

PHASE 1A HISTORICAL AND ARCHAEOLOGICAL RESOURCES
INVENTORY REPORT
TAHOE DONNER TRAILS PROJECT
FIVE-YEAR IMPLEMENTATION PLAN
TRUCKEE, CALIFORNIA
NEVADA COUNTY

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SUMMARY

Tahoe Donner Association plans to extend and improve environmental quality on their current trails system over a five-year period through a program involving existing trail and road rehabilitation and rerouting of existing trails and new trail construction for an approximate total of 22 miles. New trails account for 45 percent of the inventory, with improvements to existing trails totaling 55 percent. The Tahoe Donner Trails 5-Year Implementation Plan (Trails 5YIP) is intended to move 22 identified trail projects (and associated trail heads and parking areas) from broad recommendations contained within the Tahoe Donner Trails Master Plan closer to the project-level design and detail necessary for permitting through the various local, state and federal agencies as well as CEQA review and clearance. It is important to note that under 14 Cal. Code Regs. §15378, the term "project" is a CEQA term of art meaning "the whole of an action," and the term "project" as used in the 5-YIP project description does not have the same meaning as the CEQA terminology. As used herein, the term "project" is used to define individual trails and trailheads unless specifically referring to the 5-YIP as a whole. The individual trails and trailheads, whether referred to as "project" or similar terminology within the 5-YIP, are not separate projects within the meaning of CEQA; rather, the individual trails and trailheads are merely components of the overall project: the 5-YIP. In short, every trail and trailhead described herein is part of the 5-YIP which is the CEQA "project" which will be analyzed by the Lead Agency. The 5YIP will be concurrently submitted to both the Town of Truckee (Town) and the County of Nevada (County) for their independent review and consideration, with formal submittal to the county and a non-formal submittal to the town, allowing the county to initiate the environmental review as the lead agency with participation by the town as a responsible agency.

In compliance with state and county antiquities guidelines under the California Environmental Quality Act (CEQA Section § 21084.1, the CEQA Guidelines § 15064.5, and Public Resource Code § 5024) and the Nevada County Zoning Ordinance Land Use and Development Code (Nevada County 2013), the project sponsor is required to consider potential project impacts on significant historical and archaeological resources in the planning process and as part of baseline environmental studies. Cultural resource studies are customarily performed in a series of phases, each one building upon information gained from the prior study. The inventory phase (*Phase 1*) involves prefield research and Native American contact (*Phase 1A*), field reconnaissance/resource discovery (*Phase 1B*), and documentation of any cultural resources located within the project area (*Phase 1C*). If cultural properties are present and if they may be subject to project-related impacts, their significance is evaluated according to eligibility criteria established in the National Register of Historic Places and/or California Register of Historical Resources (*Phase 2*). If project redesign to avoid impacts to significant resources is unfeasible, then mitigation measures are implemented (*Phase 3*). Mitigation (or data recovery) typically involves additional archival research, field excavation, photo documentation, mapping, archaeological monitoring, etc.

Findings of the *Phase 1A* study are the subject of this report. In it, the cultural context has been summarized and known and suspected historical and archaeological resources and related problem areas that exist within the 5YIPlan area have been identified. The matter in which these issues should be addressed and resolved through a set of protocols to be implemented as part of the necessary agency permitting process are outlined. When properly applied, these protocols insure that implementation of the 5YIPlan and the 22 individual projects

it contains should not have an adverse impact to significant historical and archaeological resources. Note that the *Phase IA* document is intended to have much wider applications beyond trail project, as the historical and archaeological resource management protocols outlined can be employed in all ground-disturbing projects undertaken by Tahoe Donner Association in the future.

A complementary companion piece to the *Phase IA* study is presented in the accompanying *Phase IB-Addendum I* report. (*Addendum I* is filed under separate cover.) Following the *Phase IA* protocols, subsequent addenda would be created as and when needed as Tahoe Donner moves forward on other trails projects based upon the planned year-to-year project implementation.

For the *Phase IB-Addendum I*, additional steps have been taken to accomplish a selected portion of the fieldwork now, wherein seven of the 22 trails projects have been subject to a *Phase IB* field reconnaissance. The companion *Phase IB-Addendum I* volume presents findings of this initial field discovery phase (*Phase IB*). Follow-up post field research allows for the organization of raw field data and their categorization into various historical and archaeological resource types to gain a more informed assessment of inventoried resources. The *Phase IB* addendum also provides a provisional assessment of resource significance (in terms of eligibility criteria for listing in the California Register of Historical Resources as per CEQA Section 15060-15065) in order to guide Tahoe Donner staff at this earlier stage of planning. Potential project impacts are outlined and steps for further action (if appropriate) are recommended according to the protocols outlined in the *Phase IA* report. The ultimate objective is to achieve a CEQA determination that the potential effects of this project on cultural resources are not considered to be a significant effect on the environment.

To meet project objectives, Susan Lindström, Ph.D., Consulting Archaeologist, was retained under contract to Tahoe Donner Association to identify areas and issues associated with historical and archaeological resources through accomplishment of the following tasks.

- Identify and map locales within the 5YIPlan area that have been subject to prior archaeological survey and assess areas slated for new survey and/or re-survey.
- Identify and map known historical and archaeological resources within the 5YIPlan area and assess their relative importance.
- Produce a map of the relative sensitivity of various locales within the trails planning area according to various historical and archaeological resource types (e.g., low, moderate, high).
- Identify potential project impacts for various historical and archaeological resource types and describe the range of fixed mitigation measures for any given existing or potential historical and archaeological resource impact.
- Outline the hierarchy of archaeological protocols for each of the proposed trail projects.
- Produce an analytical report to be attached to the 5YIP (with confidential sections exempted). Summarize study findings and prescribe protocols necessary for Tahoe Donner to implement each of the individual trail projects.

As part of the *Phase IA* study, Lindström initiated a search of archaeological records housed at the North Central Information Center at California State University, Sacramento, an adjunct of the State Office of Historic Preservation or SHPO. Results disclosed that 53 archaeological studies have been conducted within and/or adjacent to the 5YIPlan area and at

least 26 archaeological sites have been formally recorded. None of the trails projects have been subject to complete archaeological coverage. While one-third of the trails have received some sort of partial archaeological coverage, most of that coverage is out of date in terms of current archaeological standards. Known historical and archaeological resources are within or in proximity to 50 percent of the trails. In terms of archaeological sensitivity, 55 percent fall in the moderate range, with 27 percent highly sensitive to contain historical and archaeological resources and the remaining trails spanning areas of low to moderate sensitivity. Given the above, it appears that none of the trails projects qualify for protocols that would exempt them from a field reconnaissance altogether. However, for those existing trails projects that occur in areas where considerable prior disturbance has occurred, cultural protocols should be reassessed on a case-by-case basis.

Tahoe Donner falls within the ancestral territory of the Washoe Tribe of Nevada and California and the Washoe Tribal Historic Preservation Officer was contacted in order to incorporate opinions, knowledge and sentiments regarding the project. Tribal members kindly toured the 5YIPlan area. While no specific concerns were identified, the Tribe wishes to be kept informed as project activities progress.

PROJECT DESCRIPTION AND LOCATION

The Tahoe Donner Subdivision encompasses approximately 7,000 acres in Nevada County along the ridge that extends westward towards the crest of the Sierra Nevada near Donner Pass (figures 1-3). It is roughly bounded on the west by the sierran divide, on the south by Donner Lake and Old Highway 40 (Donner Pass Road), on the north by Euer Valley, and on the east by Alder Hill and State Route 89 North. Historic downtown Truckee is situated about one mile to the southeast. Tahoe Donner falls within sections 1 and 2 of Township 17 North/Range 15 East, sections 4-9 Township 17 North/Range 16 East, sections 25-26, 35-36 Township 18 North/Range 15 East, and section 31 Township 18 North/Range 16 East (M.D.M.).

Tahoe Donner Association plans to extend and improve environmental quality on their current trails system over a five-year period through a program involving existing trail rehabilitation (about five miles), existing road rehabilitation (about four miles) and rerouting of existing trails and new trail construction (about 12 miles) for an approximate total of 22 miles. Approximately 80 percent of trails occur within disturbance contexts (Connelly, personal communication 11/18/14). Most impacts are a result of subdivision development, historic and modern logging, burning from the 1960 Donner Fire and subsequent salvage logging, and recent thinning/masticating projects in support of fire safety and defensible space.

The Tahoe Donner Trails 5-Year Implementation Plan (Trails 5YIPlan) is intended to move 22 identified trail projects (and associated trail heads and parking areas) from broad recommendations contained within the Tahoe Donner Trails Master Plan closer to the project-level design and detail necessary for permitting through the various local, state and federal agencies as well as CEQA review and clearance. The historical and archaeological resource component of the project has identified what resources and/or problem areas exist within the 5YIPlan area and outlined how they will be addressed and resolved through a set of protocols to be implemented as part of the necessary agency permitting.

The historical and archaeological resource component of the 5YIPlan includes a specific description of the land use permit need(s) or protocols for each of the trail projects dependent upon the respective field condition(s). Protocols are aimed at effectively avoiding, minimizing and/or mitigating any potential project impacts associated with any given trail project. An important goal, and resultant CEQA determination by both the CEQA lead agency, is a proposal for each of the trail projects that has or can be mitigated to a less than significant impact level. Nonetheless, it is recognized that many of the trail projects could necessitate further analysis and/or reconsideration in order to insure that any potential project impact remains at a less than significant level.

This *Phase IA* report comprises the cultural background component of the 5YIPlan, a baseline study that includes the necessary contextual framework upon which subsequent trail project reports can be appended. The *Phase IA* document is intended to have much wider applications beyond the trail project (e.g. forestry, road and utilities infrastructure, erosion control, recreation, etc.), as the historical and archaeological resource management protocols outlined are appropriate to all ground-disturbing projects undertaken by Tahoe Donner Association in the future.

A complementary companion piece to the *Phase IA* study is presented in the accompanying *Phase IB* report addendum. (*Addendum I* is filed under separate cover). Following the *Phase IA* protocols, subsequent addenda would be created as and when needed based upon the planned year-to-year project implementation as determined by Tahoe Donner. Where no potentially significant historical and archaeological resource impacts are involved, this could reduce reporting on specific trail projects to a letter report addendum.

For the *Phase IB-Addendum I*, additional steps have been taken to accomplish a selected portion of the subsequent fieldwork now, wherein seven of the 22 trails projects have been subject to a *Phase IB* field reconnaissance. Rational for their selection is based on the following considerations.

- 1) These seven trails projects constitute a representative sample based on trail project types (new and existing roads and trails).
- 2) They correspond to construction priorities (recognizing that Tahoe Donner could re-prioritize the construction schedule).
- 3) They entail some of the most culturally sensitive areas within the 5-Year Implementation Plan area and will serve as a test in order to confirm the adequacy of the cultural resource protocols presented in the *Phase IA* document and demonstrate their workability.

The companion *Phase IB-Addendum I* volume presents findings of this initial field discovery phase. Follow-up post field research allows for the organization of raw field data and their categorization into various historical and archaeological resource types to gain a more informed assessment of inventoried resources. The inventory has been "filtered" in order to:

- 1) eliminate those resources that are not historic (i.e., generally younger than 50 years and not considered to be cultural resources); and
- 2) identify only those resources that would actually be physically impacted by implementation of the planned trail project.

In order to guide Tahoe Donner staff at this earlier stage of planning, *Phase IB-Addendum I* also provides a provisional assessment of resource significance (in terms of eligibility criteria for listing in the California Register of Historical Resources as per CEQA Section 15060-15065). Potential project impacts are outlined and steps for further action (if appropriate) are recommended according to the protocols outlined in the *Phase IA* report. The ultimate objective is to achieve a CEQA determination that the potential effects of this project on cultural resources are not considered to be a significant effect on the environment.

BACKGROUND AUTHORITY AND PROJECT SCOPE

As part of the planning process, baseline environmental studies are required and the 5YIPlan will be concurrently submitted to both the Town of Truckee (Town) and the County of Nevada (County) for their review and formal consideration. In compliance with state and county antiquities guidelines under the California Environmental Quality Act (CEQA Section § 21084.1, the CEQA Guidelines § 15064.5, and Public Resource Code § 5024) and the Nevada

County Zoning Ordinance Land Use and Development Code (Nevada County 2013), the project sponsor is required to consider potential project impacts on significant historical and archaeological resources. For the purposes of CEQA, “historic resources” include “a resource listed in, or determined to be eligible for listing in, the California Register of Historical Resources” (CEQA Section § 21084.1.).

Study Protocols

Historical and archaeological resource studies are customarily performed in a series of phases that comprise a sequence of steps or "protocols", each one building upon information gained from the prior one. These protocols are summarized below and discussed in greater detail in the "Results and Recommendations" section of this report.

- Phase I: Inventory
 - Protocol: Phase IA Prefield Research
 - Protocol: Phase IB Field Reconnaissance (preconstruction pedestrian survey)
 - Protocol: Phase IC Historical and Archaeological Resource Recordation/Documentation
- Protocol: Phase II Historical and Archaeological Resource Evaluation
- Phase III: Impact Mitigation
 - Data Recovery
 - Archaeological Monitoring
 - Unforeseen Discoveries
 - Interpretation

This report represents the *Phase IA* protocol and the records search results from the state archaeological records center presented herein will not need to be updated until 2019. Before implementation of any of the trails projects, the *Phase IB* protocol will need to be completed by a qualified archaeologist. Protocols comprising phases 1C, II and III may not be necessary if no additional historical and archaeological resources are discovered during the *Phase IB* field reconnaissance.

State Guidelines

Significance

The California Public Resources Code was amended (in 1992) with the addition of Section 5024.1, which authorized the establishment of the California Register of Historical Resources. The significance of a historical and archaeological resource is typically evaluated in

terms of criteria established in the California Register. For the purposes of CEQA (Public Resources Code Section 21084.1 and CEQA Guidelines Section 15064.5), a significant historical and archaeological resource is one which:

- 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; or
- Has yielded, or may be likely to yield, information important in prehistory or history.

In general CEQA provides protection to "historical resources" and to "archaeological resources" that are "important" and/or "unique." An "important archaeological resource" must meet one or more of the above CEQA criteria. A "unique archaeological resource" must qualify under one of the first three CEQA criteria [Public Resources Code Section 21083.2(g)]. Public Resources Code Section 21084.1, which is part of CEQA, provides additional guidelines for the designation of significant resources classified as "historical resources." As outlined in CEQA Guidelines Section 15060-15065), significant "historical resources" and "unique archaeological resources" are defined as follows (CEQA Guidelines Section 15064.5[a]).

(1) A resource listed in, or determined to be eligible by the State Historical Resources Commission, for listing in the California Register of Historical Resources (Pub. Res. Code SS5024.1, Title 14 CCR, Section 4850 et seq.).

(2) A resource included in a local register of historical resources, as defined in section 5020.1(k) of the Public Resources Code or identified as significant in an historical resource survey meeting the requirements section 5024.1(g) of the Public Resources Code, shall be presumed to be historically or culturally significant. Public agencies must treat any such resource as significant unless the preponderance of evidence demonstrates that it is not historically or culturally significant.

(3) Any object, building, structure, site, area, place, record, or manuscript which a lead agency determines to be historically significant or significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political, military, or cultural annals of California may be considered to be an historical resource, provided the lead agency's determination is supported by substantial evidence in light of the whole record.

California Register criteria focus on a heritage property's associations with significant *events* and *personalities* in the nation's history and cultural heritage; its *distinctive* technical, architectural or artistic *characteristics*; and/or a property's *information potential*. Resources are evaluated within a specific and important time frame or *period of significance* during which time the property was occupied or used. (Sequential or overlapping periods of significance are possible.) Once a period of significance has been established, the property must be associated with the era that has been designated as "significant." A district, site, building, structure, or object must be at least

50 years old (unless it is an "exceptional" younger property). Properties that may not be individually eligible for listing on the register could meet the criteria of eligibility if they are integral parts of an eligible district.

To be listed in the California Register, a property must not only be shown to be significant under one or more of these criteria, but it must also have *integrity*. The quality of significance in American history, architecture, archaeology, and culture is present in districts, sites, buildings, structures, and objects that possess integrity of location, design, setting, materials, workmanship, feeling, and association. The property must remain in its original location. Its design must be in conformance with the original construction plan and without significant alterations or cumulative loss of features during the past 50 years. The materials should be original and repairs should incorporate in-kind materials so that the property retains evidence of the original workmanship. The setting should be relatively free of modern day intrusions. A property that is clearly visible and interpretable should evoke a strong sense of feeling when viewed by contemporary observers. To possess integrity a resource must retain sufficient physical character, with key aspects present, so that it conveys an association or connectedness with historic patterns, persons, designs, or technologies.

Impacts

In order to implement these state antiquities guidelines, historical and archaeological resources subject to potential project impacts are first inventoried (*Phase 1*) and subsequently evaluated (*Phase 2*) to determine their eligibility for listing in the California Register. Specific actions of a proposed project and their impacts on the characteristics that contribute to the potential eligibility of historical and archaeological properties are conducted within the context of CEQA Section 15064.4-5 Guidelines. This applies to both direct (i.e., physical) impacts and indirect impacts (i.e., alteration of the setting, increased public accessibility and potential for vandalism, etc.). For the purposes of CEQA, impacts to "historical resources" and "unique archaeological resources" that are significant are defined in CEQA Guidelines Section 15064.5(b). Adverse impacts include physical demolition, destruction, relocation, or alteration of the resource or its immediate surroundings (Section 15064.5(b-1,2)). If it has been determined that a project may impact a potentially significant historical or archaeological property, then appropriate mitigation measures are implemented and carried-out and a means to monitor mitigation is identified. Mitigation activities are typically conducted in consultation with appropriate federal, state and local agencies, and/or Native American group.

As indicated from the above, historical and archaeological resources that lie within and/or adjacent to the project impact area are formally investigated (including *Phase 1* and *Phase 2* documentation). When working within a new trail alignment or an existing disturbed footprint, and if there is no physical intercept with a significant historical or archaeological resource, there is no need to document or evaluate the resource. While the protocol for physical (direct) impacts is clear, the issue of project (indirect) impacts in proximity to and/or within the viewshed of a significant historical or archaeological property is less straightforward and is accessed by a qualified archaeologist. In the event of historic standing structures/buildings, documentation and evaluation is accomplished by a qualified architectural historian. For all cases, impact avoidance only applies to resources that have been evaluated as significant, i.e., eligible for listing on the California Register. For ineligible properties, the project can proceed as planned without constraints regarding historical and archaeological resources.

County Guidelines

To further accommodate the 5YIPlan review and implementation process, Nevada County's significant cultural resource standards and resulting management plan criteria further guide the report format and content. Chapter II of the Nevada County Land Use and Development Code requires a site-specific inventory and analysis of significant cultural resources and that this evaluation include recommended mitigation and/or alternatives necessary to avoid or lessen impacts (Section L-II 4.3.3 General Provisions) by:

- (1) avoiding the impact by designing so that the resource or constraint is fully protected and not disturbed;
- (2) minimizing the impact through preparation and implementation of a county-approved management plan; and/or
- (3) the use of compensatory mitigation.

Section L-II 4.3.6 lays out the purpose, definitions and standards regarding significant cultural resources. As a condition of project approval, a project sponsor is directed to conduct a records search at the North Central Information Center and initiate contact with the appropriate Native American group. Preservation and avoidance are the first priority and projects shall only be approved when they do not remove or disturb cultural resources, unless a county-approved management plan is implemented according to professional standards. Significant cultural resources discovered during project construction are also protected until a qualified professional can develop an appropriate management plan for their treatment. The locations of significant cultural resources are confidential and are not circulated as part of public documents, but are used for planning purposes only.

