the pellets from the Project area using the existing railroad line. The Project will occur within one parcel (APN 063-190-056), the abandoned SPI Keystone Mill located at 12001 La Grange Road, Tuolumne County, California (Figure 1, Project Location). The Project intends to use the existing Sierra Railroad – Mainline, Keystone Segment to ship pellets from the site, which is located adjacent to 12001 La Grange Road.

The site is located immediately southeast of the junction of State Route (SR) 108 and La Grange Road. The site is situated in Township 1 South, Range 13 East, and Sections 14 and 23 of the U.S. Geological Survey (USGS) Keystone, California 7.5-minute quadrangle. The APE analyzed herein consists of all areas of potential ground disturbance within the 66.5-acre Project APE (Figure 2, Project APE). 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.

## 1.2 Regulatory Context

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

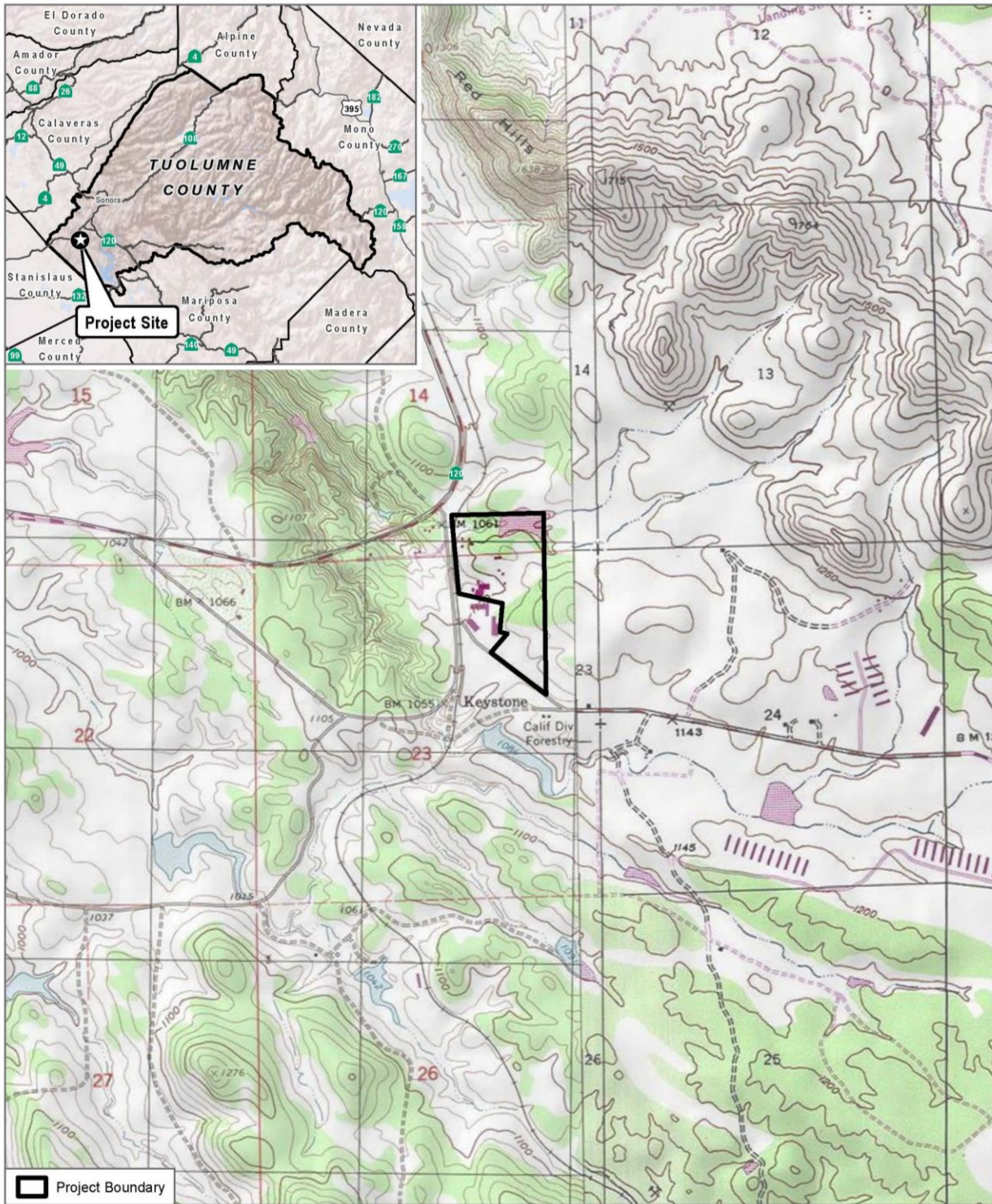
### 1.2.1 National Historic Preservation Act (NHPA)

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 (NPS), under the U.S. Department of the Interior, the NRHP was authorized under the NHPA, as amended. Its listings encompass all National Historic Landmarks, as well as historic areas administered by NPS.

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

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

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



SOURCE: USGS 7.5-Minute Series Keystone Quadrangle



**FIGURE 1**  
**Project Location**  
 Forest Resiliency Program

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SOURCE: Bing Maps (Accessed 2020), Tuolumne County 2020



**FIGURE 2**  
**Project Site**  
 Forest Resiliency Program

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

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

Effects on historic properties under Section 106 of the NHPA are defined in the assessment of adverse effects in 36 CFR 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, but are not limited to:

- (i) Physical destruction of or damage to all or part of the property;
- (ii) Alteration of a property, including restoration, rehabilitation, repair, maintenance, stabilization, hazardous material remediation and provision of handicapped access, that is not consistent with the Secretary’s Standards for the Treatment of Historic Properties (36 CFR Part 68) and applicable guidelines;
- (iii) Removal of the property from its historic location;
- (iv) Change of the character of the property’s use or of physical features within the property’s setting that contributes to its historic significance;



- (v) Introduction of visual, atmospheric or audible elements that diminish the integrity of the property’s significant historic features;
- (vi) Neglect of a property which causes its deterioration, except where such neglect and deterioration are recognized qualities of a property of religious and cultural significance to an Indian tribe or Native Hawaiian organization; and
- (vii) Transfer, lease, or sale of property out of Federal ownership or control without adequate and legally enforceable restrictions or conditions to ensure long-term preservation of the property’s historic significance (36 CFR 800.5 (2)).

