Contextual History of Tuolumne County

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CHAPTER 1: INTRODUCTION

Since humans first came to the region which became California, large numbers of people have been attracted to its diverse and fruitful environment. Rapidly growing for the past 150 years, California's rate of population increase is two and a half times that of any other state in the nation: the 1990 census counted nearly 30,000,000 people. Tuolumne County, too, is experiencing growth rates in excess of the statewide average. With a population of nearly 50,000 people, the county has increasing need for houses, stores, roads, and other facilities.

As construction in California's foothill counties increases and more and more land is altered, untold numbers of historical resources are being impacted or destroyed. Sometimes the resources are documented and other treatment occurs; more often the resources are lost forever. Both the State of California and the United States government have, by legislation, indicated that historical resources have cultural value for their citizens and that preservation of such resources is in the public interest. The California Environmental Quality Act (CEQA), *Public Resources Code* section 21001 *et seq.* states that it is the "policy of the state to...Take all action necessary to provide the people of this state with...historic environmental qualities...and preserve for future generations...examples of the major periods of California history." The document which follows has been prepared with the explicit goal of assisting county government with the preservation and stewardship of Tuolumne County's historic qualities for future generations.

Certain values or interests may come into direct or indirect conflict with the preservation of historic resources. Economic considerations and development rights are among two of the issues which must be acknowledged. The nature and means of balancing these considerations with the values of historic preservation are among the more challenging feats to face cultural resources managers. This document is therefore intended to provide guidance and structure to Tuolumne County staff when they are faced with providing for orderly and appropriate new development when cultural or other heritage resources are involved.

Scope and Purpose

In 1988, the Tuolumne County Board of Supervisors recognized a need for "compiling, recording and updating of information on cultural resources" within Tuolumne County when they created the Tuolumne County Historic Preservation Review Commission (Commission). The Commission in turn acknowledged a need to create a management framework for the identification and evaluation of historic resources within the unincorporated areas of the county. To this end, the county secured a grant in July 1992 from the State Department of Parks and Recreation, Office of Historic Preservation (OHP) to prepare a contextual history of Tuolumne County's rich and varied legacy. The principal authors (SD-K and JM) of this report contracted with the county to build the document based on the following terms:

1. Prepare a contextual overview of Tuolumne County which directs management of the county's cultural resources.

2. Identify at least six themes including but not limited to agriculture, architecture, archaeology, ethnic heritage, industry, and transportation with an emphasis on the privately-owned properties with the county.

3. Assess the relative quantities, integrity, and significance (using National Register of Historic Places [NRHP] eligibility criteria) of buildings representative of identified themes.

4. Address management of resources within identified contexts and make recommendations on goals and priorities needed to protect the resources.

5. Present the findings in a format consistent with OHP's standards as outlined in Tuolumne County's contract with the state which considers and assumes:
   a. That important historic properties cannot be replaced if destroyed and that their conservation should be a high priority;
   b. That preservation of historic properties can proceed before all of them have been identified; and
   c. That the public participates in preservation planning on a continuing basis.

Thus, a major goal of the research conducted is the compilation and preparation of guidelines and resource materials about the identification, documentation, and treatment of cultural resources in Tuolumne County. "Cultural resources," as used herein, include prehistoric and historic archaeological sites, sites of Native American concern, other traditional cultural, folkloric, or heritage properties, standing structures and buildings, and certain other remnants of our cultural heritage.

Historic Contexts

A historic context, as defined by the United States Department of the Interior in *Archaeology and Historic Preservation: Secretary of the Interior's Standards and Guidelines* (September 29, 1983), is a management tool which categorizes information about related important cultural resources based on a specific theme, geographic limits, and chronology. A historic context thus describes one or more aspects of historical development in an area, identifying the significant patterns which individual resources represent. Contexts such as these are the cornerstone of the historic preservation planning process, since the goal of such planning is the identification, evaluation, and treatment of a whole range of cultural resources rather than preservation of a few, or perhaps biased sample of properties. Historic contexts should be developed to allow subsequent identification and frameworks for evaluation of resources located at a later time.

A historic context is not to be construed as an exhaustive history of a region nor is it meant to encapsulate an area's history. Rather it should guide the course of future research, based largely on a framework for evaluation. As such, it is an artificial construct: historic contexts generally overlap with one another. One can not discuss the context for water development in Tuolumne County while separating it from mining history, for example. Generally it is unwise to create historic contexts which use modern geo-political boundaries, unless those boundaries are relevant to the context being discussed. Thus, discussing historic contexts for Tuolumne County merely places county history in a theoretical framework which generally parallels culture history for much of the Central Sierra Nevada and foothill counties. Interpretation of prehistoric lifeways, must include information gathered from studies conducted in Yosemite National Park, Calaveras County, and Alpine County, as extant information is limited from Tuolumne County. So too, that while some contexts are more easily developed for the county than others (e.g. Water Development or Railroad Logging), still others have much of their context rooted in studies conducted in other areas (e.g. Commerce).

Selection of Contextual Themes and Study Area

Six themes were chosen for the Tuolumne County Contextual History. These six (Transportation, Mining, Water, Ethnicity/Social Systems, Agriculture, and Industry/Commerce) were selected because of their broad application to county development and history, because

of the number of resources thought to survive reflecting aspects of those themes, and because people often do not think of such resources or contexts when conducting historical investigations. Most importantly, the contexts were chosen because it is felt that the information gathered about the themes would be the most helpful to Planning Staff when making decisions about cultural resources investigations (commonly referred to locally as "an archaeological survey"). Three of the themes identified by the Commission are not true themes in the sense of this study: ethnicity, archaeology, and architecture are all important contributors to the contexts and to the significance of the resources, but are not in themselves separate themes. Ethnicity was retained however, and social systems added to the theme, in the hope of developing a framework of interpretation.

Tuolumne County has been fortunate to have had many surveys conducted as part of the state or federal environmental review process of projects which fall under CEQA, federal hydroelectric or other water development projects, subdivisions, private timber sales, state highways, and other studies. The communities of Jamestown (Costello 1983), Big Oak Flat and Groveland (Thornton 1988), Soulsbyville (Marvin, Melgard, and De Ferrari 1993), and Chinese Camp (Bloomfield 1993) have all been surveyed. A portion of the city of Sonora was surveyed in 1983 (Central Sierra Planning Council/Tuolumne County Historical Society). Columbia, one of the state's premier Gold Rush towns, has been inventoried and designated as a State Historic Park; another district, the roundhouse and related buildings of the 1897 Sierra Railway, has also been designated a State Historic Park (Railtown 1897). Large tracts of land consisting of thousands of acres have been surveyed for other proposed or actual projects such as Don Pedro Reservoir, New Melones Reservoir, New Standard, Clavey River, or timber harvests conducted by the Stanislaus National Forest, resulting in relatively large numbers of documented cultural resources. Not included in the following study were: (1) areas which had been previously surveyed; (2) areas under management of the State of California; (3) land which is part of the federal (Stanislaus National Forest) or state forest preserves (such as Calaveras Big Trees State Park); or (4) other public lands (e.g. Bureaus of Land Management or Reclamation). Such areas were excluded as the emphasis of this study was to be on previously unidentified resources located on private land.

Research Methods

Field Investigations

In general, the authors are familiar with Tuolumne County history and prehistory, and were able to minimize the amount of background research required. Initially, travel over many county roads was used to gather a sense of what remains in the way of above-ground resources. Once a representative sample of resources related to the themes had been gathered (Table 1.1), properties were documented on draft OHP Primary Records (Appendix D), a single sheet inventory-record of attributes, location, and other information about cultural resources, with a map attached. While the Primary Records have yet to be approved by the State Historic Resources Commission, it was decided, in consultation with OHP and county staff, to experiment with the use of the form in the documentation of resources recorded for the Tuolumne County Contextual History.

Resources were chosen to reflect a variety of resource types, themes, and eras to consider and recall Tuolumne County's diverse heritage. A similar trend of recording and recognizing vernacular, archaeological, and industrial resources in addition to architectural resources, is occurring nation-wide. The president of the National Trust for Historic Preservation, with its legacy of concern about beautiful historic buildings, recently stated:

> I am also determined to expand and diversify our collection to make it more representative of the entire American experience...Properties such as [the home of an African-American midwife or a restored industrial warehouse] – as well as farms, ranches, mills, storefronts, and churches – should be added to our collection to reflect the building types, ethnic groups, and lifestyles that make up America's diverse cultural heritage [Moe 1993:6].

The resources documented for this study include nineteenth century bread ovens and stamp mills, prehistoric Native American milling and habitation sites, twentieth century houses, schools, offices, and more to demonstrate the variety of extant resources in Tuolumne County.

Literature and Archival Records Search

The majority of archival investigations for this study were conducted at three principal repositories of county historical records, maps, data on cultural resources surveys, and other investigations: the Tuolumne County Museum and History Center; the United States Forest

Service (USFS), Stanislaus National Forest (StNF), which maintains files for work conducted on or near forest lands and, in the authors' personal libraries. Consulted were: (1) the StNF archaeological atlas which depicts site locations and archaeological survey boundaries; (2) mining and mineral claims; (3) administrative and other historic maps of StNF; (4) a mineral potential data map; (5) the General Land Office (GLO) plats; (6) the Range Allotment Plat; (7) the Land Classification Atlas; (7) Soil Resource Inventory; (8) the Geologic Map of California (San Jose and Sacramento sheets); (9) historic topographic (quadrangle) maps; and (10) historic maps prepared by Dart (1876), Beauvais (1882), Amyx (GLO plats), Barton (1896), and Thom (1906).

The authors conducted archival research in the county archives (in the offices of the County Assessor, Recorder, and Surveyor), consulted with the Tuolumne County Historian (who reviewed this document), and conducted oral interviews with knowledgeable residents. A review of the records and survey data maintained by the Central California Information Center of the California Archaeological Inventory (CCIC) in Turlock, California, the clearinghouse for information about Tuolumne County's historic resources was not conducted for this investigation. Detailed site location data (particularly prehistoric sites) was out of scope for this project. Additionally, Tuolumne County, under a separate contract with OHP, is working with the CCIC to establish a Geographic Information System (GIS) inventory of identified resources catalogued at the clearinghouse (Appendix A).

Structure of the Report

The results of the inventory, development of themes, and additional studies are presented in the following chapters and appendices. Chapters 2 and 3 introduce an environmental and cultural overview of the county. Chapters 4-9 individually present information on the chosen themes, followed by the final chapter which offers a summary and recommendations for implementation of protection and other management strategies, including suggestions for additional work that could be undertaken by the Commission and the Tuolumne County Planning Department. Support documents are incorporated into five appendices which contain guideline information for planning, a list of registered county resources, a time line of historic events, an example of the resource recording form, and confidential records and maps.

Table 1.1: Resources Documented for this Study and Relationship to Contextual Themes[1]

Field #	Location	Resource Name	T	M	W	E/S	A	I/C
1	Gold Spring	Francois Caveron Ranch				✓	+	
2	Spring Gulch	Joanna Luddy House				+		
3	Knickerbocker Flat	Louis Dondero House				+		
4	Knickerbocker Flat	Dondero Monitor		+	✓			
5	Sawmill Flat	Water Trough	+		✓			
6	Shaws Flat	Mississippi House	✓					+
7	Shaws Flat	Empire Dance Hall				+		+
8	Springfield	Gerald Engler Barn					+	
9	Springfield	Engler Lime/Brick Kiln						+
10	Union Hill	Union Hill Mines		+				
11	French Flat	Francis Martin Ranch					+	
12	Rawhide	Green Spring/Shell Road	+					
13	Rawhide	Rawhide Mine Dams		✓	+			
14	Jamestown	John Black Dairy/House					+	
15	Montezuma	Guindon-Segard/Rosasco Corral				✓	+	+
16	Sullivan Creek	Craig's Ditch		✓	+			
17	Sonora	U.S. Lime Products Plant						+
18	Carters	Consani House				+		
19	Carters	Blair Garage	+					✓
20	Tuolumne	Old Summerville High School				+		

[1]Key:
T Transportation
M Mining
W Water
E/S Ethnicity/Social
A Agriculture
I/C Industry/Commerce

+ Primary Relationship
✓ Secondary Relationship

Field #	Location	Resource Name	T	M	W	E/S	A	I/C
21	Tuolumne	Summerville High School Gym				+		
22	Tuolumne	Veterans Memorial Hall				+		
23	South Fork Stanislaus	F. B. Hiatt Ranch				+		
24	Twain Harte	Gurney Station	+		+			
25	Bald Rock/Twain Harte	Klosh Tillicum Club House				+		✓
26	Wards Ferry Road	Morgan Chapel				+		
27	Blanket Creek	Pease Ranch/Nockinsville		✓		✓	+	
28	Algerine	Cabin/Stone Oven		+?		✓		
29	Algerine	Algerine School				+		
30	Algerine	Newcomb/Rocca Ranch/Algerine	✓	✓		✓	+	✓
31	Curtisville	Curtisville		+		+		
32	Sullivan Ck/Algerine Rd	Hill Ranch					+	
33	Campo Seco	Residence				+		
34	Jamestown	Harvard Mine House		+				
35	La Grange Road	Byington Ranch Site					+	
36	Wards Ferry Road	James Vial Ranch (ruins)		✓		+		
37	Keystone	C. C. Hosmer House (ruins)					+	
38	Ralph/Campbell's	Ralph (Campbell's) Station	+				✓	✓
39	Tuolumne	West Side Lumber Co. Office	+					✓
40	Tuolumne	Roundhouse/BRM				+		
41	Arrastraville	Arrastraville School				+		
42	Confidence	Confidence Mine Office/House		+		✓		
43	Long Barn	Long Barn Lodge	✓					+

Field #	Location	Resource Name	T	M	W	E/S	A	I/C
44	State Highway 108	Sonora-Mono Toll Road	+					
45	Middle Camp	A. E. Elsbree Apple Orchard					+	
46	Sunshine Camp	Woodham's Barn	✓				+	✓
47	Sonora	Golden Gate Mine Magazines		+				
48	Sonora	Sonora Grammar School (Dome)				+		
49	Old Don Pedro Dam Rd	Don Pedro Spur off Sierra RR	+		+			
50	Martinez	Martinez		+		✓		
51	Springfield	Springfield School/Church				+		
52	Sonora	Hales & Symons						+
53	Columbia	Bannister Marble Quarry		+				+
54	Tuttletown	Swerer Store						+
55	Jackass Hill	Mullins Cabin		+				
56	Blanket Creek	Fitzgerald Ranch				+		
57	Sullivan Creek	Jacksonville Road Bridge	+					
58	Hawkins Bar Road	Joseph Rosasco Ranch					+	
59	Standard	Union Church				+		
60	Soulsbyville	Soulsby Mines and Mill		+				
61	Soulsbyville	Bedrock Milling Station				+	✓	
62	Standard	McCauley House					+	
63	Standard	Steve's Place	✓					+
64	Phoenix Lake Road	Caesar Belli House				+		
65	Gold Springs	Trask Vineyard				+	+	
66	Montezuma	Fox's Store						+
67	Blanket Creek	Blanket Creek (townsite)		+		✓		

Field #	Location	Resource Name	T	M	W	E/S	A	I/C
68	near Algerine	Two-Stamp Mill		+				
69	Twain Harte	Bald Rock Rancheria				+		
70	Mountain Pass	Goodwin Ranch					+	
71	Rawhide	Alameda Mine		+				
72	Mountain Pass	Slane Ranch					+	
73	Beaver Creek	Beaver Creek Cow Camp					✓	+
74	Sonora	Curtin Mansion				+		
75	Sonora	Segerstrom House				+		
76	Browns Flat	Moussaud French Gardens					+	✓
77	Groveland	Sugar Pine Ranch			✓			+
78	Big Oak Flat	Longfellow Mine		+				
79	Groveland	Martinez Ranch					+	
80	Groveland/Wards Ferry	Boitano/Gookin Barn					+	
81	Groveland	Mueller Ranch and Brewery	✓			✓		+
82	Groveland/Smith Station	Smith Ranch Barn					+	+
83	Tuolumne County	Ponderosa Way	+			+		

CHAPTER 2: ENVIRONMENTAL OVERVIEW

The environmental history of the area which became Tuolumne County has been complex due to ever-changing climate, rates of annual precipitation, and to a certain extent, geological processes. During the 10,000 years or more humans have lived in the region, alterations have occurred to the physical and biotic environment, from both natural and human actions. Some of these changes have been within recent memory, such as the presence forty years ago of mixed Ponderosa and Sugar pine forest growing on the hills surrounding Jamestown where few pines grow today. Others changes in the environment include the decline of oak woodland near the 9600-foot-elevation Sonora Pass starting 12,000 years ago, the nineteenth and twentieth century damming of rivers which destroyed some habitats while creating new, or the effects of volcanic ash falling on the county after the Panum Crater eruption 700 years ago. The following chapter discusses some of these changes and their importance in understanding the cultural development in the county, briefly summarizing aspects of geology and soils, geography, water, plants, animals, climate, and fire as they relate to county history.

Environmental Change

Detailed studies of Tuolumne County's past environments have not yet been conducted, requiring the use of data acquired in adjoining or nearby counties in the interpretation of prehistoric environmental change. A good pollen sequence remains to be established for Tuolumne County for example; studies conducted in nearby counties indicate that repeated changes in location of vegetation communities have transpired through time. Pollen studies conducted near Copperopolis (in Calaveras County) indicate that a Ponderosa Pine forest some 9000 years ago was located at the 800-foot elevation (J. Pryor personal communication to S. Davis-King), while today that elevation accommodates seasonal grasses with few overstory species. A similar forest would have existed 9000 years ago on the western edge of what became Tuolumne County.

On a different scale, pollen studies conducted elsewhere reveal that the introduction of European floral species in the 1700s had rapid and everlasting changes on California's floral composition. Exotic species spread throughout the state faster than humans explored it. In

1769, for example, only three non-native species of plants were present in adobe bricks (Hendry 1931). A quick 50 years later, however, the 1820 Mission Adobe bricks at the Santa Cruz Mission contained 42 percent introduced species (the other 58% were either California natives [39%] or New World species not native to California [19%]; Rebecca Allen personal communication to S. Davis-King, May 1993), indicating a rapid displacement of native vegetation with species from Europe and elsewhere in the New World.

Another reason for change in the distribution of biological species has been the considerable climatic fluctuation in the Sierra Nevada during the past 10,000 years. According to paleobotanists, presently some Sierran locations indicate eleven percent more insolation in the summer than existed 9000 years ago. While plants respond individually to such changes in solar radiation, over time such a large percentage difference will be indicated by changes in population composition. What we find now in any given biotic zone are the remnants or relicts of previous populations, always in a state of change. Changes in species distribution necessarily affects human populations. An overview of local paleoenvironment is found in Moratto and others (1988).

Frequent episodes of flooding in some of the major river canyons have changed the distribution and growth of flora, particularly riparian species, with corresponding changes to faunal populations. The effects of flooding are minor however, when compared to phenomena such as volcanic eruptions which caused major changes in the regional distribution and survival of species. Deposits of tephra (volcanic ash) from the eruptions of the Mono Craters chain are evident in this part of the Sierra, the most recent eruption occurring circa A.D. 1270. Tephra shows up in stratified bands in meadow deposits at about the same time major changes are happening in the cultural environment (such tenuous associations need greater study, however). Climatic change, excessive spring runoff, volcanic deposits, and other phenomena have brought great changes to the human and other biological inhabitants of Tuolumne County.

Sierran vegetation was also affected by Indian management of the environment, which included cultivation, selective harvesting of plants and animals, pruning, and especially the widespread and controlled burning of vegetation, discussed later in this chapter. Another indicator of the variability of biotic populations can be found in the study of insects, especially in the cyclical nature of insect infestations. Again, Native Americans have many tales to tell about changing environmental conditions through their collection of insects. Every 40-50 years or so, for

example, a species of bark beetle flourishes in the Sierra, attacking sick or dying Ponderosa Pine. The Me-Wuk actively sought the beetle for food. Another prized specimen was the larvae of the Pandora Moth (*Coloradia pandora*), but the Indians also collected the caterpillar of that species, providing a localized but significant effect on the moth population. Historically there are stories of Me-Wuk people being paid in non-Native staples for removing caterpillars and grasshoppers from orchards, vineyards, and gardens.

While there have been many natural and human prehistoric causes of environmental alteration, flora and fauna have changed even more drastically in the last 150 years. Extensive habitat reductions and alterations, along with significant hunting activity and competition from livestock have greatly reduced the number and diversity of animal species in the Sierra. Grizzly Bear, Pronghorn, Mountain Sheep, and Tule Elk have been extirpated in the foothill and middle Sierran zones. Native fishery was nearly obliterated in the foothills (with effects on the mountain populations) as a result of mining, deforestation, stream diversion, siltation, introduction of non-native species, and pollution of streams.

The earliest major non-Indian human effects on county environment were from mining and cattle grazing. Virtually every streambed had its course altered by the early placer mining activities which moved, rock by rock, the gold-bearing deposits so eagerly sought. Attendant industries, such as logging (for mine shoring and timbers, water flumes, structures, and more) and agriculture (primarily to supply hay for labor animals, but also food for the miners and settlers) grew at a rapid pace as well. Areas which once were heavily forested were logged so extensively that timber never returned to some clear-cuts; Hog and Page mountains near Jamestown are two examples. By the 1860s most of the springs and meadows in the higher elevations had been appropriated for grazing. Many of these meadows (such as Fahey or Lords) are named for the families which produced butter, milk, and other dairy products during the summer months, a practice that has continued for more than 130 years. Grazing has created artificial biological environments, especially by preventing regeneration of shrubs and trees, and slowing down natural reclamation of meadowlands. The effects of grazing on water quality, erosion, forest regeneration, wildlife habitat, and other factors have been documented in recent years.

Geology and Soils

Tuolumne County is situated in the Sierra Nevada[1] and her foothills. The Sierra Nevada is a long mountain range, comprised of a complex group of rocks with a long history, described in Hill's (1975) *Geology of the Sierra Nevada* and summarized in Storer and Usinger's (1963) *Sierra Nevada Natural History* (a good general sourcebook). The mountain chain, some 50 to 80 miles wide, has been formed by millions of years of uplifting, vulcanism, faulting, glaciation, and a number of other processes to produce what we see today. Humans arrived in the general region of Calaveras/Tuolumne counties by the end of the Pleistocene, or "Ice Age," around 10,000 years ago, but generally the major formation processes of the Sierra had occurred millions of years prior to the arrival of human beings. A synopsis of regional geology and the relationship of human beings to it can be found in Moratto and Goldberg (1982).

A geological feature of great importance in Tuolumne County is the Tuolumne (also known as Stanislaus) Table Mountain, thought to be an andesitic remnant of a Tertiary Stanislaus River flow. Table Mountain serves as a prominent marker between today's western rangeland and the easterly rise of the mountains; a break in the formation, Mountain Pass, was used as the historic route of Highway 108 (formerly the Stockton and Sonora Wagon Road or perhaps the Mountain Pass Road). Table Mountain was a wonder to all who passed by, including Elizabeth Gunn (Marston 1928) on her first trip to the county in 1851, and Bret Harte who mentions the (Calaveras?) formation frequently in his writings. In addition to Mountain Pass, a good spot to view the formation is from the pass between Rawhide Valley to the Peppermint Falls area, where the road nearly ascends to the top of the plateau. The formation can also be seen on the north side of Highway 108 across from Standard Road, and at the northern end of Lyons Reservoir. Plants associated with the latite Table Mountain formation are discussed under Flora, below.

Portions of Table Mountain visited by the senior author in the past have been fascinating repositories of cultural resources, unique in the county. Such resources include isolated butchering stations from the ancient past, flintknapping stations with the stone chips in place,

[1] "Sierra" is the Spanish word for serrated or saw, while "Nevada" in Spanish means snowy, thus Sierra Nevada means snowy, saw-toothed mountains. Sierra should always be used in the singular; "Sierras" is often heard, but incorrect. So too is Sierra Nevada Mountains, a redundancy.

unusual gathering stations around the vernal pools, hunting blinds, medicine gathering (and processing?) areas, remarkable historic stone walls and other stone features, standing stone buildings and ranching complexes and a myriad of other resources. There are a number of reports of prehistoric Indian artifacts found in the gravels; it is unknown how the artifacts found their way into gravels which may be nine million years old or more, or how accurate the stratigraphic associations may be. Table Mountain is also important because of its gold reserves and the interesting methods of extracting the metal: hard-rock mining techniques were used to bore into the latite until the former streambed gravels, containing placer gold, were reached. Among the earlier Table Mountain mines in the county is the tunnel driven in by Mr. A. Bateman in 1852 (Anonymous 1891?). It is quite likely that massive amounts of gold remain in other such formations found in the Sierran foothills.

Of major geological importance in the county are the rocks and minerals which have been mined including gold, silver, copper, zinc, uranium, marble, chromite, magnesite, asbestos, manganese, silica, and a host of others (Clark 1966). The metallic minerals will be discussed more fully in Chapter 5 (Mining). Other less commonly considered extractions include the uranium mines located east of Pinecrest near Eagle Meadow. Limestone outcrops, particularly those near the Stanislaus River canyon contain several dozen outstanding caverns or caves, many of which are situated on private land. Tuolumne County's "Cave Country" specimens are well-known for their relationship with the area's early human inhabitants who lived and buried in them, created petroglyphs on the walls, and mined their minerals. Of course the Marble Quarry north of Columbia is famous for producing some of the finer architectural marble in the western United States. Local examples include the floor at the Sonora Inn, wainscotting in the Tuolumne County Courthouse, and the pathways in Courthouse Square.

There are numerous geological formations or outcrops in the county which contributed raw material to the Native American's tool kit. Such rocks included rhyolite, chert(s), quartz, quartzite, basalt, schist, and slate which are found locally (volcanic glass or obsidian was imported from the Central Valley and from the eastern side of the Sierra). Petrified wood, found in several locations was also a prized tool material. Granitic and other rocks were important to the Native Americans, as raw material for tools and bowls, and as outcrops and boulders used for the grinding of foodstuffs, principally acorns in the more recent past; in the higher elevations, suitably situated rocks could be used for shelter.

Soils are extremely varied in the county, some being fairly deep and developed and others

being little more than decomposing granitic sands. Some soils have developed due to human interaction; others directly reflect the location of specific resource types. Prehistoric sites are often found in generally sandy loams containing varying quantities and sizes of granitic and metamorphic rocks, reflecting pedogenesis in the decomposition of granitic and other base rock. Generally the effect of soil type on the Indian use was minimal except in how the soil affected the vegetation which grew there. Historic resources are more easily correlated with and dependent upon soil types, particularly in relation to agricultural pursuits. Orchards will grow fairly well in some county soils, as will the grasses which support cattle grazing, but the soils necessary for major cultivation of food crops are not present here.

There are at least two edaphic communities which occur in Tuolumne County: serpentine soils and the soils associated with the Table Mountain latite. In both of these cases soil is likely to be the principal factor to which the plant community must adapt. It appears that the specialized plants of these two communities may have had specialized cultural associations as well, but this has not been well-studied yet from the archaeological perspective.

Geography

Tuolumne County falls into the Sierra Nevada geomorphic province defined by the California Division of Mines and Geology. Topography is varied and includes the rugged high Sierra, the low, gently-rising hills of the west county, steep and extremely rugged river canyons, flats, ridges, ravines, and valleys. Human use of the land was often restricted by the nature of the terrain which prevented easily created transportation routes, influenced the location of Indian villages near or on the terraces of the major rivers and streams, or on the ridges away from the rivers, and generally affected the nature and location of human activity. Natural mountain passes (such as the Sonora Pass) were used by humans and animals to travel from the Central Valley and Sierra into the Great Basin. On the other hand, as noted by Moratto and Goldberg (1982:9) the "local topography favored hydraulic mining, water impoundment for irrigation, [and] hydroelectric power generation." Certainly the earliest historic settlement in the county was based upon geologic, hydrologic, or geographic factors, gold and water being the principal motivations.

Hydrology

Many of California's rivers rise in the Sierra and flow into the Central Valley, thence to the

Pacific Ocean. Tuolumne County contains two major rivers, the Stanislaus and the Tuolumne, both of which flow into the San Joaquin River. Hydrographic features include seasonal and perennial creeks which lead to the rivers, many of which were ultimately dammed for hydroelectric power generation, domestic water supply, and commercial and irrigation water. A fuller discussion of the resource can be found in Chapter 6 (Water).

Rivers of the ancient past have played an important role in the cultural development of the region, for it is the Tertiary river channels formed in the Sierra 65 to 30 million years ago that contain(ed) much of the gold for which the region is known. Early gold seekers knew a surprising amount about the location and nature of these ancient streambeds, some of which were very complex. In one geologically deciphered area near Mokelumne Hill (about 25 miles northwest of Tuolumne County) no less than eight Tertiary channels crisscrossed one another some 50 million years ago (Hill 1975:96). Although minute traces of gold are found in most rocks, rocks which formed around cooling granitic formations generally contain greater quantities of gold and other precious minerals. As a massive granitic batholith, the Sierra Nevada has a remarkable concentration of gold deposits in its rock formations, and it is these deposits which were explored with such alacrity in the Gold Rush.

Flora

Floral composition in Tuolumne County has been constantly changing since written records have been kept, and certainly much earlier than that. Today's plant communities are much different than those of the past, including those of the recent historic past. For example, the General Land Office plats largely created from 1850s and 1860s surveys, depict an abundance of pine and oak forests in the western part of the county, much different from the oak woodland present today. Thus a discussion of present biotic zones in historic and prehistoric contexts does not truly consider the great variability and change that have occurred in the distribution and content of plant communities.

Cultural resources investigations generally discuss the Sierran environment in terms of life zones, first proposed by anthropologist C. Hart Merriam in 1898. Merriam was looking for a system of gross heuristic divisions which could describe expected flora based on elevation and implied precipitation. This system does not work well in the Sierra Nevada generally or Tuolumne County specifically, where the divisions between communities are seldom clear and often ecotonal or transitional. There are five designated life zones (Upper Sonoran

Zone/Foothill Belt[2]; Transition Zone/Yellow Pine Belt; Canadian Zone/Lodgepole Pine-Red Fir Belt; Hudsonian Zone/Subalpine Belt; and Arctic-Alpine Zone/Alpine Belt [Storer and Usinger 1963, among other sources]) present in the county. Typical vegetation found in each plant community is listed in Storer and Usinger (1963); habitats or communities found include riparian areas, incorporating standing water (vernal pools, natural lakes, springs, backwaters), flowing water, marshes, meadows, grasslands, chaparral, certain rocky areas (such as Table Mountain), and the various forests and woodlands. Riparian habitats contain large amounts of culturally-desirable plants and animals in addition to water, and not surprisingly, both prehistoric and historic activity areas tend to concentrate in such vicinities.

The current communities which are present at a cultural resource may be very relevant to the human use of the land, but always what was present at the site or resource when it was being used should be considered. Many communities in the county have been artificially altered by a number of methods including clear-cut logging, mining, impoundment of water, or diversion of drainages. It is obvious from both the cultural and the biological perspective that the many flowing canals in the county are now part of regional hydrography and differ from a typical Sierran stream only in the regularity and consistency of their water flow.

Exotic or domestic species are often important in cultural resources field work, because they can be good indicators of historic site locations. Orchard trees such as pear and apple are hearty survivors from earlier eras. Chinese Tree of Heaven (*Ailanthus* sp.), introduced from China but now commonly found in mining towns in the foothills, indicate disturbed soils, while wild roses (*Rosa* sp.) and figs are found near homesteads and along drainages below houses. Horehound (*Marrubium vulgare*), a plant whose tea is made into a candy to aid sore throats and coughs, is commonly found as an indicator of past mining activity. Black locust (*Robinia pseudoacacia*), now naturalized in California, is a familiar tree at blacksmith shops, as locust wood is strong and straight and made good wheel spokes.

Unusual vegetation patterns are also important to note, as they often demark disturbed soils, soils with a different makeup from surrounding soil, past events which altered the vegetation, and a number of different actions. Additionally, there are certain ecological islands or isolated

[2]The term "Foothill Belt" is to be preferred over the second, also-accepted term of "Digger Pine Belt." The latter is considered derogatory by and to Native peoples, due to the association of the tree and word with the "Digger" Indians. As such, it is also preferable to use the term Gray, Bull, or Foothill pine for *Pinus sabiniana*.

habitats, which are often relicts of earlier communities. Native people in particular were very aware of such "islands" and often their sites will be found in ecotonal areas. It is always important to analyze the vegetation of a project area because of the potential clues to past activities.

Tuolumne County is home to the Bennett Juniper, alleged to be the oldest and largest known specimen of Sierra Juniper (*Juniperus occidentalis*). Located on a private inholding in the Stanislaus National Forest, the Bennett Juniper is named for Clarence Bennett who "discovered" the tree near the trail from Dardenelle to Eagle Meadow. The county is relatively rich in Sierra Redwood (*Sequoiadendron giganteum*) with two groves, the Tuolumne Grove in Yosemite National Park, and the South Grove in Calaveras Big Trees State Park. The latter grove contains the "Louis Agassiz", reputed to be among the larger Sierra Redwood[3].

Central Valley grasslands dominate the western portion of the county which gradually give way to chaparral, oak woodland, yellow pine forest, and the higher elevation red fir forests. Each has its own particular association with human groups; many of these are discussed in the chapter which follows.

Fauna

Although animals were important to the area's prehistoric and early historic people, their presence or absence is not as critical to humans as are the floral communities. Animal habitats generally correlate with the life zones discussed above, but important food animals are largely migratory, or at least mobile, and move easily from one zone to another. The range of distribution of Sierran animals is quite broad, and people tend to search for the animals rather than settle in the areas where the animals live. A fuller discussion of important native animals is located in Chapter 3.

Among the more important animals to cultural resources are ground squirrels, pocket gophers, moles, and other mammals which burrow either to their homes or their stashes of nuts and

[3]Sierra Redwood is used in place of "Giant Sequoia" due to the confusion in recent years of this species with the coastal Sequoia. The Sierra Redwood is of the genus *Sequoiadendron*, where the Coast Redwood is of *Sequoia*.

seeds. The importance of the animal is not in its existence, but rather in its alteration of archaeological deposits. Most Sierran sites are affected by repeated changes in the location of rodent holes (called "krotovina" by archaeologists).

Climate

The climate of Tuolumne County has fluctuated considerably during the past 10,000 years, with corresponding changes in the distribution of biological species (Anderson 1987; Moratto and Davis 1988; Moratto et al. 1978). Currently, summer climatic conditions are characterized by hot, dry summers, with few showers in the lower elevations, and frequent summer showers in the upper country, with cool, humid winters (Major 1977). This pattern of a dry season and a wet season is characteristic of much of California, where few areas experience the four seasons found elsewhere in the nation.

Microclimates are important to recognize in cultural resources investigations, as they may provide clues or answers to problems not easily answered in other ways. The "Banana Belt" located on the northeastern rim of ridge top above the Tuolumne River, for example, has a growing season of about nine months. The gardens and orchards so famous in Gold Rush Jacksonville were in a similar microclimate, as are some of the protected valleys near Columbia.

Droughts have also had important influences on the county's history. Having just emerged from a seven-year drought, the people of Tuolumne County might be interested to know that they are not due for another drought until 2003; drought has occurred about every 10-15 years (Major 1977). The dry years of the early Gold Rush most certainly contributed to the community support of building water systems to bring water from the high country to the gold-bearing deposits. The Sierra Me-Wuk also talk of drought years, and what they had to eat when the acorn crop failed, or the animals stayed in the high Sierra longer than normal.

While the climate of the county is relatively hospitable, weather can make a large difference to those living off of the land, either by growing plants and raising animals, or by gathering and hunting. Any sustained change in the weather pattern could have disastrous effects on the Indian population in particular by changing the distribution of plant and animal species, changing the location and quantity of snowfall and other precipitation, changing the ecotonal areas so important to collecting (especially medicines), and more. One of the more significant

goals of current archaeological research is the reconstruction of paleoenvironment to assist in an understanding of the human ecosystem.