Study Goals and Objectives

Objectives of this study are designed to satisfy guidelines pertaining only to *Phase 1A* prefield research (and development of recommendations, mitigations, protocols), with *Phase 1B* field reconnaissance to follow under separate contract. Pending results of the *Phase 1B* field reconnaissance, *Phase 1C* historical and archaeological resource recording/documentation, *Phase 2* evaluations, and *Phase 3* implementation of mitigation measures may or may not be necessary.

Given adequate project descriptions to assess the potential environmental impact on extant historical and archaeological resources within the project area, the primary study goal is to avoid as much as reasonably possible the potential impacts, secondarily to minimize any impacts that are unavoidable, and finally to identify mitigation for any given impact in order to reduce its impact to a less than significant level. This avoid-minimize-mitigate approach has been applied to each of the current trail projects and provides a foundation for any further analysis that will be necessary for future trail projects. To meet project objectives, areas and issues associated with significant historical and archaeological resources that have been identified and are reported in this document.

- Identify and map locales within the 5YIPlan area that have been subject to prior archaeological survey and assess areas slated for new survey and/or re-survey.

- Identify and map known historical and archaeological resources within the 5YIPlan area and assess their relative importance.
- Produce a map of the relative sensitivity of various locales within the trails planning area according to various historical and archaeological resource types (e.g., low, moderate, high).
- Identify potential project impacts for various historical and archaeological resource types and describe the range of fixed mitigation measures for any given existing or potential historical and archaeological resource impact.
- Outline the hierarchy of archaeological protocols for each of the proposed trail projects during project-level implementation.
- Produce an analytical report to be attached to the 5YIPlan (with confidential sections exempted). Summarize study findings and prescribe protocols necessary for Tahoe Donner to determine specifically when and how to permit each of their individual trail projects.

SETTING

PHYSICAL ENVIRONMENT

The project area is situated along the western edge of the Truckee Basin, an alluviated structural basin west of the Carson Range and east of the main crest of the Sierra Nevada. Project elevations range from 5,920 at the base of Northwoods Boulevard up to 7,825 feet along Donner Ridge. The project area is drained by Trout and Alder creeks and the South Fork of Prosser Creek and their tributaries. All outflows empty into the Truckee River. Topography is varied and ranges from flat valleys and wet meadows up to dry and steep ridges. Much of the northern and western portions of the subdivision were burned by the 1960 Donner Fire and extensive brush fields remain.

Landforms in the project area have been influenced greatly by Pleistocene volcanic activity that occurred between 2.3 and 1.2 million years ago and soils are largely residual volcanics (Birkeland 1963). The cinder cone of Alder Hill rises due east of Tahoe Donner. The importance of Alder Hill as a regional prehistoric toolstone source and quarry has been documented by several archaeological studies. Archaeologists working in the region have shown that many artifacts from sites in and around the northern Sierra are made of basalt sourced to Alder Hill according to their distinctive geochemical signatures or "fingerprints" (Bloomer et al. 1997; Lindström 2000b; McGuire et al. 2006). The distribution of artifacts made from a specific rock source provides important clues to the movement of raw or finished materials through a region and affords insights to regional cultural paleogeography.

The project area is characterized as a Jeffrey pine/bitterbrush vegetation community type. It lies within Storer and Usinger's (1971) Yellow Pine/Jeffrey Pine Belt. In the Truckee Basin, Jeffrey pine (*Pinus jeffreyi*) dominates forest stands and on the project site it shares dominance with ponderosa pine (*P. ponderosa*) and lodgepole pine (*P. murrayana*). Understory species include: manzanita (*Arctostaphylos* spp.), sagebrush (*Artemisia tridentata*), bitterbrush (*Pursia tridentata*), current (*Ribes* spp.), various species of *Ceanothus*, and assorted forbs and grasses. Wet meadows and riparian zones are marked by willow (*Salix* spp.) and aspen (*Populus tremuloides*).

It is doubtful that modern plant and animal communities closely resemble their pristine composition due to past disturbance. In pristine times the area is thought to have supported a

luxuriant growth of native bunch grasses which allowed an abundant large game population and provided a nutritious source of seeds for use by prehistoric peoples. Human modifications of the project area are substantial and associated with historic/modern logging activities and recent commercial-residential development.

PREHISTORY

A large view divides the prehistory of the Sierra Nevada and adjoining regions into intervals marked by changes in adaptive strategies that represent major stages of cultural evolution (Elston 1982, 1986). In broadest terms, the archaeological signature of the Truckee Basin marks a trend from hunting-based societies in earlier times to populations that were increasingly reliant upon diverse resources by the time of historic contact. The shift in lifeways may be attributed partially to factors involving paleoclimate, a shifting subsistence base, and demographic change.

Current understanding of northern Sierra Nevada and western Great Basin prehistory is framed within a chronological sequence spanning nearly 12,000 years that is drawn from archaeological investigations throughout the northern Sierra and the Truckee Meadows (Elston 1971, 1986; Elston et al. 1977; Elston et al. 1994, 1995; Grayson 1993; Lindström and Bloomer 1994; Martin 1998; Moore and Burke 1992). Known as "The Eastern Sierra Front Chronology" (Elston et al. 1994, 1995), it provides a relevant time frame for comparing and interpreting Tahoe Sierra archaeology (including the Carson Range).

The earliest recognized period in western Great Basin prehistory, from ca. 11,500 to 10,000 before present (B. P.), is marked by the presence of fluted projectile points found along the shores of shallow Late Pleistocene/Early Holocene lakeshores.

Pre-Archaic sites date from 10,000 to ca. 7,000 B. P. and cluster around lakeshores, river terraces, and high ground above valleys. Following the retreat of sierran glaciers, humans began to occupy the Tahoe Sierra by at least 8,000 to 9,000 years ago during the Tahoe Reach Phase (Elston et al. 1977). Climates were warmer and drier, although conditions remained relatively cool and moist. The earliest archaeological evidence of human presence in the region is found at South Lake Tahoe along Taylor Creek (Martin 1998) and along the Truckee River near Squaw Valley (Elston et al. 1977). Early populations were highly mobile in the pursuit of large game animals (Elston et al. 1995) and are represented by scant occurrences of isolated projectile points (large stemmed, edge-ground projectile points of the Great Basin Stemmed series).

The Early Archaic Period (or Spooner Phase ca. 7,000 to 4,000 B. P.) begins with a mid-Holocene warming trend, during which lakes and marshes receded and drought-tolerant vegetation communities expanded. Drying lowlands may have prompted sparse populations to travel into upland resource zones to hunt and fish and gather plants. Archaeological sites dated to the Early Archaic are rare and no diagnostic projectile point types have been identified until ca. 5,000 B. P., which is when the Martis Contracting Stem and Martis Split Stem atlatl dart points appear. This cultural phase was first identified at Spooner Lake in the Lake Tahoe Basin (Elston 1971).

Late Holocene archaeology is better known and chronologies are relatively well developed. Populations were on the rise and land use was more diversified, with large sites located near permanent water. Big game hunting was supplemented by intensified seed processing and storage.

Late Holocene climate (after ca. 4,000 B. P.) saw a trend toward cooling and more moisture. Population densities increased and more intensive prehistoric use of the Tahoe Sierra began during this period as people moved into the highlands on seasonal gathering, fishing and hunting forays. The Middle Archaic Period begins at about 4,000 years ago during the Early Martis Phase, and continues through the Late Martis Phase to ca. 1,300 B. P. The Martis Contracting Stem and Martis Split Stem projectile points reflect an early aspect of the Middle Archaic, but Martis Corner-notched and Elko Eared points (ca. 3,000 to 1,300 B. P.) are the predominant Middle Archaic time markers. A hallmark of Middle Archaic prehistoric culture in the Tahoe Sierra is the use of basalt (fine-grained volcanics) in the manufacture of stone tools and production of large bifaces.

The Late Archaic Period spans about 1,300 years ago to historic contact. This period is marked by an overall drying trend, punctuated by cool-moist episodes alternating with extended severe drought that lasted until about 500 years ago. Such extreme climatic fluctuations may have allowed for year-round residence in the Tahoe highlands at some times and prohibited even seasonal occupation at other times. Throughout the Late Archaic populations continued to rise, as reflected archaeologically in more intensive use of all parts of the Tahoe Sierra landscape and a greater emphasis on plants, fish and small game. The early half of this period (Early Kings Beach Phase ca. 1,300 to 700 B. P.) is characterized by Rose Spring series arrow points and the later half (Late Kings Beach Phase; ca. 700 – 150 B. P.) is marked by Desert Side-notched and Cottonwood arrow points. The bow and arrow (with emphasis on core/flake technology) replaced the atlatl and dart (and production of large bifaces). This period has been associated with the Washoe Indians (as reported in the ethnographic record). It is estimated that the prehistoric Washoe had one of the highest population densities in the western Great Basin. Relatively high estimates are attributed to the bountiful environment in which they lived (Price 1962:2). Historic declines in Washoe population and traditional resource use were caused by disruptions imposed by incoming Euroamerican groups.

WASHOE HISTORY

The project area falls within the center of Washoe territory, with primary use by the northern Washoe or *Wa She Shu* who wintered in the Truckee Meadows area and spent summers in the Truckee-Tahoe basins and Sierra Valley (Downs 1966; Nevers 1976). The Washoe regard all "prehistoric" remains and sites within the Tahoe-Truckee basins and environs as associated with their own past. In support of this contention, they point to the traditions of their neighbors (the Northern Paiute, Sierra Miwok and Southern Maidu-Nisenan) that include stories about migrations and movement, whereas theirs do not (Rucks 1996:6). However, use by these neighboring groups is not ruled out (Bloomer and Lindström 2006:10).

The closest Washoe ethnographic encampment, *Dat'sa sut ma'lam detde'yi'*, was noted by d'Azevedo (1956) near Gateway. Other camps are reported around Donner Lake. In Washoe terms, Donner Lake is generally mentioned as *datsásut*, without the qualifier for "lake" or *dá'aw* (d'Azevedo 1956:53, #126). Nevers (1976:4; Nevers, personal communication in Rucks 2005) refers to the lake as *behézing wí.giya* or "little eye", as it looks like a little eye when viewed from above. Freed (1966:81, #14) described a Washoe camp, *deiubeiyulElbEthi* ("water flowing down") at the confluence of Donner Creek and the Truckee River, "...where *welmelti* got much of their fish and game. Just upstream was the ethnographic settlement of *dat'sa sut ma'lam detde'yi'* ("mouth of stream + tributary + live there"). These were the people who may have

encountered the Donner Party. Washoe legends abound concerning ancestors who witnessed the [Donner Party] ordeal while trekking or hunting on snowshoes from nearby encampments. They were too frightened of the strange people to make themselves known. They did, however, leave food in sight of the party and took back tales of death and cannibalism to their people (d'Azevedo 1984:147 and quoted in Nevers 1976:44-45).

The Washoe once embodied a blend of Great Basin and California in their geographical position and cultural attributes. While they were an informal and flexible political collectivity, Washoe ethnography hints at a level of technological specialization and social complexity for Washoe groups, which is non-characteristic of their surrounding neighbors in the Great Basin. Semi-sedentism and higher population densities, concepts of private property, and communal labor and ownership are reported and may have developed in conjunction with their residential and subsistence resource stability (Lindström 1992a, 1996a).

The Washoe have a tradition of making long treks across the Sierran passes for the purpose of hunting, trading and gathering acorns. Although some Washoe trekked to distant places for desired resources, most groups circulated in the vicinity of their traditional habitation sites due to the large variety of predictable resources close at hand (d'Azevedo 1984; 1986:472). While there was a tendency for groups to move from lower to higher elevations during the mild seasons, and to return to lower elevations the remainder of the year (Downs 1966), a fixed seasonal round was not rigidly adhered to by all Washoe and some Washoe may have wintered in the Tahoe Sierra during milder seasons (d'Azevedo 1984; 1986:472-473). The ethnographic record suggests that during the mild season, small groups traveled through high mountain valleys collecting edible and medicinal roots, seeds and marsh plants. Men hunted large game (mountain sheep, deer) and trapped smaller mammals. The Truckee River and tributaries such as Trout and Alder creeks were important fisheries year-round. Suitable toolstone (such as basalt) was quarried at various locales, with a major basalt quarry located due northeast of Tahoe Donner at Alder Hill (McGuire et al. 2006). Archaeological evidence of these ancient subsistence activities are found along the mountain flanks as temporary small hunting camps containing flakes of stone and broken tools. In the high valleys more permanent base camps are represented by stone flakes, tools, grinding implements, and house depressions.

Their relatively rich environment afforded the Washoe a degree of isolation and independence from neighboring peoples and may account for their long tenure in their known area of historic occupation (d'Azevedo 1984; 1986:466, 471; Price 1962). The Washoe are part of an ancient Hokan-speaking population, which has been subsequently surrounded by incoming Penutian speakers such as the Sierra Miwok and Southern Maidu-Nisenan and Numic speakers, such as the Northern Paiute (Jacobsen 1966). Even into the 21st Century, the Washoe have not been completely displaced from their traditional lands. The contemporary Washoe have developed a Comprehensive Land Use Plan (Washoe Tribal Council 1994) that includes goals of reestablishing a presence within the Tahoe Sierra and re-vitalizing Washoe heritage and cultural knowledge, including the harvest and care of traditional plant resources and the protection of traditional properties within the cultural landscape (Rucks 1996:3).

EUROAMERICAN HISTORY

Transportation

Some of the first Euroamerican visitors to the Truckee area were members of the Stephens-Murphy-Townsend Party, who ascended the Truckee River and arrived at its confluence with Donner Creek in mid-November of 1844. Hundreds of emigrant trains soon followed, the most notable being the Donner Party. The ordeal of starvation and cannibalism, endured by their members in the winter of 1846-47 at Alder Creek and Donner Lake, is a well-known and tragic episode in the American settlement of the West and is now memorialized at Donner Memorial State Historic Park, a few miles southeast of the project area.

Subsequent emigrant travelers followed an alternate route to avoid the rugged Truckee River canyon, leaving Nevada in the vicinity of Dog Valley (north of the Truckee River) and then angling back down to the Truckee River east of the route of present-day State Route 89. This route has later become known as the Truckee Route of the Emigrant Trail (Map 28). A branch of the Emigrant Trail is alleged to have passed through the Tahoe-Donner Subdivision. During the 1920s, Weddell (1949) designated a dirt trail, which proceeded up Alder Creek from its intersection with State Route 89 and down the rough alignment of Northwoods Boulevard, as a branch of the Emigrant Trail. The dirt trail recorded by Weddell was used during the historic logging operations along Trout and Alder creeks. This road, which appeared on maps as early as 1865 (maps 1 and 2), is now a main residential thoroughfare. Wooden posts marking the route of the Emigrant Trail are set along Northwoods Boulevard and signage for the Emigrant Trail has been posted along the lower reach of Alder Creek that flows through U.S. Forest Service land. The alternate route along Northwoods Boulevard is controversial and remains unconfirmed. Many trail historians believe an intentional ascent in elevation up to the Tahoe-Donner area (with loaded wagons) and subsequent descent down to the Truckee River to be an unlikely logistic, when an easier route was afforded along the present-day route of State Route 89 between Alder Creek and the Truckee River. Recent critical reassessments of this alternate route by leading trail authorities (Graydon 1986) have questioned its validity and the most current maps that depict the Truckee Route of the Emigrant Trail do not indicate Northwoods Boulevard as part of the trail (Department of Parks and Recreation 1991). In any event, the basic route of Northwoods Boulevard as shown on modern maps (Map 36) and including both branches on either side of Trout Creek, seems to be the pioneer road through the area, at least since 1865 (Map 1). North of Tahoe Donner, this earliest road system followed Prosser Creek, with branch roads extending up the South Fork into Euer Valley and the North Fork into Carpenter Valley (formerly known as Twin Valley).

The evolution of road systems through the Tahoe Donner area can be traced on a number of historic maps (maps 1-7, 9-15, 17-27). Initial access from Truckee up and over the Tahoe Donner ridge began at a point due east of Northwoods Boulevard where the road now passes through a small subdivision at the base of the hill. From here, the original road contoured northwestward to meet Northwoods Boulevard near Coyote Moon Golf Course. Maps suggest this to have been the preferred route of ingress-egress until ca. 1880s (see maps 1, 5-7), when the southern access shifted eastward to the lower reaches of Trout Creek to follow the route of the Euer Valley Road (see maps 9-11, 14-15, 17). During the 1930s, travel was split between both the earlier and later routes (see maps 19-23, 25). Both old routes were largely abandoned or relegated to minor use with the construction of Northwoods Boulevard by Dart Industries ca. 1970.

Logging

Logging was first initiated in the Truckee area after the discovery of the Comstock Lode in 1859. When production began to fall in the mines in 1867, the lumbering business also began to suffer. A new market for lumber was found in the Central Pacific Railroad (CPRR), the first transcontinental railroad. As the rails reached Donner Summit in 1866-1867, a number of mills established operations in the Truckee Basin to supply the railroad with cordwood for fuel, lumber for snow shed construction and ties for the road bed. Coburn's Station (Truckee) soon became one of the major lumbering centers. After the completion of the railroad in 1868-1869 lumber companies diversified and grew as new markets were opened to them. Eighteen or more sawmills were operating in the Truckee area during the late 19th century, along with a chair factory, a furniture factory, shingle mills, and charcoal and brick kilns. Knowles (1942) describes several of these lumbering operations in the vicinity of Truckee, including sawmills along Trout and Alder creeks and their locations are shown on a number of historic maps (Map #28, #29, #128, #131, #135; also Map 30, #29, #30). Other sawmills in proximity to Tahoe Donner appear on maps 6, 9, 14, 29, and 30). Mill sites were oriented primarily along main streams, such as Trout and Alder creeks. This pattern insured easy access to water to power machinery, to supply boilers, to float logs or lumber, as well as for domestic use (Wilson 1992:12).

Elle Ellen

In 1868 during the final stages of construction of the Transcontinental Railroad, mill production in the vicinity of Truckee was at its height. Fifty carloads of railroad ties alone were shipped daily from the town and an aggregate of 65,000,000 feet of timber was cut (Knowles 1942:16). Elle Ellen established himself in Truckee in 1868 as one of the leading mill operators during this time (Edwards 1883:41). His first mill site was at the north edge of Truckee (Map 30, #29), where he operated between 1868 and 1877 (Wilson 1992:68, Map #29). His holdings included the northwest quarter of Section 6, Township 17 North, Range 16 East, which he purchased from H. Krisher in October 1873. He acquired the northwest quarter of Section 8, Township 17 North, Range 16 East from John Robinson in September 1874. In January 1875, he bought the southeast quarter of Section 6, Township 17 North, Range 16 East from J. V. Hoag (Wilson 1992:68-69). Elle Ellen's land holdings are shown on Map 8. He had a large contract from the CPRR for getting out railroad ties and shed timber. The mill was burned in 1869 and he lost his entire mill, machinery and lumber valued at \$22,000 on which there was no insurance.