To comply with Section 106, the criteria of adverse effect are applied to historic properties, if any exist in the project Area of Potential Effect (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” will be made for the proposed project. If there are historic properties in the APE, application of the criteria of adverse effect will result in project-related findings of either “no adverse effect” or of “adverse effect,” as described above. A finding of no adverse effect may be appropriate when the undertaking’s effects do not meet the thresholds in criteria of adverse effect 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 were expected to result from the proposed project, mitigation would be required, as feasible, and resolution of those adverse effects by consultation may occur to avoid, minimize, or mitigate adverse effects on historic properties pursuant to 36 CFR Part 800.6(a).

### **1.2.2 California Register of Historic Resources (CRHR) and CEQA**

In California, the term “historical resource” includes but is not limited to “any object, building, structure, site, area, place, record, or manuscript which is historically or archaeologically significant, or is significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political, military, or cultural annals of California.” (PRC section 5020.1(j).) In 1992, the California legislature established the 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 on the CRHR were expressly developed to be in accordance with previously established criteria developed for listing in the National Register of Historic Places (NRHP), enumerated below. According to PRC Section 5024.1(c)(1–4), a resource is considered historically significant if it (i) retains “substantial integrity,” and (ii) meets at least one of the following criteria:

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

In order to understand the historic importance of a resource, sufficient time must have passed to obtain a scholarly perspective on the events or individuals associated with the resource. A resource less than fifty 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 Cal. Code Regs., tit. 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 the state landmarks and points of interest. The CRHR also includes properties designated under local ordinances or identified through local historical resource surveys.

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

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

- 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(s).

More specifically, under CEQA, a project may have a significant effect on the environment if it may cause "a substantial adverse change in the significance of an historical resource." (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); PR Code section 5020.1(q).) In turn, the significance of an historical resource is materially impaired when a project:

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

(CEQA Guidelines section 15064.5(b)(2).) Pursuant to these sections, the CEQA inquiry begins with evaluating whether a Project APE contains any "historical resources," then evaluates whether that project will cause a substantial adverse change in the significance of a historical resource such that the resource's historical significance is materially impaired.

If it can be demonstrated that a project will cause damage to a unique archaeological resource, the lead agency may require reasonable efforts be made to permit any or all of these resources to be preserved in place or left in an undisturbed state. To the extent that they cannot be left undisturbed, mitigation measures are required (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 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 shall 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 Native American Heritage Commission (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 inspection must be completed within 48 hours of notification of the Most Likely Descendant by the NAHC. The Most Likely Descendant may recommend means of treating or disposing of, with appropriate dignity, the human remains and items associated with Native Americans.

## **1.3 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 summarizes the cultural resources work completed for this project to-date and provides recommendations for further treatment of the cultural resources consistent with CEQA and Section 106 of the NHPA. Several appendices are attached to this report. Appendix A provides resumes of key personnel; Appendix B includes confidential records search results; Appendix C contains NAHC and tribal correspondence documents.

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

## **2 PROJECT CONTEXT**

### **2.1 Environmental Context**

The Project APE is located in the western foothills of the Sierra Nevada Mountain Range. Elevations on the Project APE range from approximately 1,070 feet above mean sea level (AMSL) in the northwest corner of the site to 1,140 feet AMSL in the eastern portion of the site. The Project APE is surrounded by widely-scattered rural development and open space generally composed of scattered oak woodland and annual grassland. The Project APE is located in a semi-arid climate where annual temperatures range from 33.4°F to 94.5°F, and the average annual precipitation is 32.14 inches. On average, the months with the highest rainfall are January and February, and July has the least precipitation (WRCC 2021).

### **2.2 Cultural Context**

#### **2.2.1 Prehistoric Era**

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. The most recent attempt to develop a cultural chronology for the Central Sierras was undertaken by Rosenthal and colleagues (Rosenthal, 2011), who analyzed single component archaeological assemblages from Alpine, Amador, Calaveras, and Tuolumne Counties to develop an internally-consistent chronology for the region based on radiocarbon dates, obsidian hydration analyses, a projectile point typology based on metrical attributes, and diagnostic shell beads. The resulting chronology consists of five periods: the Early Archaic (11,500-7,000 calibrated years before present [cal BP]), the Middle Archaic (7,000-3,000 cal BP), the Late Archaic (3,000-1,100 cal BP), the Recent Prehistoric I (1,100-610 cal BP), and Recent Prehistoric II (. Brief descriptions and the distinctions between the cultural phases follow:

##### ***2.2.1.1 The Early Archaic Period (11,500-7,000 cal BP)***

Very little is known about occupation of the central Sierra Nevada prior to 7000 cal BP. In fact, assemblages from this early period are rare in the California as a whole. Most known sites are small lithic assemblages containing stemmed or fluted projectile points (Hull 2007), consistent with an emphasis on large game hunting. The best known Early Archaic sites in the region are Clark's Flat – CA-CAL-342 (Peak and Crew, 1990), and SkyRocket—a CA-CAL-629/630

(Bieling et al., 1996; La Jeunesse and Pryor, 1996), both of which have returned Early Holocene radiocarbon dates and have projectile point assemblages resembling those of contemporary sites in the Great Basin. Both sites also contain an abundance of plant processing tools consistent with gray pine nut processing, which would have been among the highest ranking plant resources available in the region (Whelan, et al. 2013; Whelan 2016). Based on this limited evidence, the initial occupation of the region likely consisted of limited use by small, mobile groups focused on high ranking resources such as large game and pine nuts.