Fire

Studies indicate that periodic fires are necessary to the survival and maintenance of many plant and animal communities. Well-demonstrated for the Chaparral Community, fire is also critical to the pyrophytic species (such as the Sierra Redwood) found in Tuolumne County. Additionally, fire burns off the forest litter, can loosen and release nutrients to the soil, and can remove some of the overstory allowing increased light to enter the forest floor. All of these effects influence which plants grow, how well they do, and subsequently which animal species survive. Both natural and human-set fires of the past destroyed fungi and insect pests, recycled plant nutrients, eliminated competitive grasses or shrubs, stimulated new growth, and probably contributed to fragmentation (referring to an active growth pattern).

Indians used fire extensively to increase the yield of edible seeds, encourage the growth of desirable plants, flush and drive game, provide forage and browse for deer and elk, and clear the ground beneath oak and pine to facilitate nut harvests. Collection of the Morel (*Morchella angusticeps*) and other fungi was and is dependent upon fire; the Morel was important to the Me-Wuk, but is also quite important to French and Italian cuisine, and has been actively collected over the decades. Systematic burning was the single most important environmental modification by the California Indians, allowing them to control plant successions and, locally, to maintain biotic communities such as grasslands, open forests, and oak savannahs. Early Spanish accounts describe the extensive burning by Native Americans, who were quite aware of the environmental changes their blazes brought.

The cessation of intentional burning by Native Americans is also not without effect, as a thick understory rapidly returns without fire. In the Sierra, such an accumulation of brush provides ample fuel for hot, major forest fires which do more than clear the forest floor: they become disastrous "crown" fires. Historic photographs taken in the Yellow Pine Belt and oral histories point out that the woodland areas of the region were quite open prior to 1900, since both Indians and early settlers burned the land annually and sometimes biannually in the nineteenth century. In the first decade of the twentieth century, brush began to overtake the clear forest floor. In addition, many species which were once present are no longer found, as their habitat has been reduced largely due to scrub growth from fire suppression. Today

according to Native informants, no deer grass remains on the Stanislaus National Forest, for example, due to a lack of plant propagation aided by fire.

Fire also destroyed part or all of many county communities over the years, including Columbia, Soulsbyville, Jamestown, Groveland and the seemingly pyrophoric districts of Quartz and Sonora. Quartz Mountain (and the first Poverty Hill, which was also located there), was revisited innumerable times by fire, such as the 1854 blaze which destroyed Poverty Hill, the many lessor fires there in the 1890s, the disastrous 1901 conflagration which began at the Montana Saloon (and "red-light" house), followed by two more fires in 1902, another in 1903, the destruction of the Mountain House Hotel in 1906, several more burned businesses and houses, and the July 1926 fire which destroyed all but the school and a few remaining residences. Besides the Quartz fires, the more devastating community fires include those in Carters (November 1905), Columbia (July 1854, August 1857, 1866-67, and 1911), Priest (August 1926), Big Oak Flat (1863), Tuttletown (October 1851), Sonora (The Hotel de France fire of June 1852, the fires of 1853 and 1854, 1858, the 1860 and 1865 fires at Tigre [Sonora Chinatown], August 1861, and 1867), Chinese Camp (1878), Jamestown (October 1855, 1858), and Montezuma (1866). Over the years, fire has destroyed almost all of the flimsy, wood-frame buildings from the latter half of the nineteenth century in the Mother Lode; this should be recognized by anyone conducting historic surveys in these areas. The fires also gave builders reason to construct more permanent stone or brick structures or foundations when economically feasible.

Analysis of cultural resources must entail observation and critical inspection of the environmental variables which may have affected human behavior. The way in which humans settle, work, play, and live is directly related to the changing environment: the geology, geography, soil, plants, animals, climate, water, fires, and more are important to understanding the culture history of an area. An overview of the prehistoric, late prehistoric/early historic Indian, and other historic eras of the county is presented in the following chapter.

CHAPTER 3: CULTURAL OVERVIEW

Introduction

Formed in 1850, Tuolumne County is one of California's original 27 counties, retaining its first and only county seat, Sonora, throughout its political duration (see De Ferrari 1975, included in Appendix C). Located in the foothills and mountains of the Sierra Nevada, the county extends from the Tuolumne River canyon at about 300 feet above mean sea level (amsl) to the crest of the Sierra, with elevations exceeding 12,000 feet amsl[1]. The North Fork and main stem of the Stanislaus River serve as a boundary between Tuolumne's northern neighbor, Calaveras County, while the western oak woodland borders with Stanislaus County. To the northeast Alpine County includes the Carson-Iceberg Wilderness, portions of which were part of Tuolumne prior to Alpine County's formation in 1864. Emigrant Wilderness is presently within the county's northern and eastern confines. Yosemite National Park is largely located within Tuolumne County and forms a portion of the eastern border, as does the ridgecrest between the Merced and Tuolumne rivers' watersheds.

Tuolumne County was reputedly named after Indians mentioned as "Taulamne" and "Tahualamne" in the chronicles kept by the Moraga expedition (Gudde 1969:347). This first recorded visit by a European to the county took place in October 1806, when Gabriel Moraga, with his diarist and chaplain, Padre Pedro Muñoz, visited the Stanislaus River area on their search for potential inland mission sites (Muñoz 1806). During a subsequent visit in 1808, the Moraga expedition named the major rivers in the region, calling the Stanislaus "*Rio de Nuestra Señora de Guadalupe.*" Interestingly, they also found the village of the "Taulamne" Indians, but this name was given not to the river on which it was located (the Stanislaus), but to the next river south, which became the Tuolumne River (Browning 1986).

General Mariano Vallejo was in the area in 1829 with a party in search of the escaped mission

[1]The political boundary of Tuolumne County originally extended from the crest of the Sierra Nevada to the crest of the Coast Ranges, incorporating portions of the San Joaquin River and the Central Valley. When Stanislaus County was formed on 1 April 1854, the western portion of Tuolumne County was annexed by Stanislaus.

Indian, Chief Estanislao, for whom the Stanislaus River may have been named. It is thought that Estanislao received his Christian moniker upon baptism, in honor of one of the two Polish saints named "Stanislas." The river, which became known as Rio Estanislao, was anglicized into "Stanislaus River" by John C. Frémont in 1844 (Frémont 1845).

When these early explorers came to the area, it was inhabited by the Central Sierra Me-Wuk[2] Indians, a group which still lives in Tuolumne and surrounding counties. Archaeologically, it has been difficult to distinguish different Indian groups, although there are sufficient changes in the artifacts, site location and use, and other factors to indicate that an ethnic group different from the Me-Wuk lived here prior to about 2000 years ago. Accommodating a succession of cultures, Tuolumne County has a rich and varied cultural past which began more than 10,000 years ago.

Prehistory

The prehistory of the central Sierra Nevada and Tuolumne County has not been synthesized, creating an absence of an overview with a synopsis of chronology, culture contact, and other relevant topics. Current knowledge about the prehistoric past in Tuolumne County is largely the result of major studies in Yosemite National Park, Stanislaus National Forest, and those conducted for water development projects such as the New Melones Project (e.g. Moratto et al. 1988), the North Fork Stanislaus River Project (Peak & Associates 1981, 1990) or the New Don Pedro Project (e.g. Moratto 1971). Most other county research has consisted of archaeological surveys, which add to the inventory of archaeological sites, but do not usually contribute to a greater understanding of prehistoric regional development.

The Earliest Residents

Until quite recently supposition about early human use of the higher-elevation Sierra Nevada was primarily influenced by the discovery of stone points, which bear morphological similarity

[2]The spelling of the name for the local Indian group has caused some confusion. The most common spelling of the name has been Miwok, but alternate spellings have been Me'wuk, MeWuk, or Me-Wuk. The latter, Me-Wuk, is the spelling preferred by the native people today, although Miwok is most commonly used in the literature. "Mi-Wuk" is the spelling of the Ranger District on the Stanislaus National Forest.

to Great Basin artifacts. For example, a "Clovis-like" fluted point was found at Ebbetts Pass (Davis and Shutler 1969), just north of the county, suggesting to some that hunters may have ventured into the Sierra Nevada south of Lake Tahoe more than 11,000 years ago.

Archaeological investigations in the high Sierra have been few, and most took place many years ago, such as Heizer and Elsasser's (1953) investigations into high elevation "complexes." With origins beginning sometime between 4000 and 5000 years ago, the Martis Complex (named after the Martis Valley, near Truckee) and the Kings Beach Complex (named for the vicinity at Lake Tahoe) were identified. Martis "sites" characteristically contained a predominance of flakes and large tools manufactured from basalt, presumed to be indicative of hunting with spears and atlatls. Residential structures have been identified along with intensively used occupation sites which contain milling slabs and bowl mortars (Kowta 1988). Basalt lithic scatters, assumed to be related to the Martis Complex, are not uncommon in Sierran mixed conifer forests. The Kings Beach Complex is distinguished from the Martis by use of obsidian and other silicates for tools, a decrease in the number of scrapers, and the use of bedrock mortars. Apparently these complexes were related to a heavy dependence upon hunting, with some gathering in the Martis Complex and a change to fishing, nut harvesting, and smaller game hunting in the Kings Beach Complex.

Research conducted by R. Elston and his colleagues (1977) identified seven cultural phases spanning an estimated 8000 years. Redefinition of Martis, a predominately basalt lithic tradition, by Elston (1971, 1979), Elston and others (1977), Johnson (1980), and Rondeau (1982) has shown that while there are broad cultural similarities among regions of the Sierra Nevada in the earliest phases, the greatest variance in cultural remains seems to occur when the more "modern" tribal intrusions and settlements become evident in a region. Thus, while Late Martis/Kings Beach are thought to be manifestations of early Washo in the Lake Tahoe area (Elston 1971), the Martis remains evident to the north of Tahoe (e.g., Bucks Lake in Plumas County) are overlain by remains similar to those associated with the ethnographic Maidu (Johnson 1980). What the association of these traits might be here in Tuolumne County has yet to be discovered, but as stated, there are indications that the Me-Wuk arrived here within the last 2000, and perhaps 800, years.

Early Sites Found as Part of the North Fork Project

Archaeological investigations undertaken as part of the North Fork Stanislaus River Project

revealed that early Holocene (11,000 years before present) habitation in the central Sierra very likely occurred. Studies are ongoing and publications are either being written or are yet unavailable, but preliminary indications are that this region was used at an earlier date than had been previously thought. The data emerging from the excavations may change the way prehistory in the Sierra Nevada is understood. At a site on the former Clarks Flat (04-CAL-S342), located on the Calaveras side of the Stanislaus River, 325 Western Stemmed Series points were associated with five radiocarbon samples which ranged in age from 11,720 to 6250 before present (B.P.; Peak and Crew 1990). This remarkable late Pleistocene or early Holocene component is capped by several cultural and non-cultural strata, including a mid-Holocene layer which contained Pinto-like points. Also as part of the North Fork Project studies, excavations at a site (CA-ALP-192) located a couple of miles east of Tuolumne County, in Alpine County revealed a Western Stemmed Series projectile point with a loose connection to a hearth and radiocarbon dates which exceed 9505 years B.P. (Peak and Neuenschwander 1990). Excavations at another Alpine County site (04-ALP-149/150) also yielded four Western Stemmed Series points. These excavations suggest use of the high central Sierra at a much earlier time than was originally thought, and that there is a wider environmental range in which Great Basin types of projectile points are found.

The New Melones Sequence

The archaeology of the Transition Zone of the central Sierra Nevada is now understood largely from investigations at New Melones (Tuolumne and Calaveras counties), with some important contributions from the previously discussed North Fork Project. At New Melones Reservoir, more than 700 historic and prehistoric archaeological sites were recorded and 30 separate archival and field investigations were conducted (Moratto et al. 1987) indicating that

> Over a span of millennia this part of California witnessed the ebb and flow of human populations, the emergence of an acorn-based subsistence economy, increasing sedentism, a diversity of settlement modes, expansion of trade networks, introduction of the bow and arrow, evolution of complex socio-political organization, and the advent of distinctive cult/ceremonial systems. Archeology here sheds light on the transitions from early Holocene nomadic hunting and foraging to the protohistoric semisedentary village life of hunter-gatherers [Goldberg et al. 1986:iii].

New Melones studies demonstrated that prior to 8000 years B.P., flaked-stone assemblages in the central Sierra are represented by the stemmed series of points. Little is known about this early period other than the presence of the tools and possible temporal frame. The next

temporal division in the New Melones sequence is from 8000 to 5500 B.P., also poorly understood. Sites associated with dates in this time-range have an abundance of "backed" scrapers, with a paucity of ground stone, a low density of tools and debitage, and an emphasis on chert tool production (Riley and Moratto 1986).

Beginning around 5500 B.P. and ending about 3000 years ago are components containing Humboldt- and Pinto-like points. Among the more important sites of this age to have been excavated is the Texas Charley Gulch Site (04-CAL-S286), wherein the lower levels display little development of cultural soils (anthrosols) but contain tools manufactured by percussion, and generally distinctive chert debitage and tools. While some possible grinding implements were found, little is known about

> the subsistence economy, land-use patterns, shelters, mortuary practices, or ethnic identity of the people who left the Texas Charley Phase component. Nor does this component seem to have known antecedents or successors in the study area [Moratto et al. 1988:510].

Archaeological studies of the remaining 3000 years of development in the Stanislaus drainage indicate a gradual increase in population. Archaeological sites disclose the presence of defined living floors, use of ornaments such as beads and pendants, and a wide variety of tool forms and materials. The use of obsidian from far-ranging sources and the use of coastal shells in ornamentation suggest that trade and possibly exchange systems had become components of social life. Temporal changes are largely documented as variations in tool form (e.g., shaped milling implements change to unshaped), or perhaps tool function (change from spears to bow and arrow) or changes in projectile points (e.g., the general progression of Elko Series and Sierra Concave Base points to specimens resembling Gunther Barbed).

About 600 years ago, changes in the archaeological record suggest to some (e.g., Moratto 1984:338) that a new group of people infiltrated the area. Generally considered to be the precursors of the ethnohistoric Me-Wuk, the new cultural traits are defined by acorn processing in bedrock mills, and more permanent (or recognizable) settlements indicated by relatively established or developed anthrosols. Steatite is found both as vessels and as ornamentation, and projectile points are usually from the Rosegate series in the beginning, ending with Desert Side-notched and Cottonwood in the more recent past. The presence of large circular structural depressions, considered to be round or dance houses is not uncommon where attributes such as developed midden, housepits, and burials are present.

Other Archaeological Investigations

Another Calaveras County excavation, located near Copperopolis, has contributed greatly to our understanding of regional prehistory. Archaeological research at the Skyrocket Site (CA-CAL-629/630) in the old and rich cultural deposits returned radiocarbon dates of 9240 ± 150 B.P. and 9040 ± 250 B.P. from dark, artifact-bearing strata some nine meters below the surface (J. Pryor, personal communication to S. Davis-King, October 1989). Pollen studies suggest a dryer climate existed then with no evidence of the oak-studded grass woodland present today. Ponderosa Pine bark and needles were located beneath the level from which the earlier radiocarbon date was recovered, suggesting that 9000 years ago a yellow pine forest existed at about the 800 foot elevation of the Sierra foothills. Calaveras County, with the early Holocene sites recorded by the North Fork and New Melones projects, and the Skyrocket Site, has returned some of the earlier dates for human occupation in the entire Sierra Nevada. It is not unlikely that Tuolumne County also contains some of these early sites.

An abundance of archaeological surveys have been conducted in the county for or by the United States Forest Service, Stanislaus National Forest (StNF) and by contractors for private developers during the last ten years or so. These studies are far too numerous to annotate here, as more than 300 survey projects have been conducted within the StNF alone. This massive quantity of survey data, although not comprehensively analyzed, has documented certain patterns, especially in late prehistoric settlement and land use patterns.

High Sierran (above 5500 feet amsl) sites are marked by lithic scatters, and until recently, it was thought, by few bedrock mortars. Recent surveys suggest that mortar cups are found along drainages and that a large number of sites have milling slicks (flat milling surfaces), that have gone unrecorded previously. These sites may contain artifacts to a surprising depth in clay soils, although it is generally postulated that sites above 4000 feet in elevation must represent seasonal encampments, due to winter conditions. Sites lower in elevation, generally in the Yellow Pine Belt, are characterized by observable surface "middens" (dark soil containing artifacts and other cultural material), bedrock mortars, and occasional house or other circular depressions.

Typical stone points found in Tuolumne County include Desert, Rosegate, Elko, Humboldt, and Stemmed Series. The processing of acorn (perhaps evidenced by the bedrock mortar), the presence of Napa obsidian and *Haliotis* sp. ornaments, and points such as the Gunther Barbed

indicate that there are cultural traits and materials present which are similar to those found north and west of the county. A more detailed review of information derived from excavations and surveys can be found in Davis-King and Goldberg (1988). A draft overview of prehistory within the Stanislaus National Forest is in preparation.

From previous investigations, the prehistory of the Sierran west slope can be summarized as follows:

> 1. The first, and ultimately largest, villages were situated near the rivers and their main tributaries at low elevations (usually below [4100 feet]). The intensive occupation of the Sierra after circa 1500-1000 B.C. is seen archaeologically in the . . . Late Martis, Sierra, Crane Flat, [and] Chowchilla . . . phases.
>
> 2. The highest population densities were found near the ecotones. . . . Few sites above the snow line were inhabited year-round, and only warm-season camps and activity stations were to be found in the high Sierra.
>
> 3. Cultural innovation and social change between circa 1000 B.C. and A.D. 500 included expansion of trade, increasing use of acorns, and as populations grew, the establishment of major villages in the Upper Sonoran and Transition zones.
>
> 4. Between A.D. 500 and 1400 many lower foothill villages were occupied only sparsely or intermittently; new settlements were located higher in the mountains. Trade with peoples to the west was disrupted; the bow and arrow were introduced; exotic artifacts . . . were buried with the dead; and violence was commonplace. . . . Archaeologically, this disquieting episode is recorded as the Early Kings Beach, Redbud, Tamarack [and other] phases.
>
> 5. New levels of population growth and social integration were achieved after . . . 1400-1500. This resulted in part from movements into the Sierra of new populations, notably the Miwok . . . and Mono. . . .
>
> 6. . . . as a result of Ibero-American incursions and pressures, Indians from western California sought refuge in the Sierra . . . after A. D. 1770. . . . the epidemic of 1833 devastated foothill Indians and left many of their villages deserted forever. . . . The Gold Rush of circa 1848-1860 severely disrupted settlements in the Mother Lode country and often triggered the relocation of entire villages. . . . Finally, the establishment of . . . reservations . . . further coalesced Indian groups, reduced their numbers, and accelerated cultural and social changes. All of this has resulted in an archaeological record of singular complexity in the Sierra Nevada [Moratto 1984:337-338].

Central Sierra Me-Wuk Ethnography

Several early ethnographers have written about Tuolumne County's indigenous people, the Central Sierra Me-Wuk . Stephen Powers mentions the Me-Wuk in his survey undertaken in California in the 1870s (Powers 1976:346-368) and supplies some limited data for cultural comparisons, as well as information about specific sites. Alfred Kroeber (1925) wrote an important overview and provided a map depicting named village locations. The notes and publications of C. Hart Merriam (1902-1930, 1907, 1910, 1955, 1966-1967, 1977; also Merriam and Talbot 1974) provide general information about the Me-Wuk, data on mythology, religious ceremonies, tribal boundaries, and living localities. Merriam's diaries (1898-1938) provide information on the general condition of the Me-Wuk people he encountered during his field work in the early part of the century. Hudson's (1899-1902) unpublished field notes contain a detailed vocabulary, description and comparison of material culture between Me-Wuk groups, and a rather comprehensive list of culture traits and myths of specific villages. Aginsky's (1943) detailed culture element distribution list is an important addition to these descriptions. Gifford (1916, 1917a, 1917b, 1926a, 1926b, 1944, 1955) contributed material on Central Sierra Me-Wuk ceremonies, social institutions, and mythology; Gifford's field notes from Tuolumne County have sadly been lost. Barrett (1906), Dixon (1903), Tozzer (1900), and Barrett and Gifford (1933) are important resources for understanding material culture and adaptation.

Recent ethnographic studies in the county have been conducted for cultural resources purposes. Most important among these are Dorothea Theodoratus's study for the New Melones project (1976; Theodoratus Cultural Research [TCR] 1981b, 1982b) and other project-specific studies on the Me-Wuk (Theodoratus and Parsons 1980; Theodoratus et al. 1980; TCR 1981a, 1982a; Davis-King et al. 1993). The viability of Central Sierra Me-Wuk culture is described in the ethnographic papers of Peters and Theodoratus on the Central Sierra Me-Wuk area (Davis-King 1990; Davis-King, et al. 1992; Peters 1988a and 1988b). The Master's theses of Hall (1978) and Maniery (1987) have also made important contributions to Sierra Me-Wuk ethnohistory. Finally, Conrotto (1973) provides a general overview while Levy (1978) summarizes the data on Sierran (Eastern) Me-Wuk culture up to the 1970s.

Language, Territory, and Environment

The Central Sierra Me-Wuk language belongs to the Utian language family, one of four

linguistic families within the Penutian language stock. The Utian family consists of two sub-families, Costanoan (spoken along the Pacific Coast from San Francisco Bay to the Carmel area), and Miwokan, perhaps once spoken in a "continuous belt across central California, from Marin County on the west to the southern Sierra Nevada on the southeast" (Shipley 1978:84). Miwokan also has two groups, Western and Eastern, the latter including the Sierran group of Northern, Central, and Southern Me-Wuk languages (Levy 1978:398; Shipley 1978:88). Central Sierra Me-Wuk was spoken in two dialects, West Central and East Central, which according to modern linguists are essentially the same (see Broadbent 1964:11-32; Freeland 1951:1-9; Freeland and Broadbent 1960:v; Levy 1978:398).

Using present geopolitical centers as a reference, Central Sierra Me-Wuk territory ran along the western foothills from Jenny Lind on the Calaveras River, to Knights Ferry on the Stanislaus River, and to La Grange on the Tuolumne River (Figure 3.1; Barrett 1908:350). The area to the west was held by the Northern Valley Yokuts. The southern boundary ran between the Tuolumne and Merced river drainages to Mt. Lyell, where the line turned north and ran along the Sierran crest. Their northern boundary ran from Jenny Lind, over Mt. Harmon and along the mountains about halfway between Mountain Ranch and Sheep Ranch, north of Calaveras Big Trees and up to the Sierran crest (Barrett 1908:355; Merriam 1907:344).

These boundaries are generally agreed upon. Early scholars clearly place Tuolumne County in Central Sierra Me-Wuk territory (Heizer 1966:Maps 4, 5, also pages 36, 43; Kroeber 1925:Plate 37). The 1978 Smithsonian Institution summary also places the Central Sierra Me-Wuk in Tuolumne County (Levy 1978:400). Kroeber (1925:444) writes about the Me-Wuk:

> Among themselves the Miwok are content to refer to one another by village, or employ an endless succession of "northerners" and similar directional names that never crystallize into specific designations. The same people that are northerners to their neighbors on one side are southerners to those on the other, and so on ad infinitum, even beyond the boundaries of the stock, as far as knowledge extends.

Therefore, knowledge of a group known as Central Sierra Me-Wuk was not part of the conceptual cultural design of pre-contact and early post-contact Me-Wuk. Today, however, as a result of non-Indian use of linguistic categories as tribal categories, the classifications tend to adhere. Indian people especially use these terms when communicating with outsiders, and sometimes even within groups for the sake of a reference to their culture which does not have to be explained.

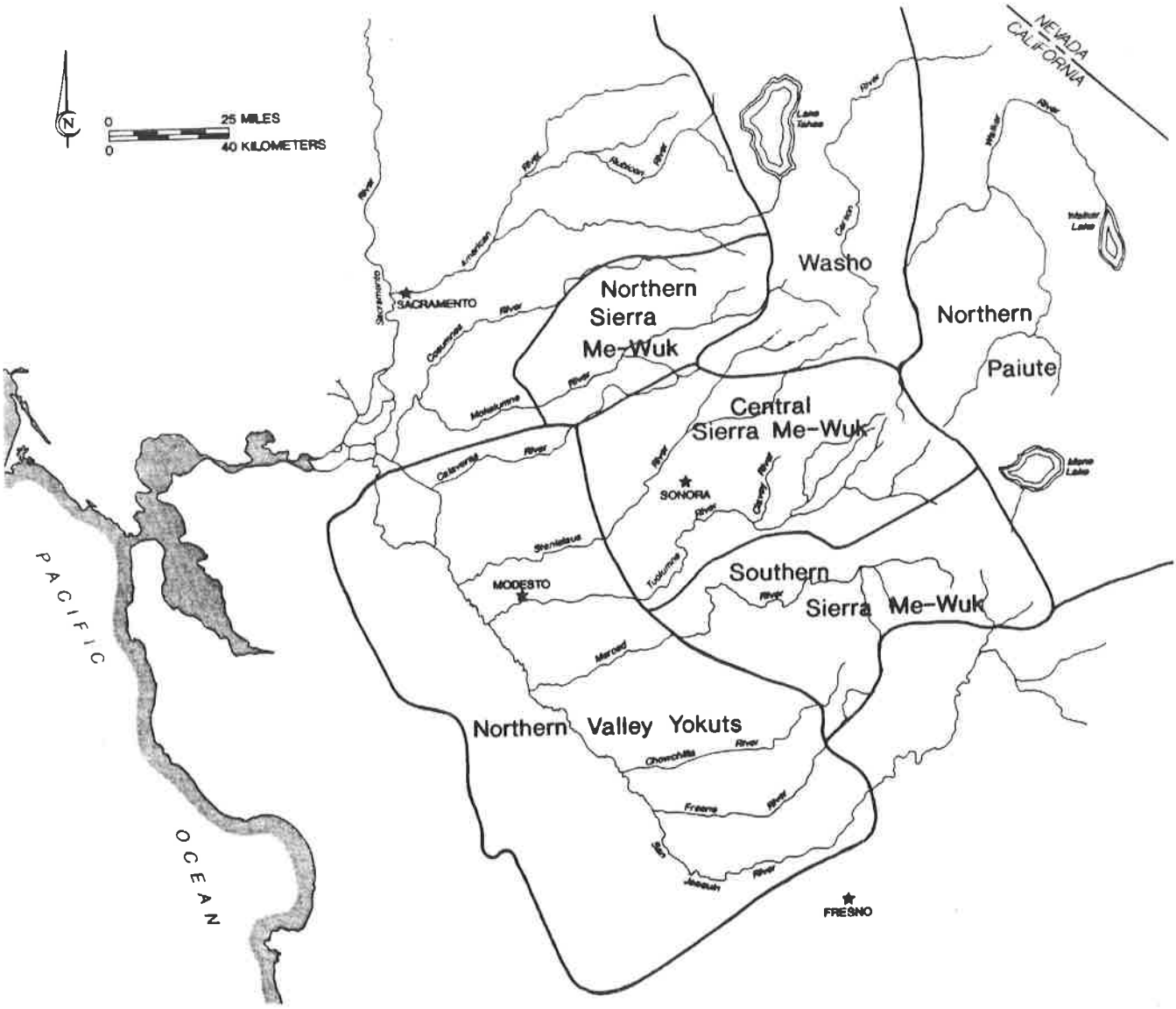

Figure 3.1 Native American Ethnographic Boundaries (Data Extrapolated from Levy [1978] and Wallace [1978]).

The Sierra Me-Wuk occupied a relatively hospitable environment, moderate in climate and rich in abundance and diversity of resources, including especially acorn and game animals. The lower reaches of Me-Wuk territory lie in the Upper Sonoran Zone (Foothill Belt) as described in Chapter 2. This zone includes three trees of major food-producing importance to the Me-Wuk: *Quercus douglasii* (Blue Oak), *Q. wislizenii* (Interior Live Oak), and *Pinus sabiniana* (Grey Pine, a source of pine nuts). These trees form sporadic cover interspersed with chaparral and grassland, the latter covering the largest part of the surface area. The California Buckeye (*Aesculus californica*), used during years of economic stress, also grows in this zone.

Chaparral, a diverse evergreen shrub community (Chamise, Ceanothus, Yerba Santa, etc.) appears sporadically in the foothills and higher regions of the Upper Sonoran Zone, offering a dense and impenetrable habitat for deer and small game. This area, at its most dense, is most useful when managed by fire to control growth and encourage propagation of edible plants. Chaparral growth found in the county is well-known and remembered today by Me-Wuk for its abundance of deer. The chaparral habitat offers plants of economic value to Indian culture such as Interior Live Oak, *Q. dumosa* (Scrub Oak), and *Arctostaphylos* sp. (Manzanita).

The Yellow Pine Belt (Transition Zone) stretches from the Foothill Belt to about 6500 feet above mean sea level, dominated by *Pinus ponderosa* (Yellow Pine), *P. lambertiana* (Sugar Pine), *Q. kelloggii* (Black Oak), *Libocedrus decurrens* (Incense Cedar), and *Abies concolor* (White Fir). Me-Wuk collected nuts from both pine species; Black Oak provided (and continues to provide) the preferred acorn, and Incense Cedar provided bark for structures. Much of the belt is interspersed with rocky outcrops, meadows, and montane chaparral (see especially Barbour and Major 1977), habitats which provided specialized, useful plant foods, materials, and medicines.

Game animals were also available to the Central Sierra Me-Wuk. From the lower plains to the 500-foot level, probably in range for Me-Wuk hunting, lived Tule Elk (*Cervus nannodes*) and Pronghorn (*Antilocapra americana*). California Mule Deer (*Odocoileus hemionus californicus*) lived throughout the county, as did jackrabbit (*Lepus californicus*), cottontail (*Sylvilagus* sp.), and the California Gray Squirrel (*Sciurus griseus*), all important food animals. Valley Quail (*Lophortyx californica*) and Mountain Quail (*Oreortyx picta*) were valued as food birds (Barrett and Gifford 1933:182-183). Band-tailed Pigeon (*Columba fasciata*) were eaten, especially in years when the acorn crop was plentiful and pigeons were abundant. Spring and autumn salmon runs were recorded at the Stanislaus River at Parrott's Ferry and in the Tuolumne River above Ward's Ferry (Barrett and Gifford 1933:189; Carlo De Ferrari, personal communication to S. Davis-King 1993; Theodoratus et al. 1976:487), but were not a major focus of Central Sierra Me-Wuk diet. Smaller fish such as trout are sought today by the Me-Wuk, but there is no evidence of prehistoric existence of these fish in the higher mountain streams and rivers. Freshwater mussel (*Margaritifera margaritifera*) were collected, and sturgeon and eel would run as high as Knight's Ferry (C. De Ferrari personal communication to S. Davis-King 1993).

Population

The population of the Central Sierra Me-Wuk before contact can only be estimated. Kroeber, using early contact reports, ethnographic data, and the number of village sites extant at the time of his investigation, estimated the population for all of California in 1770 to be 133,000. Of these, he estimated about 9000 to be Plains and Sierra Me-Wuk combined (Kroeber 1925:883). Cook (1955:36) examined data from the San Joaquin Valley and estimated 2000 individuals lived in the Stanislaus and Tuolumne watersheds. Baumhoff, basing his estimate on available food resources, revised this number to 4410 for the Central Sierra Me-Wuk (1963:219). According to Kroeber, by 1910 there were only 700 Plains and Sierra Me-Wuk surviving (Kroeber 1925:883). Cook (1976:57) notes that the California Native American population increased sixfold from 15,377 in 1900 to 91,018 in 1970, an increase that continues throughout California today.

Social and Political Organization

A Me-Wuk village, associated with a localized lineage, was identified or known by its village name. The Me-Wuk had the classic California political division, the tribelet. A tribelet had a defined territory, a principal settlement where the recognized chief resided, smaller but associated satellite settlements, and a name–usually the name of the principal settlement. The tribelet acted as a unit in terms of land ownership, violations of trespass between tribelets, major ceremonies, and entertainment (Kroeber 1932:257). Central Sierra Me-Wuk tribelets probably ranged in size from 100 to 300 people (Levy 1978:410). The exact number of pre-contact tribelets has never been determined, and accordingly, neither has the quantity of village sites.

Trade was an important activity which linked village communities to other groups. Trading goods of equal value was most common, but it was also possible to purchase commodities; lengths of strung clamshell disk beads were the principal exchange medium (Davis 1961:8). Extensive trade networks for shells and shell beads connected the Me-Wuk with Costanoans and with Southern California peoples through the Yokuts and Mono. Central Sierra Me-Wuk traded baskets, bows, and arrows to the Yokuts and shell beads, baskets, paint, arrows, acorn, manzanita berries, soaproot leaves, redbud sticks, and berries to the Washo and Mono. The Washo and Mono in turn traded skin robes and blankets, salt, pine nuts, baskets, paint, pumice stone, and moth caterpillars (Davis 1961:17, 42). People who resided in different ecological

zones could exchange a variety of commodities otherwise unavailable.

Ceremonies, Religion, Shamanism, Mythology

Me-Wuk religious expression was reflected through a system of ceremonies, shamanistic practices, and mythology. Two types of ceremonies, "little time," or *ewetu*, and "big time," or *kote*, were held. The *ewetu* was a celebration for local people only. Dances were not held for the *ewetu* (meaning to eat) which was a "first fruits" rite to mark the arrival of important food resources: clover in May followed by grass seeds, manzanita berries, and acorn in fall. The "new food" was not gathered or eaten until it had been blessed in this ceremony (Gifford 1955:266, 307).

The *kote* or "big time" brought guests from other villages for dancing, games, and feasting, a ceremony still celebrated at the Tuolumne Me-Wuk Rancheria each autumn (the "Acorn Festival"). The chief determined when a ceremony would be held; he appointed persons to procure food as well as four (a ceremonial number) cooks and four servers to attend to the feast. A ceremonial director organized the performers, the drummer, singers, dancers, clowns, and the firetender. The ceremony took place in the *hangi*, assembly house, a semisubterranean round structure about 40 feet in diameter, with a smoke hole in the roof. The foot drum was placed at the far side opposite the entrance; the fire was between the drum and the entrance. The singers performed near the drum and the audience sat around the periphery of the structure; the dancers danced around the fire, entering and passing in a circle counterclockwise.

Funeral rites were another important set of ceremonies. Upon a death, the ceremonial firetender watched over the body for three to four days while news was sent out and mourners arrived. Wailing continued from the time of death until cremation. If the deceased was particularly important a special dance, the *hohi*, was performed. On an appointed morning, the mourners marched around the funeral pyre while the body was cremated. Then the mourners were ritually washed. An ordinary person's property, including his or her dwelling, was burned several days later. If the deceased was a chief, his personal belongings were burned with him on the pyre and his ceremonial house and dwelling burned several days later (Gifford 1955:310-311). Archaeologically, Me-Wuk burials may appear as charcoal and ash lenses, as well as interred human bone.

A cry (*yame*) lasting four days was held a year after death. Three to four hundred persons

might assemble for a cry. Mourners spent the better part of the nights wailing in the ceremonial house; during the day they visited and gambled. Mourners were ritually washed by members of the opposite moiety on the fifth day. Sometimes property donated by friends and relatives was brought and burned at this time (Gifford 1955:313-315). It is also noted that a cry might take place at some sacred spot; there are indications that the hill which once existed behind the Sonora Dome was a *yame* location.

Subsistence and Material Culture

While there are several sources of information about Me-Wuk material culture, principally Hudson's excellent notes, most of these are unpublished and are not readily available. Barrett and Gifford's *Miwok Material Culture* (1933) is a primary source of information about contact and post-contact subsistence and material culture, but addresses these topics some 100 years after the initial contact was made with the Me-Wuk. The following summary derives primarily from Barrett and Gifford's volume, with the recognition that the descriptions are limited.