Elle Ellen was one of the earliest lumbermen in California, having operated a sawmill in El Dorado County at Ringgold in 1852, 14 years before he came to Truckee. His was the third sawmill on the Truckee. It cut about 3 million feet of lumber annually until the fall of 1877 when nearly all the timber within reach of his mill had been cleared off. [Knowles 1942:19]

Ellen's second mill site was three miles from Truckee on Trout Creek, which he operated between 1876 and 1883. The mill had a capacity of 30,000 feet of lumber per day. Holdings in the vicinity of this mill included half interest with A. J. Graham in the southwest quarter of Section 6, Township 17 North, Range 16 East. He also had holdings in the northeast quarter of Section 8 from D. Parks' government claim (Wilson 1992:69; Map #30). Knowles (1942:19) describes Elle Ellen's overall operation on Trout Creek.

By December 1877 he had put up a new mill with a daily capacity of 40,000 feet 3 miles from Truckee up Trout Creek. This was connected with the side tracks of the Central Pacific Railroad at Truckee by a V-flume. Dense forests of yellow pine and red and white fir on Mr. Ellen's some 3,200 acres surround quite a village - Mr. Ellen's residence, the dwellings of his employees and the boarding house near the mill.

At Elle Ellen's mill on Trout Creek the year 1880 was a productive one. Besides turning out 25,000 feet of lumber and 27,000 snow shed timbers a day, he also manufactured 20,000 shingles and 50,000 laths every week. His annual cuts during the eighties ran from 2 million to 3 million feet of lumber plus large orders of cordwood.

According to the *Truckee Republican* (12/5/1877; 9/14/1878) the new mill was located near head of Trout Creek at an altitude 164 feet higher than Lake Tahoe. (At Lake Tahoe's average elevation of 6,225 feet, this would place Ellen's mill at 6,389 feet and somewhere in the middle of the Tahoe Donner golf course. The currently signed mill site, marked an earthen/rock dam, is at approximately 6,320 feet. The Trout Creek Mill location appears on maps 9, 10, and 14.) The newspaper also notes that the sawmill was built by Dick Parks and measured 100 feet by 30 feet and constructed of 16-inch by 24-inch timbers. There was a large mill pond on a broad flat above the mill. A flume ran beneath mill. Cutting was done by a double circular saw, with the upper saw being 56 inches diameter and the lower 60 inches diameter. The edger saw was 26 inches diameter and the cutoff saw was 34 inches diameter. All saws were powered by a 65Hp engine. The mill cut 40,000 board feet daily. The mill was nicely shingled, boarded and weather proof and from a distance the complex was reported to look more like some large dwelling than a mill. Locally renowned photographer, H. K. Gage, captured an image of the mill ca. 1880 (Photo 1). Houses overlooked the mill, including the dwelling of the Ellen family, which was situated on a small hill overlooking the pond and mill. Two other residences for key personnel were built upstream. The little village around the mill also included a boarding house and some cabins for the workmen. Sparse and deteriorated artifacts and features from Elle Ellen's mill operations still remain and are reported to include: two earthen dams; a ditch; two millponds; scattered (structural?) logs along Trout Creek whose location has changed after the 2007 flood); V-flume boards near the 12th hole of the golf course; miscellaneous pieces of metal; and a metal rod driven into a boulder. Deteriorated wood cabin remains associated with Chinese artifacts are located near the driving range and burnt wood, window pane glass, and burnt pottery occur near the 18th hole. Early residents of Tahoe Donner have removed most objects (Houdyschell, personal communication 5/27/15). It is problematic whether Bennett Flat (shown as "Meadow" on the 1865 GLO Plat, Map 1) was included in this mill complex. However, the content of historic archaeological sites and the discovery of at least one Chinese coin (Houdyschell, personal communications 5/27/15) surrounding the meadow suggests that E. Ellen might have incorporated this adjoining meadow into his small community. At least the southern portion of the meadow appears to be under his ownership as of 1880 (Map 8). A "Dairy House" appears east of the mill on Trout Creek (Map 28).

A telephone line ran three miles from the mill to offices in town near the Moody Hotel (*Truckee Republican* 10/18/1879). Two teams, consisting of huge logging "trucks" pulled by five and six yokes of oxen, brought the logs to the mill (Barrett 2-16-1979:3). Ellen at that time held patents on 3200 acres of timberland immediately around his mill and "at least ten full sections of

forest lands" were naturally controlled by the location (Map 8). The supply of wood was considered to be "absolutely beyond computation" and viewed as "practically inexhaustible" (Barrett 1979:3).

Ellen opened his third mill on Alder Creek (Knowles 1942:37) and sawed from 1883 to 1901. The mill is pictured in Photo 2 and shown on map 29 (#87 or #128). He operated two circular saws, a shingle machine and a planing mill, all steam powered. His daily cut was 40,000 feet in 12 hours, with an annual output of about a million feet during the 1890s.

In 1883, in order to supply his markets, he bought the Alder Creek Mill property, including the mill site, several sections of timberland and 5½ miles of V-flume which connected the mill with the Central Pacific.

Throughout his last decade of cutting in the Trout Creek country, Elle Ellen continued to furnish cordwood and railroad timbers to his chief customer, the railroad, his outputs during these years being about 4 million feet annually. His [Alder Creek] mill ceased operations in 1901. [Knowles 1942:37].

It is reported that Ellen purchased this mill from Charles E. Roberson and James Machomick who had operated it for 10 years prior (Wilson 1992:31). Roberson and Machomick purchased the Alder Creek Mill in September 1869 from A. Proctor (Wilson 1992:77, Map #100). Wilson (1992 Map #100) locates the mill in Section 34 of Township 18 North/Range 16 East and considerably downstream from the Alder Creek mill site as recorded by the Forest Service (05-17-57-98). (See Map 30, #100.) An undated map of logging sites on file with the Truckee Donner Historical Society places the "Alder Creek Sawmill & Flume 1872-1878) at two points along Alder Creek, one is at the locale recorded by the Forest Service and the other is near the intersection of modern Alder Creek Road and SR 89. When Ellen ceased cutting in 1901, there were at least two other mills that had just commenced operations on Alder Creek: Hobart Mills and the Davies Mill (Wilson 1992:31). The records are not clear on the location of the "Alder Creek Mill(s)" and when or where the other mills were cutting, but it is likely that they cut out early in the 1900 decade.

Elle Ellen transported milled lumber and cordwood through a V-flume from both his Trout and Alder creek mills. The V-flume was developed in 1870 out of a simple modification of the traditional box flume. To form the V-flume, rough planks were joined at an angle of 90 degrees, and the trough thus made was lengthened by the junction of similar abutting sections (Galloway 1947:87). The flume was laid on the ground with simple wooden props and supported by trestlework when ravines were crossed. At first the ends of one section (or box) were lapped over the following one; later, ends were abutted and property supported. Flumes could transport lumber up to 16 inches square and 40 feet long. V-flumes could be built of any length and at varying gradients. They could be constructed piecemeal, up or down a canyon as cutting advanced. Similarly, flumes were dismantled and the wood was salvaged and recycled into the construction of each successive flume. V-flumes were generally constructed at steeper angles than box flumes and the falling water generated great speed and power, carrying wood and lumber right along with it.

Ellen built five miles of V-flume from his Alder Creek Mill to the railroad's main line at the mouth of Prosser Creek (*Truckee Republican* 9-28-1872, 6-10-1873; Wilson 1992:77). In 1876 he built a 3 1/2-mile-long V-flume with 34-inch sides, which connected his Trout Creek mill with his wood yard adjoining the railroad track in Truckee (Edwards 1883:41; *Truckee Republican* 12/5/1877). To supplement low flows in late summer, most of the water in the Trout Creek flume

was furnished from two large springs near the mill and a supplementary ditch and flume were also constructed to tap other springs upstream from the mill (*Truckee Republican* (12/5/1877)). Avocational historian, Denny Dickinson, claims that, according to Nevada County tax records, water from the upper reaches of Alder Creek was also "ditched" to the Trout Creek Mill (personal communication 6/30/15). An undated map on of logging sites on file at the Truckee Donner Historical Society shows the V-flume extending eastward from Elle Ellen's sawmill, through Bennett Flat and down Trout Creek to Truckee town. Lindström (2001) has recorded deteriorated sections of the V-flume through the current Coyote Moon Golf Course and down Trout Creek. The V-flume down Trout Creek descended at a grade of four to nine inches to the rod or 16 1/2 feet (Barrett 2-26-1979:3). Lumber came from the mill to Truckee in seventeen minutes and he at one time Ellen sent 84,800 feet from the mill to the yard in three hours and a quarter (Edwards 1883:42; *Truckee Republican* 12/5/1877). According to the *Truckee Republican* newspaper (4/30/1879), lumbermen once made a box (i.e., boat) to ride down Elle Ellen's Trout Creek V-flume and on the trip down, the box flew out of the V-flume.

Sierra Nevada Wood and Lumber Company

The most intensive and extensive cutting in proximity to Tahoe Donner occurred during the early 20th century by the Sierra Nevada Wood and Lumber Company (SNWLC) and Hobart interests. The SNWLC relocated from the Lake Tahoe Basin to the Truckee Basin after most of the timber lands there had been cut-over, bringing their railroad and sawmill equipment with them. Walter S. Hobart's SNWLC had previously cut in the northern and northeastern section of the Tahoe Basin (inland from Crystal and Agate Bays). Timber was moved by rafting and by railroad to the Mill Creek mill (near present-day Incline Village). Wood products were elevated by incline tramway and transported in V-flumes in a tunnel through the Tahoe divide and down to a wood yard at Lakeview for transport on the Virginia and Truckee Railroad.

The town of Overton (later known as Hobart Mills and located a few miles northeast of Tahoe Donner), became the headquarters for the lumber company's operations (maps 13, 17-18, 20-21). The SNWLC established their sawmill operation and company town in 1896 (Barry-Schweyer 2003). That same year, a new narrow gauge railroad was built between Overton and Truckee to service the new facilities and an extensive network of logging railroads were built to bring saw logs to the mill (Map 13). Logging railroads into Carpenter Valley and the North Fork of Prosser Creek are well documented; logging railroads into Euer Valley and up the South Fork of Prosser Creek are less certain. An undated map of logging railroads on file at the Truckee Donner Historical Society shows the "Hobart Southern Alder Creek branch Standard Gauge, 1901-02) extending up Alder Creek, westward from modern Prosser Reservoir.

Overton became Hobart Mills in 1917 when the Sierra Nevada Wood and Lumber Company was dissolved, and all properties were transferred to the Hobart Estate Company, principal stockholder of the predecessor corporation (Myrick 1992:441). During its heyday, Overton/Hobart Mills had a hotel, post office, dairy, barber shop, company store, school, boarding house, theater, hospital, residential housing, and sewer system in addition to the sawmill and associated outbuildings. The mill consisted of a large sawmill, planing mill, box factory, sash and door mill, shingle mill, light plant, lathe mill, dry kiln, welding shed, carpenter shop, paint shop, lumberyard, two large sheds for finished lumber, yard office, machine shop, blacksmith shop, donkey shed, roundhouse, and a railroad. By 1924 there were some 500 men employed at the mill and living in the adjacent town, many with their wives and children.

Outside the main mill and company town were smaller settlements built on land owned by the company (Barry-Schweyer 2003). Oral histories collected by the Tahoe National Forest from former Hobart Mill residents provide detailed information and anecdotes about life there in the early decades of the twentieth century.

The company owned more than 40,000 acres in Sierra, Nevada, and Placer counties when they built the mill at Overton. Land holdings in the project vicinity are shown on maps 8 and 16. In 1898 the trade journal *Pacific Coast Wood and Iron* (cited in Barry-Schweyer 2003) estimated that it would take 75 years to deplete the resources of the 40,000 acres to be logged “with the latest improved machinery.” In fact, the operation only lasted 40 years. Hobart Mills closed in 1936 in the depths of the Great Depression, after operating as one of the principal lumber operations in the Truckee Basin. With the timber cut over, the mill was dismantled and all activity along the narrow gauge feeder lines and the standard gauge main line ceased.

Floriston Pulp and Paper Company/Crown Willamette Paper Company/Fiberboard Corporation

Logging in the Truckee Basin continued with the harvest of second growth stands during the mid-20th century. With the closure of Hobart Mills in 1936, Fiberboard Corporation based their lumber operations out of the old lumber town. They upgraded the old Hobart Southern Railway bed in 1946 to better transport mill products to the main line at Truckee. The railroad was dismantled in 1955, about the same time that Fiberboard constructed its new mill east of Truckee. The Truckee Fiberboard Mill was torn down a few decades later.

Fir had been largely ignored during the earlier harvesting, as it was considered unsuitable for the production of railroad ties and timbers. With the introduction of paper mills, stands were re-entered to harvest fir for use as pulpwood for paper mills. The greater "digestibility" of fir species (over pine) now made them the targets of harvest. The Floriston Pulp and Paper Company, a fore-runner of Fiberboard, had considerable 20th century timber holdings within the Tahoe Donner vicinity and pulpwood was locally processed at their mill, which was located down the Truckee River Canyon on the transcontinental railroad near the California/Nevada state line. Organized primarily by the Fleischhacker Brothers, the FPPC operated the second largest paper mill in the United States during its period of operations between 1900 and 1930. In 1912 control of the Floriston Pulp and Paper Company went to Crown Columbia Paper Company, known in 1914 as Crown Willamette Paper Company, and later ownership was under the Crown-Zellerbach Corporation. An undated, untitled hand-drawn sketch map by W. H. Otis shows the "C.W.P.Co. Standard Gauge" railroad passing along Alder Creek from the Hobart Mills railroad up into the vicinity of "Euers Valley" (Map 32). An undated map of logging railroads on file at the Truckee Donner Historical Society identifies this railroad as "Floriston Paper Mill Logging RR, Standard Gauge 1924-1928." This map shows railroad grades extending into the headwaters of Alder Creek from Hobart Mills railroad (west of the current downhill ski area), with an lower and upper branch extending above Euer Valley and another branch reaching into northward into Crabtree Canyon. Shaded sections of land appearing on another untitled and undated map show logged lands owned by the Fiberboard Corporation, including sections bordering the northern, western and southern periphery of Euer Valley (Map 31). "Camp B" is listed on this map near the base lodge of the Tahoe Donner downhill ski area (Section 1, Township 17 North, Range 15 East). This logging camp appears to be accessed by a road or logging railroad. According to Tahoe Donner Forester, Bill Houdyschell (personal communication 5/27/15) Camp B is at the terminus of a rail spur and may have been active during the 1920s. The railroad grade up went up Alder Creek

and was later used by Nevada County as a sewer alignment. In his discussion with John Euer, Houdyschell was told of at least five old logging camps within the Tahoe Donner subdivision. A blacksmith shop may have been located to the north of Camp B.

Approximate dates of historic timber harvest within the Tahoe Donner vicinity, which could relate to SNWLC or Crown Willamette/Fiberboard operations, are shown on Map 33.

Euer Sawmill

A narrow gauge logging railroad is reported above the south side of Euer Valley, with a bed at a two percent grade (Huisman, personal communication 1/21/15). A map of logging railroad grades compiled by historians for the Tahoe National Forest depicts another section of railroad grade along the north edge of Euer Valley, along with a notation of "Euer Mill." A steam engine with 10-inch saw blade once sat on the mill's concrete foundation near the Euer Valley Road. A combination flume/ditch once diverted water from Red Mountain to the steam engine. Hot water overflowed into a pit lined with lava rock, which still remains (Huisman, personal communication 5/27/15). The Euers were a ranching-dairying family and not known to be lumbermen. It is possible they leased the right to harvest timber and construct a mill on their property (Huisman, personal communication 5/27/15). The "Euer Valley Mill" is documented in the historical literature (Trespel and Drake 1991:42-43 after Knowles 1942). R. C. Gracey is reported to have moved the "abandoned Euer Valley Mill" to a site on Deep Creek, located a mile and a half up the creek from its junction with the Truckee River. With a steam circular saw of 30,000 feet daily capacity Gracey cut out about four or five million feet of lumber (chiefly fir) during 1917 and 1918. This he flumed to a narrow gauge railroad along the Truckee River down to the transcontinental main line and paper mill at Floriston. Prior to this time (in December 1901), Gracey and partners Charles Burkhart and J. H. Bachelder of the Merrill Valley Lumber Company secured three sections of virgin timber in Jones and Merrill valleys and built a sawmill in Merrill Valley. From 1902 through 1907 they cut off most of the 30 million feet of Jeffrey pine at this site; Hobart later logged out the small amount they left.

Cordwood

Cordwood formed a principal aspect of the 19th century lumber business. Many large trees were cut down from which only one good sawlog could be obtained. The remaining pine scrap (along with fir wood) was salvaged for cordwood. The techniques used to cut and split fuelwood were varied. Most commonly, logs were bucked into four-foot lengths and rounds were split by pounding one or more metal wedges along the length of the round until it split in half. The resulting half round was subsequently split into quarter rounds and smaller. Black powder "wedges" were also used to split logs and to uproot and/or split stumps. In the case of cordwood harvest, winter cutting was practiced as the cold weather draws the pine sap down the trunk of the tree; less sap meant reduced clogging on cross-cut saws and promoted bark adhesion and facilitated fuelwood handling. The cordwood business was particularly profitable in the Truckee Basin and Edwards (1883:74-75) observed that cordwood was "cheap and plentiful." The large number of engines on the transcontinental line and elsewhere consumed vast quantities. Cordwood cutting was principally done by Chinese. There were from 40 to 50 thousand cords of wood sold each year, keeping a large force of men employed in the vicinity of Truckee. Contracts for fuelwood cutting within the Truckee area were awarded to a number of small operators or to larger firms, such as Sisson, Wallace and Company (later known as Sisson, Crocker and Company) and Elle Ellen.

The labor is principally done by Chinamen, who receive an average of \$1.50 per cord for cutting the wood when delivered at the track selling for \$3.75 to \$4 per cord. The heaviest contractors in this section are Messrs. Sisson, Crocker & Co., and Elle Ellen, Esq. These men handle large quantities of wood, and give it especial attention [*Truckee Republican* 1/21/1880].

Contracts were also awarded to smaller firms, including independent Chinese fuelwood-cutting contractors who also operated in Truckee.

Charcoal

Like fuelwood, charcoal production also functioned as an important adjunct to the 19th century lumber industry. Charcoal production in Truckee fluctuated widely throughout the 1870s and early 1880s, as it was tied into the ups and downs of the mining industry and the ever-changing supply and demand for charcoal. Accordingly, Truckee's approach to charcoal production was a minimalist technology that enhanced expediency and flexibility. Charcoal was largely the product of Chinese colliers. Local opportunistic businessmen were quick to seize the market when they could; otherwise, they kept Chinese workers busy cutting cordwood, which was their first order of business. This strategy worked well, in that Sisson (and Company), Elle Ellen, and others had the labor infrastructure in place with their cordwood cutting contracts and could mobilize quickly when it came time to fill a void in the charcoal market. Wood camps had a dual function and served cordwood cutters and colliers and the small inventory of multi-purpose manufactured tools (axes, shovels, saws, mill stones, files, etc.) were adaptable to either occupation. Wood was plentiful and the use of slash, limbs and tops of large pines facilitated wood handling, besides being cost effective by utilizing existing waste from large-scale logging.

By 1874 Sisson, Wallace (or Crocker) and Company had hired 350 Chinese to cut cordwood for the railroad and to make charcoal to fuel the smelting works of Nevada, and Utah (Thompson and West 1880:168). The product was railed to the mines of Nevada and Utah, where wood was a more limited commodity. Even though Truckee was situated a considerable distance from the mines, the transport of ore from Nevada and Utah was a cost-effective effort, in that Truckee was located on the main rail line, it had a bountiful supply of water, and it had timber resources with which to produce charcoal to fuel a smelter. Between 1871 and 1875, Truckee had its own smelting works to supply. During its period of operation, Truckee's Tecoma Smelter could consume about 600 bushels of charcoal per day in one of its two furnaces (900 bushels per day if the furnace was operated night and day), thus burning somewhere between 216,000 and 324,000 bushels of charcoal per year in one furnace.