### ***2.2.1.2 The Middle Archaic Period (7,000-3,000 cal BP)***

An increase in the number of sites dating to Middle Archaic period suggests that the Sierras first became permanently occupied during this time, with many sites recorded in the foothills (Rosenthal, 2011) and Yosemite National Park (Montague, 2010). Middle Archaic period assemblages in the foothills resemble the Early Archaic components from SkyRocket and Clark's Flat with abundant hand stones, millstones, and other plant processing foods. The distribution of sites and assemblage compositions of the period suggest a continued focus on the processing of fall-ripening nuts in the foothills and large game hunting at higher elevations (Whelan 2016) and the occupation of winter sites below the snow line, suggesting that the pattern of seasonal transhumance across high and low elevations was already well established at this time.

### ***2.2.1.3 The Late Archaic Period (3,000-1,100 cal BP)***

The division between the Middle and Late Archaic periods is more-or-less arbitrary from a subsistence and settlement standpoint, as site assemblages from the Late Archaic largely resemble those from the Middle Archaic (Rosenthal, 2011; Whelan, 2016). Many of the sites from this period appear to be large residential base camps that were occupied or reoccupied for a substantial amount of time (Hull, 2007), with a continued focus on large game hunting supplemented by plant processing that did not require specialized investment. Archaeobotanical assemblages show a slight expansion in diet relative to earlier periods with the inclusion of acorn and small seed taxa into the diet, although gray pine still dominates (Rosenthal, 2011). The distinction between the Middle and Late Archaic periods is largely defined by the dominance of obsidian in flaked stone assemblages, which reaches a maximum during this period (Rosenthal, 2011). Additionally, there are large numbers of high altitude sites during this period that coincide with several extreme droughts may have made high elevations more productive and habitable for longer periods (Montague, 2010). Generally speaking, the Late Archaic habitation of the region represents a continuation of previous subsistence and settlement practices at a slightly higher intensity, possibly due to an increase in population size.

### ***2.2.1.4 The Recent Prehistoric I Period (1,100-610 cal BP)***

Recent Prehistoric I marks the first major shift in subsistence and settlement pattern after the region became permanently occupied in the Middle Archaic period. Although sites dating to the Recent

Prehistoric I are under-represented in the archaeological record (Moratto, 2002, 1984; Rosenthal, 2011; Whelan, 2016), several changes to lifeways are evident. To begin, the large residential bases from the Late Archaic were replaced with a greater number of smaller, more ephemeral residential bases (Hull 2007). Important technological changes were also occurring, including the introduction of the bow and arrow and probably the first appearance of bedrock mortars (Hull, 2007; Hull and Moratto, 1999; Jackson et al., 1994; Rosenthal, 2011, 2002; Stevens, 2002; Whelan, 2016). Projectile points are found distributed in small clusters across all elevations not just high elevations, suggesting a switch from logistical forays accessing prime game habitat to hunts staged from residential camps (Whelan, 2016). The apparent introduction of bedrock mortars, which are commonly associated with intensive acorn processing, and the ubiquity of the acorn economy in the period following the Recent Prehistoric I, suggests the initial adoption of intensive acorn economies.

The small number of sites dating to the period could be explained by population decline as a result of prolonged droughts associated with the Medieval Climatic Anomaly (Hull, 2007; Hull and Moratto, 1999), or a reorganization of settlement and subsistence patterns resulting in low archaeological visibility. No matter the cause, it is apparent that Recent Prehistoric I is a time of transition in the central Sierra foothills during which Archaic period lifeways were replaced by a different set of settlement and subsistence practices.

### ***2.2.1.5 The Recent Prehistoric II Period (610-100 cal BP)***

Recent Prehistoric II is well-represented in the archaeological record of the central Sierra foothills and higher elevations (Hull, 2007; Rosenthal, 2011; Whelan, 2016). Residential sites in the foothills continue to be smaller and more dispersed than Late Archaic residential sites, but also have better developed middens and are generally associated with bedrock mortars, indicating greater investment in and repeated reoccupation of winter residences (Hull, 2007; Stevens et al., 2017; Whelan, 2016). Archaeobotanical assemblages show an increase in acorn relative to other taxa, and the presence a more diverse small seed assemblage, including summer ripening seeds and berries (Rosenthal, 2011). These trends indicate not only a reliance on intensive acorn and small seed processing as a major contributor to subsistence, but also the continued occupation of winter residences during the summer months or a greater investment in storage with the logistical transport of high elevation resources back to winter residential sites (Rosenthal, 2011). Recent Prehistoric II projectile point distributions also suggest that summer hunting was conducted by small family groups rather than logistical hunting parties (Whelan, 2016).

Recent Prehistoric II sites in the foothills suggest prolonged and repeated occupation from fall through late spring and a reliance on intensive acorn and small seed exploitation supplemented by hunting forays from residential bases, indicating that the region's ethnographic settlement and subsistence patterns (Barrett and Gifford, 1933; Levy, 1978) were largely established by the beginning of the Recent Prehistoric II period.



## 2.2.2 Ethnohistoric Period (post-AD 1750)

During the ethnographic period in California, the foothills of central and southern Sierra Nevada were occupied by various Miwok, Western Mono (or Monache), and Foothill Yokut speaking groups (Barrett and Gifford, 1933; Gayton, 1948; Gifford, 1932; Kroeber, 1925; Levy, 1978; Spier, 1978). The region surrounding the Project APE would have been in Sierra Miwok tribal territory during the ethnohistoric period (Barret 1908; Barret and Gifford 1933; Kroeber 1925). This group inhabited the western foothills of the Sierra Nevada Mountains, roughly bounded by the eastern plains of the Central Valley to the west, the Cosumnes River to the north, the Sierra crest to the east, and the Chowchilla River to the south. Ethnographic work writes of a relatively high population of indigenous inhabitants in this region, with the early work of Stephen Powers in the 1870s noting that, when accounting for all of the discrete groups, the Miwok were “by much the largest nation in California, both in population and in extent of territory” (Powers 1877).