Me-Wuk subsistence was based on available plant, animal, and fish resources. The Me-Wuk were well acquainted with, and possessed intricate knowledge of, the growth and production of the native vegetation. In addition, they managed the environment to some degree, although the extent is unknown, by burning off brush from meadows thus encouraging grass growth and by pruning and tending to specific plants. Their staple plant food was acorn (used in the singular, in keeping with Me-Wuk practice), with preference for those from the Black Oak, followed by acorn from Interior Live Oak and Valley Oak (Barrett and Gifford 1933:142). Acorn from other oaks, particularly the Blue and Canyon Live oaks, were not usually collected or used unless the favored oaks produced minimal crops. The preference for Black Oak acorn continues today.

Acorn was harvested in the fall, dried, and stored in granaries, and, when needed, ground into meal. Cobblestone pestles were used to grind acorn in bedrock mortars. A large village would have a great number of mortars in its vicinity. The bitter tannin in acorn was leached with water poured over the meal which had been placed in a sandy basin. The meal was prepared into soup, mush, or bread. Soup or mush was mixed with water in a basket and then cooked by adding hot rocks to the mixture. These broken, fire-altered rocks are often found at Tuolumne County's prehistoric archaeological sites, and are usually an indicator of

habitation even if other artifacts are not readily apparent. Bread was baked in an earth oven (of which no examples are known to the senior author); a type of tortilla was cooked on a hot, flat stone (Barrett and Gifford 1933:142-145).

Other plant foods supplemented acorn, including buckeye nuts, both Gray and Sugar pine nuts and pith, at least 20 types of seeds, a dozen bulbs and corms (called "wild potatoes," hence the name Potato Ranch), 21 species of greens, Manzanita and other varieties of berry, and certain mushrooms. Barrett and Gifford list 67 plants used by the Me-Wuk for medicinal purposes (1933:165-176). Many of these plants are still very important to the Sierra Me-Wuk and cooperative efforts to allow collecting have become more common cultural resources management goals in the last few years.

A staple meat source for the Me-Wuk was provided by deer which were hunted by netting, from hunting blinds constructed along well-known migration trails, or by stalking (sometimes the hunter wore a head and deerskin mask or a tight grass cape for camouflage). Hunters shared their kill with other members of the village (Barrett and Gifford 1933:178-183). Rabbits were perhaps a more important game animal than deer; they were driven into nets and clubbed. There are reports of men on snowshoes chasing rabbits in the mountains during winter. Elk and antelope were stalked with deer masks and shot. Bear, beaver, and squirrel were also hunted (Barrett and Gifford 1933:178-183).

The most important game birds for the Central Sierra Me-Wuk were quail. These were usually trapped when they tried to run through openings in a brush-fence snare. Pigeons, jays, and flickers were caught with a baited snare and spring pole (Barrett and Gifford 1933:182-185). Fishing afforded another staple food resource for the Central Sierra Me-Wuk. Dip nets on long poles were used in deep holes, and set nets were used in riffles. An obsidian-pointed mountain mahogany spear was used in the shallow waters of the mountain streams. Small fish were reportedly caught by hand in small creeks or holes along rivers. Mashed buckeye and soaproot were used to poison or stun the fish in small pools, causing them to float to the surface (the poison did not interfere with edibility). The upper reaches of the North Fork Tuolumne and Stanislaus rivers supplied freshwater mussels (Barrett and Gifford 1933:192).

Grasshoppers were gathered in communal drives during June. Chrysalides of the army worm and yellow jacket, and yellow jacket larvae were also eaten. Salt came by trade with other peoples who obtained it from saline lakes east of the Sierra, and from plants, such as marsh

grass that was burned and the saline constituents collected in a cake-like form from the cooled ashes. Wild tobacco was gathered, dried, and broken up for smoking in a pipe. Seeds were sometimes planted by older men. From the Me-Wuk perspective, cultivated tobacco produced a larger and better-tasting product than tobacco collected from the wild (Barrett and Gifford 1933:190-193).

It is important to understand these subsistence activities because they were supported by a number of interrelated tools, techniques, and industries, many of which survive archaeologically. Arrows shot with bows were the main hunting weapon used; generally only the tip of the arrow survives. Points and blades for knives, scrapers, and spears were made of obsidian, cherts, and other lithic materials, but these were quickly replaced with glass and steel implements in the 1850s (Barrett and Gifford 1933:211-212). Bone was used for awls, the most common implement for the basketmaker's craft, but was also used for whistles, beads, and scrapers. Antler tines were used to pressure flake stone tools and in other knapping activities (Barrett and Gifford 1933:214).

Grinding implements, such as milling slabs, stone bowls, and handstones (manos and pestles) are common survivors, as are the "bedrock milling stations" (BRMs) or grinding rocks. Small cooking vessels about eight inches in diameter were made from steatite during the later prehistoric and early historic periods. Steatite cooking stones were prized since this stone does not easily break when heated, although river stones were more commonly used. River stones were also used as pestles on the many flattish granitic outcroppings where bedrock mortars have been made. Manos, milling stones, and slicks were a recent introduction (by 1860) to the Me-Wuk, probably from Indians east of the Sierra (Barrett and Gifford 1933:208-211) although archaeological evidence suggests such tools also predate the use of the mortar and pestle in the Central Sierra.

Me-Wuk material culture was (is) largely organic and rarely survives outside of rock shelters or caves. Baskets, for example, were necessary to women's gathering activities and food preparation, but do not survive archaeologically. Me-Wuk are known to have produced coiled baskets during the early Gold Rush, where the baskets were used for panning (Young [1970], lists the price then as 15^{00}).

Each Me-Wuk family had a least one granary to store acorn and seeds; a chief required several granaries. These were made on a stand of vertical posts two to three feet off the ground and

could reach up to twelve feet from the ground. The granary was made of a "nest" of vines, twigs, and grass and sometimes had a roof of cedar bark to shed the rain (Barrett and Gifford 1933:207-208). These are infrequently found archaeologically.

Family homes were conical in shape and ranged in size from 8 to 15 feet in diameter. These shelters were made of three or four thicknesses of overlain incense cedar bark slabs leaned in a conical shape to support one another. The door, also a slab of cedar bark, was moved in and out of place as desired. A conical framework of poles covered by brush was used as a shelter during summer camping. Each house had a fireplace in the center and an earth oven next to the fire. Sleeping benches raised about 18 inches off the floor were used by important men (Barrett and Gifford 1933:198-200). Most of the known Me-Wuk houses which survive in Tuolumne County are located from Standard to the west, and are concentrated in the west county.

The sweathouse, a conical, earth-covered low-roofed structure built over a 2- to 3-foot deep pit, was 6 to 15 feet in diameter. It was heated by fire with smoke exiting through a small 6-inch diameter smoke hole in the roof. The semisubterranean assembly and ceremonial house was built in a 3- to 4-foot deep pit, 40 to 50 feet in diameter. Eight side posts and four center posts supported a low, cone-shaped earth and thatch covered roof, the edges of which rested on the circular perimeter of the house pit. The entry was usually located on the east side and extended out from the house forming a hall. This house was used for guest sleeping quarters during ceremonies (Barrett and Gifford 1933:200-207). These structures also survive in the west county.

Settlements and Places

Year-round Me-Wuk villages were usually located on ridges near a major spring or drainage confluence below the heavy snow line (about 3500-4000 feet in elevation). Summer brought movement into higher elevations where seasonal camps were established convenient to summer gathering and hunting. Research indicates that if a village is named it was a permanent one, and that 50 to 200 persons may have lived there. The major literary resources for named villages are Merriam (1907, 1977), Hudson (1898-1902), and Kroeber (1925). Kroeber's map is impossible to use for precise locations or comparison; his work was based on Gifford's notes (Kroeber 1925:*x*) but these particular notes have not been located and it is unknown whether Gifford visited (and mapped) all the sites he lists or if some are from verbal information only.

Many named villages exist in Tuolumne County; Kroeber lists about 35 villages, for example. Tuolumne County's lower elevations are known and remembered by Me-Wuk today as an area used intensively for gathering. Numerous temporary camps existed in favored hunting, fishing, and gathering locales throughout the county. The number of pre-1848 villages in this part of the Sierra Nevada indicates that the county was a significant residential and resource procurement area for the Central Sierra Me-Wuk. Tuolumne County also contains a greater number and variety of prehistoric resources than other Sierra Nevada locations, suggesting that this region has always been a favored habitation area (T. Jackson personal communication to S. Davis-King, August 1993).

Central Sierra Me-Wuk Ethnohistory

Non-Indian intrusions into Central Sierra Me-Wuk territory probably occurred sporadically prior to the Gold Rush. Plains Me-Wuk and Yokuts groups to the west were affected by the Spanish expeditions into their areas for mission recruits in the late 17th and early 18th centuries, and in turn intruded into Sierra Me-Wuk territory. A gradual erosion of native culture and a serious decline in population for these lowland groups resulted first from Spanish contact and involvement in the mission system and then from effects of "Mexicanization." Their numbers dropped further as a result of contact with European diseases for which they had little immunity. Whole valley groups were decimated when a malaria epidemic swept the lowland areas of California in 1833 (Cook 1960, 1962; Wallace 1978). The Sierra Me-Wuk were most likely keenly aware of the intrusion.

During the late 1700s and early 1800s the Sierra Me-Wuk captured runaway horses from the foreigners for meat, but are unknown to have had direct contact with the Spaniards themselves. The 1837 Amador Expedition into the county reports a stone corral in use (for horses?) by the Indians, although it is not known who built the corral (Carlo De Ferrari, personal communication to S. Davis-King, September 10, 1993). By the 1820s and well into the 1830s when the missions were being secularized, fugitive Indians from the missions were regularly fleeing into the foothills. During this early period there is evidence of tribal and territorial readjustment as fleeing tribal members joined other groups and tribal boundaries were altered. Before then probably only a few trappers and explorers ventured into the foothill Me-Wuk territory. By the Gold Rush period, valley tribes had already been seriously reduced in numbers and the foothills were affected by movement of surviving Indian refugees into their areas. Former traditions were completely disrupted (Cook 1960, 1962; Hall 1978;

Levy 1978; Theodoratus 1976; Wallace 1978).

When California was annexed by the United States, the government began a policy of taking Indian lands, even though Indian people signed treaties (1851) which were to provide them with land (Heizer 1972). These treaties were never ratified by the United States Senate, most likely as a result of pressure from non-Indian people in California. By the 1850s, with miners in great numbers venturing into the foothills, Indian people became involved in mining as wage laborers and used gold to trade for commodities. As the influx of non-Indians into foothill Me-Wuk territory increased so did the atrocities committed against Indians, and great numbers were annihilated. Those who survived scattered through the foothills, mining gold for wages or trading gold for items of their newly acquired tastes; they continued to subsist partly by traditional hunting and gathering of native foods. The adjacent valley area was confiscated early by ranchers and later, by farmers eagerly attracted to the rich soils. These non-Indians quickly set about the displacement and murder of the few remaining Northern Valley Yokuts and Plains Me-Wuk who had not fled to the neighboring Sierran Me-Wuk territory. Indian survivors in both areas found themselves essentially in bondage during the 1850s and subsequent years.

As the environment was increasingly altered by non-Indian activities, Indian people experienced deprivation and starvation. Not only was their traditional food supply cut off, but food resources were insufficient to support them. Stealing domestic animals for food only resulted in further retribution. Domestic livestock ate the acorn supply, river channels were diverted and silted, and forests were destroyed. Sometimes raids on villages destroyed food storage areas increasing the threat of starvation. The few Yokuts and Me-Wuk who had been able to survive acquired new cultural traits and developed new skills during these early years. Traditional villages that had been located in the heart of the new mining camps (given their location on the major water sources in the region) had to be moved. New settlements usually were quite peripheral to former core areas. Changes and/or alterations occurred in land tenure, tool inventory, attire, and foods; health and especially new diseases, violence, and alcoholism were confronted and the maintenance of a balanced community became difficult. There were fewer children for future cultural continuity; English and Spanish were added to the linguistic repertoire; trade with surrounding Indian groups decreased and former needs for trade items changed; gold, and later dollars, became a medium of exchange for newly desired commodities. Further, some inter-tribelet social activity was impossible to achieve and therefore reluctantly curtailed; new choices had to be made about how, what, and where to

continue old customs that were still desired and considered most necessary. The older survival strategies were combined with new, creating changed patterns of social, economic, and religious culture.

According to Hall (1978:97-118) settlement patterns were altered due to high mortality and the encroachment of white settlers on the land. Villages were abandoned or moved because of the decreased number of residents or because of forced removal by non-Indians. During the post-Gold Rush period villages contracted and consolidated. Most of the early ethnographers did not provide data on settlement size, although Merriam (1898-1938) repeatedly remarks in his diary about one or two Me-Wuk people living destitute lives as the last persons in their village. As the 1905-1906 Kelsey census (Kelsey 1971:12-13) shows, many Me-Wuk were living on the outskirts of towns, their former villages locations; census numbers reflect population loss (see especially Hall 1978:97-118). Processing acorn generally took place along stream banks, occupied by miners after 1848. The Me-Wuk soon found that the water which flowed in mining ditches could be used to process acorn. Thus milling stations and habitation areas are not uncommonly found adjacent to these historic conveyance structures.

Recent Developments

The twentieth century has brought many changes to the foothills and Indian people have accommodated these changes accordingly. The establishment of a federal forest reserve, the Stanislaus National Forest (StNF) and Calaveras Bigtree National Forest, has had an impact on native use of the forested lands. The forest has been actively harvested, first by miners for timber necessary for mining and flume construction and later, under the StNF, for an increasing public demand for lumber. Timber harvesting continues today on federal and private land; many Indian people were employed in this industry.

Traditional collecting areas are primarily in the StNF where many resources (e.g., medicine, food, and materials for basketry and other native industries) desired by Indian people are found. The Me-Wuk believed they were restricted from collecting on these lands, which were much of their previous gathering areas. Some Indians continued gathering, however, while others curtailed their activities fearing arrest.

Sometime in the last century, Me-Wuk living north of Sonora gathered together at Bald Rock Rancheria, perhaps below the rock which now supports the dam at Twain Harte Lake

(Appendix E). Very little is known about this rancheria, although Merriam visited 10 families there in 1903. Chief William Fuller had been born at Bald Rock in 1873, and certainly there were families living there before then. County archives contain a number of notes about the burials of Indians at Bald Rock Cemetery. Chief Fuller continued to live in the area until moving to the Tuolumne Rancheria in the 1930s.

In the early 1900s the government purchased, through executive order, two tracts of land for homeless Indians in Tuolumne County: Chicken Ranch and Tuolumne Me-Wuk rancherias. Chicken Ranch near Jamestown consists of 2.85 acres and currently has a resident population of five persons of Me-Wuk descent, a drop from nine people in 1951. Tuolumne Me-Wuk Rancheria, near Tuolumne, includes 335.77 acres and has an on-reservation (mostly Me-Wuk) population of 132 with an adjacent population of 467. This present on-reservation population is an increase from 50 in 1951 (Stewart 1978:711; California State Department of Housing and Community Development 1990). On Big Creek, near Groveland, there was a large Me-Wuk village named "Pigliku" (said to be the Me-Wuk pronunciation of "Big Creek"). The Indians who settled here came mainly from Reid's Ranch (above Second Garrote) and from Bull Creek in adjacent Mariposa County. All of the Indians except one, Jimmy Bill, moved to Cherokee sometime between 1915 and 1925 (C. De Ferrari personal communication to S. Davis_king, December 1993). The village site is now inundated by Pine Mountain Lake.

In this century Indian people in Tuolumne County have resided on lands in the broad vicinity of their earlier habitation areas. During the last ninety years they have maintained cultural integrity in several ways. They have continued to identify themselves as Me-Wuk and, as such, have been determined to maintain aspects of cultural meaning from a Me-Wuk perspective. Community maintenance and preservation of Me-Wuk methods of collecting and processing traditional foods, medicines, and other items from the environment, and the continued interest in dancing and ceremonial life, both public and private, are manifestations of continuing Me-Wuk cultural identity.

Through the years the Me-Wuk have experienced constant fluctuation in policies of the Bureau of Indian Affairs. For example, land has been established and expanded (Tuolumne), and some lands have been terminated and then reinstated (Chicken Ranch). They have survived a depression and two world wars, both of which affected them economically and personally. They have remained categorically an economically poor contingent on the fringe of the non-Indian community. To counteract their situation and status, the government has established

programs of health and education at Tuolumne Me-Wuk Rancheria (e.g., Head Start, a health clinic, drug and alcohol program, a youth program). Employment opportunities and training have been developed under broader federal and state programs (e.g., California Indian Manpower Consortium, Indian Health Service, Bureau of Indian Affairs), particularly in more recent years. Indian people have expanded their opportunities through these programs. Most recently, the Tuolumne Me-Wuk have received a grant to establish a native plant nursery on their land, as part of a job-training and economic incentive program.

A number of federal water projects have been introduced into Calaveras and Tuolumne counties in this century. Some of these (for example, the New Melones Project) have invited local Me-Wuk to participate in cultural resources examination and repatriation of human remains. In response to New Melones development, the Me-Wuk people formed a committee, The Me-Wuk Committee for Heritage Sites, and were directly involved in some of the New Melones excavations (Moratto et al. 1988; TCR 1981b, 1982b).

At present, Tuolumne Me-Wuk Rancheria has a ceremonial house which is actively used for ceremonial purposes and meetings, a modern tribal office building, and a health clinic. The membership holds regular monthly meetings at which they are kept abreast of tribal activities. The tribe formed a committee, The Central Sierra Me-Wuk Cultural and Historic Preservation Committee (the Cultural Committee) in February 1991, which monitors and handles cultural resources issues. The Cultural Committee has expanded through tribal sanction to include Me-Wuk representatives from the counties of Amador, Calaveras, Tuolumne, and Mariposa.

Northern Valley Yokuts, Washo, and Northern Paiute

Although most people think of Tuolumne County as Central Sierra Me-Wuk territory, which it certainly has been since 1900, other Indian groups have territorial claims on portions of the county. The Northern Paiute, Washo, and Northern Valley Yokuts in particular, are known to have hunted, gathered, and fished near, if not in the geopolitical boundaries of the county.

Northern Valley Yokuts

The western portion of Tuolumne County is likely to have been used in the past by the Northern Valley Yokuts. Their traditional eastern boundary was near Willms Road and State Highway 108 (within Tuolumne County's earliest borders), but to a certain extent this is

conjecture as the Northern Valley Yokuts rapidly disappeared as a result of early non-Indian settlement and disease, and little is known about their traditions. Surviving data on the Northern Valley Yokuts are slight at best, and few archaeological sites definitively associated with them have been excavated. Data on the Yokuts groups must be gleaned from the limited ethnographic information and the meager descriptions of travelers through their native area during the early contact period. Wallace (1978) is the best primary source on the Northern Valley Yokuts culture, with some contributions by Bennyhoff (1977), Cook (1955), and Kroeber (1925).

As stated, Northern Valley Yokuts aboriginal territory was quickly overrun by non-Indians and the native population decreased rapidly–so quickly, in fact, that very little was recorded during the first decades of the twentieth century when extensive ethnographic fieldwork in California was progressing. The few Yokuts who endured were likely absorbed as refugees into other tribelet units as they fled the onslaught of the Spanish, Mexicans, and Americans. Northern Yokuts territory was located south of the Plains Me-Wuk (between the Calaveras and Mokelumne rivers) and west of the Sierra Me-Wuk, but the core area was the San Joaquin River and its tributaries. This region includes marshes and broad plains, where the wetland areas grew tules and marsh grass, the plains were grasslands with sycamore, cottonwood, and willow growing along streams, and Valley Oak groves were scattered in well-watered localities. Resources were abundant in the area with a variety of fish, waterfowl, Tule Elk, Pronghorn, jackrabbits, and quail, among others (Wallace 1978:462-463).

The Yokuts language is of the Penutian language family, and contained approximately 40 dialects. People were unevenly distributed in the territory with clusters dispersed along the east bank of the San Joaquin River and its tributaries. The main food along stream courses was fish, with salmon the most sought-after variety, and sturgeon, perch, suckers, and pike as important food resources depending on the time of year. These seem to have been procured by dragnets and antler-tipped barbed points or harpoons (Baumhoff 1963:174; Cook 1960:242). According to Wallace, fowl and game such as antelope and elk, which were in abundance throughout the area, may have also been sources of food although early recorders do not chronicle this (Wallace 1978:464). Acorn from the Valley Oak, an abundant producer, was a primary food, as were tule roots and seeds (Cook 1960:242, 248, 264).

Little is known about the material culture. Dwellings were probably single-family, oval in shape, and made of a pole framework covered with mats made of tule stalks. Very likely each

community had a sweathouse and ceremonial structure as well. The tool inventory included portable (stone and wood) and bedrock mortars (for pulverizing acorns, roots and seeds), arrow points, knives and scrapers, and bone awls for basket making. Tule rafts were probably made for water transport, and a network of trade was established with neighboring Me-Wuk and with Costanoan people to the west. Evidence on Northern Valley Yokuts social organization is nonexistent. Politically, they probably lived in small tribelets of approximately 300 persons. The group that resided on the western area of Tuolumne County was probably the *Lakisamni* (Wallace 1978:462). Tribes probably had a headman who resided at the principal settlement, perhaps located on a low mound on the banks of a stream. Little is known about religion although it is projected from other data that the Yokuts may have participated in both the datura and Kuksu ritual systems. Wallace speculates that the celebration of life's crises as well as shamanism were also a part of Northern Yokuts life (Wallace 1978:464-468; see also Kroeber 1925).

Washo

The Washo today live in both California and Nevada in the areas around Lake Tahoe and the Carson Valley. Although Washo use of the territory which became Tuolumne County is somewhat unlikely, it is important to note that their traditional boundary extended as far west and south as Calaveras Big Trees (e.g. Kroeber 1925). Washo were commonly found overwintering in Murphys (Calaveras County) during the 1850s and 1860s. While a full description of Washo ethnography and ethnohistory (see d'Azevedo [1986]) is not important here, consultation with the Washo should likely occur if a project is located on some of the higher elevation inholdings in the Stanislaus National Forest, and on the 50,000 acres or so of private land near Calaveras Big Trees (particularly that owned by Georgia-Pacific and Fibreboard corporations).

Northern Paiute

The Northern Paiute people were and are a geographically and culturally distinct group, with linguistic ties to other Paiute groups (see especially Fowler and Liljeblad [1986]). There are indications that Paiute people had numerous associations with the Me-Wuk and the Washo, both groups with whom they traded and interacted. But even more important, it appears as if the Paiute had a strong presence in Tuolumne County, particularly in the Emigrant Wilderness area and Yosemite National Park. Close by these areas were the private lands of

the Rosasco family; Ed Rosasco noted years ago that the Paiute and Me-Wuk were known to camp and meet near his father's cow camp in the fall (Otis Rosasco, personal communication to S. Davis-King, 1991). It also appears that much of the higher Sierra was used by the Paiute, based on the presence and absence of certain cultural characteristics at archaeological sites there (Davis-King, in prep. and Kathleen Hull, personal communication to S. Davis-King, 1992).

Since Northern Paiute sites generally occur on federal land (either National Park Service or United States Forest Service), it is beyond the scope of the present research to elaborate more fully, but as with the Washo, cultural resources investigators of private land (particularly those in Township 5 North, Range 20 East) in the eastern portion of the county should remember that the Paiute likely used the area in the past.

Historic Era Exploration

Few pre-1848 accounts of historic excursions into Tuolumne County have survived. Those which have are fairly general and describe places as distances (in hours, leagues, or miles) from a known spot or describe traveling up a river drainage. As stated in an earlier part of this chapter, Gabriel Moraga and his fellow explorers are the earliest known non-Indians to venture into what became Tuolumne County, followed by General Vallejo, Jedediah Smith, Joseph Walker, John Frémont, perhaps the French trappers working for Hudsons Bay Company, and the early emigrant parties, such as the 1841 Bartleson-Bidwell Party. As these early ventures into the county were important to early transportation, they are discussed more fully in Chapter 4 (Theme I/Transportation and Communication). Little information remains about any historic settlements or other resources from this era, or remains of any settlements of the early Sonoran miners. Historic activity began in earnest soon after the publicized 1848 discovery of gold, which forever changed the face of Tuolumne County's physical and cultural landscape.

Early Historic Settlement

Gold was "discovered" in California on the banks of the American River in January 1848, ironically just a few days before the war with Mexico ended officially and the lands of California were annexed to the United States by the Treaty of Guadalupe Hidalgo. County folklore suggests that Mexicans from the state of Sonora, Mexico, arrived at what became Tuolumne County by the summer of 1848. These men, who gave the name of their home

state to the new settlement of Sonoran Camp, mined for placer gold along the banks of what is now known as Woods Creek (Heckendorn and Wilson 1856). It did not take long for word to spread that the precious metal was easily found in creekbeds, and soon thousands of men migrated to the county in search of gold.

The story of Tuolumne County during the first few years of settlement is not much different from other Mother Lode communities. Hoards of miners came; water systems were developed; settlements grew up around the more successful and environmentally rich mining areas; transportation networks between these areas developed, first as trails and then as wagon roads; farms, orchards, and truck gardens sprang up; saloons and fandango halls, along with boarding houses provided entertainment, bed, bath, and sustenance to the miners; the bare bones of civilization in the form of government, law, newspapers, and social lodges developed; and violence became commonplace, not only among the newly arrived argonauts, but also with the Indians who had lived in the area so long. Fires and damage from earthquakes destroyed many of the structures and buildings of those early days, and those that were not damaged through such actions were later razed in the name of "progress," were inundated by reservoirs (dozens of camps such as Jacksonville, Melones, or Pine Log Crossing on the Stanislaus River; and every major mining center on the Tuolumne River from Brazoria Bar to Don Pedro's Bar; or Junction Camp and Dutch Bar on Wood's Creek), were abandoned and forgotten (Poverty Hill #1, Curtisville, Blanket Creek), or otherwise decreased in importance as settlements (Stent, Campo Seco, Second Garrote, Arastraville).

Conflict raged daily in the mining camps because of the increasing dominance of the Anglo miners over the Me-Wuk and "foreigners." Much of the county's archival history fairly revels in tales of hegemony. The Me-Wuk had many of their problems in the earliest days of the Gold Rush; by some accounts it seems as if the Me-Wuk paid for deaths of the Anglos at the hand of Plains Indians, merely because they were Indian. It was hardly recognized that Me-Wuk villages had been displaced, hunting and gathering areas totally ravaged, and generally that a whole lifestyle had been uprooted. Nor is it surprising that the Me-Wuk viewed a burro or horse as "fair game" if you will, when starving hunters also needed food for their children, elderly, and sick. The stories of the raid on James Savage's store, or the fight at Turnback Creek, or the altercations at Big Oak Flat are just a few of the many atrocities perpetrated on the native people. But that was apparently not as long-lived as other areas. Perkins, living in Sonora, wrote in 1852:

> Speaking of Indians, there seems to be a great change come over the savage tribes within the last twelve months. Last year it was almost impossible to keep mules in safety any where outside the town. Almost every night the Indians were prowling about and driving off cattle. Now we scarcely ever hear of the robbery of a mule...they are moving farther up into the fastnesses of the Sierra Nevada, and seldom venture down [Perkins 1964:310].

Conflicts were not over however, and the Foreign Miner's Tax, among other problems between racial, ethnic, or religious groups, only fed the fire. Such conflict will be discussed more fully in Chapter 7 (Ethnicity and Social Systems).

Late 19th/Early 20th Century

By the mid-1860s the placer gold deposits were exhausted, the technology for extracting gold from the deep veins was not yet well-developed, and mining went into a major depression in Tuolumne County. Many miners and their families rushed to other strikes, notably the Comstock Lode in Nevada, hoping to find work, while local support industries collapsed or suffered. Farms were abandoned, businesses auctioned off and closed, and the mines shut down. Tuolumne County's population decreased by nearly 50% between 1860 and 1870.

From 1865 to the early 1890s, Tuolumne County suffered great hardship and depression, only to have mining again bring county industry back to life. The second, or Hard-Rock, Gold Rush began in the late 1880s and lasted through World War I. A combination of advanced technologies, primarily the invention of dynamite in the 1860s, the development of square-set timbering in the Comstock lode, and a heavy infusion of foreign capital, provided for the resurgence of the mining industry in Tuolumne County and foothill regions. During this period the County experienced another major period of growth and a population boom. Mines were reopened, adits driven, and shafts sunk deep into the Mother Lode and its associated veins. Hoisting equipment was developed, particularly the six-strand cables capable of lifting heavy loads of ore and debris from great depths. Air pumps forced fresh air into the shafts, expelling foul air and powder fumes. At this time, electricity (see Chapter 6) was used to provide power for the hoists and mills, with the added benefit of providing some electric light for domiciles.

Sonora and Jamestown boomed, the mines at Confidence, Soulsbyville, Jamestown, Quartz, Carters, Big Oak Flat, Groveland, Tuttletown, Jacksonville, and other locations were reopened

with investment capital and large modern stamp mills were erected. Mining was again king in Tuolumne County and its supporting industries developed closely behind. A large increase in assessed valuation allowed the county to construct a new courthouse in 1898, build bridges, improve roads, establish a high school, and generally reestablish county services. Business and commerce boomed, agriculture came into its own again as a major local industry, sawmills, planing, and box mills were developed, hundreds of homes were built to house the increased population, and whole communities were established or rebuilt.

The railroads, which were constructed initially to access the huge stands of timber in the mountainous regions, also transported local produce to distant markets, and brought flour and other products to Tuolumne County. Increasingly the trains brought visitors and investors, who in turn brought money to spend on food, lodging, transportation, sightseeing, and local products. In this way the region was introduced to those who might not have discovered it otherwise.

Later 20th Century to Present

By World War I most of the mines in Tuolumne County were again idle and many people moved away to work in the war-related industries in the San Francisco Bay Area. With the advent of the automobile and truck transportation, many agricultural products and manufactured items were imported, rather than being produced locally. The Depression in 1929 sounded the death knell for most major industries, including agriculture and timber, and the county slumbered along with the rest of the United States during the following decade.

Due to the increase of the price of gold and low operating costs during the Depression. a small mining boom occurred again during the mid to late 1930s, with exploration and preliminary investigations at the Harvard (erection of headframe, drilling, and other activities), the Confidence, the Eagle-Shawmut near Jacksonville, the Mack and Longfellow in Big Oak Flat, and the Dutch-App and Quartz Mountain mines. World War II effectively put an end to any major reopenings or hope, however, as all the mines were ordered closed in 1942. The Eagle-Shawmut was one major exception of a mine which operated through the war, processing ore from the Penn Mine in Calaveras County from which copper, zinc, and gold were removed (Wagner 1970).

The centennials of the gold discovery in 1948 and statehood in 1950 brought a renewed

interest in the gold country. Books were published, photographic and art exhibits mounted, and tourists came in droves to see where it had all happened. The quaint towns with their narrow streets of stone, brick, and frame buildings from another century, the rolling fields studded with wildflowers, the rushing streams, and the serenity of the foothills were now a destination and Tuolumne County was no exception. A gateway to Yosemite and the Sonora Pass, a land of natural beauty, with a sense of its history and place, Tuolumne County welcomed the tourists, many of whom returned to settle or retire.

At the height of the Gold Rush in 1852, the population of Tuolumne County is estimated to have numbered 17,000 individuals, a figure which was not again reached for 110 years. In 1963 there were again 17,000 people, a number that has steadily grown since then. Intense subdivision developments started at that time and continue unabated. The County today is experiencing a period of expansion that has been unprecedented since the Gold Rush. The entire foothill area has recently weathered a rapid growth in population and the economy is presently dependent upon employment by units of government, service industries, timber, gold mining, lime production, manufacturing, construction, agriculture, and tourism. With the expanding population has come an irreversible change to the fabric of society, the landscape, and the patterns of land use.

Historical Archaeology

Historical archaeological investigations conducted for the New Melones, Mokelumne River, and other projects have confirmed and expanded what was known about regional and vicinal history. The first major identifiable non-Indian archaeological components date to the time of the 1840s/1850s Gold Rush. As many as 10,000 miners had come to the Stanislaus River area by 1849 (Hall 1978), and importantly, the ethnic composition was diverse, leaving archaeological sites with distinctive remains. Remnants from this mining era include stacked rock features such as walls, alignments, waste rock piles, stone ovens, chimneys, buildings, and road embankments. Landscape alterations, largely the result of placer mining operations, occasional platforms (the foundations for tents or shacks), artifact scatters, quarries, and mills are also found from this era. The places where gold was mined were remote from the supply centers of the time; vast amounts of foods, tools, and basic supplies had to be transported to the gold country, virtually overnight. Such a need led to the development of towns and extensive road systems, both of which left developed archaeological remains. Subsequent economic and social developments generated cultural remnants such as logging camps,

homesteads, hard-rock mines, ranches, canals, and other indicators of historic activities. Examples of all of these site-types have been documented in Tuolumne County but few have been excavated. Thus treatment plans which address management and preservation of these cultural remains become even more important. Archaeological resources are each and every one unique and can not be replaced once destroyed.

Tuolumne County's Architectural Heritage

The historically and architecturally significant structures and buildings in Tuolumne County are diverse in style, method, and period of construction. Most are built of wood, but some are adobe, stone, brick, or concrete and have sidings of wood, stucco, or plaster. Of the principal architectural styles, Tuolumne County has examples of Folk, Romantic, Victorian, Eclectic, and American buildings (McAlester and McAlester 1990). A variety of principal subtypes are represented, although modified, including Spanish Colonial, Greek Revival, Neoclassical, Italianate, Queen Anne, Romanesque, false-front commercial, Craftsman, Mission Revival, Spanish Eclectic, and Art Moderne (Deco).

Although it is unknown what the dwellings of the first peoples to inhabitant Tuolumne County looked like, there are numerous descriptions and illustrations of the structures in which the Me-Wuk lived. This group, residing in the central Sierra foothills at the time of the Gold Rush, lived in conical bark shelters, and as described above also had ceremonial roundhouses, sweat lodges, and acorn granaries. Reconstructions of historic period roundhouses are located at the Tuolumne Rancheria and at Columbia Junior College. The college also has reconstructed examples of a Me-Wuk house and acorn granary. Other reconstructions can be seen at the Summit Ranger District's interpretative station near Pinecrest and in Yosemite National Park.

With the advent of the Gold Rush, tent cities and tent and log cabins were built on virtually every stream drainage in the foothills. Tents were made of white canvas, with a gable roof and front flaps. Other tents, housing a group of miners or used as stores or restaurants, were larger and often had wooden floors. Cabins were first constructed of logs, usually with a stone chimney and sometimes with stone foundations, and later of sawn lumber. Stone bread-baking ovens were often constructed in camps, and shared by several miners, or built as adjuncts to cabins.

As many of the miners in the Tuolumne area, and especially Sonora, were from Mexico, they brought their expertise in adobe construction from their homeland, and numerous adobe cabins, homes, and businesses were built in the earliest years of the Gold Rush. Of the many adobes, only a handful remain, most of them in ruins. The central part of the Gunn House, and the rear section of the City Hotel, both in Sonora, and three buildings in Groveland are the only extant adobes yet identified.

Within a few scant years after 1848, Tuolumne County's first sawmills were established, initially to provide lumber for the water flumes, mine timbers, and mills used by the mining industry. The mills soon expanded their customer base and began providing residential and commercial construction materials as well. Pre-fabricated frame houses, usually in the Greek Revival style with pyramidal roofs, surrounding porches supported by classical columns, and horizontal siding, were shipped from the eastern and southeastern seaboards to San Francisco and then brought by wagon to the gold country. One of these, the Cady House in Sonora, is a superb example of this type of construction.

The first frame homes built in the county were simple one-story vernacular Neoclassical dwellings. These ubiquitous homes, which were built in town and on ranches alike, exhibited the basic symmetry of that style, with gable roofs, horizontal siding, surrounding porches, and central entryways flanked by multi-paned windows. They usually had four rooms in the main portion of the house, with a shed-roofed kitchen attached to the rear. This style remained one of the more popular in Tuolumne County from the Gold Rush to the early 1900s, with few variants except more or less-steeply pitched rooflines, larger structures, a second story, and differing architectural decoration. Early commercial buildings, usually built close together on both sides of main streets in the established communities, were initially of frame construction, one or two-stories high, with gable roofs, front porches, and French doors.