The most common technology for making charcoal in the Truckee Basin was in rudimentary surface earthen kilns rather than brick kilns. This more conventional ground process burns cooler and is more suitable for pine that requires lower temperatures for conversion to charcoal. The collier in charge procured the necessary amount of scrap wood to build a rectangular-shaped mound. Combustible material was then covered with two to five inches of clay soil. Burn management required careful attention in order to keep the wood smoldering at a constant rate. The collier's watch camp was usually nearby. A 100-cord earthen kiln might take from three weeks to a month to burn.

Within a radius of one or two miles from the Town of Truckee, nearly 250 earthen charcoal kilns and three brick charcoal kilns have been inventoried, along with a large number of associated Chinese work camps. A noteworthy cluster of earthen kilns has been recorded by the U.S. Forest Service on land adjoining the Tahoe Donner subdivision to the southeast in Section 8, Township 17 North/Range 16 East. Sisson (and Company) had land holdings here (maps 8 and 16). Another grouping of five earthen kilns is loosely clustered around a large Chinese work camp in sections 2 and 3 (Township 17 North/Range 16 East), which adjoins Tahoe Donner on the east. The eastern half of Section 3 was owned by 19th-century lumberman Elle Ellen, the second largest employer of Chinese labor in the region. This set of earthen kilns may represent Elle Ellen's operations when Truckee's charcoal industry was in its early beginnings, before techniques had been refined and standardized by the large-scale production enterprise of Sisson, Wallace (or Crocker) and Company.

Chinese Presence in the Truckee Basin

The organization of Sisson, Egbert and Company (later Wallace and then Crocker and Company) was created in 1866 at Truckee exclusively for the purpose of importing Chinese labor for railroad construction. With the completion of the railroad, many Chinese immigrants were channeled into the lumber, cordwood and charcoal industries. Consequently, Truckee had an especially large subpopulation of Chinese, the second largest concentration of ethnic Chinese in the West. According to the 1870 census, approximately 1,400 Chinese lived in Truckee (Thompson and West 1880:76). The number of Chinese rose to 2,000 by 1886 (*Truckee Republican* 5/5/1893). In 1870, most Truckee Chinese were laborers and the vast majority of Chinese were employed as railroad construction laborers, although the census lists 71 woodcutters (Elston, Hardesty and Zeier 1982:260, Table 43). By 1880, the majority of Truckee Chinese worked as woodcutters (Elston, Hardesty and Zeier 1982:261, Table 44). Some Chinese were long-term residents and made enough money to send some home to their families in China.

Truckee's large Chinese population abruptly disappeared because of anti-Chinese agitation. Sisson, Crocker and Company and Truckee lumbermen, Joseph Gray and Elle Ellen, were prominent employers of Chinese. Such employment by lumber, merchandising and other business interests engaged immigrant Chinese into direct competition with Euroamerican laborers. The subsequent anti-Chinese sentiment resulted in the ultimate expulsion of Truckee's Chinese community in 1886 or soon thereafter, as reported by the *Truckee Republican* (1/30/1886).

Seven hundred Chinamen were at work in the Truckee basin, and scarcely one hundred white laborers. Temperate, industrious white laborers, heads of families, were out of employment and destitute, and their places were occupied by well-fed, well-paid Chinamen. Chinamen filled the leading sawmills, with the exception of the superintendent, sawyer, and setter; the factories were more than half run by Chinese labor; Chinese crews were encroaching upon the logging camps; the axes of none but Chinamen rang through the forests in cutting the 30,000 cords of wood annually supplied to the railroad company; the business of teaming was almost wholly performed by Chinamen, the hotels, restaurants and lodging houses employed Chinese help; the washing, cooking and domestic work of the town was performed by Chinamen, and it was too evident that the day was not far distant when the Chinese would monopolize every avocation and industry, and white labor would be entirely driven from the Truckee basin.

The tone of the above editorial is clear and it is no surprise that Truckee assumed a leadership role in the anti-Chinese movement (Saxton 1971:206). Intentional fires were set in Truckee's Chinatown in an attempt to extinguish the Chinese population in Truckee and on June 17, 1876, fire was set to Gray's woodcutters' quarters located on Trout Creek, approximately 1½ miles north of Truckee (Coates 2000; *Reno Gazette* 10/5/1876 *Truckee Republican* 9/30/1876, 9/30/1878). Violence escalated after the Trout Creek incident and local newspaper editorials became increasingly anti-Chinese. Truckee's downtown "Chinatown" was totally destroyed in 1878. The Chinese were driven-out of Truckee town, but within a month, a new Chinatown sprang up on the south side of the river and on the outskirts of the town limits (Thompson and West 1880:76; *Truckee Republican* 1879). The continued employment of Chinese by local industries prompted the formation of several vigilante organizations, such as the Caucasian League that supported 237 members (*Truckee Republican* 9/30/1876).

To further discourage the Chinese presence in Truckee, attention was turned away from the Chinese to the employers of Chinese. Tensions peaked in January 1886 as anti-Chinese organizations demanded that businesses discontinue hiring any Chinese and terminate Chinese workers already employed. The big companies and wood contractors were reluctant to do so and supported the rights of the Chinese during the early period of anti-Chinese sentiment because they were profiting from the cheap labor (*Truckee Republican* 2/25/1880, 3/3/1880). Elle Ellen had hired Chinese in his lumber operations since 1868 (*Truckee Republican* 1868, 1871, 1873, 1876). He fired all his Chinese laborers, including a cook in 1879, perhaps under pressure of anti-Chinese agitation (*Truckee Republican* 4/16/1879). He appears to have re-hired them as of 1880 (*Truckee Republican* 1/31/1880), where it is reported that the road to his mill was kept open by Chinese woodcutters.

By January 1886 all Chinese wood contracts were rescinded except those held by Sisson, Crocker and Company and by Elle Ellen. When the firms finally decided to void contracts, they were sued by Chinese woodcutters who demanded the company fulfill all contracts (*Truckee Republican* 1/30/1886).

To Messrs. Sisson, Crocker & Co., F. Champion, E. Ellen and Others, Wood Contractors: You are hereby notified that we intend to complete all contracts for wood cutting which we now have with you, and you will take notice that we will claim damages from you for any act on your part in violation of the terms of such contracts. Signed, Quong Sing Lung Co., Yuen Chung Jan., Yuen Sing, Wing Hop Chung Co., Tuck Chung.

As the journalistic dialogue continued, the boycotted firms justified their delay in suspending the Chinese contracts until later in the year. The end of 1886 saw the end of a viable Chinese community in Truckee; however Goldstein (1988:54) has maintained that nearly a year after McGlashan had herald "victory", Truckee still had a sizable Chinese population, and that the economic boycott had not achieved its goal of evicting all Chinese labor. The "successful" removal of all Chinese from Truckee is reported in a *Truckee Republican* editorial, dated April 5, 1893 and written by Charles McGlashan, the champion of Truckee's anti-Chinese movement.

Few of the seven year old children of Truckee ever saw a Chinaman. Prior to eight years ago there were 2,000 Chinese in the Truckee Basin, since, not one. They were not driven out by force but simply starved out. The citizens rose up as one man and discharged every single Celestial. It took just five weeks to get rid of the entire 2,000. Not one has been in

sight of Truckee for a day, an hour or a moment since March 1886. No Chinamen will ever again be employed in the region.

Trout Creek Ice Company

The Sierra Nevada ice industry developed greatly after the completion of the transcontinental railroad across the Sierra. From 1868 through the 1920s the main center of the industry was located on tributaries of the Truckee River and around Donner Pass (Hansen 1987; Itogawa 1974). Sierra ice was noted for its crystal purity and it was proudly served in large hotels throughout the nation. Ice cooled the 140-degree temperatures deep in the shafts of the Comstock mines. In addition, ice was essential to refrigerate California produce for rail shipment to the eastern markets. Lumbermen released from seasonal logging work usually found employment in the ice industry around Truckee during the winter. Ice was harvested from artificial ponds and from ponds adjacent to lumber mills that had closed for the winter. During the short harvest season, with freezing weather beginning about Christmas and continuing through January or February, at least two or three ice crops were anticipated (Gillespie 1918:21-23).

The Trout Creek Ice Company (TCIC) was one of the leading producers of ice (Lindström 2001). The company maintained holdings within the study area and drew water from Trout Creek. Operations were considered substantial, with ice inventories up to 1,000 tons (*Reno Evening Gazette* 1/2/1900:1/2). Land holdings of the TCIC are shown on Map 16. The TCIC subsequently established their facilities on or near Elle Ellen's V-flume terminus and cordwood railroad siding. The TCIC ice works were adjacent to the section of Trout Creek that is presently contained within a concrete channel. This channel, which once may have augmented fluming activities by Elle Ellen (ca. 1876-1883), later may have served to control water flows into the ice ponds by the TCIC and their subsidiaries (ca. 1901-1913). For a time, the TCIC may also have used Ellen's flume in conjunction with their ice works.

Continuity between the Elle Ellen's Lumber Company and the TCIC was not only shared in the physical proximity of their operations, but it was also maintained through intermarriage of individuals associated with these companies. In 1873 Patrick Henry, superintendent of the TCIC, married Jenne Ellen, daughter of E. Ellen (*Nevada State Journal* 1/24/1901:1/3, obituary). When Patrick Henry died in 1901, ice company affairs were carried on by his brothers. With the number of Henry family members involved in TCIC affairs, it follows that the company was also popularly referred to as "Henry's Ice Company" (Lord 1981:37). As Elle Ellen's health was failing with progressive dementia, his son-in-law, Patrick Henry, and partner J. Howard Bachelder (the former partner of R. C. Grasey, who relocated the abandoned Euer Valley Mill equipment to his Deep Creek sawmill) took over lumbering operations (*Truckee Republican* 5/19/1988).

Increasing competition from artificial ice gradually forced the closing of many of the ice ponds in the Truckee Basin (*Truckee Republican* 11/19/1911:1/3, 6). By the time the ice business died out in 1927, more than 26 companies had worked the Sierra's ice harvests (Lord 1981:34). The TCIC suspended incorporation on November 30, 1913. According to a deed of sale (Nevada County Deed 121/34, 2/4/1915), TCIC trustees sold to the "Euers of Trout Creek" all water rights and timber holdings [probably from Elle Ellen's former operations]. By 1921 ponds of the former ice works had been converted into an ice skating rink (*Truckee Republican* 10/20/1921:1/3).

Ranching

As noted above, the Euers purchased all water rights and timber holdings of the TCIC in 1915. Areas encompassing the Euer land holdings are referenced as "Evers Valley" on the 1865 General Land Office (GLO) Survey Plat (Map 1) and 1876 Wheeler survey map (Map 6) and as "Ewer Valley" on the 1880 Nevada County Map (Map 8). Euer family land ownership appears on maps 8 and 16. The Euer Valley Road, which traverses the study area, accessed the ranch (maps 4, 11 and 28).

The dairy business in the Truckee Basin flourished on a large scale from the 1860s until about 1930 (McGlashan 1982:13-17). At one time there were 15 to 20 dairy farms near Truckee that produced 60,000 pounds of mountain butter annually (Edwards 1883:69). Descendants of these dairying dynasties continue to own and maintain ranches that bear prominent names in the cattle history. Sophary Euer (aka Samuel Safariel Von Euer) was "one of the leading dairymen of El Dorado County" (Sioli 1883). Nevada County could say the same of him (McGlashan 1982:16). Born in 1840, Euer was a native of a dairying family from Switzerland; he came to America in the 1850s. In 1867 he established a dairy ranch with a dairy of 80 cows near Folsom. Four years later he married Clara Marie Antonet Lamblet of Wisconsin. Family members are pictured on Photo 3. By 1883 he had expanded his foothill holdings to 1,500 acres, in addition to almost the same acreage at his mountain ranch (McGlashan 1982:16). Dates are conflicting as to exactly when the family settled Euer Valley (1868 according to the *Sierra Sun* 1993:5; 1872 according to *Moonshine Ink* 2012:18). With the sale of their 482 acres in Euer Valley to the Tahoe Donner Association on May 10, 2012, the family ended 140 years of dairying. The last cattle round up was on October 16, 2014 (Huisman, personal communication 5/27/15). The family still maintains a 40-acre property in center of valley known as the "Circle E Ranch" (maps 24 and 25).

Euer's was a Grade B dairy as they made butter and cheese like their Swiss forebears (*Sierra Sun* 1993:5). These dairies were called "pan dairies" because the cows were milked into circular pans that were stored by the hundreds in racks. The milk stood overnight and was then skimmed. Skim-milk was fed to the calves, clabbered milk went to the pigs, which were always part of a dairy farm. Milking was done in corrals, not in barns, and all the milking equipment was kept immaculately clean. McGlashan 1982:13-14). In 1881 Sam Euer produced 17,000 pounds of butter (McGlashan 1982:16). Butter was churned by hand and it took four men to turn it. A water-powered mill on the South Fork of Prosser Creek powered the churner at the butter house (Huisman, personal communications 5/27/15). Butter was packed into 30-pound kegs; wheels of cheese were wrapped in cheese cloth, and cream was shipped in cans. Milk and eggs were stored to protect from bears.

After the turn of the century, the sons of many pioneer dairymen took over and expanded the family business with modern machinery and equipment. Many converted their dairy cattle to beef stock (McGlashan 1982:17). Robert, George and Frank Euer continued dairying, finally owning all land in Euer Valley (*Sierra Sun* 1993:5). Robert split the valley into 7-C Ranch at the valley's west end and Frank added a dude ranch on the 7-C property in the 1930s (*Sierra Sun* 1993:5). The Euers seven children are the namesake for "7-C Ranch." The 7-C Ranch is shown on maps 24 and 25. Frank's son, Bernal, was a local cowboy and from the age of 15 he led the family cattle drives between Folsom and Truckee (*Sierra Sun* 1993:5). William owned land along Little Truckee River and now under Prosser Lake.

The ranching industry was seasonal and the Truckee Basin was typically used as summer range for livestock, with winter forage available on foothill ranchlands. The harsh winters of the Sierra Nevada highlands made year round stock-raising impossible. Similar constraints were posed by the dry summers in the lowlands (Sioli 1883:112). Between the 1850s and 1870s, ranching was a small-scale, precarious enterprise based on multiple economic strategies. Early mining was not the get rich adventure many had anticipated and landowners had to turn to other livelihoods, surviving by mining in the rainy winter and spring and undertaking one or more other enterprises in the summer and fall (merchandising, logging, sawmilling, farming and ranching, maintaining toll roads, construction/carpentry, etc.). During the 1870s, such multiple economic strategies were largely replaced by a single economic strategy, and for ranchers the seasonal resource base necessitated that they acquire large acreages with summer pastures in the higher elevations in order to sustain livestock. Prominent families bought out small-parcel landowners and consolidated their ranching empires primarily on the beef and dairy business.

This pattern of transhumance -- the seasonal migration of livestock and the people who tend them between lowlands and adjacent mountains -- was well adapted for the establishment of dairy herds, whereby cows were bred to calve in the spring months, resulting in an abundant milk supply for the summer months spent in the high country. Tourism and community development at Truckee created a local demand for dairy products and the completion of the transcontinental railroad through Truckee provided the local dairy industry with a link to much wider markets. Following the creation of the national forest system in 1906, profits for dairymen were eventually cut by regulations on the use of federal grazing lands. The industry was further curtailed by subsequent improvements in the 1920s and early 1930s in the distribution of perishable items through the expansion of truck transportation and refrigeration methods, which brought an end to the need for small and localized dairies. Consequently, many dairymen switched to the less labor-intensive beef cattle industry, but continued the pattern of seasonal transhumance between winter and summer ranges.

The Euer's drove their cattle over Donner Summit and down into Euer Valley in the vicinity of the 7C's Ranch (Huisman, personal communication 1/21/15). McGlashan (1982:14-15) has described the annual trek and the typical year for dairy ranchers in the Truckee Basin.

It started in January when the new calves began to arrive. When summer came, the brown harshly dry grass told the ranchers that 'mountain time' had arrived. Horses had to be well-shod, cows had to be belled, wagon wheels repaired or the rims soaked, and neighbors contacted to agree on a starting date. Women saw to the packing -- a summer's supply of staple foods, bedding, clothing, everything they could think of. The trip would take five or six days on the rough road. Four-horse wagons, spring wagons, buggies, and carts were included in each family's entourage. One of the wagons followed the cattle to pick up a footsore dog or calves that tired along the way. Cows were milked only once a day on the trip, in the afternoon, so the drive could get off to an early morning start. They were milked directly onto the road, for the wasting of milk was less important than that the cows dry up. In time, mountain dwellers learned to expect these milking times and brought buckets to retrieve what they could of free, fresh milk. Sheep herders, as well as cattlemen, walked their stock straight through the main streets of Auburn, Colfax, Dutch Flat, and Truckee. At the summer ranch, everyone labored to restore the wire fences and put the milk house and dwelling in order. Wood had to be cut for the cook stove and the stoves that heated water

for sterilizing dairy equipment. Dry stock, too, had to be taken to areas removed from the meadows reserved for the milk cows.

Although in the mountains, meadows still had to be irrigated later in the season. This was accomplished through a network of water impounding and diverting dams and wing walls, water gates, and miscellaneous earthen water works. The Euer family also irrigated, as evidenced by ditches, cisterns and creek diversions in the valley (Huisman, personal communication 5/27/15).

Forrest Huisman of the Tahoe Donner Association has interviewed Paul Lange, caretaker for the Euer family between 1994 and 2014 before he passed away at 57 years old in April of 2015 (Huisman, personal communication 5/27/15). In their taped and photographed discussions, Lange shared personal stories, as well as providing some details regarding the workings of the family operations, now survived as only weathered structures and archaeological remains. When Southern Pacific Railroad (now Union Pacific) converted wooden snow sheds to concrete, the Euers salvaged timbers to use on the ranch. The old spring house, with Bernal Euer's adjoining concrete and brick BBQ (dated 1965), and the former chicken coop are now owned by Tahoe Donner Association. They were purchased in 2002 with funds from the \$3 million dollar sale of a 32-acre parcel once located within the subdivision (Rosenfeld, personal communication 6/8/15). Since then, the well has been filled and old cars have been removed onto the Euer's 40 acres (Rosenfeld, personal communication 6/8/15). Horse camps established by the Euers continue to be used by equestrian groups (Rosenfeld, personal communication 6/8/15). The old butter house concrete foundation, paddocks, barn and cattle guard remain on the Euer property. A dump was located across from the dairy.

According to Tahoe Donner Forester, Bill Houdyschell (personal communication 5/27/15), John Euer lived in the valley for 60 years; his original homestead included the old Euer sawmill, dairy and old spring house. Euer recalled family arborglyphs carved into lodgepole pines as early as 1900. The gravesite of George Euer is located on top of Red Mountain. A drift fence to control the movement of stock is located on the south side of the hill above Euer Valley. It is now only marked by cedar fence posts; the Tahoe Donner nordic facility has removed much of the barbed wire as ski hazard (Houdyschell, personal communication 5/27/15).