The language spoken by the Sierra Miwok is one of the five classified languages of the Miwok family, with several distinct regional dialects, all of which derived their linguistic roots from a common Penutian stock. The language falls into two distinct branches: Western Miwok, which is subdivided into Coast and Lake Miwok, and Eastern Miwok, which includes Bay, Plains, and Sierra Miwok. Lexostatistical calculations suggest that the two branches of the Miwok language began to diverge at approximately 500 BC (Golla 2011). Sierra Miwok is further subdivided into three distinct dialects: Northern Sierra Miwok, Central Sierra Miwok, and Southern Sierra Miwok—with Central Sierra Miwok would have been spoken in the vicinity of the APE. The extent to which these Sierra Miwok dialects reflect regional differences in socio-political factors is unknown as the dialects were not named and lacked sociopolitical correlates (Golla 2011).

Subsistence and settlement practices among the Sierra Miwok included a reliance on acorns as a staple food and a seasonal transhumance with occupation of permanent or semi-permanent lower elevation residential bases during the winter months and more dispersed high elevation temporary camps during the summer. Each permanent winter residence was occupied by a *mena*, a group of patrilineally related families, that served as the primary social and political unit of the societies (Gifford, 1926). Decisions on where to locate settlements were largely predicated on the timing of acorn procurement but were also influenced by seasonal temperature and weather patterns. In the late spring and summer months, small groups and families generally dispersed into higher elevations to hunt game and pursue roots, greens, and pine nuts, among others. Beginning in late summer and fall, groups began aggregating into moderately-sized villages (e.g. 10-15 people) at or below the snow line, at which point acorns were collected and stored for consumption through the winter.

The intensive exploitation of acorn is a unique aspect of the California culture area and requires specialized technologies and extensive processing in order to be incorporated as a major component of the diet. Abundant and seasonally reliable, they store well and require very little

search and procurement time, however, they entail an enormous amount of processing time. Because of their high tannic acid content—which can be poisonous in large doses—acorns must be ground into meal and leached to be consumed in bulk. As in the rest of the state, mortars and pestles were the primary means of processing acorns, in the Sierra Nevada in particular, the abundant bedrock outcrops present throughout the region were utilized as bedrock mortars for acorn processing (Heizer 1978). Acorn crops were generally collected in fall, after falling from the tree, and stored for use over the winter and early spring. While the preferred species of oak varied regionally and across the state, black oak (*Q. kelloggii*), blue oak (*Q. douglasii*), and interior live oak (*Q. wislizeni*) tended to be staples of subsistence across the Sierras.

### **2.2.3 The Historic Period**

#### **Spanish Period (1769–1822)**

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

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

#### **Mexican Period (1822–1848)**

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

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

### **American Period (Post-1848)**

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

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

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

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

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

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

Historic research was also performed to understand better the history of land use of the project area. This research consisted of reviewing historic topographic map and aerials ([NETR 2021a](#), [2021b](#)).

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 (ARMR): Recommended Contents and Format (ARMR Guidelines) for the Preparation and Review of Archaeological Reports. All cultural resources identified during this inventory were recorded on California Department of Parks and Recreation Form DPR 523 (Series 1/95), using the Instructions for Recording Historical Resources (Office of Historic Preservation 1995), including updates to previously recorded resources.

## 4 RESULTS

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

### 4.1 Records Search Results

On December 10, 2020, a CHRIS records search was conducted by staff of the CCaIC, located on the campus of California State University, Stanislaus. The search of the Project APE and a one mile radius included the CCaIC’s collections of mapped prehistoric, historic, and built environment resources, Department of Parks and Recreation Site Records, and technical reports. The search also included historical maps of the study area, the NRHP, the CRHR, the California Historic Property Data File, the lists of California State Historical Landmarks, California Points of Historical Interest, and the Archaeological Determinations of Eligibility. Dudek reviewed the CCaIC records to determine whether implementation of the Project would have the potential to impact known and unknown cultural resources. The complete results of the records search are presented in Confidential Appendix B and summarized below.

#### ***Previously Conducted Cultural Resource Studies***

Results of the cultural resources records search indicated that 11 previous cultural resources studies have been conducted within one mile of the Project APE. Of these, one study intersects the Project APE. Table 1, below, summarizes all 11 previous studies followed by a brief summary of each study that overlaps or intersects the Project APE.

**Table 1. Previous Cultural Resource Studies within One Mile of APE**

Report ID	Authors	Year	Title
<i>Previous Reports Intersecting the Project APE</i>			
TO-06986	Berg, J. E. and K. R. McGuire	2009	Archaeological Survey and Extended Phase I Report for the Proposed Acceleration Lane at the State Route 120/La Grange Road Intersction Tuolumne County, CA 10-TUO-120, PM 8.19 E10-OP160.
<i>Previous Reports within One Mile of the Project APE</i>			
TO-01223	Napton, L. Kyle	1979	Archaeological Reconnaissance of the La Grange Road Realignment, Tuolumne County, California.
TO-01319	Raymond Vail and Associates	1979	La Grange Road Realignment Project, Tuolumne County, California: Historical Property Survey.
TO-05197	Barnes, J.	2003	Cultural Resource Inventory Report, USDI Bureau of Land Management, CA-018-S-TM-03/03, Red Hills Section 110 Cultural Inventory.
TO-05498	Leach-Palm, L., P. Mikkelsen, J. King, J. Hatch, and B. Larson	2004	Cultural Resources Inventory of Caltrans District 10 Rural Conventional Highways; Volume I: Summary of Methods and Findings.
TO-05501	Rosenthal, J. S. and J. Meyer	2004	Cultural Resources Inventory of Caltrans District 10 Rural Conventional Highways; Volume III: Geoarchaeological Study.
TO-05505	Leach-Palm, L., J. King, J. Hatch, and B. Larson	2004	Cultural Resources Inventory of Caltrans District 10 Rural Conventional Highways; Volume II H: Tuolumne County.