After numerous buildings and several communities were lost to fire, a scourge of the Mother Lode region in the early days, more affluent merchants began to rebuild in more permanent brick and stone. Brick and lime kilns, which took advantage of the abundant local supplies of clay and limestone, were established in several communities, and, by the mid-1860s, most main streets were lined with gable- roofed Neoclassical buildings with false fronts, simple cornicing, brick and stone relieving arches over the windows and doorways, and iron shutters for protection from both fire and thievery. Many buildings were constructed with layers of dirt between the ceiling and attic, or between the floor and basement; this method of

construction provided both insulation from heat and cold and afforded extra protection from fire.

Although many Americans built with stone, it was the Italian and French stonemason, so experienced with this method of construction in their homeland, who built the majority of the lasting stone structures in the California foothills. They built commercial establishments, residences, basements, storehouses, outbuildings, ovens, walls, corrals, dams, ditches, and numerous other structures with the abundant local schist, slate, marble, granitics, and andesite.

As the camps became communities, and women and children moved west to be with their menfolk, the appearance of the towns changed. Back streets became lined with one and two-story frame houses, picket fences delineated planted yards and gardens, and churches, schools, and social halls were constructed, usually in the Neoclassical style. Farmhouses dotted the landscape, surrounded by their attendant barns, bunkhouses, blacksmith shops, sheds, corrals, and springhouses.

By the mid-1870s most of the towns in Tuolumne County were well-established, with commercial establishments along the main streets, residences on the secondary streets, and businesses such as slaughterhouses in the outlying areas. Farms and ranches were dotted throughout arable land, usually on 160 acres or more. Camps and communities were established around the principal gold mines and higher up in the mountains, around the lumber mills. In the highest country, summer cow camps were set up, and cabins and corrals built to house those who made the annual trek to the mountain meadows with their herds. Along the way, hotels, way stations, and trading posts were established to cater to travelers on the main routes to the mines and over the Sonora Pass.

Hard-rock mining, which had languished in the decades since the mid-1850s, was rejuvenated in the late 1880s and continued for 20 years. With this boom came a new growth in the towns and business communities. Buildings constructed during this period included the usual false-front commercial buildings, as well as Italianate and Queen Anne homes. The Queen Anne style, popular in California in the 1890s and early 1900s, with its asymmetrical facades, hipped and cross-gabled roofs, and decorative shingles in the gables, porches supported by turned and bracketed posts, and spindle work, was utilized both for the large mansions of the commercial barons as well as for hundreds of small homes and farmhouses. Pattern books, which enabled any house builder to construct a modern, sophisticated dwelling, were also

used. The Romanesque or Romanesque Revival style, so popular in the Midwest and throughout numerous small towns in America in the early 1900s for banks, offices, and public buildings, was not readily embraced in Tuolumne County. The County Courthouse, in Sonora, is one of the few buildings constructed in this style (Sally Woodbridge, personal communication to J. Marvin, September 1993).

In the period following World War I, numerous Craftsman bungalows were constructed in communities and on ranches. Most Craftsmen structures appear to have been built by local carpenters from style books produced by architects such as Greene and Greene, Gustav Stickley, and others. The Craftsman style, the most popular residential style in American between 1905 and 1920, was an outgrowth of the Arts and Crafts movement, begun in nineteenth-century England by John Ruskin and William Morris. The ideal was the union of the fine and decorative arts, with individual craftsmanship to constitute real beauty in art, furniture, or architecture. Based upon the idea that a human habitation should harmonize with its external surroundings, California with its moderate climate was the perfect location for the establishment of the style. The Craftsman idea was broad enough to include farmhouses, suburban houses, mountain cabins, and commercial buildings, but by far its greatest application was for residential "bungalows."

During the 1920s and 1930s, a romantic nostalgia for the Hispanic culture culminated in the development of the Mission Revival and Spanish Eclectic styles, both in commercial and residential architecture. Built of brick or stucco, with colonnades, arches, pillars, tile roofs, decorative tile work and flooring, and metalwork, these buildings supplanted the bungalow as more affordable housing throughout California and the foothills. The style was also used extensively for commercial buildings, hotels (the remodeled Sonora Inn, for example), and public buildings.

The Art Moderne, or Art Deco, style is best seen in the county in the town of Tuolumne. There, in the mid-1930s, the Summersville High School Gymnasium and the Memorial Hall were built as WPA (Works Project Administration) projects. The buildings were constructed of timber-formed cast concrete, with square pilasters, geometric motifs, and cast decorative shields.

Only a very few early homes in Tuolumne County were designed by architects; the Segerstrom residence in Sonora, constructed in 1927, was one of them, as was the Ed and

the Stanislaus River drainage, crossing the crest of the Sierra near the routes of either Sonora or Ebbett's passes (Farquhar 1965, Morgan 1953). Most recent research places his crossing in the Ebbett's Pass area.

The Stanislaus River canyon was also chosen by the Bartleson-Bidwell party, the first group of American settlers to enter California from the east, over the Sierra Nevada. An accurate account of the emigrant train's route is also not known, but descriptions indicate that in 1841 the party arrived in what became Tuolumne County, following the Clark, then Middle, and probably South forks of the river to the ridge which separates the Stanislaus and Tuolumne river drainages. From there, they likely ventured into the vicinity of future Twain Harte, to Sonora, Jamestown, and west to the Knights Ferry vicinity. None of these settlers or members of other emigrant parties chose to stay in the area, and except for some possible later uses of the trail which have etched it into the landscape, no on-the-ground cultural remains below 4500 feet in elevation are known from this period. According to Sharon Marovich, wagon debris is still found on the trails (comments on draft contextual history, August 1993). Artifacts and information were put on display at the Tuolumne County Museum in 1975; an exhibit on the overland trail was expanded in 1992.

John C. Frémont's biggest contribution to county history is his anglicization of the name *Rio de Estanislao* to "Stanislaus River." During his First Expedition, it is unlikely that he ever ventured closer to the western county than Ripon (Jackson 1976). In February, 1844, Kit Carson and Frémont entered the high Sierra near present Alpine County during Frémont's Second Expedition. Setting out in May, 1843 to explore and map the Oregon Trail, Frémont reached Oregon six months later, but for some unexplained reason failed to return over the same route, turning south near Goose Lake. Hopelessly lost between the Walker and West Walker rivers, the party decided to cross the Sierra in order to reach Sutter's Fort to replenish supplies, thus making the first documented winter crossing of the Sierra Nevada by Anglo-Americans.

The explorations of these early travelers did little to advance the future county; it took the discovery of Sonoran miners to bring settlers and development into the area. Although there were a number of trails and exploration parties into Tuolumne County, the area was not very well known, and county terrain did not make travel particularly easy:

> The rugged terrain...severely limited foot and [later] vehicle traffic within the river corridor: Most transportation routes, beginning with Indian trails, intersected the river at favorable crossings or followed ridge alignments well above the river. Few trails or roads held to the riverbank for any appreciable distance [Moratto and Goldberg 1982:9].

Most of the major highways and corridors in California followed the routes of Indian trails, based largely on resource location (Davis 1961). Such routes include the El Camino Real, State Highway 99, and in Tuolumne County, State Highway 49, and probably portions of Highway 108. Indian trails were well-established in the county, and were generally followed by the early explorers and cartographers. Some examples of trails exist within the federal forest reserves in the county, but the authors know of none in the private, lower-elevation areas.

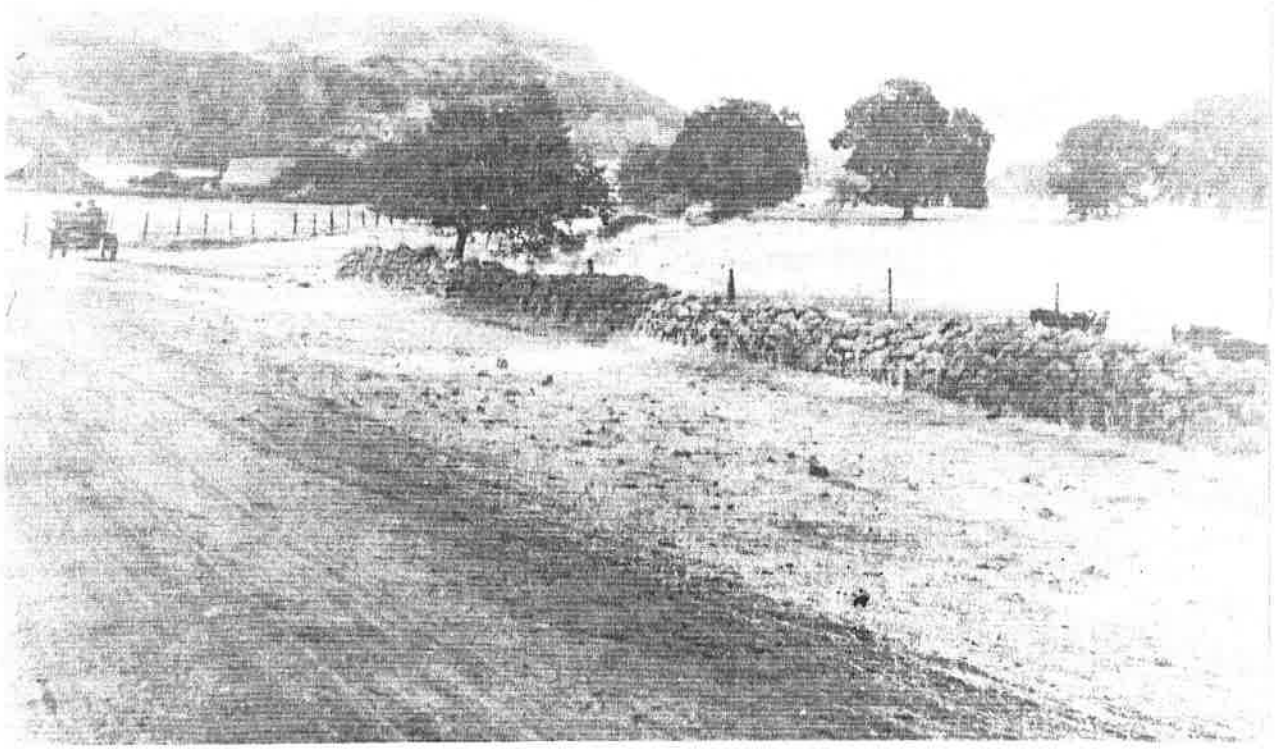

Figure 4.1 Road to Mountain Pass (no date). Tuolumne County Museum archives.

Among the early local roads which may have followed Indian trails, the Mule Trail, established by 1850 leading from Green Springs to Montezuma Junction near Mountain Pass, was one of the more likely. Another, O'Byrnes Ferry Road, was a public corridor by 1850.

It had the first chain suspension bridge built on the upper Stanislaus River in the summer of 1853. The bridge collapsed when overloaded on November 16, 1853. The second, covered bridge, was not erected until the latter part of 1863 and early 1864 by the Union Bridge Company. During the ten-year period between the collapse of the first bridge in 1853 and the construction of the Union Bridge, there was only a ferry at the crossing. O'Byrnes Ferry, crossing the Stanislaus River, was operating legally by November 1850. Subsequently, the road on the south side of the Stanislaus was declared to be public by the Tuolumne County Court of Sessions and its successor, the Board of Supervisors.

This pattern of roads leading to fords, then ferries, then successive bridge crossings held true for many areas of the county, including Ward's Ferry (bridged in 1879), Don Pedro (the 1860 Sanborn Bridge), Stevens Bar (Deering Brothers Bridge of 1859), Central Ferry (late 1850s Central Bridge replaced the ferry; bridges also washed out in the flood of 1862), Jacksonville Ferry, McLean's Ferry (the first county ferry, started in the fall of 1849 about one mile above Melones), and more. Most physical remains that might be related to the time of the ferries (guy wires, eyehooks, hooks, landings) and early bridges (abutments) are now gone (generally under reservoirs), but the names of those crossings survive today as road names: Parrotts Ferry, O'Byrnes Ferry, Reynolds Ferry, Wards Ferry, and Don Pedro Bar. Francis Bishop (n.d.) has written a history of the ferries on the Stanislaus River and an article on Tuolumne County's early ferries can be found in *Chispa* (Nau 1971).

Once gold was discovered, transcontinental routes to California became heavily traveled with an estimated 200,000 people arriving overland in the period from 1849-1860 (Owens 1992:26). The Clark-Skidmore party was the first wagon train over Sonora Pass, arriving in Columbia in August 1852. No other parties crossed until the following year, 1853, when the well-known Duckwall party, the Washington-Trahern party, and scores of other groups reached Upper Relief Valley in late September. Captain John Ebbetts also crossed over Tuolumne County's Emigrant Trail in the autumn of 1853, going east and returning west over the pass that now bears his name (Incidentally, he mentions the use of skis, but may have been referring to snow shoes.).

Slightly to the south, Lt. Tredwell Moore, who led the first white party into the Mono Basin in 1852, traversed the Sierra Nevada over Mono Pass, following an established Indian trail. He entered the basin via the future-named Bloody Canyon on a punitive expedition against Chief Tenaya and his band of Yosemite Me-Wuk. Moore made discoveries of gold and other

minerals while exploring the region north and south of Mono Lake, samples of which he exhibited upon return from his abortive attempt to capture Tenaya. An enterprising Mariposa prospector, Leroy Vining, was impressed enough to make the arduous trip east over Mono Pass in the fall of 1852 with a few companions in search of precious metal and remained to establish the first settlement in the basin.

Over the next few years a few miners and prospectors continued to use the Mono route. Colonel Alexy W. Von Schmidt, who was commissioned to survey the Mono Basin and extend the Mount Diablo Base Meridian in 1855, traversed the Mono Trail on his first trip into the area. He subsequently used the easier emigrant routes to the north, as did most of the travelers into California. More complete histories of the prehistoric and historic trails throughout this area which became Yosemite National Park can be found in Snyder (1989 and 1990).

The Sonora Pass road, which quickly became the most heavily traveled route into Tuolumne County after its completion in 1864, was first surveyed in 1860. A portion of it, however, had been built by the Tuolumne County Water Company as early as 1852, and likely followed the Indian trail which traversed the ridge between the Stanislaus and Tuolumne drainages, later known as the "Ice Trail." The Columbia and Stanislaus River Water Company extended the road to Cow Creek during construction of their canal system at Donnell's Flat in the 1850s. It was called the "Cow Creek Road" then. This same route was probably used by the Bartleson-Bidwell party as well, as the easiest route to travel. Almost all early roads in the county followed the tops of ridges where possible so that hillsides would not have to be excavated and drainage would be better. It was the mining boom in the Eastern Sierra that provided the impetus for the completion of the Sonora-Mono Wagon Road, however, as it was the most direct route between Sonora and the rich strikes in the Bodie region. Officially opening 22 October 1864 as a one-track road with turnouts, contractor J. D. Patterson took the route, in a buggy, to Aurora, Nevada two days later. Freight wagons soon used the road daily, taking food and supplies to the isolated mining camps located in an inhospitable climate where only minimal produce could be grown. Portions of the road/trail can still be found paralleling and crossing Highway 108, including a fine rock-reinforced segment near Confidence (Appendix E, TCH 44) or superseded portions visible along the Patterson Grade.

The mining industry also caused the first segment of the Tioga Pass Road to be built, in part over the old Mono Trail. Constructed by the Great Sierra Consolidated Silver Mining

Company, the Tioga Road, or "Great Sierra Wagon Road," was completed in 1883 as far as the Tioga mining district east of Yosemite. When the mines were closed, a year later in 1884, the road was abandoned; it wasn't until 1909 that a connection again was made from the eastern Sierra into Yosemite. The Tioga Pass Road was donated to the U. S. Department of the Interior in 1915, and is now one of the more heavily traveled trans-Sierran routes in the summer and fall.

Numerous avenues between towns, camps, woods-mills, mines, ranches and all the other human additions to the landscape were developed especially during the period 1849-1900 (Appendix E, TCH 12). With the advent of the automobile and other vehicles powered by gasoline, there grew a state-wide interest in transportation. In 1901 the California Legislature adopted the Sonora and Mono Toll Road from Long Barn to Bridgeport (in Mono County), one of the first ten state highways. Segments of the road can either be seen beside or are still travelled on parts of present Highway 108 (California Department of Transportation Library). The bridge crossing Wood's Creek at Rawhide Road, built in 1908, is the only bridge recognized by Caltrans (1990) as having historical significance in the county[1]. A Caltrans assessment of all bridges in the state lists none of statewide significance in Tuolumne County. It should be remembered by people using this study however, that a local level of significance was apparently not considered in this study. In addition to Highway 108, the very historic and old Highways 49 and 120 were adopted into the state system, the former in particular because of its historic identity. The Ponderosa Way was adopted by the United States Department of Defense as an alternative highway system in case of national emergency (Appendix E, TCH 83). Early maps depict the location of these roads, trails, and byways, so many of which survive today either as the county's paved arteries or as county back roads.

The Railroads

Although the first common carrier railroad in California was built by 1852, and the transcontinental rails of the Central and Union Pacific were laid by 1869, it was not until the end of the nineteenth century that Tuolumne County began to have glimmer of a railroad. The California and Nevada Railroad surveyed a route in 1881-1882, the lower elevations of

[1]The Sullivan Creek Bridge (recorded for this study as TCH 57) on the old Stent-Jacksonville Road is contemporary with the Rawhide Road Bridge, but was apparently outside of Caltran's study-area. Caltrans also recognizes the Sugar Pine Railroad trestle in Twain Harte as a bridge in its study; see next section).

which were closely aligned with the future Sierra Railway. The first railroad in the county, the Sierra Railway listed in its 1897 Articles of Incorporation that it intended to operate a standard gauge railroad between the city of Oakdale (on the Southern Pacific line) and the City of Angels, in Calaveras County (Coleman 1952:165). A major investor and developer of the project was Thomas S. Bullock, a financier from New York, by way of Arizona, who contributed money, materials and know-how toward the building of the Sierra Railway, largely to gain access to the timber patents he was buying in the Sierra Nevada. Along with W. H. Crocker and Prince Poniatowski, Bullock completed the railroad from Oakdale to Jamestown in 1897 (Deane 1960).

The tracks of the railroad were hardly in place before an article in Sonora's *Union Democrat* asked "Where Will Road Go? (October 23, 1897). Opposition to the coming of the railroad to Sonora ran high at the time, but by the time the train finally pulled the coaches full of cheering people into the depot, animosity was apparently forgotten (*Union Democrat* February 12, 1898, March 4, 1899). What the townspeople did not know was that the Sierra Railway had already signed a construction agreement to extend the line 12 miles to the town of Summersville (*Union Democrat* March 4, 1899), a project that would forever change the nature of the economy and the appearance of Tuolumne County. When this line was completed in 1901 it had penetrated further into the Sierra Nevada than any other railroad in the state of California, excepting the Central Pacific (Deane 1960:318). Significantly, the Sierra mainline provided access for two new railroads, to be used in the woods for logging: the Sugar Pine and the Hetch Hetchy & Yosemite Valley.

By 1919, several railroad logging companies operated in Tuolumne County: the West Side Flume and Lumber Company (the Hetch Hetchy & Yosemite Valley Railroad); the Standard Lumber Company (which operated the Sugar Pine Railroad); the Empire City Railway; the Yosemite Lumber Company; and the California Peach and Fig Growers Railway (Deane 1960; Supernowicz et al. 1987: 76; Wurm 1970a, 1970b).

Importantly, the railroads, while hauling timber, were also looking for routes across the Sierra and into Yosemite for tourism reasons. The surveying engineer of the Sugar Pine, W. H. Newell, not only set a course from Campbells' orchard to the forests in the Stanislaus drainage, but was also instructed to be mindful of a route across the Sierra Nevada (*Union Democrat* March 4, 1899). Bullock was involved with other operations at the time, not the least of which was the Yosemite Short Line Railroad (locally called the "Turkey Trot Trail"),

Bullock's attempt to create a common carrier into Yosemite National Park. Many events happened over the next few years (not the least of which was the San Francisco earthquake in 1906 which created financial reverses for many), and Bullock had to abandon the Yosemite Short Line. He was left not only with the narrow gauge materials that he had purchased, but also with a group of railroad graders from Japan, whose contract had yet to expire. Bullock quickly put the graders and materials to good use, building a narrow gauge system of nearly 12 miles of track plus several inclines to take timber out of the mills at Empire City and Cold Springs (Hungry Wolf 1978). This system, known as the Empire City Railway, used inclines to haul lumber to the top of the ridge, near Stoddard Springs. Oxen teams then took the milled product across dirt roads to the Sugar Pine Railway station at Middle Camp, where lumber could be transported by rail to Sonora and beyond. A cursory look at a vicinity map will show that it would not be long before Bullock would connect the rails of the Empire City Railway to those of the Sugar Pine at Lyons.

The Sugar Pine originally hauled lumber from the woods-mills across the 14+ miles of standard gauge rail from Lyons Reservoir to Campbells (Ralph) Station (Appendix E, TCH 38). At that time there were eight timber trestles and a number of timber, rubble and terra cotta pipe culverts (California Railroad Commission 1915:3). Other features include as many as 24 logging camps, 16 or more sidings or stations (Appendix E, TCH 24), numerous water tanks, oil tanks, landings, junctions, inclines and spurs. Portions of the line contained 40 pound rail (rail which in a three foot length weighed 40 pounds), so thin that "this light weight steel necessitates the use of more than the usual number of ties per mile" (California Railroad Commission 1915:13). The trains, while carrying partially milled lumber down the hill, transported an extraordinary amount of alcohol–wines, liquors, and beers–to thirsty miners, loggers and others in the mountains on the uphill journey. Company records indicate that in the year 1910 alone, some 25 tons (including the weight of the bottles) of alcohol were transported into the woods.

A similar story developed for each of the other logging railroads, especially the West Side Logging Company railroad. The West Side Flume and Lumber Company and the West Side and Cherry Valley Railroad (WSRR), had headquarters in the town of Tuolumne (Appendix E, TCH 39), also the terminus of the Sierra Railroad (Deane 1960; Ferrell 1979). Principal investors behind the construction of this system were again the Crocker family and Thomas Bullock, still hoping to find a tourist route to Yosemite National Park, under the guise of a logging railroad. The WSRR developed into a 72 mile-long mainline, with 49 camps, and was

unusual in that it was a narrow gauge line which operated into the 1960s.

South of the West Side and the Sugar Pine systems was the railroad logging system operated by the Yosemite Lumber and later Yosemite Sugar Pine Lumber Company, organized in 1910. This system depended on mills located outside of the woods, and thus the trains transported cut logs. It included more than 59 miles of trackage, 12 camps, and was once the seventh largest lumber producer in the west (Isaacs 1989).

Each of these railroads have had portions or all of their systems evaluated for the National Register of Historic Places. None of the systems have been physically surveyed in whole however. There are numerous remains of these systems left on private land in the woods, and even more remaining on federal land. Several logging camps are extant, including at least one located on private land with standing structures. Other remains include the grades themselves, sometimes with ties in place, and sometimes not, and with relatively large amounts of equipment (including steam donkeys) left behind. Trash dumps containing bottles and cans from this era are common archaeological deposits, although usually located with the lands of the national forest.

County railroads were built for purposes other than hauling logs, timber, supplies, or passengers. Several were built to assist in the construction of the county's dams. The Union Construction Company grades, associated with the construction of Stanislaus Powerhouse, can be found, some on private inholdings. The railroad grade at Relief Reservoir is evident on the east shore, segments of the Sierra Railway spur to the first Melones Dam are visible, and portions of the grade to old Don Pedro Dam were documented for this study (Appendix E, TCH 49). The Hetch Hetchy Railroad, built as a construction railroad by the City and County of San Francisco also has well-preserved segments remaining, even after the removal of the rails in 1949. In the mid-1930s the Sierra Railroad hauled cement and other supplies across the Hetch Hetchy line during the raising of O'Shaughnessy Dam. Some of the mines in the county had rail lines, including the Harvard Mine branch which passes under Highway 108 at Woods Creek, the Dutch-App spurs, the Draper, and the Eagle-Shawmut on the ill-fated Yosemite Short Line. Lime from the many plants operated by the California Lime Company was hauled on the Sierra Railroad and became extremely important in the economy of the county (Wyatt 1984). A privately owned tramway which exists at Spring Gap may be among the last surviving trams of its sort in the state. Other tramways were constructed on the Hetch Hetchy system at Early Intake and at Moccasin Creek, and on the Sugar Pine Railroad

leading to the South Fork Mill.

The rate of survival of the many train routes in Tuolumne County is relatively high, and importantly, so too are the associated ancillary remains such as camps, landings, sidings, spurs, water and oil tanks, trestles, and equipment.

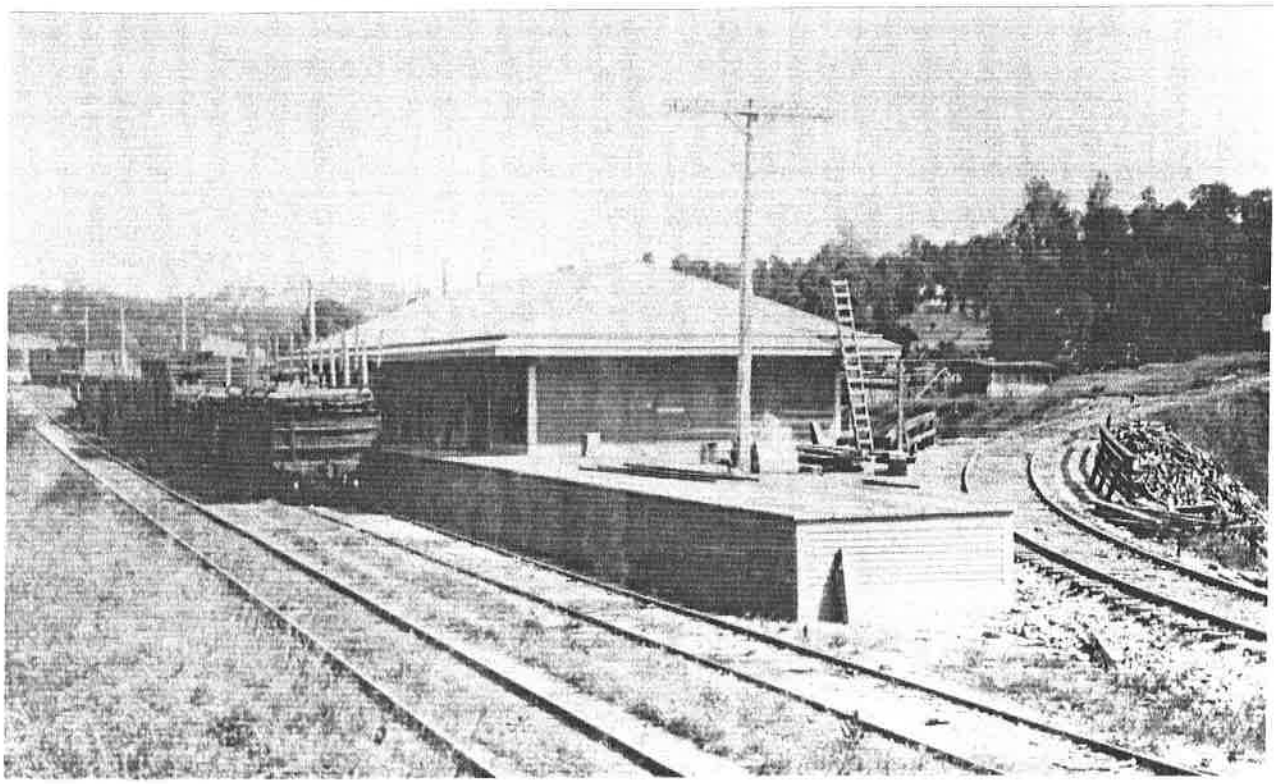

Figure 4.2 Hetch Hetchy Junction (no date; Sierra Railroad to the left, Hetch Hetchy Railroad to the right). Tuolumne County Museum archives.

Communication

Communication networks are more difficult to define for a study such as this. Most early communication took place by word-of-mouth and later by the written word. Post offices sprang up quite early; one was established at Sonora on 28 July 1851, housed in the first wood-frame post office in the state (1850? 1851?). By 1856 there were no fewer than 10 post offices in the county (Heckendorn and Wilson 1856).

Soon after the miners came, several newspapers emerged, the first being the *Sonora Herald*, published on the Fourth of July, 1850, followed by the *Columbia Gazette* in October of 1852.

Telephone and telegraph service was also important, and several old lines can still be seen in the county. The first county telegraph line was built by 1855, with the first telegram sent from Stockton to Sonora on February 17th of that year. By 1871, Sonora was connected by telegraph to the southern county and Yosemite. Most of the extant historic lines are those associated with the railroads: there is a fine example of a telegraph line adjacent the Sierra Railroad just outside of Standard.

Sonora received its first telephone service in 1895, followed by a telephone book issued in 1897 (Appendix C). Quartz Mountain had early telephone service with its own switchboard (after repeated complaints by subscribers of eavesdropping) and a few physical remains of that system may still be seen. While cultural remains can still be found in the county, they are more likely to survive adjacent to the rails or older roads which are also extant.

Figure 4.3 Mississippi House Gas Station and Store, 1949. Tuolumne County Museum archives.

Summary and Synthesis

The development of communication and transportation networks in Tuolumne County began with the Indians and continues today with the rerouted Highways 49, 108, and 120, and the construction of cell-sites for cellular telephone transmissions. The county developed common

carrier and logging railroads, in addition to construction railroads, had a full network of early roads, stage routes and parallel roads (such as the Stockton and Sonora Wagon Road and the Stockton and Sonora Stage Road), haul roads from mines, major thoroughfares, emigrant trails, and more. Numerous important people are associated with many of these, including John Bidwell, Joseph Walker, Thomas Bullock, Charlie Crocker, John Wallace, and William Newell, among others.

Property Types

Owens (1992) has detailed several property types in his contextual study of historical trails and roads. These are:

1. Hispanic Exploration, Trade, and Immigrations Routes
2. Trails and Roads in Hispanic California
3. Fur Trade Routes and Frémont's Surveys
4. Overland Emigrant Routes Before 1848
5. Gold Rush Era Emigrant Trails
6. Wagon Roads and Stage Roads
7. Overland Mail and Express Routes
8. Improved Roads and State Highways
9. Highways and Roads Constructed Since 1941

Although this scheme covers the major categories of transportation in the state, for the purposes of Tuolumne County it omits several important property types: common carrier, logging, and construction railroads and Native American trails. The study also does not consider resources associated with these linear systems, such as those recorded (Appendix E) has part of this study: roadhouses (TCH 6, 30, 63, and 81); water troughs (TCH 5); garages (TCH 19); liveries and smiths (TCH 46); lodges (TCH 43); and bridges (TCH 57).

Each of the early transportation routes should be considered sensitive to cultural resources other than the historic corridor itself. For the purposes of identification, it will be important to consult the General Land Office maps and the historic maps mentioned earlier in this report. The California State Office of Transportation maintains a database of properties located adjacent to or related to State roads. In some cases there have been evaluations of significance; unfortunately many of these look at the statewide level only and forget that some of the resources may be significant at the local level.

Relative Number Remaining/Condition

According to the personal observations of the authors and the Tuolumne County Historian, there are hundreds of segments of historic transportation and communication systems present in the county. Several of these, including the Sugar Pine Railroad (more than 400 miles in length, for example), the Sierra Railway, the West Side Logging Company railroad, the Sonora-Mono Toll Road, the Angels Branch of the Sierra Railway, and others have been evaluated for the National Register of Historic Places. Still others have been documented in part for both state projects and federal undertakings, and should be included in the Tuolumne County Planning Department's new Geographic Information System overlay. The integrity of the surviving resources can not be guessed; new segments of previously unrecorded roads are located on many surveys, for example, and often contain well-preserved rock walls and other features.

CHAPTER 5: THEME II/MINING

Theme:	**Mining**
Time:	**A. D. 1848-1942**
Location:	**Tuolumne County**
Properties Recorded:	**TCH 4, 10, 13, 16, 27, 28, 30, 31, 34, 36, 42, 47, 50, 53, 55, 60, 67, 68, 71, 78**

Background

Gold mining history has captured the fancy and interest of Sierra Nevada historians and archaeologists for years. Like every other county along California's Mother Lode, the most booming part of Tuolumne County's history began with its mining operations. County folklore credits the initial discovery of gold to James Savage, Benjamin Wood, and company, in July 1848 on the future-named Wood's Creek near its crossing of what is now the Stockton Road (Highway 108). However, Indians working for Charles Weber found gold in the Stanislaus River in May or June of that year (Appendix C), and should more properly be acknowledged for the first recorded find. Nevertheless, it is not known who first mined for gold in the region, but pertinent evidence points to people of Hispanic origin. Accounts of Mexicans from Sonora, Mexico, working the flats and streams, are found in the diaries of Americans who arrived in the area in 1848. There are also accounts of Native Americans assisting with mining and leading miners to specific locations, but there is no indication that they ever mined the precious metal for themselves prior to the arrival of Hispanic people.

In the 1830s and 1840s, Spaniards and Mexicans conducted both placer and quartz mining for gold in the area which became Ventura County (Frazier Mountain, Lockwood Valley, Piru Creek). In 1842 Alfred Robinson carried 20 ounces of gold mined there through Mexico to be assayed at the Philadelphia Mint. This event caused little fuss, especially when compared with the 1848 "official" discovery of gold in California which precipitated a worldwide rush of people to the Sierra Nevada foothills. Virtually overnight, the land was populated with gold-seekers from the Atlantic seaboard, the Midwest, Central and South America, the South Pacific, Australia, Europe, and Asia. In addition, California was annexed to the United States that year, formalized by the Treaty of Guadalupe Hidalgo. By the end of 1849 an estimated

10,000 gold-seekers had arrived to mine in the Stanislaus River area (Hall 1978). The movement that ensued has been called the greatest mass migration in human history: an economically, ethnically, and culturally diverse population converged upon the Sierran foothills, all in search of the promised gold.

Demographically, mining attracted a specific type of individual: at first, young, unmarried males seeking quick wealth during the Gold Rush era; later, married and unmarried men looking for employment in hard-rock mining. The ethnic composition of the Stanislaus River area included large numbers of Hispanics, Chinese, and both Anglo and non-Anglo Europeans (Greenwood 1977); similar ethnic and racial mixes were found in other county mining camps (Chapter 7). Given the composition of the population and the vagaries of the mining economy, with its cyclical pattern of prosperity and depression, instability was injected into the population from the outset. Immigrants flowed in with each mining boom and poured out with the arrival of hard times. So too, did support industries succeed or fail depending upon the miners' fortune (Chapter 9).

Mining accounted for the location and names of many of the towns and communities within the county. The larger towns were located where major strikes occurred or where supply camps sprang up to provide necessities for the surrounding encampments (Sonora, Summersville, Garrote, Jacksonville). The availability of water might be reflected in the name (Campo Seco meaning Dry Field or Camp) or the results of mining activity would be evident (Poverty Hill, Humbug Gulch, or Half Ounce Gulch). Some settlements were named for individuals (Soulsbyville for the Thomas Soulsby family, Jamestown for Colonel George F. James, Shaw's Flat for Mandeville Shaw, Tuttletown for Judge Anson Tuttle, Kincaid Flat after Almirin Kincaid and so forth) or the dominant ethnic or cultural group mining the area (Chinese Camp, Kanaka [Hawaiian] Creek, Knickerbocker [New York or Dutch] Flat, Mormon Gulch, Yankee Hill, Chili Camp). Features of the area such as springs (Springfield, Gold Spring), mills (Saw Mill Flat), trees (Big Oak Flat) and minerals (Quartz Mountain) also lent their names to the workings. Others reflected the patriotism to the United States (Columbia, American Camp, Union Hill). Many of these settlements no longer exist in Tuolumne County, but their names are recollected in those of historic roads. It is important to remember that many of these camps will survive as archaeological resources, full of information (Appendix E, TCH 30, 36, 50, 67); this means that it is imperative that the cultural resources specialist conduct thorough and adequate prefield research to determine the potential presence of such precious, dwindling resources.