Community Development

A history of the community of Truckee is marked by the arrival of Joseph Gray, who built a stage station near the present-day downtown in 1863. Gray was soon joined by a blacksmith named S. S. Coburn, and the fledgling settlement of Gray's Toll Station was renamed Coburn's Station. In 1868, Coburn's Station burned and the name was changed to Truckee. This tiny way station grew from two structures into a thriving town, which accommodated emigrants, stagecoach travelers and freight wagons enroute westward to California's gold fields and eastward to the Comstock Lode in Nevada. The completion of the transcontinental railroad in 1869 gave rise to other developments in the transportation, lumbering, ice, agriculture, dairying, and tourism industry, which were to become the essential economic bases of Truckee.

McGlashan Water Company

The growing needs of Truckee prompted the establishment of several private water companies. One of the earliest water sources was developed within present-day Gateway as part of the McGlashan water system. "Springs" appear on Map 20 and Map 34 shows the line of the McGlashan water system, extending from McGlashan Springs (located within present-day Tahoe Donner subdivision in the vicinity of Bermgarten Road), eastward along the ridge to the Northside/Town Station above downtown Truckee. The McGlashan Spring domestic water use dates from the incorporation of the McGlashan Water Company in August of 1889. This water, originally piped to Truckee for use in the McGlashan Addition subdivision on High Street, contributed to the Truckee water supply into the 1970s, i.e., ca. 1976 (Richards to Board of Directors 2006).

Small independent systems were unable to supply enough sanitary water to the growing town and most of these older systems were consolidated under the Truckee Donner Public Utility District (TDPUD), which was incorporated in 1927 (TDPUD 1968:18, 25-26; 1971:II-45). The TDPUD purchased the McGlashan Water Company in 1943 (Tahoe Donner Association Archives McGlashan File-Bill of Sale McGlashan Water Co. to "Truckee Public Utility District" [now TDPUD] April 26, 1943). The TDPUD now owns 160 acres of undeveloped land to the west of Northwoods Boulevard, which it acquired along with the McGlashan water system in 1943. The parcel contains springs that were part of the McGlashan water system and were used by the PUD water system for several years. The District ceased using the spring water because the cost of maintaining the spring boxes, treating the spring water and maintaining the piping system became impractical considering the quantity of water provided (Holzmeister to Board of Directors 6/2/2006). The TDPUD rehabilitated the McGlashan Springs in June 1960. Rehabilitation plans involved: (1) vegetation clearing, (2) trenching and installation of rock drains to box inlets and extending existing pipe to meet these boxes, (3) constructing a 200,000 gallon storage tank, and (4) and replacing pipeline in downtown Truckee (Anon 1960). Plans include a detailed description of the water system as of 1960 (Anon 1960).

The source of the McGlashen [sic] system is, of course, McGlashen [sic] Springs with a flow of 45 g.p.m. into a redwood storage tank and thence by gravity into the distribution system known as Source No. 3. Source No. 1 consists of two spring-fed reservoirs ("A" containing 16,200 gallons and "B" containing 35,100 gallons) from which a six-inch gravity pipe flows to Source No. 2, which is a pumping plant situation adjacent to the Truckee River...possible total of 200,000 gallons storage for the McGlashen [sic] System.

Remains associated with this early water system were first inventoried by Lindström (1991a) and subsequently evaluated by Jensen (1992). Water management features associated with this historic system include an above-ground reservoir with earthen dam, an underground tunnel reservoir, constructed in 1883 (or 1893) to serve as an infiltration gallery, a pipeline, the site of the "Town Tank" (in use between 1853 and 1873), miscellaneous discarded pipe segments, and a network of access roads and communication lines. Site features extend eastward onto TDPUD property, with the spring head at McGlashan Springs located on Tahoe Donner property. Remnants of the older systems around McGlashan Springs remain and items have been "picked-over" (Houdyschell, personal communication 5/27/15; Rosenfeld, personal communication 6/8/15).

Dart Industries/Tahoe Donner

Prior to the development of the Tahoe Donner subdivision in 1970, three other "paper" subdivisions were established along the steeper southern section of the Tahoe Donner subdivision: the Henry Tract, the Bucknam Tract and the Sinclair Tract (Map 16). These housing tracts were never developed.

The Tahoe Donner subdivision covers approximately 7,000 acres. Justin Dart of Dart Industries acquired the land from Jack Kirby, President of Lakeworld Properties, effective December 1, 1970 (Kirby 2006:271). Other land may have been purchased directly from Fiberboard Corporation (Rosenfeld, personal communication 6/8/15). At the time, Lakeworld Properties, one of the largest corporations in the California land-development industry, was actively involved in developing the Alta Sierra subdivision near Grass Valley and the Prosser Lakeview Estates subdivision in Truckee (Kirby 2006:273-274). Dart Industries originally began as Walgreen Drugs, as Justin Dart married Ruth Walgreen, whose father founded the drugstore chain (Kirby 2006:265). Dart Industries purchased the property in early spring 1970 and obtained county, state and federal approval for Tahoe Donner subdivision within 11 months time, an exceedingly quick review process even in those less-regulated days (Kirby 2006:274). Lots within 11 created "units" (Map 35) began selling in 1971 (Kirby 2006:258). Numbered units and permit issue dates are as follows:

Unit 1 (6/7/71); Unit 2 (7/1/71); Unit 3(8/25/71); Unit 4 (11/29/71); Unit 5 (12/8/72); Unit 6 (7/27/72); Unit 7 (12/8/72); Unit 7 (12/8/72); units 8-11 (11/17/78)

The design and creation of Tahoe Donner was somewhat unique for the time in the focus on home-owner amenities, covering every aspect of recreational possibilities to include (Photo 5): fishing/swimming/water-skiing/boat-ramp at the beach club at the east end of Donner Lake, golf, hiking and equestrian trails, downhill skiing, a recreation center and clubhouse, and campground on Alder Creek (Kirby 2006:278; Rosenfeld, personal communication 6/8/15). A nordic center was added later. Developers were careful to chose the name "Tahoe Donner" for its association with Lake Tahoe and recognition of a regional qualifier of Donner Lake (Kirby 2006:279).

Shortly after the 1960 Donner Ridge Fire (or "Donner Burn"), Fibreboard Corporation initiated an intensive program of salvage logging, harvesting about 17 million board feet of timber (Houdyschell, personal communication December 8, 2015). In 1960-1961 the company constructed miles of tractor-truck logging roads, skid trails, log landings, etc., to facilitate post-fire logging. The burn encompassed the northwest quadrant of the present-day Tahoe Donner Subdivision, as now marked by expansive brush fields and a large number of post-Donner Burn logging features/landscapes containing log landings and staging areas, skid trails/roads, mechanically-scarred boulders and scarred trees, drainage and erosion control features such as culverts, water bars, etc. Map 37 shows the extend of the fire through the Tahoe Donner Subdivision. It is likely that, following the railroad logging era of the 1920s, Tahoe Donner stands were not re-entered until 1960-1961 and immediately following the Donner Burn (Houdyschell, personal communication November 13, 2015).

METHODS

Work for the current study was conducted by Susan Lindström, Ph.D., Consulting Archaeologist. Lindström has over 42 years of professional experience in regional prehistory and history, holds a doctoral degree in anthropology/archaeology and has maintained certification by the Register of Professional Archaeologists (formerly Society of Professional Archaeologists) since 1982. She meets the Secretary of Interior's Standards for expertise in archaeology and history (see attached resume).

Research was supplemented by helpful field orientation of the 5YIPlan area on November 18-19, 2014 from Sean Connelly, Tahoe Donner Trails Manager, and environmental planner, Gavin Ball.

A list of contacts and research sources consulted is provided below and in the references cited section of this report.

RESEARCH CONTACTS

- Sean Connelly, Tahoe Donner Trails Manager, Tahoe Donner Association, Truckee (11/18-19, 2014; 5/18, 2015) ;
- Darrel Cruz, Tribal Historic Preservation Officer, Washoe Tribe of Nevada and California, Gardnerville (4/12, 14/2015; 5/12, 13, 15, 18/ 2015);
- Denny Dickinson, avocational historian (Truckee Donner Historical Society), Truckee (6/30/15);
- George Hansen, King Engineering (employed as a construction inspector for Dart Industries 1973-1974), Grass Valley (6/8/2015);
- Forrest Huisman, Director of Capital Projects, Tahoe Donner Association, Truckee (1/21/15, 5/27/15, 6/4/15);
- Bill Houdyschell, Forester, Tahoe Donner Association, Truckee (5/27/15, 6/9/15);
- Rus King, King Engineering, Grass Valley (6/8/15);
- Heidi Euer Martin, (cousin of John and Robert Euer), Truckee (1/5/15, 6/20/15);
- Chaun Mortier, Research Historian, Truckee Donner Historical Society, Truckee (5/27, 28/15, 6/11/15);
- Jo Ann Nevers, Washoe Tribal Historian, Carson City (5/18/15);
- Annie Rosenfeld, Division of Facilities and Risk Management, Tahoe Donner Association, (employee 15 years and knowledgeable in local history), Truckee (6/5, 8, 11, 18/15);

- Carrie Smith, Heritage Resource Coordinator, Tahoe National Forest, Truckee (6/20/15, 5/5, 27, 29/15, 6/1/15);
- Nelson Van Gundy, Research Historian, Truckee Donner Railroad Society, Truckee (5/28/15).

Recommended Future Contacts

- JoJo Toeppner, former Manager of Nordic Center (now works for Royal Gorge);
- Albert Salas (retired staff of 30 years);
- Betty Baker (retired staff of 27 years);
- Hans (retired ski area connections of 20 years).

ARCHIVAL SOURCES

Organizations

- Truckee Donner Historical Society (5/28/15, 6/11/15; Euer Valley File, Elle Ellen File, McGlashan Springs File, John Corbet Oblique Aerial Photos (ca. 1960s);
- Truckee Donner Railroad Society (5/28/15);
- Tahoe Donner Association Archives (6/8, 18/15); Dart Industries File; McGlashan Springs File (Note that the Tahoe Donner Association Archives house folders containing legal documents that specifically reference McGlashan Springs and other springs, along with a perpetual right-of-way for a pipe, ditch, flume or aqueduct, a tunnel, and reservoirs; files are a good source of detailed information and contain multiple work orders and receipts for labor and materials, maps, with specific information on the historic spring and its development by the TDPUD in June 1960).

Historical Maps

Lindström consulted a number of historic maps and aerial photographs (many of which are on file in her personal library).

- 1865: General Land Office Survey Plat, Township 17 North/ Range 16 East, Township 17 North/Range 15 East, Township 18 North/Range 16 East, Township 18 North/Range 15 East
- 1874: Topographic Map of Lake Tahoe by Von Leicht and Hoffman
- 1876-1877: Expeditions of George Wheeler for the U.S. Army
- 1880: Map of Nevada County
- 1889 (1897 ed.): USGS Truckee Quad
- 1897: U.S. Geological Survey: Geological Atlas, Truckee Folio
- 1911: Tahoe National Forest
- 1913: Map of Nevada County

- 1914 (reprint of 1895): USGS Truckee Quad
- 1915: Tahoe National Forest
- 1921: Tahoe National Forest
- 1926: Tahoe National Forest
- 1930: Tahoe National Forest
- ca. 1938: Metzker's Map of Nevada County
- 1944-1945: Eldorado (Tahoe) National Forest
- 1955: USGS Truckee 15' Quad
- 1955: USGS Norden 15' Quad
- 1955 (photo revised 1969): USGS Truckee 7.5' Quad
- 1955 (photo revised 1979): USGS Norden 7.5' Quad
- 1962: Tahoe National Forest, Truckee Ranger District
- (undated): Emigrant Tail (Graydon 1986)
- 1856-1936: Lumbering History of the Truckee River Basin (Knowles 1942)
- (undated): map of lumbering in the northwest Truckee Basin (Wilson 1992)
- (undated) untitled map by W.H. Otis (logging railroads in study area)
- (undated) untitled map of Fiberboard Corporation (land ownership in study area)
- (undated) untitled map of logging railroads in study area (U.S. Forest Service, no date)
- (undated) untitled map of McGlashan water system (TDPUD 1981)
- aerial photographs (1939, 1952, 1966, 1970s+)

North Central Information Center Records Search

As part of the current study, Lindström initiated a search of archaeological records housed at the North Central Information Center (NCIC) at California State University, Sacramento (CSUS), an adjunct of the State Office of Historic Preservation or SHPO (NCIC File No.: NEV-15-5, see attached correspondence). Records were reviewed by NCIC staff to identify any properties listed on the National Register, California Register and other listings. In addition to the records and maps for sites and studies in Nevada County, other official inventories were also reviewed:

- Office of Historic Preservation's *Historic Property Directory* (updates)
- *Determination of Eligibility* (updates)
- *California Inventory of Historical Resources* (1976)
- *California State Historical Landmarks* (1996 and updates)
- *National Register of Historical Places/California Register of Historical Resources listings* (updates)
- *California Points of Historical Interest* (1992 and updates)
- *Caltrans State and Local Bridge Surveys* (2009 and updates)

Results disclosed that at least 26 archaeological sites have been formally recorded within the 5YIPlan area. A number of other resources have been noted but not formally recorded. Table 1 provides a list of all resources formally recorded within the 5YIPlan area. Known

archaeological sites are plotted on a map contained in the confidential appendix under separate cover.

At least 53 archaeological studies have been conducted within and/or adjacent to the 5YIPlan area. Table 1 provides a list of all the reports and Figure 3 shows the areas of prior archaeological coverage that have been formally documented. Archaeological study dates range from 1979 up to 2012, with three studies completed during the 1970s, three in the 1980s, 28 during the 1990s, 16 in the 2000s, and three in the 2010s. Although there is no standard measure within the archaeological community as to when an archaeological study requires updating, there is general consensus amongst archaeologists that records searches older than three years and field surveys older than 15 years should be updated (using the baseline of 2016 when the 5YIPlan is anticipated to be activated). Factors affecting the decision whether or not to update (along with the relative thoroughness appropriate for an updated study) should be considered by a qualified professional on a case-by-case basis and involve: (1) the completeness of the prior field reconnaissance; (2) the proximity of the trail to known significant historical and archaeological resources; (3) the overall archaeological sensitivity of the project area; and (4) the type and severity of prior disturbance (e.g., new trails versus existing trails). While analysis should focus on disturbance associated with new trails, existing trails also warrant scrutiny. Although existing trails may have already impacted surface artifacts and features, there remains the possibility of buried intact archaeological deposits that could be damaged by continued trail use and maintenance. Also indirect impacts could occur due to increased public access into a site area that could result in vandalism and unauthorized artifact collecting.

NATIVE AMERICAN COORDINATION

Tahoe Donner falls within the ancestral territory of the Washoe Tribe of Nevada and California and the Washoe Tribal Historic Preservation Officer (THPO) was contacted in order to incorporate opinions and knowledge regarding the project. Project background information and location maps were emailed to the Tribe on April 12, 2015 and a formal response was received on May 12, 2015 (see attached correspondence). The THPO, accompanied by Washoe Tribal Historian, Jo Ann Nevers, kindly toured the 5YIPlan area on May 18, 2015, accompanied by Ball, Connelly and Lindström (Photo 4). A sacred lands file search request was made to the Native American Heritage Commission on October 31, 2015 (see attached correspondence). A response is pending.

RESULTS AND RECOMMENDATIONS

HISTORICAL AND ARCHAEOLOGICAL RESOURCE SENSITIVITY

A generalized sensitivity map of the 5YIPlan area (Figure 4) has been created to allow for the identification of the level/type/intensity of future project-specific field work depending upon the sensitivity and relative potential for impact to any significant historical or archaeological resource. The previous cultural setting section of this report provides sufficient background to identify heritage themes and associated resources likely to occur within the 5YIPlan area. A number of regional historic maps and photos of selected resource types, assembled to supplement this cultural narrative, are contained in the attached appendices (Appendix 1 and 2). In addition, review of the available aerial and topographic mapping information, archival and oral-history research, and the archaeological and ethnographic record, as well as contact with various Tahoe Donner staff and

consultants, public agency personnel and other individuals knowledgeable in local history, has provided a level of project specificity adequate to further target resource types that exist and any issues needing analysis and solutions.

Prior archaeological investigations suggest that the overall archaeological sensitivity of the 5YIPlan area ranges from low to high, depending upon the particular microenvironment. As listed on Figure 4, three general sensitivity levels are shown: low, moderate and high. These ratings relate not only to characteristics of the physical environment, but are based on the locations and densities of formally and informally documented archaeological sites. As noted above, even though the NCIC may have no record of formally recorded resources, that does not preclude the possibility that undocumented resources may exist. This circumstance particularly applies to timber harvest projects, where historical and archaeological resources have been noted, but not formally recorded as the projects were modified to avoid impacts (Houdyschell, personal communication 5/27/15).

Areas of high sensitivity encompass the permanent drainages of Trout and Alder creeks and the South Fork of Prosser Creek where it flows through Euer Valley. Areas of moderate sensitivity occur in level to moderately steep terrain that is drained by seasonal water sources. Areas shown on Figure 4 with low archaeological sensitivity include steep and dry terrain where no resources (either documented or undocumented) have been found.

Prehistoric sites are known to occur along permanent and seasonal drainages and in areas containing basalt outcrops suitable for stone tool manufacture. Sensitivity is high within and surrounding Euer Valley and Bennett Flat and anywhere in proximity to the more level reaches of Trout and Alder creeks and the South Fork of Prosser Creek. The project area's likelihood to contain prehistoric resources is low to moderate in areas where the terrain is steeper and drier.

Prior ethnographic studies indicate that the Washoe Tribe of Nevada and California is the applicable tribal authority for lands encompassing the 5YIPlan area. Current communications with Tribal members indicate that no Traditional Cultural Properties (TCPs) occur. A TCP is defined as a place "...that is eligible for inclusion in the National Register because of its association with cultural practices or beliefs of a living community that (a) are rooted in that community's history, and (b) are important in maintaining the continuing cultural identity of the community" (Parker and King 1998:1). Key components of a TCP, which are extracted from published sources, unpublished field notes and Native American consultant interviews, comprise: (1) the "ethnographic landscape", (2) a construct or cultural map of native "place names" within that landscape, and (3) corresponding archaeological sites.

Historic resource sensitivity is less responsive and dependent upon factors of terrain and hydrology. Historic sites can be expected to occur almost anywhere in the 5YIPlan area, especially because of the nature of early settlement patterns involving initial emigrant travel and subsequent transportation networks, timber harvest and cordwood production. However, sawmills, logging railroads, skidways, wood camps, and charcoal production sites are more likely to occupy more level ground and most of these resource types require water. Water management systems related to fluming and ice works activities along Trout and Alder creeks are obviously tied to water sources, no matter how steep. Within the 5YIPlan area, ranching activities are generally tethered to Euer Valley.

HISTORICAL AND ARCHAEOLOGICAL RESOURCE MANAGEMENT PROTOCOLS

As previously discussed, the Trails 5YIP is intended to move 22 identified trail projects (and associated trail heads and parking areas) from broad recommendations contained within the Tahoe Donner Trails Master Plan closer to the project-level design and detail necessary for permitting through the various local, state and federal agencies as well as CEQA review and clearance. Prior sections of this report have identified what historical and archaeological resources and/or problem areas exist within the 5YIPlan area.

A logical next step is to outline how potential trail project impacts will be addressed and resolved through a set of land use permit need(s) recommended mitigation measures, or protocols, to be implemented as part of the necessary agency permitting. As such, a specific description or "menu" of mitigation measures is attached to individual trail projects in order to avoid, minimize and/or mitigate any potential project impacts associated with each trail project. Where no potentially significant historical or archaeological resource impacts are involved, no mitigation is necessary.