Report ID	Authors	Year	Title
TO-06363	Hollett, S.	2007	An Archaeological Survey Report for the Green Springs CDF Station Leach Field Replacement Project, Tuolumne County, CA
TO-06788	Wooten, K.	2000	Department of Transportation Negative Archaeological Survey Report, 10-TUO-120, P.M. 8.0/8.45.
TO-06789	Wooten, K.	2005	Extended Phase I Investigations in the Greensprings Run Area for the Proposed Sight Distance Improvement Project at La Grange Road on California State Highway 120, Tuolumne County, PM 8.0/8.4.
TO-08988	Parker, A. and A. Whitaker	2019	Archaeological Survey Report for Director's Orders Hazard Tree Removal in District 10, Amador, Calaveras, Mariposa, Merced, San Joaquin, Stanislaus and Tuolumne Counties, CA

### **Previously Recorded Cultural Resources**

CCaIC records indicate that a total of four previously recorded cultural resources fall within one mile of the Project APE; one of these resources (P-55-000347) intersects the Project APE (Table 2).

**Table 2. Previously Recorded Cultural Resources within One Mile of the Project APE**

Primary ID	Trinomial	Resource Name	Age	Description	Eligibility
<i>Previously Recorded Resources Intersecting the Project Area</i>					
P-55-000347	CA-TUO-002774H	Sierra Railroad / Sierra Railway	Historic	Railroad Grade, Engineering Structure, Bridge	Not Listed
<i>Previously Recorded Resources within 1/2 mile of the Project Area</i>					
P-55-001432	CA-TUO-000409/H	4-TUO-S-409 combined with Sawmill Hill Site; Green Spring Run Site	Prehistoric, Historic	Foundations; Trash Scatters; Water Conveyance System; Road; Mines; Graves; Lithic Scatter; Bedrock Milling Feature; Burials; Habitation Debris	P-55-001432 / CA-TUO-409/H is a combination of CA-TUO-409 with CA-TUO-690/H
P-55-006800	CA-TUO-005955	CA-018TM-262	Prehistoric	Lithic Scatter; Bedrock Milling Features; Habitation Debris	
P-55-006934		FT-113	Historic	Wall	

### **P-55-000347**

P-55-000347 has been nominated for the NRHP as part of the Sierra Railroad Historic District, However, it is unclear if the property was ever formally listed. The Sierra Railroad – Mainline and its components including Sierra Road, Paulsell Station, Cooperstown Road, Keystone, Chinese Station/Montezuma, Woods Creek, Sullivan Creek, Standard, Black Oak Road, and Ralphs Station were evaluated in 2008 by JRP Historical Consulting LLC. The Sierra Railroad - Mainline begins in Oakdale (Stanislaus County) on the south side of East H Street, between South Sierra and South Yosemite Avenues, and follows a generally easterly route into Tuolumne County passing through communities of Jamestown, Sonora, and Standard before terminating in Tuolumne City. Currently

the status is listed as, “Eligible (3D) Appears eligible for listing in the National Register as a contributor to a district that has been fully documented according to OHP instructions and appears eligible for listing.”

### **Historic-Period Map Review**

In addition to the historical maps from the CHRIS records search, Dudek also consulted historical topographic maps and aerial photographs through the Nationwide Environmental Title Research, LLC (NETR) to understand the development of the Project APE and surrounding properties. Topographic maps are available from 1916 to 2018 and aerial images are available from 1945 to 2016 (NETR 2021a, NETR 2021b).

Both mapping and aerial images show the Project APE as largely undeveloped up until the 1980s. The 1987 aerial displays the largest change to the project area with its development as an industrial property including the construction of approximately eight industrial buildings on the western side of the lot along La Grange Road. The eastern and northeastern sections of the property display large piles of material accessed by an informal road from the west. The northern end of the property displays the construction of two residential properties, the aerial is of too poor quality to identify the number of buildings and their features. Surrounding the property there is an increase in development including the construction of CA-108 and several other residences to the southeast. To the north of the industrial property is a small, improved spring with a dam. The 1988 image displays several changes to the project area with the demolition of the majority of the original industrial buildings and replacement with three others. The only remaining buildings are located at the far southwestern end of the property. Due to poor image quality alterations to the other buildings on the property could not be identified. The 2005 image displays little discernable changes from the 1998 image. The largest change is seen in the demolition of the northeast rectangular in plan building. The 2016 aerial displays an increase in the number of buildings at the western end of the property with the construction of six buildings. The rest of the property and surrounding area display no discernable changes.

## **4.2 Geomorphological Information**

There are four soil mapping units mapped on the Project APE: Copperopolis-Whiterock complex, 2–8% slopes, rocky; Bonanza-Loafercreek complex, 3–15% slopes; Aquic Haploxeralfs-Loafercreek-Dunstone complex, 1–12% slopes; and water (USDA 2021). The Copperopolis-Whiterock complex consists of shallow, well-drained soils formed in colluvium over residuum from metasedimentary rocks. The Copperopolis soils are formed on low hills. This map unit occurs along La Grange Road in the southern portion of the parcel. Whiterock complex is a secondary soil series within this unit. The Bonanza-Loafercreek Complex generally consists of shallow, well-drained soils formed in residuum weathered from metavolcanic rocks. These two soil types comprise the majority of the APE. Due to their shallow, residual nature, cultural deposits are likely to manifest on or near the ground surface, but potential for buried deposits remains especially at



the base of slopes where colluvial deposits may develop. The last soil type mapped within the APE is the Aquic Haploxeralfs-Loafercreek-Dunstone complex consisting of moderately well-drained loam and gravelly clay-loam formed in depressions and drainages. Comprised of alluvium and/or colluvium deposited over residuum, this soil classification presents the greatest potential for buried cultural deposits.