Until recent times, socioeconomic development in the area has occurred primarily within the context of the mining industry. Not only did the industry lead to the formation of Tuolumne County in 1850, but mining was the main pillar of the local economy for nearly 75 years thereafter. Almost all other businesses operated within the shadow of mining and were directly or indirectly affected by it. As mining changed over the years, from early placer mining to hydraulic (1849-1860) and hard-rock (or quartz) mining (especially 1888-1920), associated businesses changed as well. Additionally, during the 1880s and 1890s, many of the mines consolidated, facilitated by advances in technology and financing.

Placer Mining

The richest deposits of retrievable gold in California were to be found in the foothill region of the Sierra Nevada. How the gold came to the foothills is an involved story of geological processes. Basically granitic rock, quartz lodes, and the contact zones were washed, eroded, naturally milled, and concentrated the native gold in former and present streams and gravel beds. It was this "freed" or placer gold which attracted the Gold Rush miners. Placer mining was the initial extraction method used in Tuolumne County, already familiar to miners from Mexico, Central and South America, where placer mining had occurred since the 1500s and collection of gold had likely occurred for millennia. Typical tools of the placer miner include the pan or batea, a cradle or rocker, a sluice box, a long tom, or a mixture of these. Miners would literally move the streambeds, removing gravels, sifting them, and redepositing them, all the while storing water in check dams (Appendix E, TCH 13), and redirecting the streams into ditches (Appendix E, TCH 16). Characteristic remains of waste rock[1] can be seen in most drainages below 3000 feet in elevation. Breached dams, ditches, flumes, terraces, and rock walls, in addition to the waste rock are remains typically found today along drainages which have been placer mined.

There are some other types of placer mining which leave characteristic landscapes, but are often overlooked in field reconnaissance. Dry-panning (or dry-winnowing) and ground sluicing are two of these. In cases where water was not available to wash pay dirt, miners would gather the dirt in blankets and toss it into the air. The dirt would blow away in the breeze, while the heavy gold would fall back into the blanket. The remains of such activity

[1]The placer mining remains of hand-stacked waste rock in streambeds is not correctly termed "tailings." Tailings refers to processed residue which results from the milling process (extraction of ore).

would be small dirt mounds formed in rather regular patterns. It has been said that the "mounds" on Highway J-59 are the result of dry-panning, but there are other examples in the county which are unfortunately not so observable. Dry-panning was not very effective, or healthy, or efficient, and therefore, those that practiced this method were often on the fringes of the settlements (e.g., the Chinese, the Indians). Ground sluicing and booming, early hydraulic methods of washing soils by gravity down a hill to pan or sluice the remains at the bottom, is not common, but is found in Tuolumne County. Typically there will be a water source higher than the area which was sluiced, sometimes there will be a channel straight down the hill, or there will be a characteristic rippling on the hillside which resembles numerous, closely-traveled cattle trails.

Some miners found placers by digging, often to bedrock. "Coyoting," a technique that was used in hard rock mining and in placer mining in other states, was sometimes used in Tuolumne County. With this method, the miner would dig a "shaft" to the pay dirt, and then drift into the streak from a mini-adit. This sort of digging removed enormous quantities of waste rock, leaving massive piles of detritus behind.

The early miners quickly exhausted the gold in the streambeds; soon they were searching out the ridgetops with Cenozoic-age gravels. As early as 1853, Dr. J. B. Trask (the first State Geologist), described the gravels and their mining, by recognizing that they were ancient rivers. During the latter part of the nineteenth century, Tuolumne County miners concentrated on mining these gravels as an industry of the area. The gravels were generally washed with high-head streams of water gushing from hydraulic monitors (Appendix E, TCH 5); the dislodged soils were then passed through a sluice box, much in the same manner that placer gold was extracted from stream gravels. A secondary method of acquiring the gold was described in Chapter 2, where horizontal tunnels or drifts were driven into the volcanic or other rocks. There is a remarkable amount of placer mining evidence remaining in the county, although some of the better examples have been eradicated in recent years by development (Appendix E, TCH 27, 31).

Hydraulic Mining

After placer mining began to decline in the 1860s, the advent of hydraulic and quartz lode mining for gold gave the region a more permanently based mining economy, one which continued–with cycles of expansion and contraction–through a period of prosperity in the

1930s and in some areas until the 1950s. Hydraulic mining, with its dramatic landscapes and large open pits, never advanced as much in the Southern Mines, including those in Tuolumne County, as it did in the Northern Mines of Placer, Nevada, Amador, and El Dorado counties. Nevertheless, remains of hydraulicking are what create the remarkable "moonscapes" on the approach to Columbia, near Springfield, and Columbia airport, and to this day are one of the better hydraulic landscape examples extant in the state.

Born in California, hydraulic mining began in the 1850s when Anthony Chabot attached a wooden nozzle to a canvas hose and washed ancient river gravels north of the county. Over the next 20 years, miners improved upon Chabot's design, developing "the Little Giant" used for more than 100 years thereafter. The Little Giant, or monitor, required vast amounts of gravity-fed water at high head to spray on the Tertiary river gravels. Torrents of water would melt away boulders, trees, gravel, and dirt, all mixed with gold. This technique, always the more successful method of extracting placer gold, reached its peak in 1880, when miles of ditches, flumes, reservoirs, tunnels, and pipelines were constructed to supply water to the operations, notably at Columbia (Appendix E, TCH 10), Cherokee, and east of Groveland on the gravel range.

Although a simple and economic way of recovering rich nuggets deep in the gravels, hydraulic mining created disastrous problems downstream where thousands of cubic yards of dirt and rocks were sent into the Central Valley. The tons of waste that entered the valley rivers caused the water to rise, resulting in floods, which destroyed crops, agricultural fields, and buildings. The bed of the Sacramento River, for example, rose 16 feet. Fighting back, the farmers were successful in curtailing hydraulic mining in 1884, when Judge L. B. Sawyer of the United States Circuit Court granted an injunction against the North Bloomfield Mining Company of Nevada County, making it illegal to discharge mining residue into rivers and streams. Hydraulic mining was effectively ended in California and Tuolumne County. The 1893 Caminetti Act permitted hydraulicking if debris-impounding dams were constructed, but the construction and maintenance of the dams were generally too expensive and not very successful (Wagner 1980:37), and so was not widely used in the county.

Drift mines, especially in the Shaws Flat/Springfield area, at Cherokee, and beneath Table Mountain, attempted to take up the economic slack after hydraulic mining was banned, but by 1915 only eight drift mines were operating in Tuolumne County, employing about 80 men (Hamilton 1915:166-168).

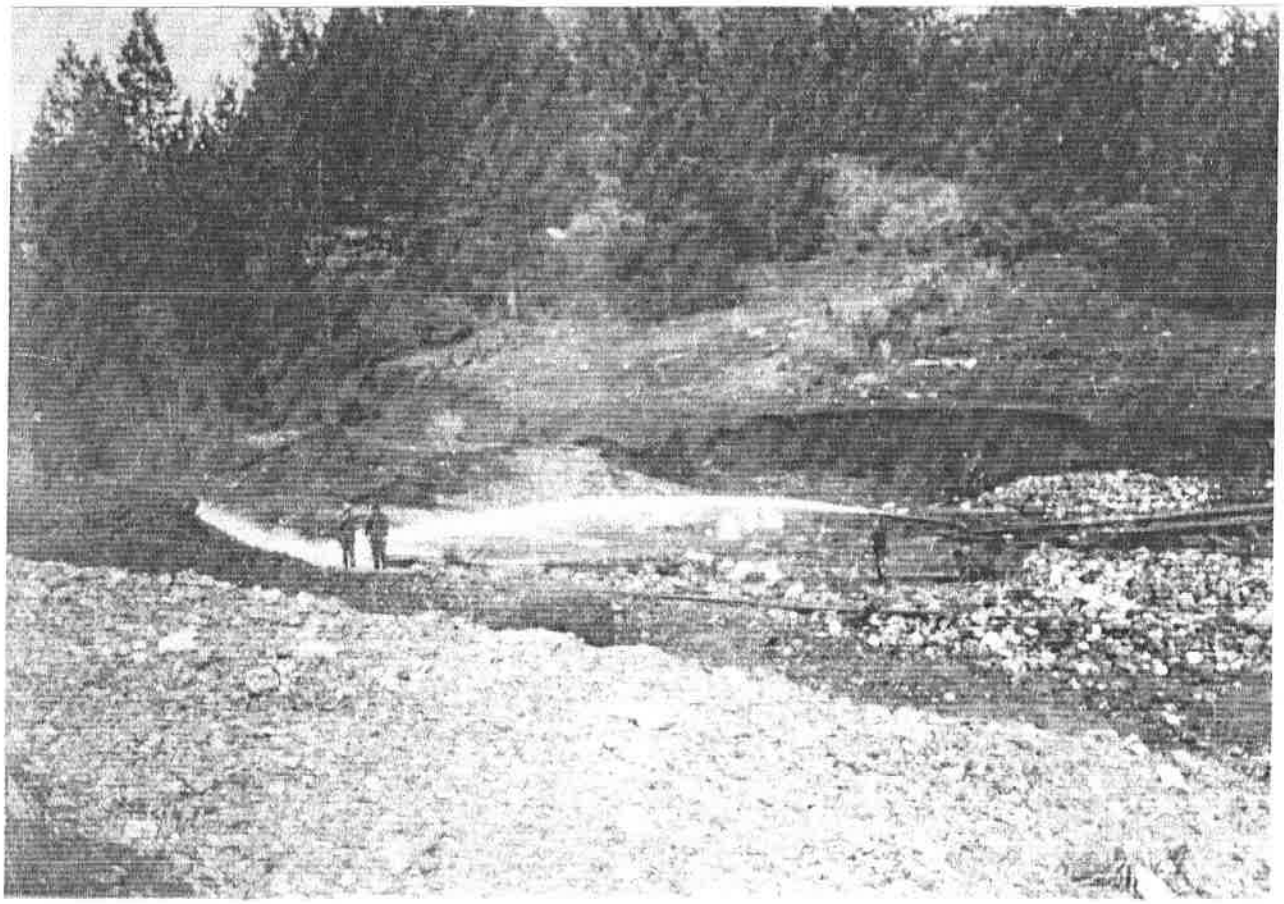

Figure 5.1 Conlin's Gravel Mine at Knickerbocker Flat (1895?). Louis Dondero had hydraulic operations there during the 1870s, with a continuous line of sluice boxes from Knickerbocker to Saw Mill Flat. Tuolumne County Museum archives.

Hard Rock Mining

Hard rock (or quartz) mining began in Tuolumne County in the 1850s as well. Some of the earlier quartz mines continued operating for many years: Carlin (1851), Cherokee (1853), Buchannon (1856), Confidence (1856), App (1857), Soulsby (1858), Butler (1850s), Dutch (1865), and the Trio/Whiskey Hill (1865). Hard rock mining is a method of exploration that is largely subsurface, prospecting for gold-bearing quartz veins. The history and geology of such mining are far too complicated and detailed to discuss here, but this sort of mining left many remains on the landscape. Shafts, adits, haul roads, waste rock, prospects, surface vein workings, and tunnels are just some of the surficial remains that might be observed. Far more remain underground.

The early mines did not leave much of a scar on the landscape. It was the second boom, or

second gold rush, which began in 1888, that truly changed the face of the mined countryside.

> Beginning about this time and continuing for several decades, great improvements were made in mining and milling methods. These changes enabled many more lode deposits, especially large but low-grade accumulations, to be profitably worked. The improvement of air drills, explosives, and pumps, and the introduction of electric power lowered mining costs greatly. The introduction of rock crushers, increase in size of stamp mills, and new concentrating devices, such as vanners, lowered milling costs. Cyanidation was introduced in 1896 and soon replaced the chlorination process (Clark 1970:7).

This later hard rock mining operation was much more of a business, a serious enterprise, with serious investors. Physical remains include shafts and adits, stamp mills (Appendix E, TCH 68), haul roads, equipment, leach fields, powder magazines (Appendix E, TCH 47), mill tailings ponds, waste rock or dumps, workers' housing, company offices (Appendix E, TCH 42), and superintendent's housing (Appendix E, TCH 34), like that exposed in 1992 at the inundated mining town of Melones.

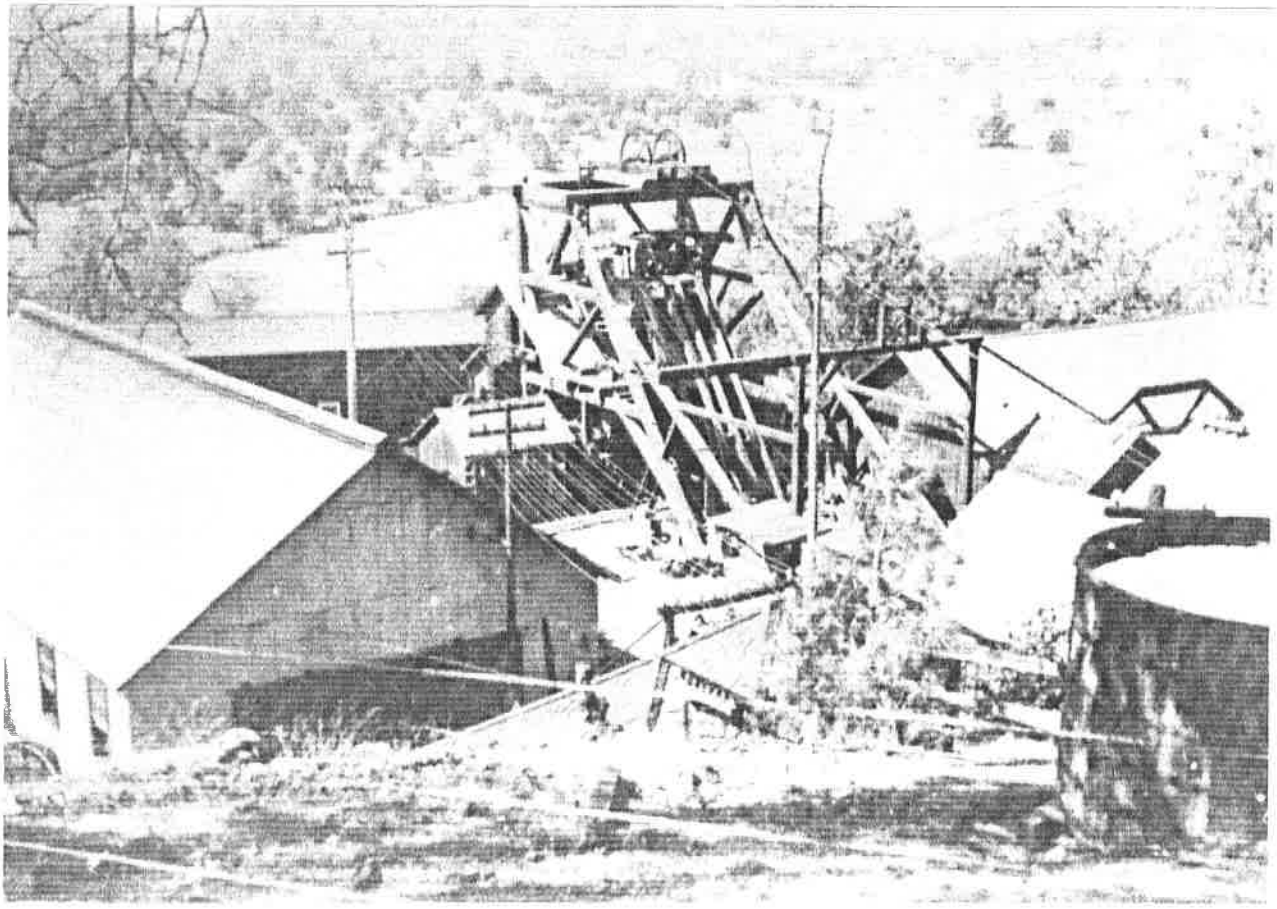

Figure 5.2 The App Mine, Quartz Mountain. Tuolumne County Museum archives.

Mines throughout Tuolumne County were reopened, often with new names and under new ownership, the larger ones by corporations with large amounts of capital to invest in the construction of modern and larger stamp mills and recovery systems. The Eagle-Shawmut near Jacksonville and the Harvard Mine near Jamestown were the largest of these, although hundreds of small and moderately-sized mines were developed at Confidence, Soulsbyville, Jamestown, Stent, Quartz, Carters, Big Oak Flat, Groveland, Tuttletown, Sonora, and other locations (Appendix E, TCH 60, 71, and 78).

Figure 5.3 Alameda Mine (French Flat Road). Flag flying on the Fourth of July, 1898. Tuolumne County Museum archives.

This boom continued for two decades, and still by 1915, mining was the major industry in the County, although many of the mines were again idle (Hamilton 1915:136-166). World War I, which brought prosperity and high costs to California, caused a decrease in gold production until the stock market crash in 1929. A short boom occurred at the end of the Depression,

continuing until 1942, causing gold production to increase, reaching its greatest height in 1940. The rise in the price of gold from 20^{67} to 35^{00} an ounce, along with the low operating costs resulting from the Depression, created yet another boom for the mining companies (Clark 1970:7-8). The Eagle-Shawmut Mine was the largest in Tuolumne County during this period, but many others operated successfully. In October of 1942 the War Production Board Limitation Order L-208 was issued, closing all of the mines, most of which never reopened.

It was fully three decades before the hard rock mines were to produce again. The Sonora Gold Mining Corporation acquired the Harvard Mine and a number of nearby Quartz Mountain mines in September 1983 from Gulf + Western, and reopened the Harvard, Crystalline, and Alabama mines as a large open-pit operation, constructing a modern ball mill, and employing 225 workers. The final chapter of this ambitious venture, stimulated by increased demands and higher gold prices and financed largely by foreign capital, has yet to be told. Some 500,000 ounces have reportedly come out of this new mine, including the 60 pound nugget recovered from the Crystalline, Christmastime 1992. One hundred and forty-five years after the initial discovery, Tuolumne County is still yielding up its gold.

Other Kinds of Mining

This chapter has focused on the mining which extracts precious metals, in Tuolumne County, generally gold. Extraction of other rocks and minerals might have been included here, such as limestone, lime, and its more refined sister, marble, but instead are discussed in Chapter 9, under Industry. The extraction of marble in particular at the county's quarries(Appendix E, TCH 53), left remains and landscapes of a grand nature, as seen in Figure 5.4.

Another type of mining which should be recognized is dredging (or "sluicing on a boat") which took place on the lower Stanislaus and Tuolumne rivers. Bucket-line and dragline dredges became important producers of placer gold in the twentieth century. Although introduced into California in 1897, dredging didn't become a viable method of mining in Tuolumne County until the 1930s, when dredges worked on the Stanislaus and the Tuolumne rivers, Moccasin Creek, and at Montezuma. "Doodlebug" dredges were used on the hillsides below Jamestown during the 1940s(?). Both forms of dredging have left characteristic scars on the landscape, although most dredger gravel bars are not under reservoirs.

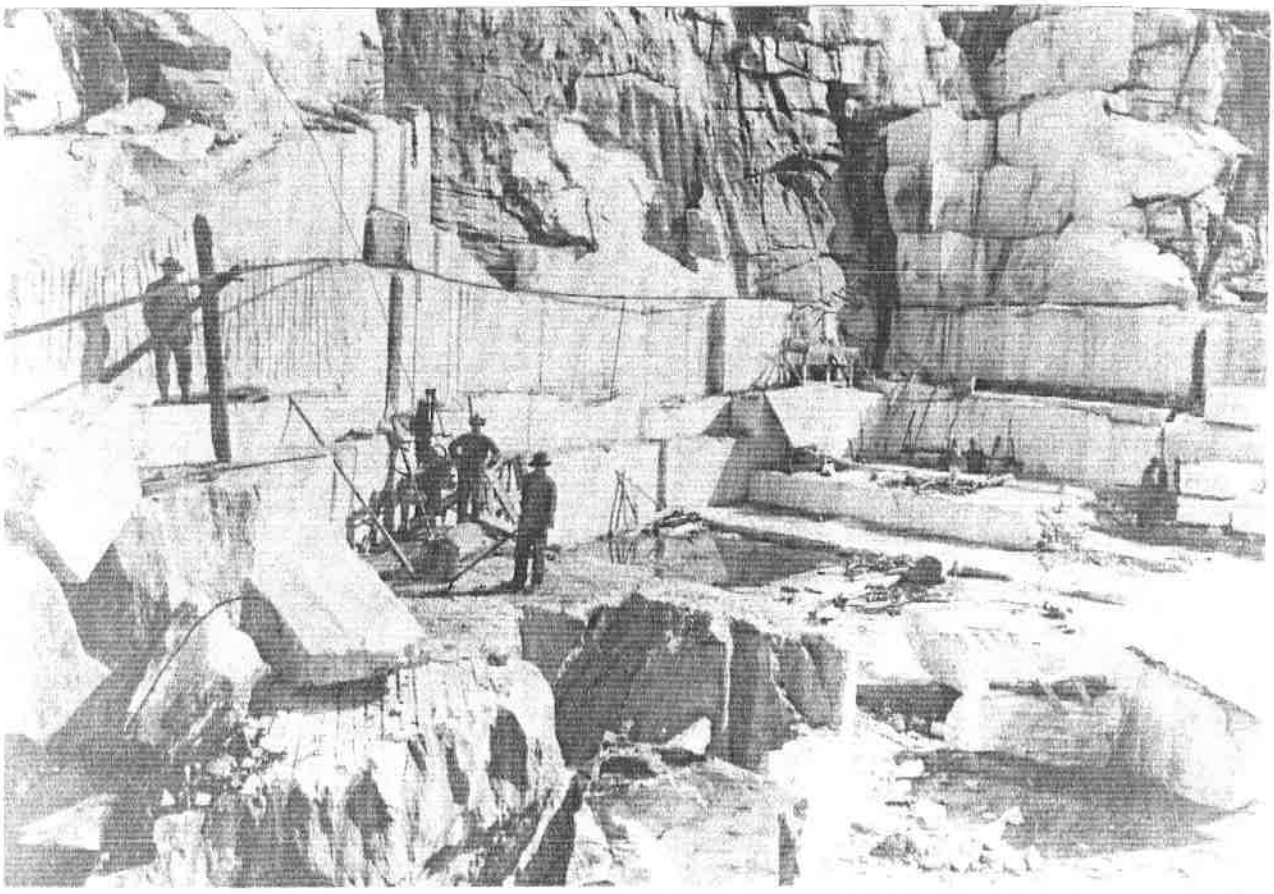

Figure 5.4 Columbia Marble Quarry. Tuolumne County Museum archives.

Summary and Synthesis

Property Types

placer waste rock piles
check and wing dams
ditches
mining towns
associated houses, cabins
tent platforms, stone ovens
stamp mills
mine buildings and offices
superintendent's house
storehouses
mine dumps
tailings ponds
claim markers
assay areas
shafts
adits and tunnels
prospects
surface vein workings
country rock piles (often with quartz)
flumes and trestles
equipment (shovels, sluices, etc.)
haul roads
railroad spurs
rock caverns (hydraulic)
mill tailings
drift "tunnels"
arrastras and chili mills
smiths

Relative Number Remaining/Condition

As of 1900, there were at least 200 patented quartz, drift, or hydraulic mines and stamp mills in Tuolumne County, and at least three times that many mines were unpatented. The number of mines, particularly small mines continued to increase through the 1930s, when the populace supplemented meager earnings by reworking placer mine waste rock. With the abandonment of finished mines, extensions of quartz mines, prospects any place quartz could be seen on the surface, and placer mining on every drainage, the number of mines in Tuolumne County alone is estimated to exceed 2000.

Most of the mines remaining in the county are not in very good condition. They have had their surface equipment removed, their openings closed, shoring and other timbers have rotted, buildings have decomposed, water systems have been disrupted, and generally all that remains are the piles of waste rock (mine dumps or hand-stacked waste rock), and occasional tailings. There are a few excellent examples of mines or mining equipment remaining, such as the headframe and buildings located in Quartz Mountain, the two-stamp mill or Longfellow Mill recorded for this study (Appendix E, TCH 68, 78), ditch systems (the Main Tuolumne Canal or "PG&E" Ditch), and towns (Blanket Creek, Columbia).

Mines are not necessarily predictable in their locations, although they are ubiquitous in Tuolumne County. There are a number of good maps which depict patented mine locations (e.g., Barton 1896, Benjamin 1899, Dart 1879), and virtually every drainage below 3000 feet in elevation has been placer-mined, but unpatented mines, prospects, and other explorations, as well as adjacent associated resources are found on many tracts of land within the county. Certain mine-types are somewhat unpredictable, such as the uranium mine located on private land near Eagle Meadow or the gold (?) mine located on private land near Payton Saddle, but virtually every surface survey in the county will produce some evidence of some resource related to mining. One of those resource-types, ditches, is discussed in the next chapter on water.

CHAPTER 6: THEME III/WATER

Theme:	**Water Development**
Time:	**A. D. 1849-1955**
Location:	**Tuolumne County**
Properties Recorded:	**TCH 4, 5, 13, 16, 24, 49, 77**

Introduction

The native people of what would become Tuolumne County are not known to have devised modifications to watercourses. Neither the transport nor long-term storage of water were part of their cultural tradition. Generally Indian settlements were located near dependable or predictable springs, rivers, or drainage confluences, and while certain activities took place without regard for water location, all known village and major settlement sites are found near natural water sources. Animal and plant life were diverse then, forests existed where none could be imagined today, and for much of the year, with planning, water and its resources could be extremely accessible.

Prior to the systemic controls of water we see today, California's rivers, including the Stanislaus and the Tuolumne, were unpredictable and often seasonal, flowing unimpeded into the Central Valley, often flooding an area as large as Lake Superior. Conversely, these streams might as easily become dry in August, leaving parched landscapes. Hydrographic alterations have increased over the past 200 years or so since the arrival of non-native people to California. Dams that contain and control the flow of rivers, bottomlands which have been converted or "reclaimed," and aquifers which have been reduced or depleted are three among many illustrations of human intervention in the region.

Although changes to Tuolumne County's waterscape were not evident until the mid-1850s, the policies which influenced that development stemmed from early English ideas about water rights, and importantly, from the Hispanic attitude that control of water (as well as most things in nature) was a duty to be performed for God and crown. Diversion and storage of

water were essential to political planning, social organization, agriculture, and mining. Vast networks of canals, cisterns, irrigation systems, and other water features began to change the face of California as natural drainages were diverted and distributed to newly claimed lands. The Spanish, in part due to centuries of adaptation to their arid homeland, seem to have quickly recognized that the California water pattern was no pattern at all: they could expect either floods or drought. They were careful to design thoughtful systems that would not be destroyed by flooding; and they devised redistribution systems which indicate an appreciation of a potentially scarce and precious resource:

> A typical pattern would find water diverted by a dam or lifted by a *noría* (or waterwheel) into the zanja madre [main canal] of a mission, presidio, or pueblo. From there it might be channeled to a gristmill and then to a reservoir settling basin from which it would pass through a filter on its way to a public fountain, next to a lavendería [communal laundry tank], and from there perhaps to a pottery or tannery. Drainage would then be filtered before being diverted onto the fields [Hundley 1992:43-44].

Augmenting the environmental changes brought about by the redistribution and reservation of water were changes resulting from supplantation of human or animal labor with water power. Water had long been used as a power source by Western Europeans to grind grain, to cut, lathe, polish, and drill wood, to transport goods, to press olives, and to contribute greatly to the tanning, mining, paper-making, and textile industries. Waterpower was particularly important in those European countries where latitude and geography are similar to California's: Spain, France, Italy, Greece, Portugal, and to a limited extent, Great Britain. And, it was the inhabitants of those countries who so quickly invaded Tuolumne County once gold was discovered.

Typically the Sierran areas with the most placer gold also had minimal rainfalls, receiving on average 25 inches of precipitation in a year (e.g., Donley et al. 1979). Water is essential to the recovery process of almost all placer gold due to gold's high specific gravity (Young 1970); consequently, most early placer mining took place near or in drainages during the spring and early summer when there was a ready supply of water. The miners regulated the flow of water with small dams (Appendix E, TCH 13) while they built parallel drainage courses, channeling and moving water as their prospecting needs dictated. By 1853 however, within five years of gold's "discovery," most easily retrievable gold had been recovered. To make matters worse, just when the gold was harder to find, Tuolumne County experienced a drought. Thus, decreasing quantities of placer gold and the need for vast quantities of water

to mine in new ways and areas spurred the development of large-scale water storage and conveyance systems. In a few short years, hundreds of miles of flumes and canals were built in the county, principally to bring water (white gold) to the miners, but having the added benefit of irrigating fields and gardens.

The 1859 California *State Register* asserts "There is no class of enterprise which is more essential to the development of the resources of California, than the construction of such works as will secure to the mining population ...an adequate supply of water" (Langley and Morison 1859:275). The *Register* goes on to list more than 6700 miles of California canals which had been constructed in the previous ten years to assist the mining industry at an estimated cost of $13,575,000^{00}$. Ten years following, J. Ross Browne, in his summary of Pacific Coast resources, acknowledged that

> Ditches occupy an important place in California mining. Indeed, it may be said that without them the mines of the state would be relatively insignificant. At least four-fifths of the gold is obtained with the assistance, direct or indirect, of ditch water [Browne 1869:179].

In 1858 Tuolumne County was assessed for 10 ditches with an aggregate length of 181 miles (Table 6.1; Langley and Morison 1859), although many more ditches (Appendix E, TCH 4, 16) had been built by this time.

Early Water Control: The Tuolumne County Water Company

The early water history of Tuolumne County is intimately linked with the history of Columbia, one of the richer concentrations of gold in the state (Clark 1976:39). The main problem faced by the early miners was the lack of water with which to wash the gold. Thus, after an initial boom created by thousands of miners rushing to Columbia in the spring of 1850, by the (dry) summer of that year a bust had set in (Gudde 1975:79), prompting an organization of miners to build a canal to bring in a permanent supply of water. From a short ditch intended to serve only Columbia, the so-formed Tuolumne County Water Company system was expanded, lengthened, and improved to provide water to the entire area between the Tuolumne and Stanislaus rivers. The system extended from the headwaters of the South and Clark Fork Stanislaus and North Fork Tuolumne rivers, with some 400 miles of main or branch ditches serving mining, agricultural, and residential users.

Table 6.1. 1858 Canal Data in California (from the *State Register* and Assessed Records)

County (Source)	No. of Canals	Aggregate Length	Cost of Construction	Assessed Value	Capacity
Amador (Register)	35+	531 miles	$880,400		
Amador (Assessed)	32	475 miles		$280,600	
Butte (Register)	10+	400 miles	$804,000		
Calaveras (Register)	54	550 miles	$1,600,000		
Calaveras (Assessed)	49	720 miles	$991,100		12,019 in.
El Dorado (Assessed)	43	1,150 miles	$1,600,000	$617,970	
Mariposa (Register)	10	65 miles	$169,500		
Nevada (Assessed)	86	696 miles	$1,700,000	$953,700	
Placer (Assessed)	35	550 miles	$1,550,000	$283,160	
Plumas (Assessed)	92	201 miles	$600,000	$210,000	16,775 in.
Sacramento (Assessed)	11	135 miles			
Sacramento (Register)	8	340 miles	$800,000		
Shasta (Assessed)	24	104 miles	$300,000		9,000 in.
Sierra (Assessed)	70+	183 miles		$420,650	
Tuolumne (Assessed)	10	**181 miles**			
Tuolumne (Register)	**14**	**425 miles**	**$1,481,000**		
Yuba (Register)	31	241 miles	$700,000		

The construction of a canal system was no small undertaking. It involved a huge financial investment, the importation of machinery, and the labor of hundreds of men. It also involved the faith that the reward of gold was sufficient to warrant the effort and money expended on the water system. The Tuolumne County Water Company was organized at Columbia in late June 1851, hiring an English engineer named John Wallace. Wallace immediately surveyed the South Fork Stanislaus River (the closest major river to Columbia) to find a line for the canal. Ditch digging began in early July 1851 and by the autumn of 1852, the Tuolumne County Water Company had a debt of about $75,000^{00}$, but a nearly completed canal and flume system between Lyons Ranch and Columbia. Relatively small amounts of water had been brought into Columbia in the completed portion of the system from Five Mile Creek in the spring of 1852, but it was not until the end of 1852 that the company's water system was, for the time

being, complete. In 1852, the system consisted of about 18 miles of flume, 30 miles of earthen ditch, and four small reservoirs (Eastman 1970:310). In addition, a diversion dam had been constructed at Lyon's Flat. Although this original system has been modified over the years, and the dam at Lyons has been enlarged to create Lyons Reservoir, the water delivery system in use today in Tuolumne County is largely the system engineered by John Wallace in the early days of the Gold Rush. Wallace, in letters written home to his mother, discusses the technology and engineering of ditch construction, and provides many valuable tidbits of information about the early years in Tuolumne County. For example, he writes about cutting timber for the numerous flumes:

> We had at first proposed putting up a water power Saw Mill for the purpose of cutting the immense quantity of boards which we will require, but we have now purchased a Steam Engine, & are about erecting a saw mill on top of the mountains, where there is plenty of timber growing, and there to saw a great quantity of the boards required, and then shift the mill to another place further on as we progress with the work...When this work is completed we shall have a large stream of water running into the richest mining district in this part of the country...The water will also be a great use and value for agricultural and mill purposes... [Eastman 1969:298].

Once in operation, the water system of the Tuolumne County Water Company proved to be profitable. Wallace stated in December of 1852 that he expected that receipts would soon average more than $9,000^{00}$ a week, although he noted that the investments had cost $350,000^{00}$, (Eastman 1970:310) and expensive repairs were frequently needed (breachings, flooding, landslides, trees and animals falling into the canal), in addition to routine maintenance. Water company owners felt justified in charging high prices for water. The story of the miners' rebellion over the high prices and their solution of constructing a new system (the Columbia and Stanislaus River Water Company) is one of the great stories of the Gold Rush (see Davis-King and Goldberg 1988; Shoup 1988).

Over the years, the Tuolumne County Water Company bought competing water company's systems, expanding their own with the others' facilities. Several of the more important companies to be acquired at that time include the Columbia and Stanislaus River Water Company (or Miners Ditch), the Sullivan Creek Water Company, James Street Properties, and Shaws Flat and Tuolumne Hydraulic Association, among the many. On file in the Bancroft Library at the University of California is a map prepared by John Wallace displaying the Tuolumne County Water Company system as it was in 1862. By that time, many major systems had been acquired, making his map very useful in determining the location and nature

of the county's early ditches. According to the State Register (Langley and Morison 1859) no company in Tuolumne County had a more valuable water system at this time, and only three in the entire state were more valuable. That is quite a statement for a county whose mining interests lay more in stream-side placering than hydraulicking.

1870s: The Miners Leave

The Tuolumne County water system was essential to the development of mineral resources, the attendant industries such as the steam or water powered sawmills, and the commercial establishments and towns that grew up in the county. However, this era of development and prosperity was ending by the late 1860s, when the focus of the water companies was on maintenance and operation at a time when mining was in a decline. Herbert O. Lang, writing in the 1880s, described the decline as follows:

> ...by the end of the sixties but few placer claims were worked with good results; the enterprising gold-seekers had sought more productive fields...With the departure of the miners came dull times for the camps...The stores and saloons, no longer crowded with customers, put up their shutters and retired from a business no longer profitable...Ditches and flumes were suffered to go to ruin...By the close of the next decade the resounding crash of the stamp mill had well nigh ceased, and now, in 1882...one can not say that mining is entirely done...yet gold extraction is comparatively at a painfully low ebb. [Lang 1882:234]

The change from boom to bust was somewhat gradual. In 1866 the water company was making profit, paying $35,750^{00}$ in dividends to stockholders (Browne 1869:194). The trend, however, was clearly downward. The census figures for Tuolumne County show a decline in population of nearly 50 percent (16,229 to 8150 people) between 1860 and 1870. People continued to leave over the next two decades, when citizens numbered 6082 in 1890 (Appendix C).