A simple but comprehensive list of protocols required to reduce impacts to a less than significant levels is provided below. It is based on a hierarchy of mitigation steps that assign levels of constraints to each trail project with reference to the various applicable protections, specifications and standards. Note that the historical and archaeological resource management protocols outlined below (prefield research, field reconnaissance, historical and archaeological resource recordation and evaluation, and mitigation) are directly linked to the general study protocols discussed in an earlier section of this report. They are modeled according to an "if-then" scenario -- if a certain situation exists, then it triggers a certain response. These protocols are not restricted to trails projects, but can be applied to all ground-disturbing projects undertaken by Tahoe Donner Association in the future (e.g., forestry, roads and utilities infrastructure, erosion control, recreation, etc.).

Phase 1A. Prefield Research

1. Assess trail project in terms of the relative level of impacts involving *new* construction vs. improvements to *existing* trails.
 - (a) Trail projects involving *new* impacts require prefield research and an intensive field reconnaissance.
 - (b) Trail projects involving improvements to *existing* trails also require prefield research, but the necessity for a field reconnaissance may be adjusted on a case-by-case basis depending upon the type and severity of prior disturbance, proximity of the trail to known historical and archaeological resources and if the trail falls within an area of low archaeological sensitivity.
2. Review the cultural setting section of the 5YIPlan historical and archaeological report to determine historical and archaeological resource types anticipated within the trail project.

3. Review Figure 3 of the 5YIPlan historical and archaeological report to determine prior archaeological coverage within and/or adjacent to the trail project.
 - (a) If the prior archaeological reconnaissance strategy incorporated intensive coverage, and if coverage is less than 15 years old (as of 2016 when the plan is anticipated to be activated), and if no historical or archaeological resources were previously identified, then no ground survey is required.
 - (b) If the prior archaeological reconnaissance strategy did not incorporate intensive coverage, and/or if coverage is older than 15 years old, and/or if no historical or archaeological resources were identified, then a ground survey is required.
4. Review Figure 4 of the 5YIPlan historical and archaeological report to determine archaeological sensitivity and likelihood of the trail project to contain significant historical and archaeological resources.
5. Review confidential appendix of the 5YIPlan historical and archaeological report to determine known historical and archaeological resources within and/or adjacent to trail project.
6. If prior archaeological reporting is older than three years, then initiate required NCIC records search.

Phase 1B. Field Reconnaissance

The trail treadway width varies from about 20 plus feet wide along existing dirt roads and at road intersections down to about five feet wide along proposed new trails. As such, the archaeological survey corridor width varies accordingly and includes a limited buffer zone to allow for potential ground disturbance due to trail construction, staging and or maintenance. Survey techniques typically employ intensive coverage or, for larger-acreage non-trails projects, it may be appropriate to use a mixed reconnaissance strategy of general and/or cursory coverage.

Intensive Coverage: An intensive reconnaissance entails systematically inspecting the corridor by walking transects between five and 20 feet apart, looking for all evidence of prior human activity. In many cases it is necessary (and possible) to perform some ground cover modification in the disturbance area to allow for the detection of the smallest of archaeological remains likely to occur in the area under study. Areas containing significant historical and archaeological resources, or expected to contain significant historical and archaeological resources, are examined the most thoroughly. Although an attempt is made to systematically transect the entire trail project, some areas may be less than completely inspected because of obscured ground surface visibility.

General Coverage: Incorporation of intensive coverage strategy employing wider-interval transect intervals.

Cursory Coverage: Systematic transects cannot be maintained and where the ground cannot be examined due to impenetrable vegetation, brush, standing water, hard surface overlays, or due to objects/structures of the built environment.

1. If prior archaeological coverage is older than 15 years and/or if prior coverage is less than intensive, and/or if the trail falls within an area of moderate to high archaeological sensitivity, and/or historical and archaeological resources were encountered, then conduct a field reconnaissance.
2. If the prior archaeological reconnaissance strategy incorporated intensive coverage, and if coverage is less than 15 years old, and if no significant historical or archaeological resources were identified, then no ground survey is required.
3. If historical or archaeological resources are encountered during the field reconnaissance, then modify trail design to avoid physical impacts to significant historical and archaeological resources and/or alterations of their setting.

Phase 1C. Historical and Archaeological Resource Recordation/Documentation. If impacts are unavoidable to historical or archaeological resources, then archaeological site field recording is completed on State of California archaeological records (DPR 523A-L).

Phase 2. Historical and Archaeological Resource Evaluation. All inventoried historical and archaeological resources are evaluated according to eligibility criteria established by the California Register of Historical Resources. In the case of Native American resources, input from the Washoe Tribe is recommended.

1. If ineligible (i.e., non-significant) historical or archaeological resources are present, then the trail project may proceed without constraints once the resource has been formally recorded and evaluated.
2. If eligible resources are present, then a determination of project impacts is assessed and detailed measures to mitigate impacts are proposed.

Phase 3. Mitigation-Data Recovery. Implementation of mitigation measures may involve supplementary focused archival research, field excavation, photo documentation, mapping, interpretation, etc. Archaeological monitoring may be required for trail projects located within and/or impacting known significant historical and archaeological resources. With the completion of mitigation, the trail project may proceed without constraints regarding historical and archaeological resources. Although the project area has been subjected to a systematic surface investigation, it is possible that buried or concealed historical and archaeological resources could be present that may be detected during project implementation. In the event of unforeseen finds, work should stop in the immediate vicinity and a qualified archaeologist and/or Native American consultant should be contacted to assess the nature and significance of the find. If human remains are inadvertently discovered, California law requires that work must stop immediately and the county coroner must be notified. If the remains are found to be Native American, both the Native American Heritage Commission and members of the Washoe Tribe (or other identified descendants) must be notified to insure that proper treatment is given to the burial site.

PROTOCOLS: INDIVIDUAL TRAILS PROJECTS

New trails account for approximately 45 percent of the inventory, with improvements to existing trails totaling about 55 percent. In terms of archaeological sensitivity, 55 percent fall in the moderate range, with 27 percent highly sensitive to contain historical and archaeological resources and the remaining trails spanning areas of low to moderate sensitivity. It is acknowledged that physical impacts can be relatively minor for trails projects (given typically near surface grading within a narrow disturbance corridor), as opposed to projects requiring heavy mechanical equipment for deep and wide excavation. As such, the modest level of prior ground disturbance on existing trails are not so consequential to the integrity of extant historical and archaeological resources and subsurface deposits are more likely to survive intact for future detection and recordation. Records research shows that none of the existing trails projects were subject to archaeological study at the time they were established. While one-third of the trails project have received some sort of partial archaeological coverage, most of that coverage either dates from studies that are older than 15 years, or coverage has gone undocumented due to Tahoe Donner's practice of flag-and-avoid, which has discouraged the preparation and submission of archaeological study reports to the NCIC.

Known historical and archaeological resources are within or in proximity to 50 percent of the new and existing trails. Many of these resources remain undocumented and there is no purpose served in further modifying trail alignments at this point time until the exact location of these resources has been verified and their content, extent and integrity has been confirmed through field survey.

Table 2 provides a rough breakdown of prior archaeological coverage (and dates of survey), documented and undocumented historical and archaeological resources, archaeological sensitivity, and the appropriate cultural protocols. Specific cultural protocols that are tied to individual trails projects are summarized below. The initial expectation at the outset of this study was to prescribe a specific protocol to each of the trail projects based upon their resource sensitivity rating and mapping of prior archaeological coverage and known historical and archaeological resources. Study results indicate that none of the trails projects were exempt from prefield research (Protocol IA) or field reconnaissance (Protocol IB). As such, the same set of protocols appear for each of the 22 trails projects (Table 2). Although data are redundant, the table does provide a basic template of management protocols for future trails projects and/or other types of projects, when it is anticipated that documentation of archaeological coverage and the number of historical and archaeological resource records will increase over time. If properly applied, these protocols will insure that implementation of the 5YIPlan and the 22 individual projects it contains should have no significant environmental impacts to historical and archaeological resources.

Trail #1: "Coyote Crossing and Last Round-Up"

Trail Type: existing road/trail improvement and rehabilitation

Location: south side of Euer Valley and connecting to the end of Alder Creek Road

Description: approximately three miles of single lane unpaved road; road currently has drainage and erosion issues that impede vehicle access and impact water quality; proposed work intended to repair and stabilize road surface involving roadside ditch improvements, culvert and turnpike/drainage lens installations, and surface capping/stabilization

Prior Archaeological Coverage: none

Known Historical and Archaeological Resources: existing trail located on historic railroad grade (Huisman, personal communication 5/17/15) that was adapted into a mid-20th century tractor logging road; trail crosses old Euer Valley Road (shown on maps ca. 1880s maps and 1939 aerial)

Archaeological Sensitivity Level: high

Cultural Protocols: review *Phase IA* and implement *Phase IB* (*Phase II* and *Phase III* if appropriate)

Trail #2: "Wild West"

Trail Type: new trail

Location: westerly end of Euer Valley, south of S. Prosser Creek

Description: new trail paralleling westernmost portion of Trail Project #1

Prior Archaeological Coverage: none

Known Historical and Archaeological Resources: none

Archaeological Sensitivity Level: high

Cultural Protocols: review *Phase IA* and implement *Phase IB* (*Phase II* and *Phase III* if appropriate)

Trail #3: "Sidewinder"

Trail Type: new trail

Location: north side of Euer Valley on south aspect of hillside north of and paralleling N. Euer Valley Road

Description: creation of new multi-use trail in Euer Valley; hillside trail to relocate users off of North Euer Valley Road

Prior Archaeological Coverage: partial coverage, "Euer Ranch THP" (Gilbert 1991, NCIC #8274)

Known Historical and Archaeological Resources: no formally recorded resources; historical resources reported in close proximity, e.g., logging and horse camps; concrete foundation of steam engine (Euer Sawmill), spring, barn, corral, dairy, logging railroad (Huisman, personal communication 5/17/15)

Archaeological Sensitivity Level: moderate to high

Cultural Protocols: review *Phase IA* and implement *Phase IB* (*Phase II* and *Phase III* if appropriate)

Trail #4: "East Mustang Sally"

Trail Type: new and existing trail improvement

Location: northeast corner of Euer Valley, north of N. Euer Valley Road

Description: new trail off old steep roadbed to reduce erosion and improve safety as well as drainage improvements to existing roadbed trail; future connection on USFS property to Trail Project #5

Prior Archaeological Coverage: none

Known Historical and Archaeological Resources: none

Archaeological Sensitivity Level: moderate to

Cultural Protocols: *Phase IA* and implement *Phase IB* (*Phase II* and *Phase III* if appropriate)

Trail #5: "West Mustang Sally"

Trail Type: existing trail improvement

Location: northwest corner of Euer Valley; future connection on USFS property to Trail Project #4; realign trail off steep, rutted sections to reduce erosion and improve safety; new switchback up barren ridge

Description: realign trail off steep, rutted sections to reduce erosion and improve safety; new switchback up ridge and decommissioning of existing trail; future connection on USFS property to Trail Project #4

Prior Archaeological Coverage: none

Known Historical and Archaeological Resources: existing roads, old; 7-C Ranch dude ranch; dairy, barn and corrals outside project; spring house adjacent to project;

Archaeological Sensitivity Level: high and low

Cultural Protocols: *Phase IA* and implement *Phase IB* (*Phase II* and *Phase III* if appropriate)

Trail #6: "Upper Mother Lode"

Trail Type: new trail

Location: north side of Hawk's Peak between Hasting's Cutoff and Summit

Description: new trail connection with Lower Mother Lode; creation of sustainable trail to complement and connect Euer Valley Trail system with trail system in the Hawk's Peak area (and beyond)

Prior Archaeological Coverage: none

Known Historical and Archaeological Resources: none

Archaeological Sensitivity Level: low

Cultural Protocols: *Phase IA* and implement *Phase IB* (*Phase II* and *Phase III* if appropriate)

Trail #7: "Upper True Grit"

Trail Type: new trail

Location: northwest of equestrian/cross country ski center

Description: construct new trail from Sundance Hut to Upper Mother Lode/Andromeda/Crazy Horse trails; connection with trail project near Sundance Hut

Prior Archaeological Coverage: none

Known Historical and Archaeological Resources: none

Archaeological Sensitivity Level: moderate

Cultural Protocols: *Phase IA* and implement *Phase IB* (*Phase II* and *Phase III* if appropriate)

Trail #8: "Lower True Grit"

Trail Type: new trail

Location: northwest of equestrian/cross country ski center

Description: construct new trail from near end of Alder Creek Road to Sundance Hut; utilize parts of existing user created trails; connection with trail near Sundance Hut; portions of trail parallel a power line

Prior Archaeological Coverage: none

Known Historical and Archaeological Resources: no formally recorded resources; barbed wire line and old fence posts remnant of Euer ranching operations; some wire removed by nordic ski operations (Houdyschell, personal communication 5/27/15)

Archaeological Sensitivity Level: moderate

Cultural Protocols: *Phase IA* and implement *Phase IB* (*Phase II* and *Phase III* if appropriate)

Trail #9: "Whoop It Up"

Trail Type: existing trail improvement and new trail extension

Location: west of equestrian/cross country ski center

Description: short trail segment improvements; re-route out of wet and steep area; decommission old route through riparian area; new trail extension

Prior Archaeological Coverage: none

Known Historical and Archaeological Resources: none

Archaeological Sensitivity Level: moderate

Cultural Protocols: *Phase IA* and implement *Phase IB* (*Phase II* and *Phase III* if appropriate)

Trail #10: "East Firewalker, East Sundance, Lower Crazy Horse"

Trail Type: existing roads/trails improvement and rehabilitation

Location: access trail from trailhead on Skislope Way; located between the Moondance Hut (to the Sundance Hut) and Ski Slope Way

Description: single long segment of dirt equestrian/administrative road; adding base material and possible re-grading as well as drainage management features; improve administrative and fire-fighting access, reduce airborne dust from use

Prior Archaeological Coverage: none

Known Historical and Archaeological Resources: none

Archaeological Sensitivity Level: moderate

Cultural Protocols: *Phase IA* and implement *Phase IB* (*Phase II* and *Phase III* if appropriate)

Trail #11: "Home Range Road"

Trail Type: existing roads improvement and rehabilitation

Location: the west-surrounding area of the equestrian/cross country ski center

Description: addition of base material, possible re-grading and drainage management features of an existing equestrian/administrative road; improve administrative and fire-fighting access, reduce airborne dust from use

Prior Archaeological Coverage: none

Known Historical and Archaeological Resources: no formally recorded resources; possible historic blacksmith shop and railroad ties in proximity to trail (Houdyschell, personal communication 5/27/15)

Archaeological Sensitivity Level: moderate

Cultural Protocols: *Phase IA* and implement *Phase IB (Phase II and Phase III if appropriate)*

Trail #12: "Rust Never Sleeps"

Trail Type: existing trails improvement

Location: west of equestrian/cross country ski center

Description: rehabilitation and drainage improvement of a steeper and wet trail characterized as an old logging road

Prior Archaeological Coverage: none

Known Historical and Archaeological Resources: none

Archaeological Sensitivity Level: moderate

Cultural Protocols: *Phase IA* and implement *Phase IB (Phase II and Phase III if appropriate)*

Trail # 13: "Eagle Rock"

Trail Type: new trail

Location: base of the downhill ski area to Glacier Way Trailhead

Description: new trail to increase connectivity of trail network between the Glacier Way TH and the ski area lodge

Prior Archaeological Coverage: one point location of coverage adjoining east side of trail, "Jonah Ridge" (Maziarski 2012, NCIC #11280)

Known Historical and Archaeological Resources: none

Archaeological Sensitivity Level: moderate

Cultural Protocols: *Phase IA* and implement *Phase IB (Phase II and Phase III if appropriate)*

Trail #14: "Sunrise"

Trail Type: new trail

Location: near Drifter Hut through Sunrise Bowl to Glacier Way Trailhead

Description: construct new hiker/biker trail to increase single-track connectivity

Prior Archaeological Coverage: none

Known Historical and Archaeological Resources: none

Archaeological Sensitivity Level: moderate

Cultural Protocols: *Phase IA* and implement *Phase IB* (*Phase II* and *Phase III* if appropriate)

Trail #15: "Glacier Way TH"

Trail Type: existing trailhead expansion and improvement

Location: off Glacier Way/Skislope Way

Description: high use trailhead; expand parking lot to include 10-15 additional parking spaces; add informational kiosk

Prior Archaeological Coverage: none

Known Historical and Archaeological Resources: none

Archaeological Sensitivity Level: moderate

Cultural Protocols: *Phase IA* and implement *Phase IB* (*Phase II* and *Phase III* if appropriate)

Trail #16: "Broken Chain"

Trail Type: new trail and existing trail improvement and decommissioning

Location: from existing Teton Way Trailhead to existing Glacier Way Trailhead

Description: construct new hiker/biker trail to increase connectivity of larger trail network; includes improvement of steep slope approach onto Ski Slope Way and the improvement and decommissioning of this same spur trail

Prior Archaeological Coverage: partial coverage on eastern half, "Tahoe Donner Salvage THP" (Houdyschell 1993)

Known Historical and Archaeological Resources: no formally documented resources; historic road (shown on ca. 1938 map) crosses trail; possible 20th century logging camp and can dump at east end of trail near trailhead (window pane glass, old trail with ox shoe (Houdyschell, personal communication 5/27/15)

Archaeological Sensitivity Level: moderate

Cultural Protocols: *Phase IA* and implement *Phase IB* (*Phase II* and *Phase III* if appropriate)

Trail #17: "Hillside"

Trail Type: existing trail improvement

Location: along Alder Creek on south side, southwest of Alder Creek Campground

Description: relocate portions of trail away from creek due to erosion and water quality concerns; re-vegetation and rehabilitation of decommissioned trail; installation of new puncheons and rock steps

Prior Archaeological Coverage: none

Known Historical and Archaeological Resources: no formally recorded resources; a historic railroad grade and the route of the Emigrant Trail are in close proximity to the trail; a former creek crossing (historic?) is adjacent to the trail

Archaeological Sensitivity Level: high

Cultural Protocols: *Phase IA* and implement *Phase IB* (*Phase II* and *Phase III* if appropriate)

Trail #18: "Bermgarten/McGlashan Springs TH"

Trail Type: new trailhead

Location: off of the southeastern end of Ski Slope Way (end of Bermgarten Road beyond gate)

Description; new trailhead providing access to Donner Lake Rim Trail and McGlashan Springs area; to be built on existing logging deck; estimate ten paved parking spots; add informational kiosk

Prior Archaeological Coverage: partial coverage adjoins (but appears to be outside) the proposed trailhead on the southeast: "Tinker's Knob Land & Livestock Co. Land Exchange" (Russell 1997, NCIC #3433/FS-543) and on the southwest: "Timber Harvest Plan" (J. Johnson 1996, NCIC #3421)

Known Historical and Archaeological Resources: no formally recorded resources; McGlashan Springs (P-29-1118) and charcoal production sites (P-29-1708) have been recorded to the south

Archaeological Sensitivity Level: moderate

Cultural Protocols: *Phase IA* and implement *Phase IB* (*Phase II* and *Phase III* if appropriate)

Trail #19: "Nature Loop South"

Trail Type: existing trail improvement

Location: on southwest side of Trout Creek

Description: improve tread bench and reduce erosion runoff into creek; improve and repair existing pedestrian bridge; areas of steep side slope and near creek; improve and add turnpike

Prior Archaeological Coverage: partial coverage by "Tahoe Donner Thinning THP" (Houdyschell 1996, NCIC #5485)