In general, the soils present in the APE consist of metavolcanic residuum underlain by weather slate and metavolcanic bedrock. While such low-slope locations are characteristically Late Holocene or younger, the distinction between depositional and non-depositional formations are more difficult to discern in the foothills when overlaying bedrock or where glacial deposits are erosional. The areas within close proximity to the natural springs within the project area would have been an attractive resource for prehistoric people, and any low-slope areas adjacent to these springs would have higher potential for buried deposits.

## **4.3 Field Survey Results**

### **Field Methodology**

A qualified Dudek archaeologist conducted a survey of the Project APE on January 13, 2021. The survey was conducted to identify and record any cultural resources that may occur in the Project APE. The intensive-level survey methods consisted of a pedestrian survey conducted in parallel transects, spaced no more than 15 meters apart (approximately 50 feet), over the entire Project APE, from north to south. Deviations from transects occurred only in the center of the subject property where an expansive paved area in association with the sawmill facilities and storage bays obscured all ground visibility, and in areas with standing water. The ground surface was inspected for prehistoric artifacts (e.g., flaked stone tools, tool-making debris, ground stone tools, ceramics, fire-affected rock), soil discoloration that might indicate the presence of a cultural midden, soil depressions, features indicative of structures and/or buildings (e.g., standing exterior walls, post holes, foundations), and historical artifacts (e.g., metal, glass, ceramics, building materials). Ground disturbances such as burrows, cut banks, spoils piles and vehicle were also visually inspected for exposed subsurface materials. No artifacts were collected during the survey.

All fieldwork was documented using field notes and an Apple Generation 8 iPhone (iPhone) equipped with ESRI Collector and Avenza PDF Maps software with close-scale georeferenced field maps of the Project APE, and aerial photographs. Location-specific photographs were taken using the iPhone's 12-mega-pixel resolution camera. All field notes, photographs, and records related to the current study are on file at Dudek's Auburn, California office. All field practices met the Secretary of Interior's standards and guidelines for a cultural resources inventory.

## Survey Results

The Project APE has been substantially altered since the development of a sawmill on the site in the 1970s. Large portions of the Project APE consist of graded roadways and staging areas with retention basins, primarily along the eastern half. Ground visibility varied across the Project APE, often obscured by dense grasses areas in the southeastern and western portions of the Project APE, and by woodchips in the unpaved areas in the center of the Project APE. The best visibility was along the northern edge of the Project, where sparse grasses and dry seasonal drainages afforded a 50% view of the ground surface. Areas of exposed soil along drainages and near rodent burrows were closely inspected. No historic-period or prehistoric cultural resources were identified during the cultural resources survey.

## Auger Testing

Dudek archaeologist Ross Owen, conducted auger tests in order to determine subsurface conditions within the project area. Nine 4-inch diameter augers were hand excavated with the project area (Figure 1). Results of these excavations are provided in Table 3.

The purpose of auger testing was to determine the potential for subsurface deposits yielding cultural materials within the project area. Surface conditions indicate the Project APE generally consists of shallow loamy topsoil atop gravelly clay subsoil with fragments of weathered bedrock. Large areas of the APE have been highly disturbed through grading, the development of retention basins and alterations to drainages. Soils profiles were variable, with a noted change in color and composition within the northern third of the Project APE (A-6, A-7, A-8; Table 3, Figure 3).

In general, documented soils were observed to consist of the following:

- Topsoil (A Horizon): Represented by dark brown and very dark grayish brown loams (Munsell 10YR 3/2 and 3/3) terminating between 3-10cm below the surface (cmbs).
- Subsoil (B Horizon): Represented by dark yellowish brown clays (Munsell 10YR 4/4) with gravels and decomposing bedrock overlying metavolcanic and slate bedrock at 25-55cmbs.

Soils within the northern portion of the Project APE also consisted of a shallow soil profile, however there was an increase in clay content in both horizons and a notable change in coloration to a more reddish hue. No archaeological material or indications of subsurface deposits were identified throughout the course of testing. While significant soil disturbance has occurred within the footprint of the sawmill and retention basins, the soil profiles in the undeveloped areas within the Project APE appear to be intact.

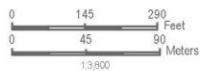
**Table 3. Auger Testing Results**

Unit ID	Depth (cmbs)	Results	Artifacts Recovered	Soil Description
A-01	0-10	Negative	None	10YR 3/2 Very Dark Grayish Brown Sandy Loam
	10-25	Negative	None	10YR 4/4 Dark Yellowish Brown Sandy Clay Loam; decomposing bedrock at 25cmbs
A-02	0-10	Negative	None	10YR 3/2 Very Dark Grayish Brown Loam
	10-55	Negative	None	10YR 4/4 Dark Yellowish Brown Clay Silt, increased clay content with depth, pockets of degraded metamorphic bedrock; sub-angular and sub-rounded gravels
A-03	0-3	Negative	None	10YR 3/2 Very Dark Grayish Brown Sandy Loam
	3-10	Negative	None	10YR 4/4 Dark Yellowish Brown Clay silt, water table encountered at 10cmbs
A-04	0-10	Negative	None	10/YR 3/3 Dark Brown Sandy Loam
	10-25	Negative	None	10YR 3/4 Dark Yellowish Brown Sandy Loam with increased clay; sub-angular and sub-rounded metamorphic gravels
A-05	0-10	Negative	None	10YR 3/3 Dark Brown fine silty loam
	10-25	Negative	None	10YR 5/4 Yellowish Brown Clay Loam; decomposing bedrock at 25cmbs
A-06	0-22	Negative	None	7.5YR 3/3 Dark Brown Clay Loam; bedrock at 22cmbs
A-07	0-18	Negative	None	5YR 3/4 Dark Reddish Brown Clay Loam; bedrock at 18cmbs
A-08	0-28	Negative	None	7.5YR 3/3 Dark Brown Clay Loam; bedrock at 28cmbs
A-09	0-10	Negative	None	10YR 3/2 Very Dark Grayish Brown Loam; high moisture content
	10-30	Negative	None	10YR 3/3 Dark Brown Loam with degraded bedrock fragments; high moisture content