During this time, water was delivered to agricultural users (Appendix E, TCH 5), especially the truck gardens and apple orchards, and also continued to supply mining ventures. The Tuolumne County Water Company absorbed and purchased the facilities from a large number of smaller water companies which were also feeling the economic pinch. The biggest single consolidation was the takeover of the Tuolumne Hydraulic Association, which included the Phoenix Reservoir (Figure 6.1) in February 1876 (Union Democrat 1909:11). The purchase of Phoenix Reservoir allowed the company to transfer water to Sonora and Jamestown, a necessary manoeuver if it was to survive the hard times. The company which had been

completely oriented to serving Columbia was now devoted to serving the entire county north of the Tuolumne River, the location of economic development in the 1870s, 1880s, and 1890s.

Archival data suggest that the Tuolumne County Water Company barely survived during this era, incapable of repairing breakages and leaks, or conducting routine maintenance. The dam at Lyons had not been in existence since at least 1882 and county water was apparently diverted from the South Fork Stanislaus River directly into the distribution canal. Fortunately, just when the company was about to declare bankruptcy, mining technology improved tremendously, providing a resurgence in that industry, and the new power source of hydroelectricity was developing locally. William Nevills, owner of the App and Rawhide mines, provided capital to the water company to improve their water conveyance and storage facilities so that they in turn could provide his mines with electricity in repayment.

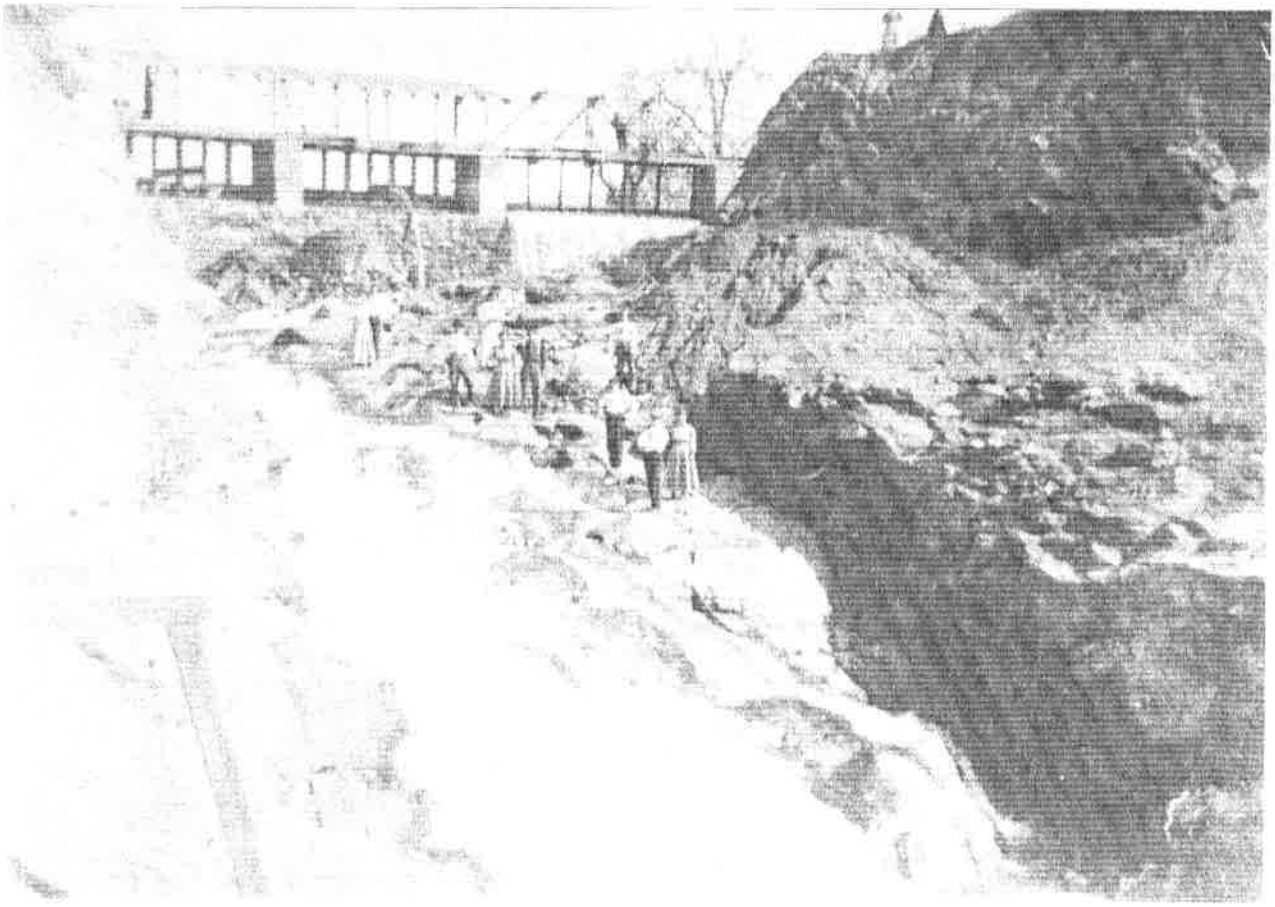

Figure 6.1 Phoenix Lake Dam Spillway. Social Outing. Tuolumne County Museum archives.

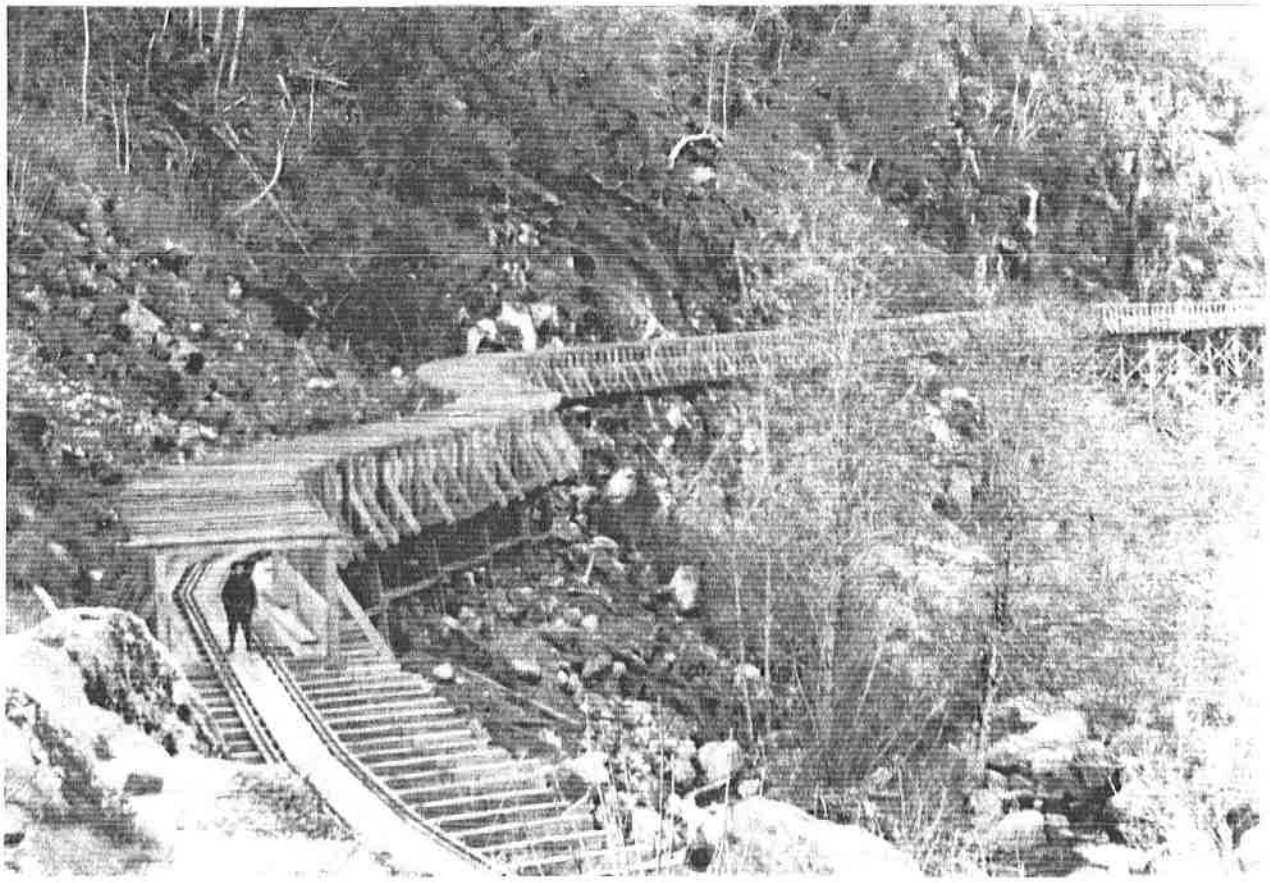

Figure 6.2 Stanislaus Canal from Sand Bar Dam to Forebay Reservoir (1906). Tuolumne County Museum archives.

1890s: Hydroelectricity

The Tuolumne County Water Company took the challenge, rebuilt the ditches and flumes (Figure 6.2), built a new dam at Lyons, and constructed the first Phoenix Powerhouse (the archaeological ruins of which are located at the end of Lyons Bald Mountain Road). Although the 1898 Phoenix Plant was the largest in the county at the time, it was not the first or the only. As early as October 1, 1892, the Sonora Electric Light Company had a small hydroelectric plant located on Wood's Creek at Brown's Flat, and furnished enough power for 600 homes and businesses to light one light bulb each. A 60 horsepower Dodd waterwheel and a Westinghouse generator were equipment in the plant sold to W. D. Bannister in October 1896 for use at his marble quarry. Although the history is a little confusing, it seems the Tuolumne Electric Power & Light Company furnished power to Nevills' Rawhide Mine from the Marble Quarry plant at least as early as 1 October 1896.

Other early plants include the one erected by the Jumper Mine on Sullivan's Creek which began operation in mid-February 1896. It had a 200 horsepower Pelton Water Wheel driving a 100 kw Westinghouse three phase generator with 2500V service. As of 6 November 1988 a portion of the penstock was remaining near the Mazeppa Mine. John App also had a small hydroelectric plant on Woods Creek below Woods Crossing about this time as well. By the middle of 1897, electricity was provided to Quartz Mountain from power generated at Woods Creek by the Central Electric Light Company. The plant soon converted to steam and later sold to the Tuolumne County Water and Electric Power Company (the county's major producer of power at the time), who also purchased the 46 year-old Tuolumne County Water Company in 1898.

1900-Present: PG&E Takes Over

The Phoenix Powerhouse was put into operation in 1898 and modified a year later. Ownership transferred to the Tuolumne Water Power Company in 1907, reformed as the Sierra and San Francisco Power Company in May 1909. Although the system would be owned by the Sierra and San Francisco for 20 years, it was clear that the emerging "Pacific Service" of the Pacific Gas and Electric Company was operating the plant. Pacific Service formalized their lease in 1919, and bought the system outright in 1927 (PG&E archives). PG&E continued to buy and modify most, if not all of the water and power companies in the county (and, in the central and northern Sierra Nevada, for that matter) during the next few decades. Modifications to their system, many components of which date to the Gold Rush, include replacement of flumes, spraying of Gunite on earthen berms, facing stone dams, and consistent maintenance, generally preserving these systems rather than damaging them. In the 1980s, PG&E sold much of its local system to Tuolumne County, which began a program of systematically piping and abandoning the ditches which had been built 140 years ago.

Summary and Synthesis

The chronicle relayed above is only one story among many in Tuolumne County. Water has always been, and continues to be of major importance. The county has had a long and developed water history, from the early days of mining ditches taking water to the camps and dry workings to the present, outside interests using county water for hydroelectric power generation, agriculture, domestic water supply and more. Each major drainage in the county, from the rivers to the tributaries, such as Griswold, Bear, Hunter, or Cherry creeks have had

Resource Types

There are many different resource types associated with water development, distribution, containment, and use. Some of those found in Tuolumne County are:

earthen ditches
major canals
flumes
inverted siphons
spillgates
spillways
check dams
diversion dams
storage reservoirs
grizzlies
construction quarries
ditchtender cabins
orchards
historic era Native American sites
blacksmith shops
bridges
borrow pits; construction areas
blast holes; dynamite stores
ditch construction camps
penstocks
powerhouses
transmission lines
forebays; afterbays
towns, mining sites, other end users

Many of these resources are found in a rather decayed state, in various stages of disrepair, and some are archaeological sites only. Some of the resources lack integrity or no longer have their associations with events that are important to county history. Each water system, ditch, or other feature however, can not be viewed as an isolate, but rather was part of a much larger working system. Identification of that system and an evaluation of the resource in relation to the system will be critical to the process of distinguishing important water features from unimportant resources.

Relative Quantity and Condition of Resources

As with the transportation corridors, Tuolumne County has hundreds and hundreds of miles of ditch systems alone, and perhaps no fewer than 100 historic dams, the remains of at least two hydroelectric powerhouses, and an uncertain amount of related features. Ditchtender cabins (Figure 6.4) are largely gone from the landscape, although Gurney's by the Section 4 Ditch in Twain Harte is still standing ((Appendix E, TCH 24). The Main Tuolumne Canal and the Columbia and Stanislaus River Water Company canals have been determined eligible for the National Register of Historic Places, and any segments related to them should be evaluated during cultural studies. Numerous orchards survive down berm from the ditches (Chapter 8), as do the resources related to other end uses. Most of the major water systems are located in part or all on federal land, or are licensed by a federal agency and therefore

become part of a federal undertaking. Generally this means that the resources will be identified and evaluated.

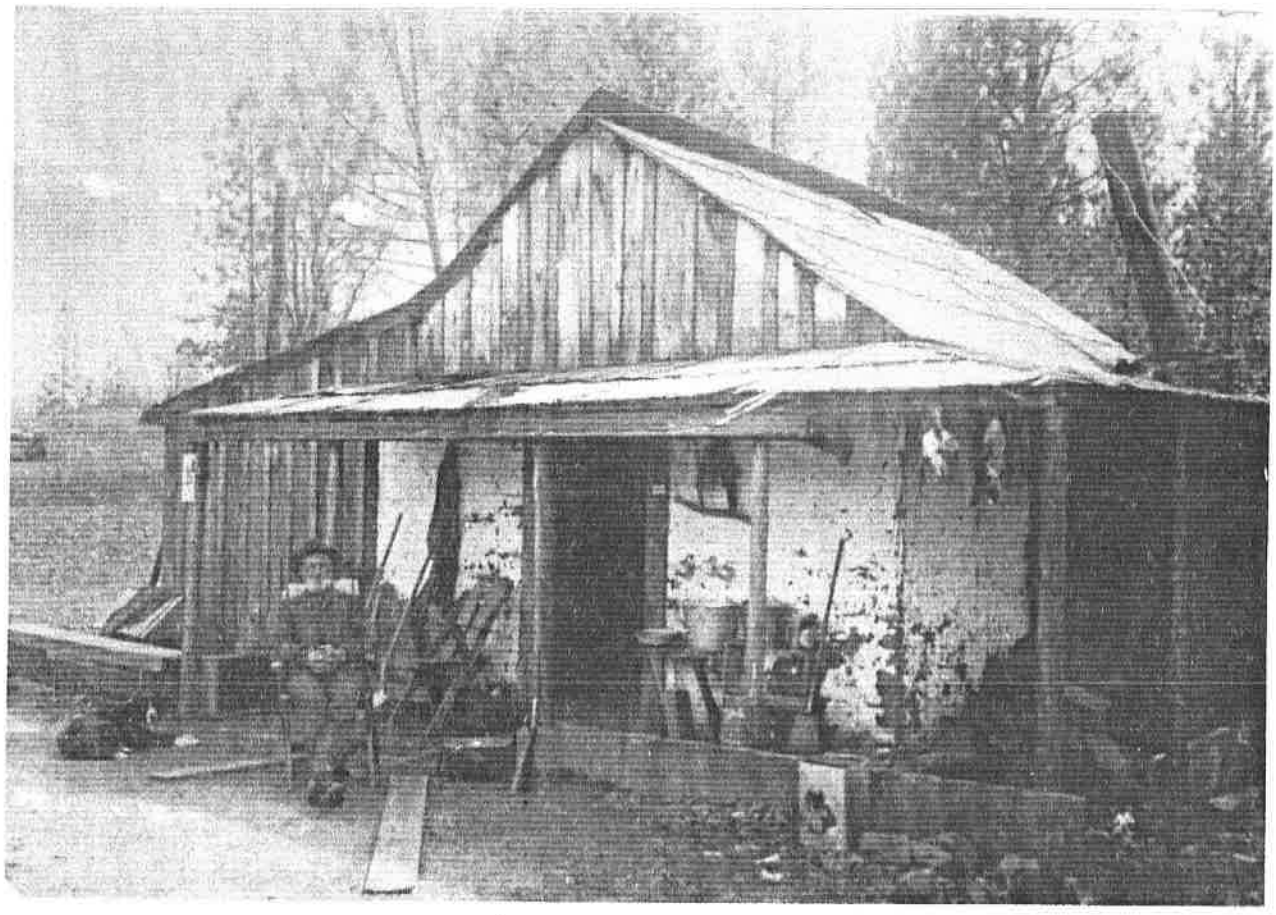

Figure 6.4 Guard Gray, ditchtender. Tuolumne County Museum archives.

CHAPTER 7: THEME IV/ETHNICITY AND SOCIAL SYSTEMS

Theme:	**Ethnicity and Social Systems**
Time:	**?-present**
Location:	**Tuolumne County**
Properties Recorded:	**TCH 1, 2, 3, 7, 15, 18, 20, 21, 22, 23, 25, 26, 27, 28, 29, 30, 31, 33, 36, 40, 41, 42, 48, 50, 51, 56, 59, 60, 61, 64, 65, 67, 69, 74, 75, 81, 83**

Introduction

The cultural resources which remain today in Tuolumne County gain much of their importance from the people who lived and worked here, from the people who designed or built or used the resource. Tuolumne County's structures, sites, objects, and buildings often bear more meaning or significance because of their association with a particular ethnic, racial, religious, or social group which constructed it, lived in it, or otherwise was associated with it. As such, the Tuolumne County Historic Preservation Review Commission deemed that the ethnic heritage of the county was sufficiently important to consider it as a contextual theme. As study of the county's ethnic past progressed however, it became clear that few resources remaining in the county are clearly associated with one group or another. Rock walls have been built here by the Italians, English, Germans, French, Chinese, and others. Building types show no great affinity for one cultural or racial group over another. And except for prehistoric archaeological sites which are *a priori* associated with Native Americans, no single other major resource type could be identified exclusively or mainly with another group.

Although there were ethnic groups present in California prior to the Gold Rush, particularly the Hispanic and Russian, there were very few who might have made it into what is now Tuolumne County. The massive inrush of people, generally male, into the area brought a unique situation of many different types of people thrown rapidly together socially. The population that arrived was among the most heterogeneous of any in the entire world, certainly up until that time.

Early County Residents

In the middle of the nineteenth century, the area which became Tuolumne County was inhabited by several different Indian groups, Californios, a handful of Americans, and other people born elsewhere. The Indians were the original native people of course, but since the takeover of the land by the United States, Native Americans have been considered an "ethnic" group. The only traditional Native American group still in the county is the Central Sierra Me-Wuk. The Me-Wuk have two rancherias: Chicken Ranch and Tuolumne (Appendix E, TCH 40). Every prehistoric archaeological site (Appendix E, TCH 61) located in the county can be considered ethnic, but there are also a number of historic resources associated with the Me-Wuk, including the former rancheria of Bald Rock (Appendix E, TCH 69) and the Klosh Tillicum social club (Appendix E, TCH 25), which was built by Chief William Fuller.

The Californios (one of the names for the people of Iberian descent who lived in California before the Gold Rush) were born in California, usually of Spanish or Indian parents. There are many resources, if they survived, that might be associated with this group, including adobes, stone and lime bread ovens, cattle ranches, trails, corrals, early stone walls, and stone shrines. It is not known how many of these resources might exist in the county; those that do are most certainly in the west county. It may be that a few resources of this nature exist on the proposed Blue Oaks Subdivision, for example, where unusual rock walls and features were noted on this and an adjacent ranch. Unfortunately, study of those resources did not occur, so their nature is not clearly understood.

Another early group in the county was the 500 very young men from the eastern United States who came to California in 1846 with Colonel Jonathan D. Stevenson to become the first American regiment in the state. The Mexican-American War had begun, and Stevenson amassed his group of multi-talented, varied professionals, who ended fought in Baja California, but otherwise saw no action in the war, spending the latter part of the war on the Stanislaus River. By 1849 their military tasks were finished and many stayed to become craftsmen, miners, and merchants. Among these were the famous Chaffee and Chamberlain, upon whose story Bret Harte allegedly based his "Tennessee's Partner." Chaffee and Chamberlain's house was located at Second Garrote, two miles east of Groveland.

Ethnic Composition: Some Generalities

Numerous groups have lived in area of Tuolumne County; some of these are well integrated into society, others have left their names behind (e.g. Chinese Camp), and still others have continued an existence apart. One of the first ethnic minorities was the Anglo-American, ever discriminate among themselves. There was the dichotomy of northerners ("Yankees") and southerners ("Chives" short for chivalry), but there were slurs for every geographic region, such as the "Pikers," named for people who came from Pike County, Missouri. The Anglos, or people of British extraction (generally British Isles), composed an early majority of inhabitants, but they too, were composed of subgroups: the Cornish, with their important hard-rock mining skills; the English, Irish, Welsh, and Scots.

Other Europeans were important to the early development of the county, and many of these people stayed when the placer gold was gone. Among them were the Deutchmen (German), Knickerbockers (Dutch), Swiss, Italians (distinguishing between those from the north and those from the south), French, and Basque. South Americans and Mexicans both were early county inhabitants and brought along their considerable knowledge and skills of mining. The earliest techniques used were those of the batea, a v-shaped bowl for panning gold, the arrastra, a mill used to grind the rock, and the chili mill, not as common in Tuolumne County as in Calaveras, but found nonetheless. People from the Pacific Rim also mined here, including South Sea Islanders and Hawaiians, called "Kanakas" (their name is left on Kanaka Creek above the former Jacksonville, at Kanaka Mine near Groveland, and in the Kanakas area near Tuttletown), New Zealanders, and Australians ("Sydney Ducks"). There does not appear to have been an early Japanese presence in the county, but Japanese graders were used by Thomas Bullock in the construction of his railroad projects in the county a half century later, and the remains from their grading/habitation camp might still be found in at least three locations (especially Brownes Meadow, Sullivan Creek "Jap Camp," and perhaps at Lyons Reservoir).

People of African origin have an early history in California, with at least two interracial subgroups recognized in the pre-Gold Rush days: *mulato* (originally black and Spanish; not spelled "mulatto") and *zambo* (black and Indian, a term also used for Indian and Chinese mixtures). Estimates for the black population in the southern mines during the early 1850s generally run in the hundreds, but do not identify if these are blacks by way of South America, Africa, or the American south. One of the better known local blacks, Stephen Hill (who lived near Gold Spring at Nigger Hill) was a successful miner and known rancher.

Captured as a runaway slave by Mr. Rozier, Stephen Hill escaped or disappeared in Stockton. According to John Jolly's diary, Rozier then attempted to confiscate Hill's land.

Billy O'Hara, a black, who from his name may have also been of Irish extraction, co-operated the Jenny Lind Restaurant in Columbia. Vernon McDonald, whose great grandmother came across states in Prairie schooner, had a fair-skinned daughter who married free black, William Sugg, and they built the Sugg House 1857 (listed on the National Register of Historic Places). "Nigger Jack" John Wade operated O'Byrnes Ferry and Eddie Webb was a noted, turn-of-the-century stagecoach driver, but distinctive cultural remains are not a part of their imprint on the county.

Figure 7.1 "Happy" Hen Chow "last" Chinese to live in Tigre Town. Tuolumne County Museum archives.

The Chinese in the Mother Lode are a legendary group of hard-working miners, laundrymen, cooks, ditchdiggers, and railroad builders whose archaeological remains are found in many historical sites. One of the more common set of artifacts to be found are those from Chinese foodstuffs shipped to the United States from the Six Companies in China, and the remarkable

equipment related to opium smoking. A large concentration of Chinese people lived, of course, at Chinese Camp, the subject of a recent study (Bloomfield 1993), but according to census notes, Jamestown too had more than a 50 percent Chinese population at the turn of the century. Sonora's Tigre Town, first occupied by Mexicans, was an important Chinese settlement, where archaeological deposits are still likely. Chinese artifacts have been found at Lyons Reservoir, at New Melones, along the Algerine Road, and in Stent. The Chinese formed a large, important part of the nineteenth century labor force.

Many of the resources recorded for this study have ethnic affiliations, including the Indian resources already noted, many of the houses, ranches, and farms, some of the mining areas, and the towns (Appendix E, TCH 1, 3, 18, 31, 50, 64, and 65). Discrimination was common among certain ethnic groups, beginning at the onset of mining when the Sonorans were constantly pushed from their workings to new areas, or the Basques and French were taxed for the sheep they brought in the county, or most harshly, by the Foreign Miner's Tax enforced in May 1850, which forced "foreigners" to pay 20^{00} per month for the privilege of mining on American soil. Native American people have always been discriminated against, although some have integrated into mainstream society more than others.

Settlements (Social Systems)

In the earliest years of the Gold Rush, virtually all settlement sprang up around the gold discoveries and their supply camps. As placer mining was the major industry these first few years, most of the towns grew up along the streams and rivers where the gold could be mined. With the advent of hard-rock mining, however, towns were built near the rich ore veins, often far from natural bodies or streams of water. Ditch and flume systems developed to bring water to the miners were also used by the towns (Appendix E, TCH 67), settlements, individual ranchers, and farmers (Appendix E, TCH 2, 23, 27, 28, 33, 36, 42, 56, 74, and 75) who reaped the benefits of these water systems, establishing branch ditches to their communities and to their fields for irrigation purposes. As water was an absolute necessity for life, both for the settler and his stock, the more valuable lands were those with water rights or access to a ditch system, stream drainage, or substantial spring.

There was no method for obtaining legal title to agricultural or residential parcels in the earliest years of the Gold Rush, so many settlers simply filed preemption claims under their mining claims, stating that they were using their lands for agricultural purposes. Legal title

was established under preemption acts, passed by the California legislature in 1850 (this was later repealed and a new, more comprehensive statute was adopted in 1852). When local government was established, the land was surveyed and opened to claimants who were able to obtain title to the land under the Public Land Act of April 24, 1820, and its successors. The Homestead Act of 1862 also allowed settlers title to their lands, although the laws required specific periods of residence and the making of improvements of a specified value prior to the issuance of a patent.

Lands not immediately suitable for agriculture and without obvious mineral reserves were ignored for the first three decades after the gold discovery. On June 3, 1878, however, Congress passed the Timber and Stone Act. This law allowed individual acquisition of 160-acre parcels of timbered land for 2^{50} per acre. Individuals looking to the future began to file claims to timberland, and began to advance settlement in the higher elevation of the county.

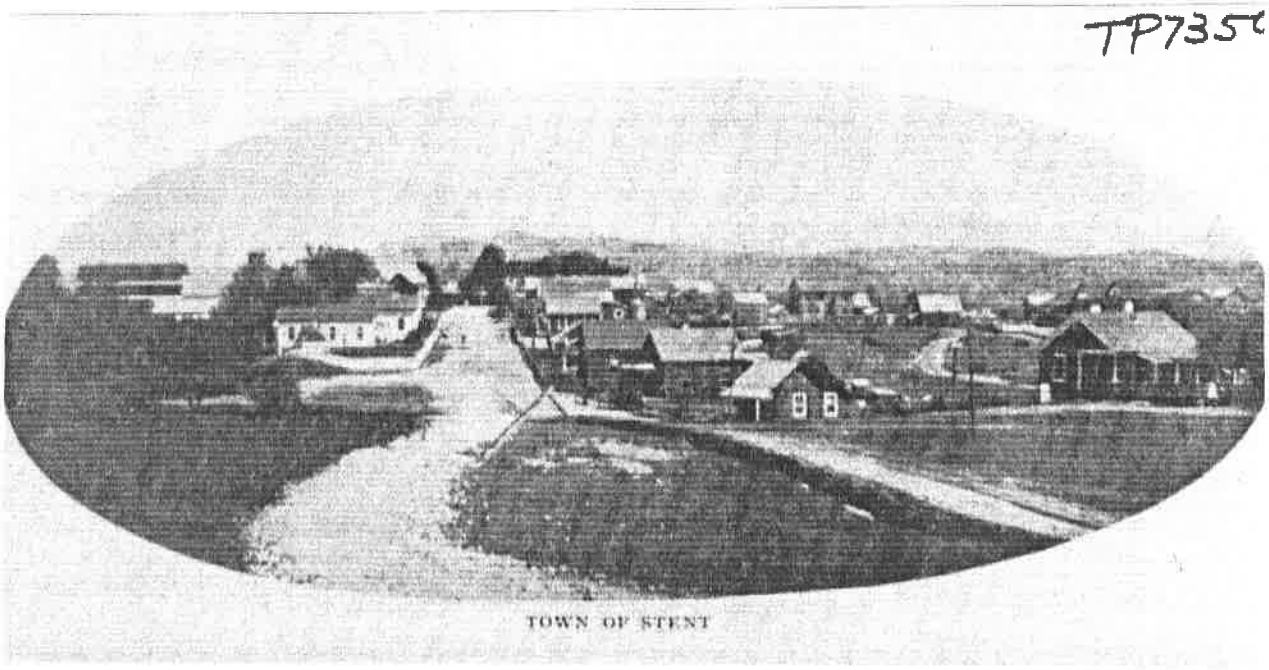

Figure 7.2 Town of Stent. Tuolumne County Museum archives.

Social order began early in the future-county region, originally in the San Joaquin District of the state. The first local election was in August 1849, signalling the arrival of government and politics to the area. Tuolumne County was officially established 18 February 1850, and the first churches (Appendix E, TCH 26, 51, 59), schools (Appendix E, TCH 20, 21, 29, 41, 48,

and 51), and social institutions (Appendix E, TCH 7, 15, 22, 30, 81) followed soon thereafter.

Women were not as rare in the Mother Lode as some historians would have us believe (see Census Records; Levy 1990), nor are those who were here exclusively or mainly prostitutes. Women here were schoolteachers, mothers, temperance speakers, miners, boardinghouse keepers, cooks, laundrywomen, seamstresses, entertainers, real estate agents, doctors, diviners, midwives, artists, and more. Levy (1990) suggests that between 10 and 25 percent of the overland forty-niners were female, with many women already living in California even before Jennie Wimmer tested James Marshall's 1848 find in her lye soap kettle and pronounced the gold as genuine. The more famous entertainers from the early period were women, such as Lola Montez and her risque spider dance, Lotta Crabtree, a child of six when she moved to the mining camp of Grass Valley and learned to dance, Carrie Chapman, and others who entertained in city theatres and camp lyceums. Prostitutes were here, including Chinese, South American and Anglo women, and French harlots, living in the filth of flophouses or rarely in the splendor and opulence of grand brothels.

Religion seems to have been important in the county from the early days, as churches were one of the first buildings constructed once a settlement was organized. Not only did Tuolumne County have the usual assortment of Christians (protestants and Catholics), but Jews and Serbians (Orthodox) also had a presence here. Most Jews who came to California were Reform Jews; this is also true of Tuolumne County. Generally, the people fit in with the rest of society, differing only in their religious observances on Saturday rather than Sunday. Prominent early Jewish families include the Linobergs and the Baers, the latter family still living in the community (the Levi-Strauss Company tells a story of how their famous 501 jeans were first made for a Jewish clothier (the Baer family?) to sell to an extremely large miner). The Jewish people were a strong merchant group, here as elsewhere. Perhaps the most famous Jewish merchant in Sonora was Mike Goldwater, merchant of Washington Street and Shaws Flat, whose store in Sonora failed, but whose perseverance lead him to take goods across the desert to Arizona, eventually founding Goldwaters Department Store. The Jewish Cemetery in Sonora is a principal resource relating to this group. The Serbian components of the Carters and Sonora cemeteries too, are the only resources known to be related to that religious group.

CHAPTER 8: THEME V/AGRICULTURE

Theme:	**Agriculture**
Time:	**1848-1950**
Location:	**Tuolumne County**
Properties Recorded:	**TCH 1, 8, 11, 14, 15, 27, 30, 32, 35, 37, 38, 45, 46, 58, 61, 62, 65, 70, 72, 73, 76, 79, 80, 82**

Introduction

First mining, then agriculture, reaped the benefits of the extensive ditch, flume, reservoir, and power systems created in the early years of the Gold Rush. Vast streams of water were needed for all types of mining operations, especially early placer and hydraulic mining. Unable to work during the dry seasons, the industrious miners soon discovered ways to bring rivers and tributaries to their diggings. By late 1850, most of the major mining communities up and down the foothills had begun exploration of the Sierran rivers and many had commenced building ditch systems. Originally constructed for use by the mining companies, these expanded water networks were eventually taken over by agricultural and domestic consumers as the importance and needs of the mining economy declined and towns and farms developed.

The preeminence of mining ensured that all other local industries would be its auxiliaries. Hence the lumber industry developed primarily to meet the demands of mining operations (construction of miles of flume, with their decadal replacement, headframes, and timbers for the miles of shafts and tunnels) but did not come into its own until the demise of hard-rock mining in the twentieth century. Transportation, water, power generation, and ranching have all been directed and influenced by the mining industry, and have benefitted from the mining industry's manipulation of area hydrography.

Stock Raising

In Tuolumne County, agricultural pursuits were always critical as a supporting service, and at times were the most important source of income, but even in 1909, the *Union Democrat* publication on the county suggests that agricultural development was not as great as the

conditions warranted since the interest in the county was so heavily centered on mining. In the early years when animals provided much of the labor, massive production of hay and grasses was necessary to feed the cattle, oxen, and horses. In 1909 about 18,000 acres were devoted to "hay" (wheat, barley, and oats), since these could be grown without water or much attention (Figure 8.1). Additionally, county grasslands were used for stock grazing in the past as well as now.