Known Historical and Archaeological Resources: no formally documented resources; a number of undocumented resources are reported; the trail passes through Elle Ellen's mill site, marked by two earthen dams, two mill ponds, a ditch, V-flume boards, and miscellaneous pieces of metal, burnt wood and pottery, window pane glass, and Chinese artifacts; early Tahoe Donner residents have removed many of these artifacts (Houdyschell, personal communication 5/27/15)

Archaeological Sensitivity Level: high

Cultural Protocols: *Phase IA* and implement *Phase IB* (*Phase II* and *Phase III* if appropriate)

Trail #20: "Nature Loop North"

Trail Type: existing trail improvement

Location: on northeast side of Trout Creek

Description: provides connection between Northwoods Clubhouse and Trout Creek Recreation Center; improve trail tread; redirect street runoff drainage off of trail; realign or turnpike trail out of wet areas

Prior Archaeological Coverage: partial coverage by "Tahoe Donner Thinning THP" (Houdyschell 1996, NCIC #5485)

Known Historical and Archaeological Resources: no formally documented resources; a number of undocumented resources are reported; the trail passes through Elle Ellen's mill site, marked by two earthen dams, two mill ponds, a ditch, V-flume boards, and miscellaneous pieces of metal, burnt wood and pottery, window pane glass, and Chinese artifacts; early Tahoe Donner residents have removed many of these artifacts (Houdyschell, personal communication 5/27/15)

Archaeological Sensitivity Level: high

Cultural Protocols: *Phase IA* and implement *Phase IB* (*Phase II* and *Phase III* if appropriate)

Trail #21: "Clubhouse Trail"

Trail Type: new and existing trail improvement

Location: between the Clubhouse and Trout Creek Trail (to Town of Truckee)

Description: improve existing trail to allow trail users to safely travel between the Clubhouse and Trout Creek Trail that will lead to downtown Truckee; crossing at Lausanne Way; majority of trail to be placed on portions of old Euer Valley Road and previously graded Truckee Sanitary District sewer easement; includes drainage improvements to existing trail and decommissioning of small portion of existing side trail

Prior Archaeological Coverage: partial coverage: "Williams' Fiber Optic Cable" (Jones & Stokes 1999, NCIC #2935), "Hopkins Land Exchange" (G. Johnson 1979, NCIC #3467) "Ronald Grider Euer Valley Road Subdivision (Lindström 1991, NCIC # 3665), "AT&T Fiber Optic Line" (Peak 1988, NCIC #8074)

Known Historical and Archaeological Resources: no documented resources within trail corridor but numerous archaeological resources recorded in close proximity: (Euer Valley Road P-29-1236; bedrock mortar and lithic scatter P-29-170; historic trash scatter P-29-176); members of the Washoe Tribe visited the bedrock mortar/lithic scatter site (P-29-170) and agree that it will not be impacted by project activities; they prefer that the feature not be highlighted or interpreted; rather a sign with generalized text could be placed within the Clubhouse about Washoe culture; the Tribe recommends archaeological monitoring during trail construction in the vicinity of Bennett Flat; Bennett Flat is also sensitive to contain historic resources, including remnants of Elle Ellen's mill complex and residence by Chinese laborers (as evidenced by a Chinese coin found on Bennett Flat by Houdyschell, personal communication 5/27/15)

Archaeological Sensitivity Level: high

Cultural Protocols: *Phase IA* and implement *Phase IB* (*Phase II* and *Phase III* if appropriate)

Trail #22: "Eastern Perimeter"

Trail Type: existing trail improvement

Location: improvements on four separate sections of the Eastern Perimeter Trail

Description: numerous small drainage fixes and improvements to existing trail segments; realign and improve existing trail sections to reduce steep grade and erosion; decommissioning of old trails

Prior Archaeological Coverage: partial coverage by "Hopkins Land Exchange" (G. Johnson 1979, NCIC #3467)

Known Historical and Archaeological Resources: none

Archaeological Sensitivity Level: moderate

Cultural Protocols: *Phase IA* and implement *Phase IB* (*Phase II* and *Phase III* if appropriate)

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TABLES

Table 1. Prior archaeological studies within and/or adjacent to the 5YIPlan area

<i>Report No.</i>	<i>Year</i>	<i>Author(s)</i>	<i>Title</i>	<i>Resource No.</i>	<i>Resource Description</i>
497	1991	Lindström	David Baker Skislope Way Subdivision	n/a	n/a
544	2001	Jensen	Boca Sierra Estates	n/a	n/a
554	2000	Lindström	Donner Lake Water Co	n/a	n/a
1146	1996	Lindström	Donner Lake Rim Trail: Negro Canyon	n/a	n/a
1167	1997	Ferrier	Zweigle et al. Properties THP	n/a	n/a
1903	1998	Houdyschell	Reamer Thinning THP	n/a	n/a
2935	1999	Jones & Stokes	Williams' Fiber Optic Cable	P-29-169 P-29-948	Lithic scatter; bedrock mortar Lithic scatter
3401	1997	Levy	Mitch V THP	n/a	n/a
3403	1998	Kostick	Alder Hill THP	n/a	n/a
3419	1991	Jensen	Alder Hill Estates Subdivision	n/a	n/a
3421	1996	Johnson, J.	Timber Harvest Plan	P-29-1118	McGlashan Spring
3431	2000	Kautz	Four-Acre Parcel	P-29-1126	Lithic scatter
3433/FS-543	1997	Russell	Tiinker's Knob Land & Livestock Co. Land Exchange	n/a	n/a
3434	1993	Jensen	APN 19-400-10, 110-ac Lower Alder Mountain	n/a	n/a
3467	1979	Johnson, G.	Hopkins Land Exchange	P-29-732	Emigrant Trail
3503	2001	Lindström	Third Tahoe Donner Connection	P-29-1236 P-29-1237	Euer Valley Rd Elle Ellen V-Flume
3643	1992	Lindström	APN 45-070-08 & 09	n/a	n/a
3655	1992	Lindström	APN 45-050-06	n/a	n/a
3657	1994 b	Lindström	Truckee Falls Evaluation	P-29-732 P-29-1236 P-29-1237	Emigrant Trail Euer Valley Rd Elle Ellen V-Flume
3659	1994	Lindström	Tahoe Donner Golf Facility	n/a	n/a
3664	1992	Lindström	APN 45-080-01	n/a	n/a
3665	1991	Lindström	Ronald Grider Euer Valley Rd Subdivision	n/a	n/a
3666	1991	Lindström	TDPUD Tahoe Donner Northwoods Booster Pump Station	n/a	n/a
4869	2002	Lindström	Tahoe Donner 32-Acre Project	n/a	n/a
4978/FS-1259	1997	Spencer	Donner Timber Stand Improve	n/a	n/a
5465	2002	Whittlesey	7C Ranch THP	n/a	n/a
5470	1992	Smith	Horse Saddle THP	n/a	n/a
5472	2002	Stewart	Donner THP	n/a	n/a
5484	1993	Houdyschell	Tahoe Donner Salvage THP	n/a	n/a

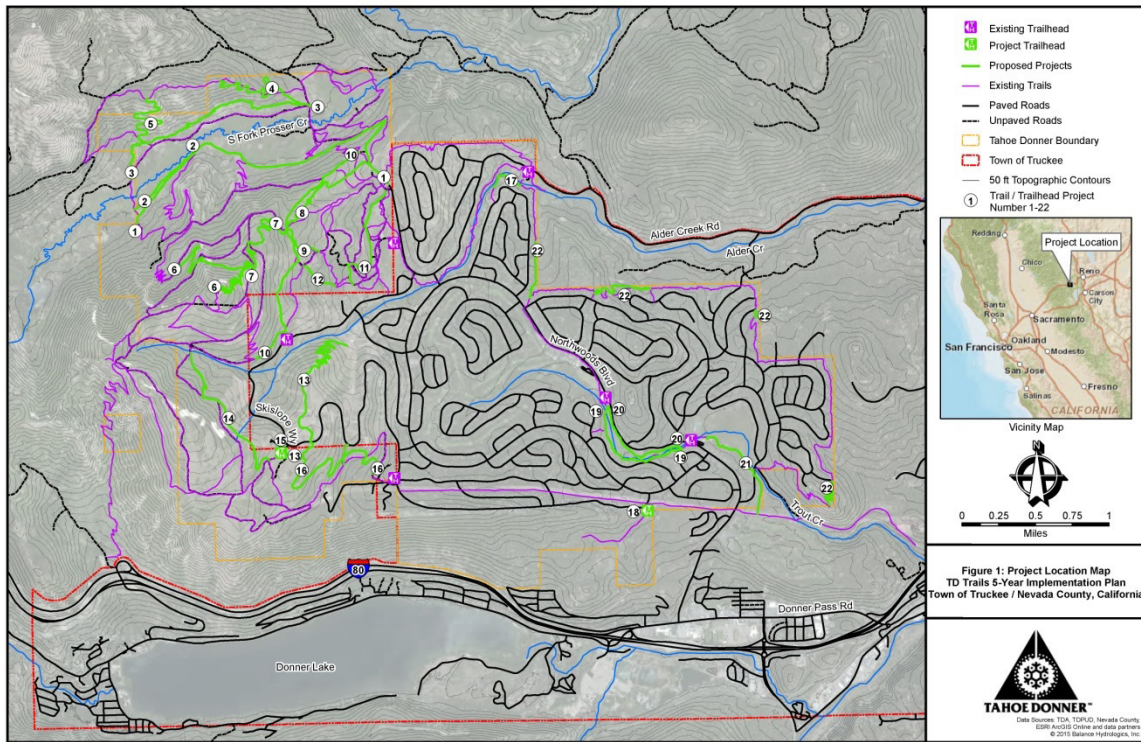
5485	1996	Houdyschell	Tahoe Donner Thinning THP	P-29-732 P-29-2167	Emigrant Trail Cabin flat, trash scatter, road, dam
7117/FS-1033	1993	Hall et al.	Alder and Prosser Biomass Timber Sale	P-29-732	Emigrant Trail
8074	1988	Peak	AT&T Fiber Optic Line	P-29-168 P-29-169 P-29-170 P-29-171 P-29-172 P-29-173 P-29-174 P-29-175 P-29-176	Lithic scatter Lithic scatter; bedrock milling feature Lithic scatter; bedrock milling feature Lithic scatter Trash scatter Lithic scatter Lithic scatter Lithic scatter Trash scatter
8274	1991	Gilbert	Euer Ranch THP	n/a	n/a
8891	2007	Stewart	Burns Fire 2 Salvage	n/a	n/a
8920	2004	Carr	Donner Crest THP	n/a	n/a
10203	2009	Duke	Nevada Energy 101/619/102 Transmission Line Hazard Tree Removal	n/a	n/a
10270	2009	Lindström	TDPUD Meter Box Retrofit	P-29-171 P-29-172 P-29-173 P-29-174 P-29-732 P-29-948 P-29-1126 P-29-2167	Lithic scatter Trash scatter Lithic scatter Lithic scatter Emigrant Trail Lithic scatter Lithic scatter Cabin flat, trash scatter, road, dam
10521	2007	Walden	Walther THP	n/a	n/a
10621	2010	Duke et al.	NV Energy Transmission Line	n/a	n/a
10726	2010	Seybold	West Truckee Tahoe Donner Fire Prevention Exemption	P-29-865	Cabin flat
11075	2011	Houdyschell	Alder Creek Community Fuel Break Exemption Grant	n/a	n/a
11083	2012	Waechter & McCabe	Phase II Evaluation, Tahoe Donner to Downtown Recreation Trail	P-29-4342 P-29-4344	Road Trash scatter, road
11280	2012	Maziarski	Jonah Ridge	n/a	n/a
No #	1981	Santoro et al.	n/a	P-29-1708	Charcoal production camp (Chinese)
No #	1994 a	Lindström	Truckee Falls Inventory	P-29-732 P-29-1236 P-29-1237	Emigrant Trail Euer Valley Rd Elle Ellen V-Flume

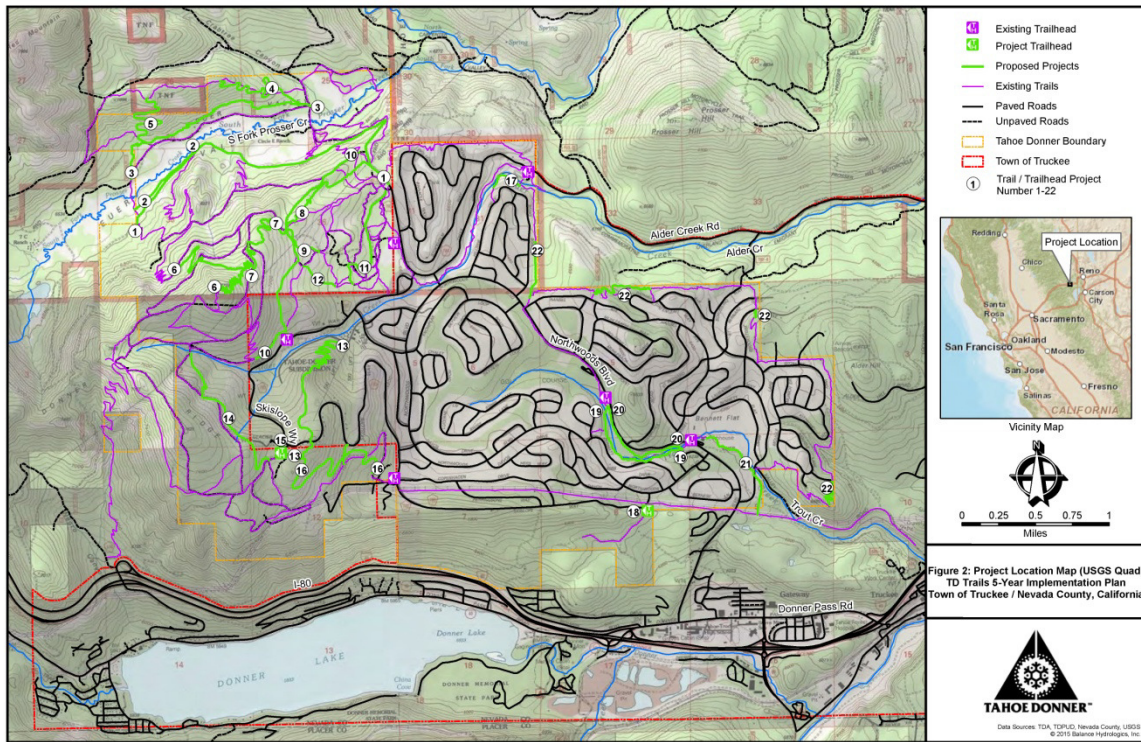
FS-299	1979	Johnson, G.	Euer-Carpenter Valleys	n/a	n/a
FS-324	1979	Ripple	Prosser/Henness Site Prep	n/a	n/a
FS-782	1989	Smith	Alder/Prosser Compartment	n/a	n/a
FS-1099	1994	Biosystems	Pendola Land Exchange	05-17-57-549	Lithic scatter
FS-1254	2005	Betts	Donner Lake Rim Trail	n/a	n/a
FS-1305	1998	Betts	Donner Lake Rim Trail	n/a	n/a
FS-2003	2006	Axsom	Alder Forest Pest Management	05-17-57-98 05-17-57-712 05-17-57-725	Alder Creek Sawmill Railroad grade Emigrant Trail Markers
n/a	1991	Betts	n/a	05-17-57-475	Cabin (Chinese)

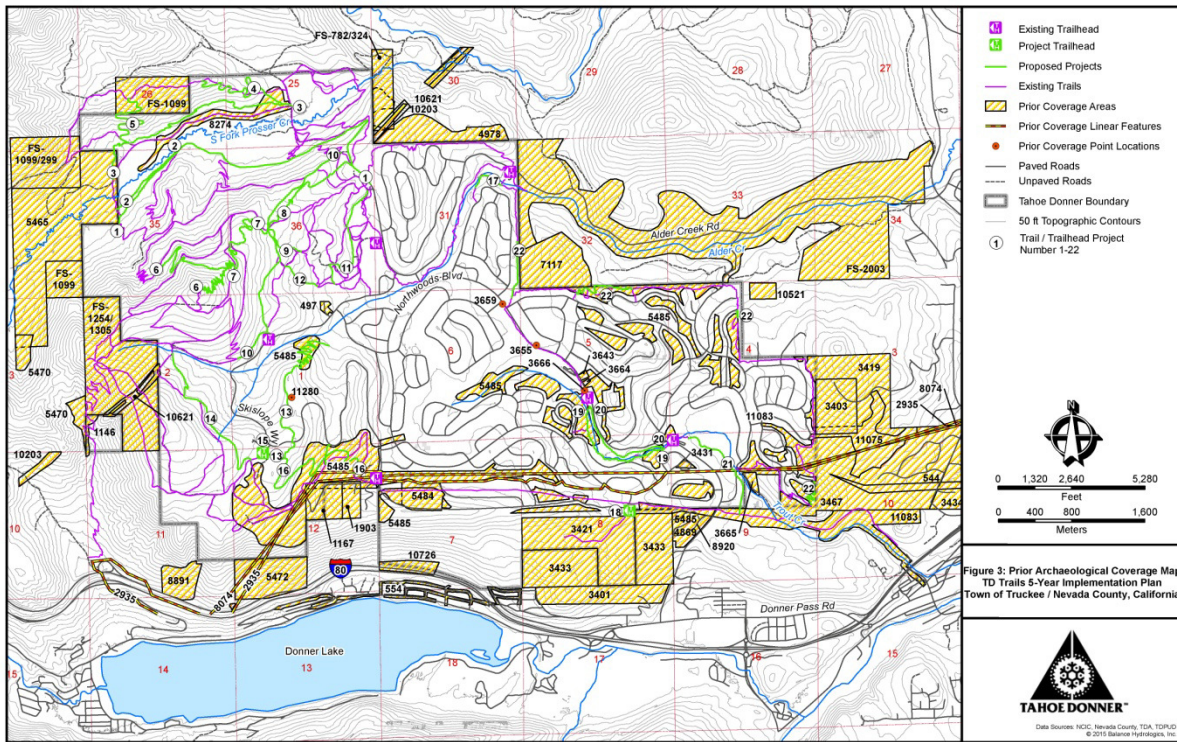
Table 2. Prior archaeological coverage, documented/undocumented resources, archaeological sensitivity, and cultural protocols (*includes trail type: N = new trail; E = existing trail improvements)