Figure 3. Auger Testing Locations



SOURCE: Bing Maps (Accessed 2020), Tuolumne County 2020



**FIGURE 3**  
Auger Testing Locations  
Forest Resiliency Program

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Figure 3. Dense grasses adjacent natural spring with retention basin in background, facing south



Figure 4. Drainage along northern edge of APE, facing southwest

#### **4.4 Tribal Coordination**

The NAHC was contacted by Dudek on January 18, 2021 to request a search of the Sacred Lands File. The NAHC responded on February 4, 2021 indicating that the search failed to identify any Native American resources in the vicinity of the project and provided a list of individuals and organizations to contact that may have additional information. The Golden State Finance Authority (lead agency) will be conducting Tribal consultation pursuant to AB 52.

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## **5 SUMMARY AND MANAGEMENT CONSIDERATIONS**

The current cultural resources inventory was completed to satisfy the requirements of CEQA and Section 106 of the NHPA. Dudek's Phase I cultural resources inventory of the APE suggests that there is a low potential for the inadvertent impact to unanticipated cultural resources or deposits. The NCIC records search and the NAHC SLF search did not identify any resources within the APE. No newly recorded cultural resources were observed during pedestrian survey. Soil within the APE appears relatively undisturbed and could support the development and presence of cultural deposits in the area. Waterways were attractive resources for prehistoric people and generally have a higher potential for buried deposits. As the project encompasses a portion of Dry Creek, there remains potential for subsurface deposits to be exposed during restoration work. Thus, there is a potential that unanticipated resources could be encountered during project-related activities. As such, the following management recommendation for unanticipated archaeological resources and human remains are provided to follow:

### **Unanticipated Archaeological Resources**

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

### **Unanticipated Human Remains**

Should human remains be discovered, work will halt in that area and procedures set forth in the California Public Resources Code (Section 5097.98) and State Health and Safety Code (Section 7050.5) will be followed, beginning with notification to the ACOE (if applicable) and County Coroner. No further excavation or disturbance of the site or any nearby area reasonably suspected

to overlie adjacent remains shall occur until the County Coroner has determined, within 2 working days of notification of the discovery, the appropriate treatment and disposition of the human remains. If the County Coroner determines that the remains are, or are believed to be, Native American, he or she shall notify the NAHC in Sacramento within 24 hours. In accordance with California Public Resources Code, Section 5097.98, the NAHC must immediately notify those persons it believes to be the most likely descendant from the deceased Native American. The most likely descendant shall complete his/her inspection within 48 hours of being granted access to the site. The designated Native American representative would then determine, in consultation with the property owner, the disposition of the human remains.

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## 6 REFERENCES

- 36 CFR 60. National Register of Historic Places.
- 36 CFR 800.1–800.16 and Appendix A. Protection of Historic Properties.
- 48 FR 44720–44726. “The Secretary of the Interior’s Standards and Guidelines for Federal Agency Historic Preservation Programs Pursuant to the National Historic Preservation Act.” April 24, 1998.
- Barrett, S.A., Gifford, E.W., 1933. Miwok material culture. *Bulletin of the Milwaukee Public Museum* 2, 117–376.
- Bieling, D.G., La Jeunesse, R.M., Pryor, J.H., 1996. Skyrocket: a Central Sierran Paleoindian Archaic Transition Site. *Current Research in the Pleistocene* 13, 4–6.
- 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.
- Bureau of Reclamation. 2010. Cultural Resources Survey for the Closure of Eight Abandoned Mines in the Oregon Hill Area of Auburn State Recreation Area, Placer County, California. Mid-Pacific Region. Prepared by Joanne E. Goodsell and Amy Dunay, Division of Environmental Affairs Cultural Resources Branch. Report on file at 2800 Cottage Way, MP-153 Sacramento, CA 95825. Carlson, Anne 1986.
- Costello, J.G. and J. Marvin. 2002. *Results of Phase II Test Excavations at The Mountain Quarries Site: Historic Component of CA-ELD-616/H Near Cool, El Dorado County*. Prepared for California Department of Transportation. Report on file at Bureau of Reclamation, Mid-Pacific Region, Sacramento, CA.
- Davis, L.M. 1975. Dry Diggings on the North Fork: Personal Observations of Auburn, California in the Days of ’49. Published by Placer County Museum Foundation.
- Frank, Nicole, Sarah Corder, Fallin Steffen, and Kathryn Haley. 2021. *Historical Resources Inventory and Evaluation Report for the Forest Resiliency Program Project SPI Keystone, Tuolumne County, California* (publication pending).
- Gayton, A.H., 1948. Yokuts and Western Mono Ethnography, II: Northern Foothill Yokuts and Western Mono. *University of California Anthropological Records* 10, 143–301.
- Gifford, E.W., 1926. Miwok lineages and the political unit in aboriginal California. *American* 1932. The Northfork Mono. *University of California Publications in American Archaeology and Ethnology* 31, 15–65.