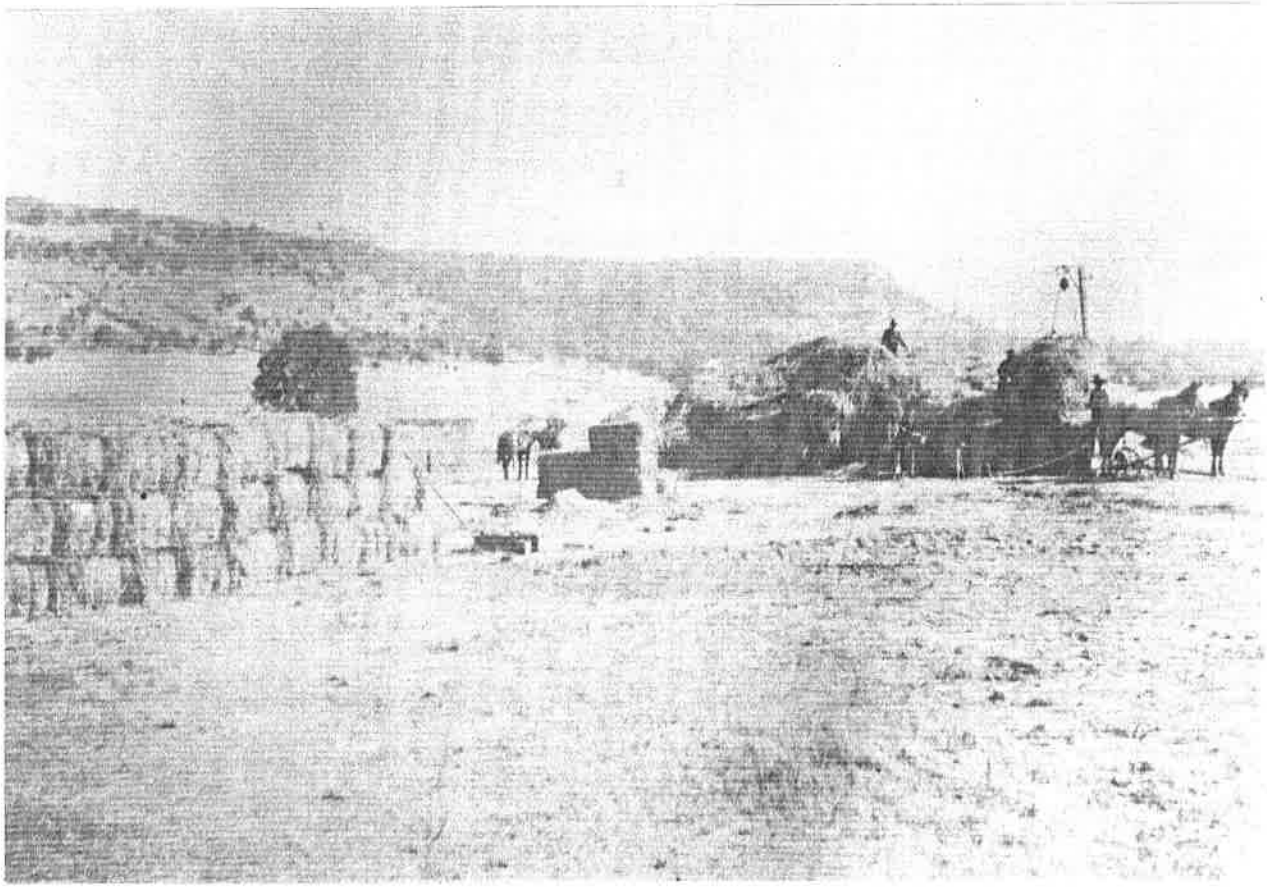

Figure 8.1 Haying operation on the Russell/Loney Ranch, Turner's Flat. Tuolumne County Museum archives.

A few cattle, in addition to the oxen used to pull wagons, came to California with the early settlers, but most early cattle were scrawny Mexican Longhorns. Slowly the industry changed, but even the *Union Democrat* publication notes that "the few [cattlemen] that are left, who believe that a $30 bull is as good as one costing $500, are in full enjoyment of chronic hard times" (1909:62).

Upland grazing of cattle, sheep, and goats was an important historical land use. As early as

1850, there were accounts of stock grazing in the high country. By the mid-1860s virtually every lake, meadow, and open area had been appropriated by stockmen. Pasturing their animals on foothill ranches during the winter and spring months, sheepherders and cattlemen took their animals and their families to the mountain meadows and grasslands each June (Appendix E, TCH 73). This cycle was extremely important since the green grass of the lower elevations would have been eaten and the stock ponds would be dry by mid-summer. Water and food for the animals was not as great a concern in the high country.

The pattern of high country stock grazing has continued to the present, although in recent years, the practice is not as common as it once was. Just three short decades ago, both sheep and cattle were driven up Highway 108, blocking the road to all visitors who were then forced to look at the still verdant countryside. Then it was possible to graze cattle and sheep within the lands managed by the Stanislaus National Forest, as permits were available and restrictions not so severe. The Miwok Ranger District now has only eight allotments, seven of which were issued permits in 1993 (Beth Chacon, personal communication, September 1993), where in 1900 there were 130 district permits issued. This pattern of decrease in permits is evident on all the districts: more than 600 permits were issued in the early 1900s on the Calaveras District when the Forest Preserve was established and stockmen were first obliged to obtain leases, for example, compared with six total permits issued today.

Hogs were one of the earlier animals to be raised in the county, since they took little care or consideration. Although most ranches and farms had a few hogs to keep the place clean and provide bacon and ham, few ranchers developed hog operations. There used to be a ranch at Kincaid Flat, operated by Price Cattle Company, and another in the west county. Other animals, such as goats, llamas, chickens and other poultry, have been raised on county ranches and farms over the years. Several historic ranches (Appendix E, TCH 1, 11, 27, 30, 32, 58, 62, 70, 72, and 79), barns (Appendix E, TCH 8, 46, 80, and 82), archaeological ranch sites (Appendix E, TCH 35 and 37), a corral ((Appendix E, TCH 15), and a dairy (Appendix E, TCH 14) were recorded for this study.

Orchards, Vineyards, and Gardens

Fresh fruit and vegetables were at a premium in the early days of the Gold Rush, and the famous gardens of Tuolumne County were able to produce in abundance. As an economic endeavor for the county, however, agriculture did not come into its own until the initial flood

of miners had left during the 1860s. Farms were started by the miners who stayed behind, generally developing the plots to feed their families, selling excess to neighbors and passersby. In those early days, most farms produced everything that was needed to survive, with the exception of coffee and staples, and society was more cooperative in assisting and exchanging with one another.

By the 1870s, from plats and deeds, it appears that farmers and ranchers owned more than 50 percent of the available county land, largely through homesteading, but some through purchase. While many of these farms had the full retinue of animals, row crops, orchards, vineyards, and vegetable gardens, the owners would list their profession as "miner" on the census rolls. Mining during the winter months, ranchers would grow vegetables, hay, and fruit in the spring and summer; both activities were often necessary to support a family. Many farmers developed their land, looking forward to the next mining boom.

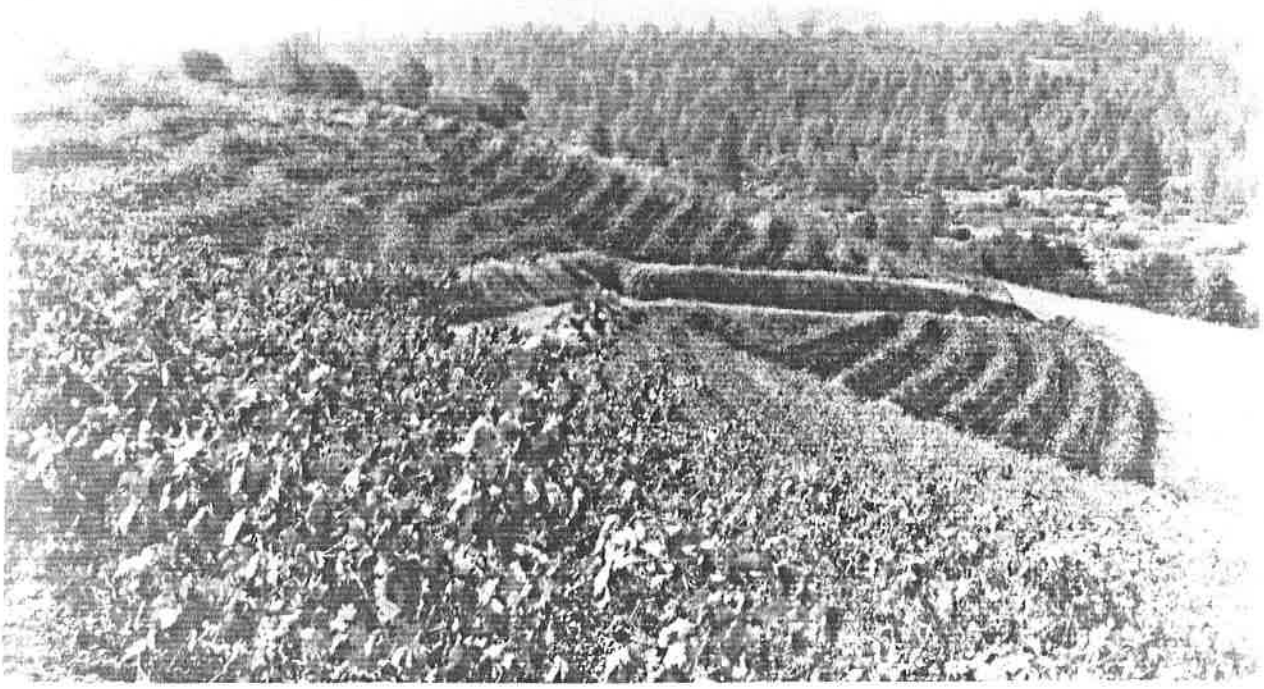

Figure 8.2 P. M. Trask Vineyard, Gold Spring. Tuolumne County Museum archives.

In time, fruits and vegetables produced in many of the county's fine gardens were transported across Sonora Pass to the mines on the eastern slope, especially those near Bodie. County

orchard fruits were also well-regarded and tens of thousands of trees were imported into the county in the last century (Davis-King 1988). Peaches, pears, figs, cherries, apricots, and especially apples were abundant (Appendix E, TCH 45, 65, and 76). Tuolumne County exported produce as far away as New York and China and was known as the "Home of the Big Red," named for its excellent Red Delicious apples. Terraces, such as that in Gold Spring on the Trask Ranch, packing sheds (Appendix E, TCH 38), railroad spurs, rock embankments, remnant apple and pear orchards, water delivery systems, and more remind the archaeologist of the fruit growing industry in Tuolumne County.

Summary and Synthesis

Resource Types

corrals
rock fences and walls
trails
cow camps
farms
wells
cisterns
barns
remnant vegetation patterns
orchards
ditches
processing plants
sheep camps
lambing pens (rock enclosures)
dairies
spring houses
blacksmiths
packing sheds

Number and Condition of Surviving Resources

Virtually all open country in Tuolumne County shows some evidence that agricultural pursuits have occurred there in the past. This may include such seemingly minor activities such as field stone clearing or fencing, to more major endeavors of building branding corrals or water systems. Generally the agricultural operations which have continued in operation over the years are in better condition than those which have been abandoned, as the former are repaired, stabilized, and cared for while the latter are left to deteriorate in place.

Today there are approximately 20 major cattle ranches left in the county, with about 45 major land holders, including names of some of the county's pioneer families: Rosasco, Jasper, Guisi, Gandolfo, Baker, Casserretto, Kress, Grohl, Gardella, Diestel, Questo, Abbott, Engler, Pooley,

Richards, and Gookin. Dairy operations were never terribly significant in the county, providing products for local consumption only. Insufficient grazing lands and fenced parcels were available; dairy cattle could not be left to pasture in the forest since they had to be gathered each day for milking. In 1925 1200 head of dairy cattle were here, increasing to 1400 in 1937, and thereafter declining (900 head in 1951).

Sheepherders have generally left the county, the last major rancher was the William Fitch operation, also owned by a Gold Rush family. Most early shepherds were forced out of the county, seemingly because they were "foreign" and further discouraged by the imposition of a nickel-per-head tax on all animals entering the county, and finally by the prohibition of sheep on any Stanislaus National Forest land. Turkeys continue to be important in Tuolumne County, but there are far fewer operations today than in the past. Agricultural produce is generally brought into the county, with apples and pears being the only fruit that is produced in any major capacity.

CHAPTER 9: THEME VI/INDUSTRY, COMMERCE, AND TOURISM

Theme:	**Industry, Commerce, and Tourism**
Time:	**A. D. 1848-1993**
Location:	**Tuolumne County**
Properties Recorded	**TCH 6, 7, 9, 15, 17, 19, 25, 30, 38, 39, 43, 46, 52, 53, 54, 63, 66, 73, 76, 77, 81, 82**

Within a few months after the discovery of gold in the tailrace of Sutter's Mill on the American River, mining became Tuolumne County's first historic-era industry. During the initial years after the gold discoveries, almost all other industries were spawned by it. The Federal Census records for 1850 listed page after page of men who noted their occupation as "miner." Among other pursuits listed, many were mine- or mill-related, or related to the transportation of water for mining and milling purposes. The larger mines and water companies in these early years employed ditchtenders, lumbermen, smiths, and sawyers. In betwixt these occupations were listed those few who provided support to the miners, as goods and services: saloon keepers, boardinghouse keepers, merchants, clerks, laundrymen and women, barbers, druggists, lumbermen, and a handful of doctors and attorneys.

Early Professions

It wasn't long, however, before the rapidly growing towns of Columbia, Sonora, Shaw's Flat, and others boasted a full complement of pursuits which reflected the growing industrial and commercial base of the area. The *Miners & Business Men's Directory* , published in 1856, listed men with more than 60 different occupations at work in Tuolumne County (Heckendorn and Wilson 1856). They included the construction industries (carpenters, cabinetmakers, bricklayers, stonecutters, tinsmiths, painters, paperhangers); merchants and storekeepers (clerks, fish express dealers, butchers, bakers, boot and shoe makers, tailors, upholsterers, book and "segar" sellers); lodging, food, and drink establishments, including coffeehouses, breweries, soda and syrup manufactories; commercial establishments such as banks and express companies; watchmakers and gunsmiths; and many businesses related to transportation: teamsters, livery stables, blacksmiths, saddlers, carriage and wagon makers, and wheelwrights. There were even two daguerreotype studios, located in Columbia and Jamestown respectively.

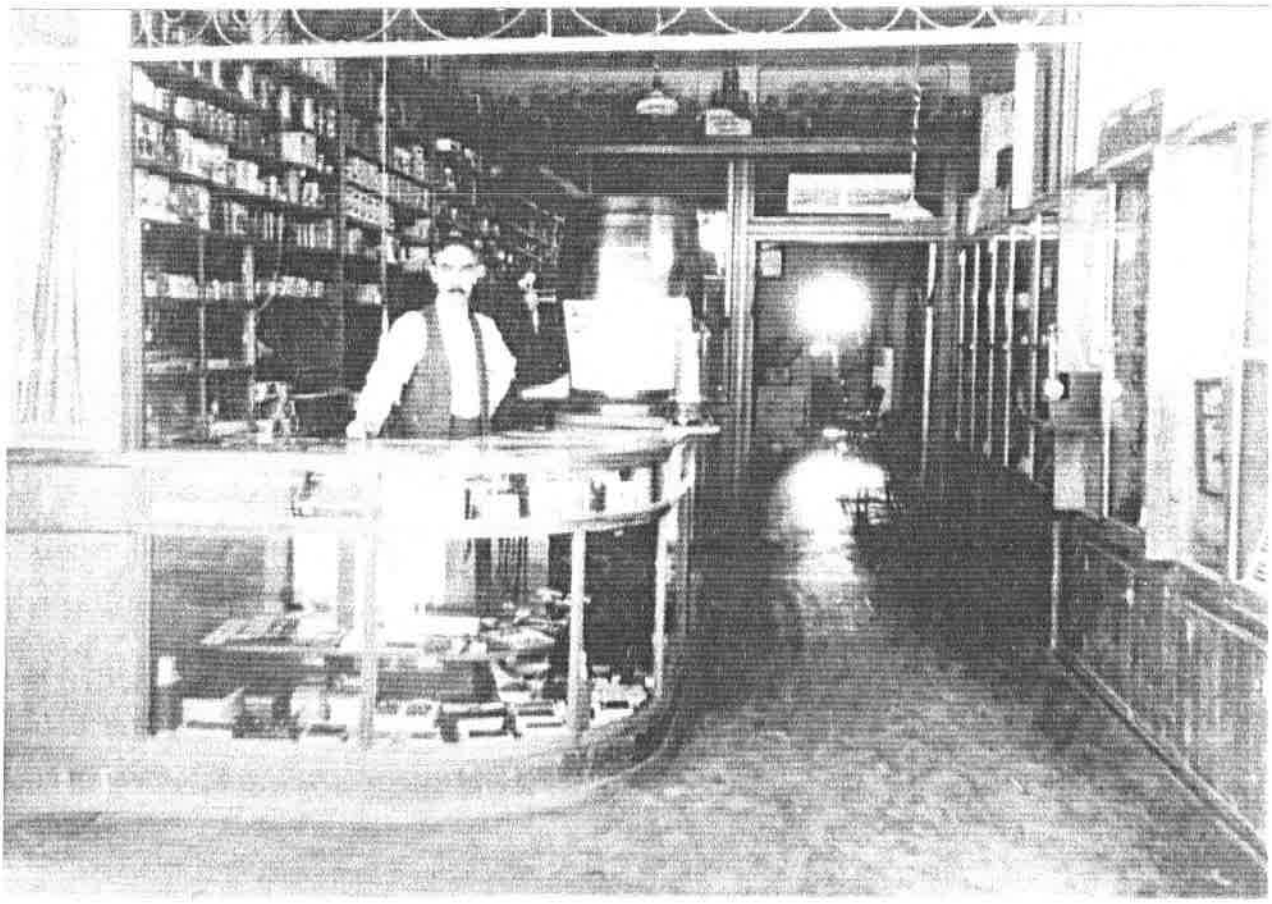

Figure 9.1 Punter and Burns Cigar Store, Washington Street, Sonora. Presently occupied by The Sportsman. Tuolumne County Museum archives.

By the mid-1860s Columbia, Sonora, Jamestown, and Big Oak Flat/Groveland had become commercial and industrial centers in Tuolumne County, a role they have maintained to this day. Smaller satellite towns such as Summersville (Tuolumne), Soulsbyville, Shaws Flat, Chinese Camp, Jacksonville (now inundated by Don Pedro Reservoir), and others remained as supply centers to the surrounding mines and ranches, but were never again to reach the heights of population and development they did during the Gold Rush.

Limestone and Marble

Gold continued to be the principal extracted mineral in Tuolumne County through the early 1910s, although various other minerals, including copper and silver, are also found in small quantities in quartz rocks. There were a few silver mines located near the summit of the

Sierra Nevada, but none were sufficiently important or productive to be considered major industries in Tuolumne County. The county's extensive marble and limestone deposits, however, were developed on a large scale. The Columbia (Bannister's) Marble Quarry (Appendix E, TCH 53) turned out a product that was in demand throughout California during the 1890s and 1910s. The marble was of such a fine quality that for a brief time Thomas Bullock bought the quarry, intending to transport marble to San Francisco via his railroads, with the hope of facing the new San Francisco post office (he lost the contract however to an out-of-state granite supplier).

In 1857, Andrew Vincent began cutting a two-foot by four-foot block of marble excavated from the Columbia quarry to be used in the Washington Monument. Vincent sent his finished block on the ill-fated Flying Dutchman which sunk at sea. A second block was prepared to replace the first.

Dolomitic limestone was quarried back to the very early days for building purposes. W. C. Badgley and E. C. Rudorff pioneered the production of lime south of Sonora and sold their claims to the Pacific Lime and Plaster Company in 1905-1907. The making of lime for plaster and mortar was carried on throughout the limestone belt from Shaws Flat (Appendix E, TCH 9), Springfield, and Sonora (Hamilton 1915:132). In 1936, the *Sonora Banner* said that 60 per cent of the state's production of lime came from Pacific Lime and Plaster, then the state's largest operation. It was also the largest employer in the county at that time. The production of lime products is still one of the major industries of Tuolumne County, as the Marine Magnesium Company of Pennsylvania is profitably operating the former U. S. Lime Products Corporation (Badgley and Rudorff's plant, incorporated in 1907) near Sonora (Appendix E, TCH 17). The Columbia Marble Quarry, under the name Blue Mountain Minerals, and a small lime kiln at O'Byrne's Ferry and Mountain Pass continue to be extracting limestone profitably today.

Agriculture and Food Production

Agricultural industries had progressed to include "rancheros," hay and flour dealers, a "pork packer," dairymen, fruiterers, farmers, and gardeners, reflecting the growing importance of local agriculture. Gardens were begun as early as 1849, and more perishable vegetables were locally grown. W. S. Smart had established his garden at Jacksonville by the summer of 1849 and wrote a letter to military authorities inquiring about getting title to the land. Daniel

Sexton had a large garden growing below Sonora at Mill Villa in 1849-1850, and William Wadsworth had a large one at Mountain Pass by 1850. Produce was carried by wagons to the various nearby camps, and in the early days consisted of potatoes, cabbage, beets, corn, squash, onions, beans, melons, and vegetables that could be stored for long periods of time.

Agriculture, which was initially a support industry for the mining operations and its attendant work force, by 1900 had become established as the second most important local industry. Gardens, orchards, and vineyards that had been planted by the mid-1850s, came into prominence in the 1860s as numerous varieties of apples, pears, plums, peaches, walnuts, wine and table grapes, and truck gardens of vegetables were produced for local use and for shipment outside the county (Appendix E, TCH 76). During the "Bodie Boom" in the eastern Sierra in the late 1870s, freight lines made daily trips over the Sonora and Mono Road, constructed to assist deliveries of goods, supplies, fresh fruit and vegetables to the inhospitable land and its teeming population of miners, merchants, and families. Before the road was completed, supplies were carried over the summit by pack trains, obviously during the milder months. Firkins of butter, made on local ranches and near the mountain meadows, were a major item to be transported at that time. The practice of taking supplies across the pass to the eastern Sierra and the Great Basin continued during the 1890s boom, and, to a lesser, extent into the mid-twentieth century.

Apple trees were probably the earliest fruit tree grown in Tuolumne County. Most Californio ranchos had apple trees, and the argonauts often purchased apples to bring with them to the gold fields (Davis-King 1988). Times were tough, and the frugal miners planted seeds they saved from the cores, looking to the future. William Smart's Spring Gulch Garden, mentioned previously, was producing fruit within seven years of the gold discovery, by 1856! In that year, it was reported that

> "Spring Garden" [is] the first fruit garden in this part of the State...Here we see upwards of sixty peach trees in bearing order, which produced the past season more than one hundred bushels...Here are thirty varieties of pears, fifty of apples, twenty of cherries, twelve of plums, and twenty of the finest of European Grapes, together with apricots, currants, gooseberries, raspberries, pomegranits, figs, blackberries, and strawberries...[Heckendorn and Wilson 1856:85-86; emphasis added].

While Spring Gulch may have been the more fruitful of the vegetable gardens and orchards, there were many similar operations established within a few years after 1850. Leonard Jarvis operated Vine Springs Ranch below Gold Spring where 120 acres were devoted to fruit trees

and vineyards. Jarvis also operated a nursery which provided stock to orchardists throughout the county. Extensive apple and other fruit orchards were planted in the 3-4000 foot elevation stretching from Twain Harte southwest to Tuolumne. Most of the orchards which produced fruit for export were planted by the 1870s, using wagons to deliver their produce. Apples were packed in barrels and were of the winter varieties which stored well until spring. Several fruit drying plants were constructed in the late 1870s, but these were never of any great success. The construction of the Sierra Railway, completed to Sonora by 1901, provided transportation for fruit, nuts, and other produce to distant markets. When the Sugar Pine Railroad was built to Middle Camp (Figure 9.2) and the ridge above Soulsbyville, and the Sierra was extended to Tuolumne, the rails provided transportation for the fruit grown in the numerous apple and pear orchards in those areas. Packing sheds were established on the rail line at several locations, including Ralph (Campbell's Station, Appendix E, TCH 38) and others.

Figure 9.2 Logging town of Middle Camp, a stop on the Sugar Pine Railroad (~1915?). Tuolumne County Museum archives.

Orchard operations continued to grow, with the 1910s and 1920s being the boom years in this century. The industry declined rapidly after that time, as cheaper produce from the extensive apple orchards in Washington state killed the local market. Many of the old orchards survive in the woods, near the towns, and on ranches. Within the past decade, given the resurgence of interest in food quality over quantity, several old orchards (Covers [first Lava Ridge, then Sonka's], Potato Ranch [Mother Lode], and Haslams [Sierra Glen]) have been pruned, cared-for, and replanted, all producing bountiful harvests of crisp, spectacular mountain apples once again.

Vineyards, which had provided grapes for the growing foothill wine industry, dotted the hillsides near Sonora, at Gold Spring, Spring Gulch, Garrote, Columbia, and Brown's Flat. Two of the larger vineyards were located on Moccasin Creek: the Joseph Ferretti vineyard which produced a great amount of red wine; and the Culbertson and Newhall vineyard known for the quality of wine it produced. One of the county's larger and more varied vineyards was the "Idylwild Ranch", located at Marsh's Flat. Operated by the Schofield family, the ranch had large beds of various berries and other vegetables as well, and exported fruit, vegetables, and wine to towns in the county and the San Joaquin valley. While the wineries in Tuolumne County never achieved the size and production rates of those in the Sonoma and Napa Valleys, they provided a palatable product for local consumption. Numerous small family wineries were operated as adjuncts to family farms and stores, especially by those of Italian and French extraction. Cider was also an important early beverage, perhaps the most notable of the firms being Macomber's, in Sonora, who made a "Champagne" apple cider, served at weddings and special events. When irrigation reached the Central Valley, and orchards and large-scale farming became productive there, county vineyards could no longer compete, and went out of business.

Breweries, born in the early days of the Gold Rush, continued to operate through the early 1900s in several locations. Without refrigeration, beer, porter, and ale had to be made and stored in cool places, and were usually sold from those locations. The Bixel Brewery at Columbia was probably the best known, but others were established at Groveland (Stachler/Mueller Brewery; Appendix E, TCH 81), and at Sonora (Middlesworth, Sonora, and Philadelphia breweries). Breweries were also the victim of better transportation and refrigerated cars, and could not compete with the large producers from the San Francisco Bay Area and Sacramento. Soda and syrup manufactories were also quite popular, with every large community having its own soda works and bottling plant.

The livestock industry, one of the earliest in the area, was well-established by the mid-1850s. Hogs were the first animals to be raised, since they could be marked (or branded) and then let to run wild. Cattle raising was quickly followed by sheep, and poultry production, especially in the western county, where land was combined into vast rangelands for feed, hay, and grain production. Most of the foothill cattlemen found that their ranches were unable to support year-round herds however, and began driving the cattle into the high country to feast on summer grass (a corollary of this appears to be that the ranchers, lacking fish in the streams, brought buckets of fish to the high country and began planting what are now considered "native" trout). A dairy industry was also established, and butter and cheese were made especially at the summer cow camps (Appendix E, TCH 73), but also in the areas now occupied by East Sonora and Standard. Agriculture and ranching remain major economic pursuits in Tuolumne County; it is still one of the major producers of turkeys in the state, with turkeys second only to timber in gross value.

Flour and ground grains were produced for livestock as well as human consumption. A large mill known as Bell's Bill was located a mile west of Sonora at Mill Villa. Other mills were located a Big Oak Flat and Second Garrote, and as late as ~1910, a mill was operating in downtown Sonora. The railroad again spelled doom for the local flour mills, as flour could be imported more cheaply than it could be produced in the county.

Beef production, which became the major agricultural industry in the county in the 1870s and through the 1890s, continued as an important resource to the local economy until recent years. The high cost of acreage, low beef prices, the drought, and the regulations on and loss of high country pasturage have all combined to reduce ranching to about 20 established families. Cattle ranked fourth in 1992 gross value for agricultural products, preceded by timber, turkeys, cord and fuel wood.

Tourism

Provisioned by the local agricultural and livestock industries, inns, boarding houses, hostelries, and restaurants were established in virtually every community, at crossroads, and at stopping places along the major roads in Tuolumne County (Appendix E, TCH 6, 43, 63, 77). Even ranchers provided sustenance and a warm place to stay for those who found themselves far from a commercial establishment as night fell (Appendix E, TCH 15, 30, 46, 82). Although tourism was an early activity in the county (the wonders of Bower Cave, Hetch Hetchy, and

Table Mountain), it was the railroad from Stockton to Milton, completed in May 1871 that brought tourists and other passengers that June. This greatly increased tourism; some tourists went via stagecoach to Angels Camp and Murphys, on to Big Trees, and thence to Vallecito, Columbia, Sonora, Chinese Camp, and Yosemite Valley. Others took Reynolds Ferry to Sonora while a third route was via O'Byrne's Ferry Bridge to Chinese Camp. This influx of tourism was seasonal, but of great financial help to the people who provided accommodations to the tourists, the ranchers who provided fodder and services to the stagecoach teams, and the farmers and cooks who provided tourists with sustenance. After the completion of the Sierra Railway, many locations in the county became destinations for vacationers who came to admire its rushing streams, natural wonders, and cooler elevations.

Tourism today is one of the major industries of the county, especially along the Highway 108 corridor and the Big Oak Flat Road into Yosemite National Park, as well as at Tuolumne County's three state parks, Columbia, Big Trees, and Railtown 1897. The California Centennial, which ran from 1948 to 1950 and celebrated the anniversaries of the gold discovery and statehood, sparked an interest in the Mother Lode. Numerous histories, photographic studies, and travel writings brought a flood of tourists to the gold country and its sleepy towns whose main streets were lined with picturesque stone, brick, and frame buildings from the boom years. Communities such as Jamestown and Sonora have capitalized on that ambience and have begun restoring historic buildings and opening up shops, restaurants, and inns which cater to visitors from all over the world. As the 150th anniversary of the gold discovery approaches, there is a renewed interest in the Mother Lode and an expected outpouring of publications, videotapes, and museum exhibits should entice an even greater amount of tourists to the area.

Commerce

Most merchandising establishments in the early years were individually owned, and were either general merchandise stores providing virtually all the needs of a miner and his family (Appendix E, TCH 54, 66), or were specialty stores such as gunsmiths, jewelers, cigar stores, butcher shops, etc. By the 1890s, however, some stores had begun operating branches in other localities. Hales & Symons (Appendix E, TCH 52), which had begun as a freighting business, rapidly expanded to sell lumber, mine supplies, feed, hardware, and numerous other goods which were freighted by wagon and train to distant locations throughout the county.

Until the early 1960s, most of the merchandising establishments in Tuolumne County remained in the hands of the same few families (e.g., Baer's Clothing Store) as they had when first opened in the nineteenth or early twentieth century. Recent years, however, have seen the development of large shopping centers, on the outskirts of the communities, where chain stores have pushed out many of the older established businesses that cannot compete with corporate purchasing and marketing resources. The face of downtown Sonora is changing, as the original store, druggist, grocery, and other buildings are occupied by boutiques and popular restaurants. While the commercial aspects of these changes may be good for the community, the alterations to the interior and exterior of the nineteenth century buildings are substantial, often removing original materials and destroying archaeological deposits.

Industries and commercial establishments related to transportation were many and diverse in Tuolumne County. They include carriage and wagon makers, livery stables, blacksmiths, wheelwrights, teamsters, and saddlers and provided employment for large numbers of workers. With the advent of the automobile, most of these businesses were supplanted by garages (Appendix E, TCH 19), gasoline stations, and tire shops, although some liveries simply converted their operations to handle the modern trucks and automobiles. Today, businesses relating to transportation abound on Highways 108, 120, and 49, as well as in virtually every community.

Construction

The building industry, which had its inception in the mines and mills, has been a major employer in Tuolumne County since the 1850s. As established towns and communities replaced the initial tent cities, carpenters, masons, smiths, and their associated trades became an important segment of the local economy. Even after towns were established with their attendant numbers of commercial, industrial, and residential buildings, frequent fires (Appendix C) necessitated quick rebuilding, thus providing an endless source of work for the building trades. The hard rock mining booms, especially those of the 1890s and 1910s, created a need for more housing and business establishments. This industry declined, however, during the decades after World War I, as most of the mines closed, never to reopen. Those which did, in the 1930s, created another small spurt of development. The unparalleled growth in population over the past 15 years, though, has occasioned the greatest growth in the building industry. The construction of shopping centers, subdivisions, and vacation homes has continued unbridled in recent years.

Logging

In the early days of acquiring lumber, sawmills were very mobile and generally operated by water, steam or occasionally by animal power. The mobility of the saws meant that they were self-contained units, and left little behind in the way of artifacts or features when they moved on. While timber is now logged and hauled to centralized mills, early mills were moved instead to the lumber. Logs were hauled by oxen to the mill, and when the trees in the vicinity had been cut, the mill was moved to a new forested location. Prior to the coming of the railroad (Chapter 4 and below), larger sawmills were developed, such as Hales' or Bradford and Way's mills. These were located in the higher timber belt where plenty of Sugar Pine grew. The logs would be sawed there and transported to Sonora for planing and final processing.

In 1850, Henri Charbonelle had built his sawmill near the corner of Church and Washington streets in Sonora, and three more were located between town and Mill Villa, the last being at Mill Villa itself. One of the larger sawmills from the early days was the C. C. P. Severance & Company steam sawmill, located at the Half Way House site on Curtis Creek near what is now Standard. That mill was moved to a location near the future Twain Harte in 1856, after four years of operation. Other early sawmills were located on Mormon Creek, Sullivan's Creek, Mountain Brow, Algerine, at Vine Springs, and near Garrote, to mention a few. The biggest demand for milled wood in the early days came from the flume and home builders, but by the 1880s (during the second Gold Rush), there was a huge demand for cordwood to power the steam engines and lumber for shoring in the shafts and adits. After the railroad came, large plants such as those in Sonora, Standard, and Tuolumne were constructed, and the logs hauled by rail to them.

The timber industry, itself a stepchild of mining, had become the major industrial base in the county by the turn of century. It not only provided the impetus for the growth and development of the Sierra, West Side and Cherry Valley, and Sugar Pine railways, but also created hundreds of jobs for loggers, sawyers, millers, and related professions. The towns of Standard, Cold Springs, and Tuolumne (Appendix E, TCH 39) were laid out and constructed as lumbermill towns.

The Standard Lumber Company was incorporated in 1899, and either owned or had rights to many large timber patents. The company eventually acquired four mills, the Empire, the Cold

Springs, and the South Fork, which were all located in the mountains, where the timber was logged and sawn, and the fourth, a sash and door factory located adjacent to the Sierra Railway's docking yard in Sonora (Figure 9.3). At first, lumber was transported up and out of the canyons by mule, oxen team, and a few steam tractors over dirt roads and portions of the Mono Trail, but soon was hauled on railroad mainlines, spurs, and inclines.

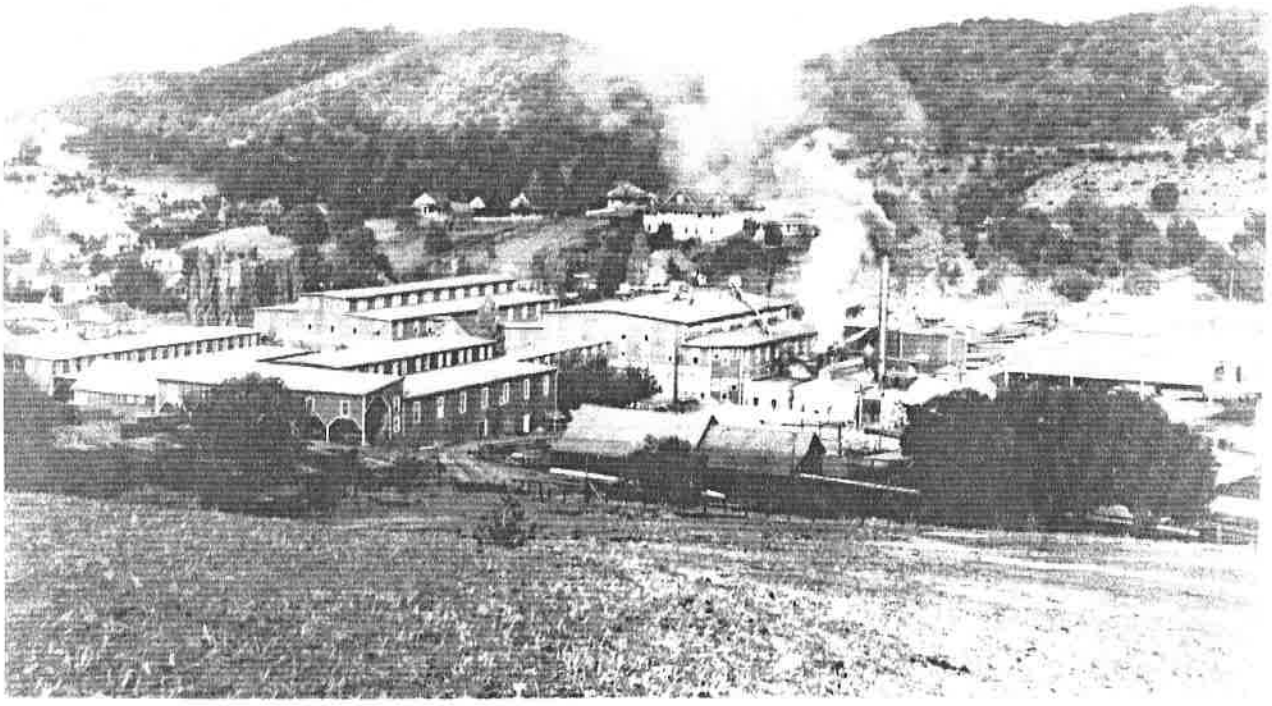

Figure 9.3 The Standard Lumber Company, Sonora. These buildings stood near the present Safeway, Sonora Post Office, and Hales and Symons (which still owns two of the buildings). Tuolumne County Museum archives.