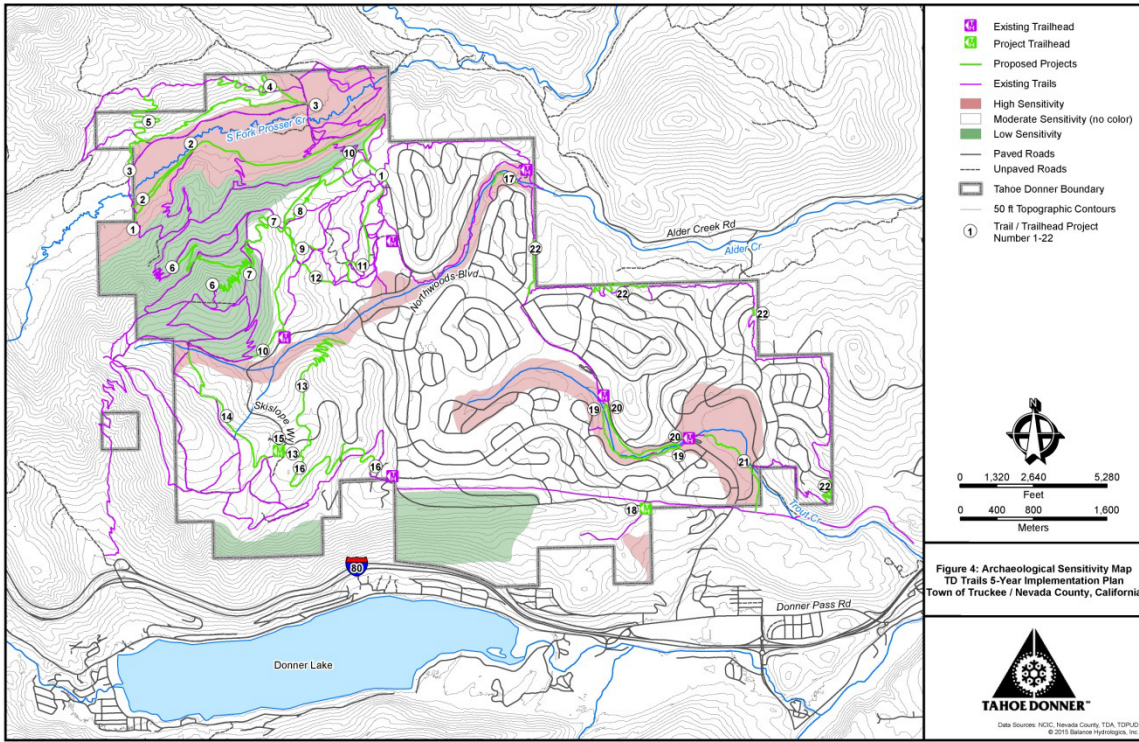
*Trail #	Partial Coverage	Resources	Sensitivity	Cultural Protocols
1E	No	Yes	High	IA & IB (IC, II & III if applicable)
2N	No	No	High	IA & IB (IC, II & III if applicable)
3N	Yes (1991)	Yes	Moderate-high	IA & IB (IC, II & III if applicable)
4E	No	No	Moderate-high	IA & IB (IC, II & III if applicable)
5E	No	Yes	Low & high	IA & IB (IC, II & III if applicable)
6N	No	No	Low	IA & IB (IC, II & III if applicable)
7N	No	No	Moderate	IA & IB (IC, II & III if applicable)
8N	No	Yes	Moderate	IA & IB (IC, II & III if applicable)
9E	No	No	Moderate	IA & IB (IC, II & III if applicable)
10E	No	No	Moderate	IA & IB (IC, II & III if applicable)
11E	No	Yes	Moderate	IA & IB (IC, II & III if applicable)
12E	No	No	Moderate	IA & IB (IC, II & III if applicable)
13N	Yes (2012)	No	Moderate	IA & IB (IC, II & III if applicable)
14N	No	No	Moderate	IA & IB (IC, II & III if applicable)
15E	No	No	Moderate	IA & IB (IC, II & III if applicable)
16N	Yes (1993)	Yes	Moderate	IA & IB (IC, II & III if applicable)
17E	No	Yes	High	IA & IB (IC, II & III if applicable)
18N	Yes (1996, 1997)	Yes	Moderate	IA & IB (IC, II & III if applicable)
19E	Yes (1996)	Yes	High	IA & IB (IC, II & III if applicable)
20E	Yes (1996)	Yes	High	IA & IB (IC, II & III if applicable)
21N	Yes(79,88,91,99)	Yes	High	IA & IB (IC, II & III if applicable)
22E	Yes (1979)	No	Moderate	IA & IB (IC, II & III if applicable)
N=10/45% E=12/55%	Yes=8/36% No=14/64%	Yes=11/50% No=11/50%	High=6/27%; Moderate=12/55%; Low & low/high=2/9%; Moderate-high=2/9%	

FIGURES









CORRESPONDENCE



3/4/2015

NCIC File No.: NEV-15-5

Susan Lindstrom
Consulting Archaeologist
PO Box 3324
Truckee, CA 96160

Re: Tahoe Donner Trails

The North Central Information Center received your record search request for the project area referenced above, located on the Truckee, Norden, and Independence Lake USGS 7.5' quads. The following reflects the results of the records search for the project area and a no radius:

As indicated on the data request form, the locations of reports and resources are provided in the following format: custom GIS maps shapefiles hand-drawn maps

Resources within search area:	P-29-168 P-29-169 P-29-170 P-29-171 P-29-172 P-29-173 P-29-174 P-29-175 P-29-176 P-29-732 P-29-865 P-29-948 P-29-1118 P-29-1126 P-29-1236 P-29-1708 P-29-2167 P-29-4342 P-29-4344
Reports within search area:	497 544 554 1146 1167 1903 2935 3401 3403 3419 3421 3431 3433 3434 3467 3643 3655 3659 3664 3665 3666 4869 4978 5465 5470 5472 5484 5485 7117 8074 8274 8891 8920 10203 10521 10621 10726 11075 11083 11280

- Resource Database Printout (list):** enclosed not requested nothing listed
- Resource Database Printout (details):** enclosed not requested nothing listed
- Resource Digital Database Records:** enclosed not requested nothing listed
- Report Database Printout (list):** enclosed not requested nothing listed
- Report Database Printout (details):** enclosed not requested nothing listed
- Report Digital Database Records:** enclosed not requested nothing listed
- Resource Record Copies:** enclosed not requested nothing listed
- Report Copies:** enclosed not requested nothing listed

- OHP Historic Properties Directory:** enclosed not requested nothing listed
- Archaeological Determinations of Eligibility:** enclosed not requested nothing listed
- CA Inventory of Historic Resources (1976):** enclosed not requested nothing listed
- Caltrans Bridge Survey:** enclosed not requested nothing listed
- Ethnographic Information:** enclosed not requested nothing listed
- Historical Literature:** enclosed not requested nothing listed
- Historical Maps:** enclosed not requested nothing listed
- Local Inventories:** enclosed not requested nothing listed
- GLO and/or Rancho Plat Maps:** enclosed not requested nothing listed
- Shipwreck Inventory:** enclosed not requested nothing listed
- Soil Survey Maps:** enclosed not requested nothing listed

Please forward a copy of any resulting reports from this project to the office as soon as possible. Due to the sensitive nature of archaeological site location data, we ask that you do not include resource location maps and resource location descriptions in your report if the report is for public distribution. If you have any questions regarding the results presented herein, please contact the office at the phone number listed above.

The provision of CHRIS Data via this records search response does not in any way constitute public disclosure of records otherwise exempt from disclosure under the California Public Records Act or any other law, including, but not limited to, records related to archeological site information maintained by or on behalf of, or in the possession of, the State of California, Department of Parks and Recreation, State Historic Preservation Officer, Office of Historic Preservation, or the State Historical Resources Commission.

Due to processing delays and other factors, not all of the historical resource reports and resource records that have been submitted to the Office of Historic Preservation are available via this records search. Additional information may be available through the federal, state, and local agencies that produced or paid for historical resource management work in the search area. Additionally, Native American tribes have historical resource information not in the California Historical Resources Information System (CHRIS) Inventory, and you should contact the California Native American Heritage Commission for information on local/regional tribal contacts.

Should you require any additional information for the above referenced project, reference the record search number listed above when making inquiries. Requests made after initial invoicing will result in the preparation of a separate invoice.

Sincerely,

Nathan Hallam
Coordinator, North Central Information Center

Susan Lindström, Ph.D.

Consulting Archaeologist

P.O. Box 3324

Truckee CA 96160

530-587-7072 voice

slindstrom@cebridge.net

DATE: April 12, 2015

TO: Darrel Cruz, Tribal Historic Preservation Officer

Washoe Tribe of Nevada and California

919 Hwy 395 South, Gardnerville, NV 89460

775-782-0014 (775-546-3421 cell)

darrelcruz@washoetribe.us

RE: Tahoe Donner Trails Project

Tahoe Donner Association plans to extend their current trails system over a five-year period through a program involving existing trail rehabilitation (5.25 miles), existing road rehabilitation (4.35 miles) and rerouting of existing trails and new trail construction (12.5 miles) for a total of 22.1 miles. (See accompanying project location maps.) The Tahoe Donner Trails 5-Year Implementation Plan (Trails 5YIP) is intended to move 23 identified trail projects from broad recommendations contained within the Tahoe Donner Trails Master Plan closer to the project-level design and detail necessary for permitting through the various local, state and federal agencies as well as CEQA review and clearance.

The heritage resource component of the project will identify what resources and/or problem areas exist within the 5YIPlan area and outline how they will be addressed and resolved as part of the necessary agency permitting process. The primary study goal is to avoid as much as reasonably possible the potential project impacts at this level of project, secondarily to minimize any impacts that are unavoidable, and finally to identify mitigation for any given impact in order to reduce its impact to a less than significant level. This avoid-minimize-mitigate approach will be applied to each of the current trail projects and provide a foundation for any further analysis that will be necessary for future trail projects.

Project objectives will be met through the following list of tasks and deliverables in order to identify the areas and issues associated with heritage resources.

- Identify and map locales within the 5YIPlan area that have been subject to prior archaeological survey and assess areas slated for new survey and/or re-survey.
- Identify and map known heritage resources within the 5YIPlan area and assess their relative importance.
- Produce a map of the relative heritage resource sensitivity of various locales within the trails planning area according to various heritage resource types (e.g., low, moderate, high).

- Identify potential project impacts for various heritage resource types and describe the range of fixed mitigation measures for any given existing or potential heritage resource impact.
- Outline the hierarchy of archaeological protocols and the subsequent permitting path for each of the proposed trail projects during project-level implementation.
- Produce an analytical report to be attached to the 5YIP (with confidential sections exempted). Summarize study findings and prescribe a research design necessary for Tahoe Donner to determine specifically when and how to permit each of their individual trail projects.

I wish to bring this project to your attention at this early stage in project planning in order to incorporate the Washoe Tribe's opinions, knowledge and sentiments regarding any potential concerns specific to the project area. I welcome any input the Tribe may have regarding potentially sensitive areas within the 5YIPlan area and suggestions on how best to protect and manage these sensitive areas. I look forward to hearing from you if you have any comments or information. I would appreciate your formal response in a brief memo/letter regarding the project that I could include as an appendix to my report submittal in mid-May 2015. Thank you very much.

Washoe Tribe of Nevada and California
Cultural Resources Department/Tribal Historic Preservation Office
Protect, Preserve, Promote Washoe Culture



May 12, 2015

Susan Lindstrom
P. O. Box 3324
Truckee CA 96160

Subject: Tahoe Donner Trails Project

Dear Ms. Lindstrom,
Thank you for consulting with the Washoe Tribe of Nevada and California on the Tahoe Donner Trails Project. This project is within the ancestral lands of the Washoe Tribe.

If I remember this project had come to my attention one or two years ago and at that time there were archeological resources identified within the trail alignment. We anticipate this project will have archeological resources of Washoe origin within the area of potential effect.

We wish to meet with the project proponent or their archeologist consultant and possibly take a tour of the project area so we may offer valuable insights and comments on the project. In addition we would like to be able to visit some of the known archeological sites during the proposed field visit.

Thank you and call me at (775) 782-0014 if you have any questions

Respectfully,

A handwritten signature in blue ink that reads "Darrel Cruz".

Darrel Cruz, Director
THPO/Cultural Resource Department

919 Highway 395 South, Gardnerville, Nevada 89410
Office (775) 782-0014

Susan Lindström, Ph.D.

Consulting Archaeologist

P.O. Box 3324

Truckee CA 96160

530-587-7072

slindstrom@cebridge.net

October 31, 2015

Ms. Katie Sanchez

Native American Heritage Commission

915 Capitol Mall, Room 364

Sacramento, CA 95814

916-653-4082 (657-5390 fax)

RE: Tahoe Donner Trails 5-Year Implementation Plan Project

Sacred Lands File Search

Dear Ms. Sanchez;

Tahoe Donner Association plans to extend their current trails system over a five-year period through a program involving existing trail rehabilitation (5.25 miles), existing road rehabilitation (4.35 miles) and rerouting of existing trails and new trail construction (12.5 miles) for a total of 22.1 miles. The Tahoe Donner Subdivision is located in Truckee, California, Nevada County. (See accompanying project location maps.) As a follow-up to my communications with Darrel Cruz, Tribal Historic Preservation Officer of the Washoe Tribe of Nevada and California, I am writing to request a record search of the sacred land files. I wish to bring this project to your attention in order to incorporate your opinions, knowledge and sentiments regarding any potential Native American concerns specific to the project area.

Sincerely,

Susan Lindström, Ph.D.

Consulting Archaeologist

RESUME

Susan Lindström, Ph.D.
Box 3324, Truckee CA 96160
530-587-7072 (530-713-1920 cell)
slindstrom@cebridge.net

Education

Ph.D. Archaeology 1992 - University of California Davis
M.A. Anthropology 1978 - University of California Davis
B.A. Anthropology 1972 - University of California Berkeley

Expertise

Cultural Resource Management
Archaeology (prehistoric and historic period)
History and archival records research
Ethnography, ethnohistory, oral history
Native American consultation
Interpretation and public education

Professional Organizations

Register of Professional Archaeologists
(member since 1982)
Society for Historical Archaeology
Society for California Archaeology
Various county and regional historical societies

Lindström's qualifications include archaeological field work and analytical and archival research in the prehistory and history of the western United States including California, the northern and western Great Basin in Nevada and Oregon, and the Cascade Range and the Columbia River Plateau in Oregon and Washington. Her area of expertise is centered in the north-central Sierra where she has over 40 years of experience in historic preservation matters on a local, state and federal level. She has resided in the Tahoe Sierra and accrued full-time professional experience here since 1973.

Heritage Resource Management -- As Forest Archaeologist from 1973 until 1978 for the Tahoe National Forest and "zone" Archaeologist for the El Dorado National Forest and Lake Tahoe Basin Management Unit, and as District Archaeologist for the Bureau of Land Management in 1978 (Burns, Oregon), Lindström initiated and implemented heritage resource programs for the inventory, protection, management and interpretation of prehistoric and historic heritage resources. She conducted training sessions on their identification and on antiquities legislation.

Contracting and Consulting -- Between 1980 and the present time, as a private consultant, Lindström has conducted and/or supervised fieldwork, data analysis, archival research, and report preparation for hundreds of federal, state, county, and private projects within the north-central Sierra and adjoining regions in California and Nevada. During this time she has served as an expert witness on historic and prehistoric resources involving California State Supreme Court cases within the Tahoe Sierra.

Teaching -- Lindström instructed introductory level courses in cultural and physical anthropology and archaeology at the University of Nevada, Reno and the University of California, Davis and was appointed as an adjunct professor to the University of Nevada, Reno in 2010.

****Research, Publications and Papers*** -- Academic and heritage management reports pertain to regional prehistory and history, as well as print and video publications for the popular audience (including research findings on the Donner Party, California gold mining, Washoe Indians, and California ethnobotany).

Secretary of Interior Standards: Archaeology and History (Prehistory, Ethnography, Ethnohistory, Ethnobotany, History, Paleoenvironmental Studies)

Lindström's 40 years of full-time professional experience in archaeological research, administration and management at the supervisory level involves the study of resources of the prehistoric, ethnographic, ethnohistoric, and historic period. In the Lake Tahoe Basin and Truckee Basin alone, Lindström has supervised and/or participated in the cumulative survey of nearly 50,000 acres. Her work in the adjoining sierran foothills and valleys approaches an additional 25,000 acres.

Prehistory. Experience in prehistoric archaeology largely pertains to the study of hunter-gatherer groups in the far west. Her surveys and excavations center upon the prehistoric ancestors of the Washoe and Maidu Indians of the north-central Sierra.

Lindström's Ph.D. dissertation focused on Washoe fishing in the Truckee River Drainage Basin. Her M.A. thesis explored high-elevation prehistoric land use in the Truckee-Tahoe Sierra.

During the 1990s she participated in the development of a research design for the Framework for Archaeological Resource Management (FARM), a heritage resource management document used by all north-central sierran forests.

She is presently a reviewer for the *Journal of California Archaeology*.

Ethnography, Ethnohistory, Ethnobotany. Lindström has developed an extensive knowledge of Washoe and Maidu territory and has maintained a good working relationship with these groups beginning in 1973. Since 2000 she has collaborated with prominent Washoe ethnographers such as Warren D'Azevedo and Merideth (Penny) Rucks. Lindström conducted and coordinated ethnographic research to develop a management plan for Cave Rock, a high-profile Washoe Traditional Cultural Property within the Lake Tahoe Basin. She authored a chapter on Native Californian ethnobotany that appears in a standard source book on California vegetation.

History. Experience in historic sites archaeology has focused on resources associated with the study of mining, logging, ranching, transportation, and water management resources. Since 1991 Lindström has conducted excavations at a number of rural work camps and industrial sites, many involving Chinese wood cutters and colliers. In 1987 and 1990 she field-directed excavations at two Donner Party camps (Murphy's Cabin and Alder Creek) and co-authored a book detailing the archival research, archaeology, architecture, dendrochronology, and zooarchaeology surrounding the tragedy.

Paleoenvironmental Studies. Lindström is a contributor to the 1997 congressionally funded, multi-disciplinary study assessing the environmental health and ecosystem management of the Sierra Nevada (*Sierra Nevada Ecosystem Project* [SNEP]) and the pilot case study focusing on the Lake Tahoe Basin.

She is also a contributor to the *Lake Tahoe Watershed Assessment* study, published in 2000 by the Pacific Southwest Research Station, USDA Forest Service, in collaboration with the Pacific Southwest Region of the USDA Forest Service, the Tahoe Regional Planning Agency, the University of California at Davis, the University of Nevada at Reno, and the Desert Research Institute, Reno, Nevada. The study was mandated as part of former President Clinton's actions to protect Lake Tahoe.

Through a series of snorkel and SCUBA surveys during the 1980s and 1990s in Lake Tahoe and its tributary lakes, Lindström investigated lake level changes and explored submerged remnant forests and prehistoric milling features as paleoenvironmental indicators over the past 6000 years. She presented her findings in scientific journals as a co-author with geologists, hydrologists and limnologists. Her work was also featured in *National Geographic* magazine (March 1992).

Secretary of Interior Standards: Closely Related Fields

Lindström's 40 years of full-time experience also entails research, writing, inventory, evaluation, data recovery, and management in closely related fields pertaining to the "built environment." Her work falls within the historical context of mining, logging, water supply engineering, and ranching landscapes, as well as transportation and communications networks, and town sites. Evaluation and data recovery have been directed to 19th and 20th century structural remains for the following resource types: Chinese/Basque/miner cabins; bake ovens/hearths; sawmills; railroad grades and camps; flumes; ditches; pipelines; dams; reservoirs; water tanks; ice works; ranch complexes; charcoal kilns; mine features; trails/roads/highways; utility lines; and fences.

For her projects involving more complex structural properties such as intact standing buildings, bridges and other architectural features, Lindström has had the opportunity to collaborate and learn from a number of prominent architectural historians, beginning in the early 1980s with the Town of Truckee National Register District nomination process up until the present time.

Lindström also has experience with a number of historic preservation projects. She authored the heritage resource components for local community plans (from 1989 through 2005) and for county general plans (beginning in 1991). During the 1980s she served as a charter member of the Truckee Historical Preservation Advisory Council. She assisted in the preparation of the Truckee Historic Preservation Plan in 2009, followed by the formal National Register District nomination and subsequent Truckee Streetscape project. She served as a member of the "Placer County Department of Museums Collections Management Task Force" in 2000 and is currently an advisor to the California Department of Parks and Recreation (Sierra District) for their upcoming museum at Donner Memorial State Historic Park.

*available upon request