- Golla, V. 2011. *California Indian Languages*. University of California Press, Berkeley, California.
- Grunsky, F. R. 1989. *Pathfinders of the Sacramento Region: They Were There Before Sutter*. Sacramento County Historical Society.
- Heizer, R.F., and A.B. Elsasser. 1953. *Some Archaeological Sites and Cultures of the Central Sierra Nevada*. University of California Archaeological Survey Reports 12. Berkeley.
- Heizer, R. F. 1978. *Handbook of North American Indians: Volume 8-California*.
- Homer, A.T. 1988. *Auburn and Placer County: Crossroads of a Golden Era*. Windsor Publications, Inc., Northridge, CA
- Hull, Kathleen L. 2007. "The Sierra Nevada: Archaeology in the Range of Light." In *California Prehistory: Colonization, Cultural and Complexity*, edited by Terry L. Jones and Kathryn A. Klar. Lanham, MD: AltaMira Press.
- Hull, K.L., Moratto, M.J., 1999. *Archaeological Synthesis and Research Design, Yosemite National Park, California*. National Park Service, US Department of the Interior.
- Jackson, R.J., Jackson, T.L., Miksicek, K., Roper, K., Simons, D., 1994. *Framework for Archaeological Research and Management, National Forests of the North Central Sierra Nevada*.
- Jennings, C.W., 2010. *Geologic Map of California*. California Geologic Data Map Series.
- Kroeber, A.L., 1925. *Handbook of Indians of California*. Dover Publications, New York.
- La Jeunesse, R.M., Pryor, J.H., 1996. *Skyrocket Appendices*.
- Levy, R., 1978. Eastern Miwok, in: *Handbook of North American Indians*. pp. 398–413.
- Montague, S.T., 2010. *High-Elevation Prehistoric Land Use in the Central Sierra Nevada, Yosemite National Park, California*. Californai State University, Sacramento.
- Moratto, Michael J. 1984. *California Archaeology*. San Diego: Academic Press.
1999. *Cultural Chronology 2: The Yosemite Data*. In *Archaeological Synthesis and Research Design, Yosemite National Park, California*, edited by Kathleen L. Hull and Michael J. Moratto, pp. 121-204. Yosemite Research Center Publications in Anthropology No. 21

2002. Culture History of the New Melones Reservoir Area, Calaveras and Tuolumne Counties, California. *Essays in California Archaeology: A Memorial to Franklin Fenenga*, Contributions of the University of California Archaeological Research Facility 60, 25–54.
- NETR (Nationwide Environmental Title Research). 2021a. Historical Topographical Maps of the APE. Accessed January 2021. <https://www.historicaerials.com/viewer>.
- 2021b. Historical Aerial Photographs of the APE. Accessed January 2021. <https://www.historicaerials.com/viewer>.
- NPS (National Park Service). 2009. Archeology and Historic Preservation: Secretary of the Interior’s Standards and Guidelines [As Amended and Annotated]. Electronic document, [http://www.nps.gov/history/local-law/arch\\_stnds\\_0.htm](http://www.nps.gov/history/local-law/arch_stnds_0.htm), accessed on March 19, 2009.
- 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.
- 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>.
- Peak, A.S., Crew, H.L., 1990. An Archaeological Data Recovery Project at CA-CAL-S-342, Clarks Flat, Calaveras County, California.
- Powers, Stephen 1877. *Tribes of California. Contributions to North American Ethnology, Volume III*. Department of the Interior, U.S. Geographical and Geological Survey of the Rocky Mountain Region. Washington D.C.: Government Printing Office. Reprinted 1976 by University of California Press, Berkeley, California.
- Rosenthal, J.S., 2011. Building a New Chronological Framework for the West-Central Sierra Nevada, in: Jeffrey, R. (Ed.), *A New Frame of Reference: Prehistoric Cultural Chronology and Ecology in the North-Central Sierra Nevada*, Center for Archaeological Research at Davis Publication. Center for Archaeological Research at Davis, Department of Anthropology, University of California, Davis, Davis, CA, pp. 37–66.
- Rosenthal, J.S., 2002. Projectile Point Typology and Chronology in the North Central Sierra Nevada. *North American Archaeologist* 23, 157–183.
- Spier, R.F., 1978. Monache, in: *Handbook of North American Indians*. pp. 426–436.

- Stevens, N.E., 2002. Prehistoric Use of the Alpine Sierra Nevada: Archaeological Investigations at Taiboose Pass, Kings Canyon National Park, California (Master's Thesis). California State University, Sacramento.
- USDA (United States Department of Agriculture). 2021. Web Soil Survey. Survey Staff, Natural Resources Conservation Service, United States Department of Agriculture. Accessed January, 2021. <http://websoilsurvey.sc.egov.usda.gov/>.
- Whelan, C.S., 2016. Hunter-Gatherer Storage and Settlement: A View from the Central Sierra Nevada (PhD Dissertation). University of California Davis.
- Whelan, C., Whitaker, A., Rosenthal, J., and Wohlgemuth, E. 2013. Hunter-Gatherer Storage, Settlement, and The Opportunity Costs of Women's Foraging. *American Antiquity*, 78(4), 662–678.
- USDA (United States Department of Agriculture). 2021. Web Soil Survey. Survey Staff, Natural Resources Conservation Service, United States Department of Agriculture. Accessed January 2021. <http://websoilsurvey.sc.egov.usda.gov/>.
- WRCC (Western Regional Climate Center). 2021. Western Regional Climate Center Historical Data. <https://wrcc.dri.edu/Climate/summaries.php>. Accessed January 18, 2021.

**APPENDIX A**  
*Key Personnel Resumes*



# **APPENDIX B (CONFIDENTIAL)**

*Records Search Maps and Information*

# **APPENDIX C**

*NAHC and Tribal Correspondence*