Logistical problems beset the lumber company and led to their eventual decision to build a company town. In 1907, a fire razed the Cold Springs Mill, which had to be rebuilt. The South Fork and Empire mills were not readily accessible by any means and the company was committed by contract to the enlargement of the box factory in Sonora to accommodate the rapidly expanding orchard fruit industry in Tuolumne County. It was also to fill an order for one million orange boxes for the California Fruit Growers Associations (Hungry Wolf 1978).

The Empire Mill and significant stands of timber burned to the ground in 1913; a few years later no insurance could be found for the remaining two woods mills (Hungry Wolf 1978:121). This signaled an end to an era. Woods-mill logging was over; logs were brought out of the mountains to be milled in towns, in a move to centralize the mills in the state (Shoup 1988).

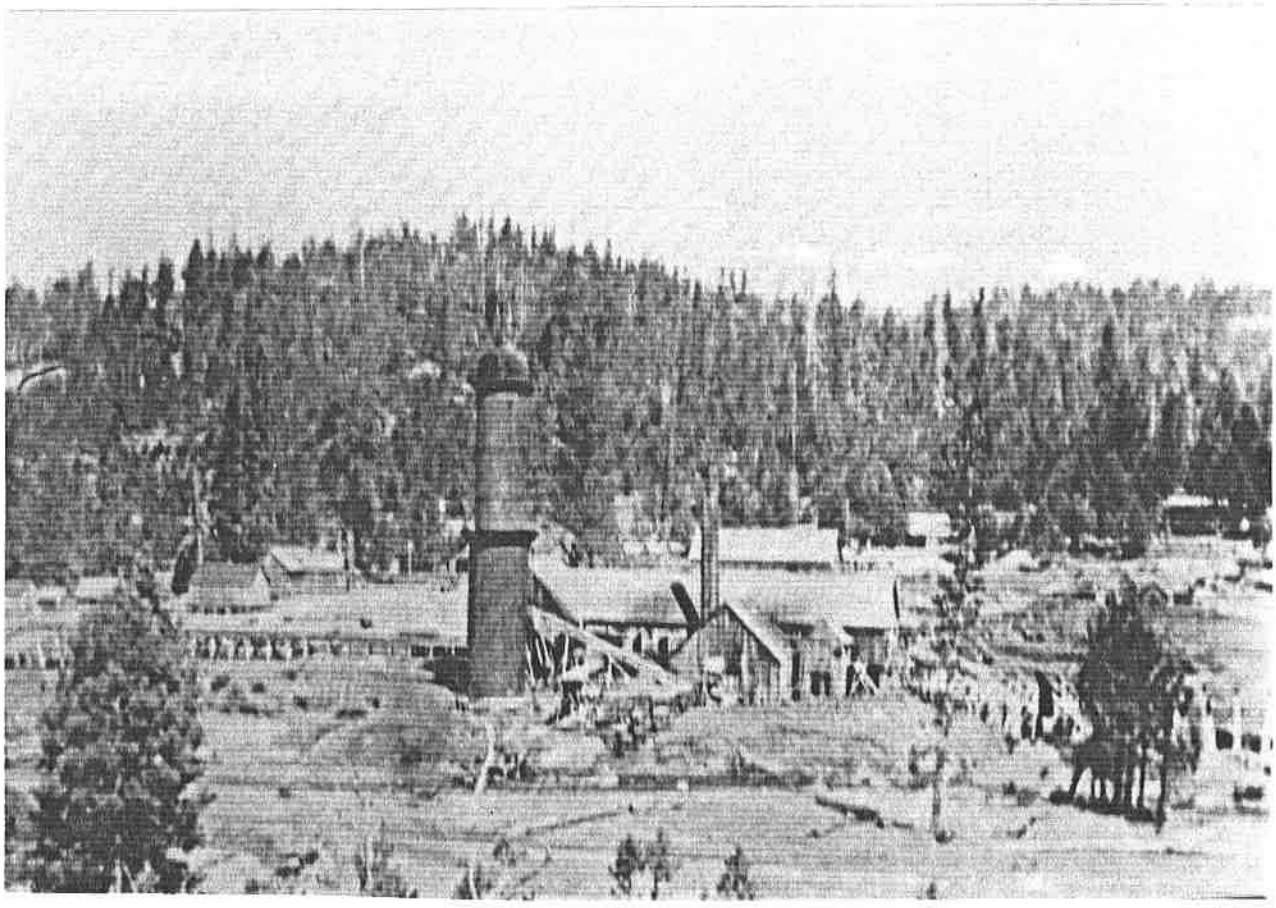

Figure 9.4 The Empire Mill in Browne's Meadow on the Tuolumne River. One of the "woods mills" that transported finished lumber, in it later days via the Empire City Incline to the Sugar Pine Railroad at Lyons Camp. Tuolumne County Museum archives.

The Standard Lumber Company soon purchased the old Xavier Fassler diary farm (Hodge 1961), and built a full-fledged company town containing boardinghouses, an inn, a school, butcher shop and slaughterhouse, post office, commissary, firehouse, community hall, company office buildings, a railroad depot, a church (Appendix E, TCH 59), and rows of company houses and apartments. Similar stories can be told of the other mill towns in the

county. For more than 30 years, from the turn of the century until the Depression, timber was very important in Tuolumne County, with thousands of board feet cut annually in the higher elevations, carried by rail to the mills at Tuolumne, Standard, and Sonora where it was made into lumber, boxes, and other wood products. Although the industry has suffered in recent years, the modern Fibreboard operations at Standard, Keystone, and Chinese, along with their attendant work force, attest to its viability today. Unmilled, unprocessed timber remains as Tuolumne County's highest gross-value product, with a raw cost in 1992 of $29,000,000^{00}$.

Summary and Synthesis

Industry and commerce in Tuolumne County began with the Gold Rush, spurred by the mining industry. From the earliest years other industries and commercial establishments were developed to provide economic support to the miners and their families. As the economy stabilized, and towns were established, the county saw the growth of the usual complement of stores, shops, inns, restaurants, liveries, and local industries, as well as social halls and gathering places (Appendix E, TCH 7, 25). Over the ensuing years, industry and commerce waxed and waned with the mining (or logging) booms and busts, but have remained relatively steady since the demise of mining as the major local industry and the rise of a multi-industrial and commercial base.

Property Types

Industrial and commercial property types in Tuolumne County are extremely diverse and include many structures, buildings, sites, and landscapes discussed in previous chapters:

Mines and mills
Quarries
Kilns
Sawmills
Foundries
Hotels, inns, and roadhouses
Liveries and garages
Stores, shops, and office buildings
Banks
Breweries and Soda Works
Garden terraces
Reservoirs
Railroad grades, spurs, features
Unidentified foundations
Can dumps and scrap metal
Garbage (mixed dumps)
Company towns
Blacksmiths
Other smiths and residue
Borrow pits, construction areas
Slaughterhouses (bone concentrations)
Vineyards and orchards

Many of these properties are extant and represented by buildings or structures, while others are simply archaeological sites. Not all buildings or sites which represent early commercial and industrial enterprises are important, however, as they may be lacking in integrity, or have no associations with events important in history.

Relative Number Remaining/Condition

While there are thousands of buildings and sites related to industry and commerce in Tuolumne County, and hundreds of landscapes related to industrial activities, not all are in good condition or retain any integrity. Although gold mining sites are ubiquitous, there appear to be only three standing stamp mills in the county, and none of those in good condition. Their scarcity as a resource, however, makes them important in regional history. A few quarries and kilns remain in operation today, but most historic locations are overgrown pits and collapsed structures. Therefore, it would appear that those few remaining structures should be preserved for future generations.

Foundries and other large industrial complexes are also relatively lacking in representation, while early sawmills (with perhaps the exception of the Empire Mill at Browne's Flat) have disappeared from the landscape and are marked only by a few collapsed structures or land disturbances.

Remnant orchards and vineyard terracing are all that remain of most of these once abundant agricultural resources. Sonka's Apple Farm and a few other orchards are maintained, and grapes are again being planted locally, but the original acreages have been vastly reduced and the industry sharply curtailed.

Breweries and soda works, which were once operating in several communities, disappeared as commercial establishments in the 1910s and 1920s. The gaunt remains of the Bixel Brewery, above Columbia, are the most significant remnants of that era, while only the collapsed stone walls of the hop kiln remain at Mueller's Brewery in Groveland and nothing but foundations can be seen at the Rocher Brewery near Columbia (Marvin 1992).

By far the greatest number of remaining resources related to industry and commerce are the buildings which once housed stores, shops, offices, banks, hotels, restaurants, and roadhouses. As they were usually located in communities and could be remodeled into other businesses

uses as commerce changed, they remain functional and many have been preserved. Historic resources inventories, conducted in Sonora, Jamestown, Big Oak Flat, Groveland, Soulsbyville, Chinese Camp, and, by the Department of Parks and Recreation in Columbia, provide numbers and frequencies of these types of resources for those towns. When surveys have been completed in the other major communities in Tuolumne County, a more complete record of their frequencies and conditions will be available.

CHAPTER 10: CONCLUSION AND RECOMMENDATIONS

Tuolumne County's cultural remains include both prehistoric and historic archaeological sites, standing buildings and structures, beautiful homes, ancient villages, landscape remnants of bygone industries, objects, whole towns or other districts, and indications on every street corner of a rich heritage. Tuolumne County, in supporting the preparation of this document has recognized the need to preserve, enhance, perpetuate, and use a cultural resources in the interest of economic prosperity, cultural enrichment, and the general welfare of the people. The preceding chapters gave an overview of the prehistory and history of the county to assist in planning decisions, provide guidance for the addition of a cultural resources element to the General Plan, and to protect resources that might otherwise be overlooked. The remainder of this chapter provides a brief overview of the non-federal process used to identify, evaluate, and protect important resources. This is followed by a set of personal observations about how the process currently works in Tuolumne County, guidelines for assessing impacts to cultural resources, and recommendations for management and other treatment options.

The California Environmental Quality Act, Appendix K

The California Environmental Quality Act (CEQA) is the most commonly used statute in the State for identifying and managing cultural resources. CEQA guidelines, Appendix K, have been adopted, and although used as statutes, are <u>not</u>.

The background to the preparation and adoption of Appendix K is important to understand, as state regulations have changed, as has the awareness of what should be inventoried and how. The guidelines were written by prehistoric archaeologists at a time when only those resources were of concern. Historic resources, areas of Native American traditional value, landscapes, and more were not considered in the preparation of guidelines. At the time the guidelines were formulated, they were intended for use by professional archaeologists <u>only</u> who understand what the various terms and strategies mean. For instance, "capping a site," one of the recommendations in Appendix K, is, in and of itself an impact to a resource, and must be mitigated (e.g., capping might destroy the organic components of a archaeological deposit). Another common management tool is that of setting aside a site into "Open Space." An

archaeologist should ask what is being "set aside?" Surface remains may represent the "tip of the iceberg," as it were, with subsurface remains being far more extensive than those observed on the surface. What is being protected in the open space? Additionally, "setting aside" an archaeological site does not really evaluate the impacts to the resource. If a site is to be left alone in an new subdivision, for example, what will prevent the site from being looted or vandalized by residents? What might the impacts be on site components if it is irrigated or fertilized? What are the impacts of cattle or grazing? The list goes on and on. The point is that Appendix K is meant to provide guidelines, not the weight of a statute, and that impacts and mitigation measures should be assessed and developed by professionals who have been trained to understand and interpret the complex variables of cultural resources management.

The process of identification will become more clear in the coming year when the new state-wide system of cultural resource documentation is established (Appendix D). Cultural resources are to be identified first. This means that the land must be surveyed for archaeological and above-ground resources. Prefield investigation, involving record searches at the Central California Information Center of the California Archaeological Inventory and basic historic archival research should be part of this identification phase. Although it is not clearly mandatory that Native American groups should be contacted as part of the investigation, at any time where prehistoric resources are involved, or where there is a strong likelihood of ethnographic or ceremonial resources present, then it is a good idea to consult with the Indians. There are other, very particular laws regarding the treatment of human remains which may be relevant if skeletal material is present. The Tuolumne Me-Wuk are an "agency of record" to the County, and should be aware of and comment on any projects of interest to them. Once the resources are identified, some of them may be evaluated as unimportant, and are unlikely to warrant additional study. Others however, including all archaeological sites, should be evaluated through excavations and other means if they are going to be protected as was the intent of the CEQA guidelines. If they are not evaluated, then mitigation measures become more complex, and will need to be reviewed on a case by case basis.

Recommendations

As a result of years of conducting cultural resources studies in Tuolumne County, the following recommendations are offered for consideration in ameliorating the processual quirks and assisting county planners and commissioners in their tasks. Recommendations are not

listed in any particular order or weight. Each should be considered on its own merit, with the express intent of providing guidance in particular to Tuolumne County Planning Department (TCPD) staff and the various members of design review, local planning, and other boards which may deal with alteration of land and the potential impacts to cultural resources.

1. **Create a workable, flexible, but strong Cultural Resources and Historic Preservation Element to the General Plan** which incorporates: design review; demolition policies; recognition of archaeological, Native American, structural, and other heritage resources; buildings; historic preservation (including plans for alteration); penalties; benefits; scenic corridors; and more. This should include provisions for the establishment of conservation districts or areas where preservation at the neighborhood or localized scale is undertaken without the perceived burdens of the traditional historic district approach. A recent National Park Service publication states:

> Preserving neighborhoods, historic and near-historic, takes on special significance in today's changed political climate. The designation of a local historic district, whether through zoning or some other source of authority, is a vexing issue for elected officials in many cities and towns. Historic district ordinance require all property owners within a proposed district to comply with a police power regulation that carries with it both criminal and civil penalties for violation. They are also seen as regulating "taste" through the review of proposed additions or new construction. Mistakenly or not, the process is often perceived as government interference with individual rights of free speech and the unfettered use of private property. Thus, the local political sieve through which additional regulations must be filtered is an increasingly difficult one.
>
> The conservation area approach -- and the term "area" is used here throughout to make clear that ideally it is not a special kind of zoning district -- offers a number of distinct advantages. It fits well with contemporary thinking about what is worth preserving. It is more susceptible to local definition, more flexible in interpretation, and less threatening or restrictive to the average property owner. The conservation area approach melds easily with contemporary local planning processes and administrative structures; and, most important, admits to the evaluation process additional associative values, including human ones, without demeaning history or architecture. [Stipe 1993].

2. **Create/establish a program of oral interviews about county resources**, similar to that begun in the 1970s at Columbia Junior College. A remarkable wealth of information about resource locations, land ownership histories, marriages and other liaisons, who built what and when, and so forth that could be collected from long-time county residents. The use of video cameras to document the resource in its setting while the interviewee is talking is preferable, but audio cassettes can be used when there is no need to document visual information.

3. **Establish a means of protecting historic resources, including archaeological deposits, from looters and vandals, by encouraging enforcement of current laws and through education of the public.** One of the bigger problems facing cultural resources managers is that of how to counter the presence and promotion of bottle collectors, pothunters, and other "amateur" archaeologists who destroy archaeological deposits in their search for relics. Unfortunately, such behavior is encouraged by front-page newspaper articles which extol bottle collections, tombstones, gaslight fixtures, bones, and any number of other cultural items as matters of curiosity and collection (e.g., "Historian keeps eye on fabled sink hole" [*Union Democrat* 24 May 1989], "Past rises from the rubble" [*Union Democrat* 28 April 1993], or "Sonoran seeks history etched in Glass" [*Union Democrat* 28 December 1992], among many).

At the state-funded 29th District Agricultural Association (Mother Lode Fair), there exists a recognized, judged category to display collected Indian artifacts. While some collections may have been legally collected, many have not; furthermore, such displays are offensive to Native Americans. The Commission could meet with the fair board to discuss the nature and source of the displayed artifact collections and perhaps assist them in revising their entry policy. An educational series of articles in the *Union Democrat* or news clips on the local radio station about such topics as pothunting or looting, the laws regarding archaeological resources, the reasons looting can be so destructive, and the loss of the information to us all might be beneficial.

4. In discussions with the County Historian, it has become clear that Tuolumne County might not long remain home to the fabulous private collection of original information he maintains. While the collection is private, and therefore under his control, the Commission might consider entering into discussions with him regarding funding to place the collection in an appropriate repository.

5. **Establish a program which recognizes the historical archaeological (buried) resources present in the county.** Above-ground buildings often contain archaeological deposits beneath the ground; such deposits may have research value. One such area is "Tigre," in Sonora, where the buildings, inhabited first by Mexicans followed by Chinese, were demolished, but the area was merely flattened, leaving behind archaeological deposits. So too, when historic buildings in the towns are to be remodeled, archaeological data are often present in abundance. These data should be evaluated under the terms of the CEQA. The loss of a building through razing or demolition does not necessarily remove the archaeological values which might be present.

6. **Establishment of a demolition policy, in consultation with the County Building Inspector and County Fire Warden, is critically important for the future of Tuolumne County's cultural resources.** Demolition is a major threat to existing buildings and structures. Buildings may be evaluated as "unsafe, public nuisance, structurally unsound, firetraps" by building inspectors, fire wardens, or others, without consideration of the structures' historic values. The policy should discourage automatic or gratuitous demolitions of historic structures for fire training, or demolition because they are "attractive nuisances" or safety hazards, without CEQA review. The county could refer to City of Sonora's demolition ordinance, along with similar regulations from other counties for guidance.

7. **Improve the working relationship between the Native American and non-Indian community, by encouraging personal telephone calls, joint field inspections, and consideration of Native American values.** The Indians are powerful allies and can become more so as historic preservation advocates Native American lifestyles, "patrimony," and traditional areas. Insure that Native Americans are contacted whenever there is a potential for their resources to be impacted. This can occur efficiently through the Environmental Impact Report process, where consultation with Native Americans can occur as part of the public participation process.

8. **The TCPD or the Commission should prepare a packet of information containing copies of relevant burial legislation, information about the treatment of human remains and prehistoric sacred items, and encourage agencies to become familiar with the process.** One of the problems currently facing the county archaeologists and Native Americans is the lack of understanding (respect?) for state laws (especially the Public Resources Code) regarding the treatment and disposition of human bones. While the Native American Heritage Commission and the State Attorney General's office have been notified of a problem in Tuolumne County, it would be helpful to have the Commissioners talk with the Tuolumne County Sheriff's Department and County Coroner. The summary list of relevant legislation should outline policies and procedures, and be included in Appendix A of this document.

9. **Federal undertakings and their cultural resources evaluations (especially Section 106 of the National Historic Preservation Act) should be reviewed by the TCPD, among other county agencies.** Water development projects in particular will affect all types of cultural resources; while most will be monitored by the State Office of Historic Preservation (OHP) because of federal entailment, the county should become actively involved in the review of the

cultural resources work performed for those projects. The county could also exercise its concerns regarding CEQA in this light; most of the projects fall under the National Environmental Policy Act (NEPA) and assume that process will cover all concerns of the state/county's lead agency. This means that the county of origin is often not afforded the opportunity to comment on projects that will take place and affect resources of local concern.

10. **Include ethnographic village and other ethnographic site locations (see Chapter 3) in the Geographic Information System (GIS) system,** even if their plotted location will not be precise. A similar strategy might pull major historic settlement data from General Land Office (GLO) plats. Such information will assist planners in assessing sensitivity for cultural resources.

11. **Consider setting aside all of Table Mountain as a highly sensitive area which will need inventory and evaluation by professional archaeologists and Native Americans (among other specialists).** The resources located there are so unique that methods of analysis have yet to be developed for some sets of data. Very little has been documented about these limited and fragile resources, which exist in pristine states, many of which have not altered since the time they were last used.

12. **Planning staff should become familiar with the Tuolumne County Historical Society's Landmark's Committee process of identification of potential resources when it makes recommendations to the TCPD. In return, the Committee should give Planning staff as much information as possible about how decisions were made.** The Landmarks Committee currently acts as an advisory agency to the TCPD on the need for cultural resources investigations in project review. TCPD procedure generally is to send the Committee a form about a project with a map depicting the location. The Landmarks Committee then advises the county on the likelihood of the project impacting cultural resources. For example, if it is known that resources are likely to be present from inspection of GLO plats, on-the-ground examination, information from knowledgeable informants, or other sources, then those sources should be referenced in the recommendation for an archaeological survey or other form of investigation. If it is thought that no resources are present then the Landmarks Committee generally does not respond, but the request for a survey is generally taken under good advise. The Landmarks Committee is the best current resource available to county staff about the location of historical resources. Planners can always ask for additional information if so desired.

13. **The TCPD should establish a firm policy of sending out requests for information from advisory agencies dealing with cultural resources for all projects at all times,** if for no other reason than it protects the County in the event of future litigation. There is at present uneven departmental treatment.

14. **Consider establishing the Central Sierra Archaeological Society (CSAS) as an advisory agency to the county.** The CSAS members are the most knowledgeable group on archaeological resources in the county. If the CSAS became an advisory agency, conflict of interest issues would have to be explored before members could agree to assist the TCPD. Alternatively, the county could consider hiring an archaeologist as a planner, or contract with a cultural resources management firm to advise on or investigate proposed projects.

15. **Investigate how to get the county listed as a concerned or responsible agency for federal undertakings and state projects which take place in the county.** One avenue for discovering when undertakings occur in the county might be through OHP, since that agency is supposed to review cultural resources investigations conducted for federal projects. OHP also has funding for two new employees to oversee certain State projects. Responsibilities will include development of the guidelines, standards, and criteria for implementing the requirements of Executive Order W-26-92 and Public Resources Code Section 5024/5024.5, as well as guiding the consideration of historical resources under CEQA.

16. **Establish a procedure for quarterly or biannual updates of site location information from the Central California Information Center of the California Archaeological Inventory (CCIC).** The proposed procedure for the county to update its GIS database is to receive the annual report from the CCIC. This once-a-year receipt of information is too infrequent in a county where development is occurring at an unprecedented pace. It can be foreseen that electronic transfer of information may be possible in the not-to-distant future, which may be the most effective way for county planning staff to gain access to current locational information.

17. **It should be recognized in the planning process that certain areas will be more likely to contain important resources than others.** Ranches or other large tracts of private land held for long periods of time are more likely to contain resources which are not only undisturbed by development, but less likely to have been looted or vandalized over the years. Drainages and especially confluences of drainages are more likely to contain archaeological

resources, due to their proximity to water if nothing else. This may be particularly true below the 4000 foot elevation, as there was a greater concentration of both prehistoric and historic people there. Such tracts of land should be recommended for cultural resources surveys when they come before the TCPD.

18. **Professional cultural resources specialists should evaluate impacts to resources and make management recommendations.** "Open Space Zoning" is often used as the sole management tool for avoiding cultural resources. The assumption is that a resource placed within open space will not be subject to project impacts. This may or may not be the case depending on the nature of the project and the resource. In fact, open space can invite impacts. For example, open spaces are used as trails, taking people potentially closer to resources increasing chances for vandalism and looting. In the discussion below are listed some of the different types of impacts which may occur at archaeological sites. While there are many more examples that could be present, these are listed to demonstrate that it is critical to have a professional take responsibility for assessments.

A project should be considered to have an impact on a cultural resource when the impact may lessen the integrity of the location, design, setting, materials, workmanship, feeling, or association, as suggested by federal law (36 CFR 800.9(b)). Impacts include, but are not limited to physical destruction, damage, or alteration of all or part of the property, isolation of the property from its setting or landscape, or introduction of visual or audible elements that are out of character. In this regard, a place of religious importance to the Native Americans may be affected if its setting is compromised.

Two types of impacts occur: the first are previous effects on to the integrity of the cultural resource, and the second are the proposed impacts to the resource should the project proceed. Thus one has already happened, generally through no fault or agency of the project applicant, and the second is an estimate of what may potentially happen. Previous and potential impacts to cultural resources include road construction and use, cattle grazing, logging, vandalism, plowing, bulldozing, siltation, destruction, razing, maintenance activities, collecting, erosion, soil turbations (animals, weather, etc.), inundation, recreation, burial or removal of deposits, general construction and earth moving, and exposure.

Impacts to resources may often be mitigated in several ways. Below are listed several treatment options which could be used alone or combined to mitigate impacts to cultural

resources in Tuolumne County.

Preservation of a property in place: (1) Preservation of a property, including avoidance of effects, is the preferred treatment under both California and federal law. Protection measures need to be carefully considered however. Historic structures for example would not necessarily benefit by avoidance, but rather would suffer the effects of age and reclamation. Therefore mitigation measures, including adaptive reuse, rehabilitation, affordable housing, among other considerations might be more appropriate. (2) Protection of cultural resources through in situ preservation is difficult for the county to enforce or monitor since most resources are located on private land. Even more important, there are far too many "protected" resources for the county to monitor effectively as it is. The TCPD, in consultation with the Commission, might consider establishing a monitoring program where resources are annually inspected and a log or register is kept of the examination.

Ongoing use: Continued use of certain property types can have beneficial impacts and should be considered. Usually such resources are historic structures or buildings such as canals, roads, dams, historic buildings, trails, railroad grades, and related resources where ongoing use involves maintenance and frequent monitoring.

Adaptive use of a resource: This treatment option considers modifying a resource by altering its function. Examples include the Wells Fargo Express Company office which was used for buying and arranging transportation of gold in the past and is currently used to book and manage stagecoach rides, or the former Sugar Pine Railroad grade used as a bicycle and pedestrian path. Such adaptive reuses should be encouraged in the General Plan, as good economic incentives for tourism and recreation.

Incorporation of a cultural resource into the design of the project: This treatment incorporates the resource into the design of the project (a building, subdivision, or whatever) without altering the elements which make it important. For example, a golf course that is to be built on a historic cattle ranch might consider using the historic buildings for the club house or "pro shack" or using historic split rail fences, ranch roads, and stock ponds for landscape and design features.

Vigorous prosecution of trespassers, looters, and vandals: This treatment as a policy would do a great deal to prevent the unauthorized excavation of archaeological resources, and deter the vandalism which occurs to so many the more remote or rural resources. Breaking windows, removing doors, stripping wallpaper, throwing objects at the walls and siding are just some of the acts which may destroy the integrity of a structure. Bottle-collecting, including excavation is also destroying the integrity of historic resources. The penal code (Title 14, Part 1. § 622.1, 622.2) stipulates that anyone, not the owner thereof, who willfully injures, disfigures, defaces, or destroys any object or thing of archaeological or historical interest or value is guilty of a misdemeanor. The county need only enforce the laws which are already "on the books." Appropriate

signage might state that violators of the law will be prosecuted to the fullest extent.

Ground-protecting vegetation: Vegetation can be very beneficial for hiding or protecting cultural resources, but it must be carefully considered. How deep will the roots go? How will the plant get its water? Will the plant attract humans or animals, such as in the case of certain flowers or berries? What effects will the roots or chemistry of the plant have on the site components, particularly the organic components? What effects will fertilizers or other soil additives have on site components? What will be the overall effect of the vegetation on site architecture?

Bank stabilization: Riprap or other stabilization may be the best preservation of archaeological deposits, and might be considered especially in areas adjacent to water. Stabilization should halt the long-term effects of reclamation and should preserve the values associated with the resources. If the resource is an important archaeological site, some sort of data recovery will likely be necessary before stabilization can occur.

Recovery of archaeological data: This in many ways is the last solution which should be considered for the management of archaeological resources. Data recovery is a very complex technical procedure which dictates preparation of research designs, explicit methodologies of excavation and analysis, professional publication and review of reports, and other treatment.

Recordation of historic structures and photodocumentation: This treatment uses the National Park Service standards for documentation and photogrammetry of historic buildings and structures: the Historic American Buildings Survey (HABS) and Historic American Engineering Record (HAER). These methods recover significant data on important structures and buildings. If chosen as a treatment then such drawings and documents should be prepared in a manner consistent with the "Secretary of the Interior's Standards for Architectural and Engineering Documentation" and may include the "Secretary of the Interior's Guidelines for Architectural and Engineering Documentation," both found in *Archaeology and Historic Preservation; Secretary of the Interior's Standards and Guidelines.* Documentation such as this is most appropriate when historic buildings or structures are to be destroyed or have their integrity compromised.

Additional research (archival, oral, and documentation): Additional research involving the archives, gathering of oral testimony, and documentation would be an excellent way of collecting and preserving information that is likely to be lost about resources in the future. It is often not possible to preserve resources in place (e.g., long, linear resources such as railroad grades or ditches). Historical documentation could be undertaken to make a detailed record of the importance of the resource for research and provide conservation of information, according to the "Secretary of the Interior's Standards for Historical Documentation" found in *Archaeology and Historic Preservation; Secretary of the Interior's Standards and Guidelines.* Importantly, a research design should be developed to state how the research would enhance existing, available archival data,

and provide a record of the system greater than what is presently known.

Long-term monitoring: Monitoring of potential impacts to important cultural resources, including those properties which were not evaluated but are treated as if they are important, is an important option. Monitoring should be directed by a qualified archaeologist or specialist who meets the Secretary of the Interior's standards. Monitoring of effects to the cultural properties is critical for those resources which have been set aside in Open Space or are otherwise left in situ.

Public education: Public education is an admirable and often necessary application of information which derives from the study of cultural resources. Too little information is relayed back to the public, although a major purpose of conducting the research in the first place is to protect public values. Interpretative areas can be developed for the public, a non-technical popular account of the area or resource history may be prepared, or work sheets and exercises could be prepared for community school children about history, among many avenues for public benefit.

19. **Planners should consult historic GLO plats, historic maps such as those prepared by Thom, Beauvais, Dart, and more in the course of their work.** While those maps will not tell them where all historic resources are located, they will identify some of the earlier or larger ones. Of course such maps will not identify any but the larger Native American villages and sites.

20. **The TCPD should consider organizing an in-field training session of planning commissioners and staff by professional cultural resources managers.** Training might then enable planners to make decisions about when and how cultural resources studies should be implemented.

21. **The county should review all plans put forward by the California Department of Transportation, among others, which could destroy the unique character of historic roads and landscapes, considering aesthetic as well as historic values.** The county's state highways are being systematically redesigned and "cut and fill" has become de rigueur road-building. Such degradation of such valuable resources is not necessary, and is not sufficiently mitigated. Scenic Highways 120 and 49 (a state-designated heritage corridor) are especially valuable historic resources to Tuolumne County. Widening the roads to four-lane highways destroys the rural character, historic integrity, aesthetics, gentle transport feeling, and related resources found along the highways.

22. **Recognize that historic landmarks in the county include historic vegetation, particularly gardens, scenic vistas that add to the feeling of history, and historic landscapes**, such as fields with rock walls or mining areas (like the "moonscape" rocks left over from hydraulic mining). While archaeological and historic resources as have been discussed in the preceding volume, evaluation of historic landscapes can be particularly important in a county where industries made such predominant imprints on the terrain. While this is a relatively new topic in historic preservation, there have been good guidelines established by the federal government for identifying and evaluating such resources.

23. **Evaluate whether previous surveys were adequate for the project at hand.** Several parcels have had archaeological surveys conducted, generally by prehistorians who were not recording historic and ethnographic resources.

24. **Continue protection of historic railroad grades and active ditch paths as natural recreation paths for county citizens.**

This list of recommendations is not exhaustive, and could be expanded as procedures and policies develop in the county. Perhaps the final suggestion to the Commissioners and TCPD staff is that this study be considered a working document, to be placed in a three-ring binder to facilitate changes and additions as time passes. New contextual studies will be developed, new inventories conducted, a new General Plan with new policies will be certified, and all should be included in a document such as this.

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Persons Consulted

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Costello, Julia: Dr. Costello is a historical archaeologist who has conducted several archaeological surveys and prepared reports on Tuolumne County sites.

De Ferrari, Carlo: Mr. De Ferrari is the Tuolumne County Historian, former County Clerk, Auditor, Controller, and a recognized expert on the history of Tuolumne County. He is the editor of *Chispa*, the quarterly bulletin of the Tuolumne County Historical Society, and is the author of numerous articles and books about the county. Mr. De Ferrari maintains an extensive library, card file, and microfilm collection of materials relating to the Gold Rush and Tuolumne County.

Fraguero, Lena: Mrs. Fraguero is the owner of the Pease Ranch near Algerine and is a lifelong resident of Tuolumne County.

Fuller, Reba: Ms. Fuller is the granddaughter of Chief William Fuller and she is Spokesperson for the Central Sierra Me-Wuk Cultural and Historic Preservation Committee.

Fuller, Willard P., Jr.: Mr. Fuller is a mining geologist, former editor of *Las Calaveras*, the bulletin of the Calaveras County Historical Society, and an expert on marble and limestone quarries and resources.

Heron, Dorothy: A native of Jamestown, Mrs. Heron is the owner of the Newcomb Ranch at Curtisville.

Longeway, Elsie: Mrs. Longeway is a native of the Twain Harte area and is knowledgeable about its history.

Marovich, Sharon: Former president of the Tuolumne County Historical Society, a member of the Tuolumne County Historic Preservation Review Commission, and a former Sonora City Councilwoman, Mrs. Marovich is very knowledgeable about the history, and particularly the buildings, of Tuolumne County.

Nicholls, Wendell: Mr. Nicholls is a native of Soulsbyville and is the third generation of his family to reside in the area.

Pecchinino, Bradley: A native of Columbia, Mr. Pecchinino often visited Gold Springs and knew George Trask.

Riedel, William: Mr. Riedel is a third-generation cattle rancher from Angels Camp whose family took cattle to the Beaver Creek area for many years.

Rozier, Marie: Mrs. Rozier is a native of Tuolumne who has conducted considerable research on its history, as well as remembering much of it from her childhood.

Scott, Lyle: Mr. Scott is a past president of the Tuolumne County Historical Society and is very knowledgeable about Tuolumne County history, especially near Jackass Hill.

Sturgis, Eileen: Miss Sturgis is the daughter of Lee Judd Sturgis, who purchased the Woodhams Ranch in 1923.

Thornton, Mark: Author of the Big Oak Flat-Groveland Historic Sites Survey, and Chair of the Tuolumne County Historic Preservation Review Commission, Mr. Thornton is a resident of Groveland and is knowledgeable about the history and sites of Southern Tuolumne County especially.

APPENDICES

Appendix A: Relevant Legislation, Regulations, Guidelines, and Policies (CEQA, General Plan, Native American Heritage Commission, Local Native Americans, NEPA, Public Resources Code, OHP Recommendations, Local Ordinances)

Introduction

The intent of the following appendix is to provide some information and guidelines about relevant legislation, guidelines, policies, ordinances, and other information about cultural resources management. The Tuolumne County Contextual History is meant to be useful on the local planning level, and was explicitly directed towards resources located on private land. Tuolumne County is composed of more than 78 per cent federal or state owned lands, and as such regulations governing either entity or the agencies of management may prevail. The documents included here are not the only relevant documents to consult; the Tuolumne County General Plan, the Blue Ribbon Committee report, and other specific ordinances (Sugar Pine Railroad right-of-way, for example) were not included here.

City of Sonora

Sonora is the only incorporated city in Tuolumne County. The city policies regarding cultural resources were not reviewed for this study, but it is notable that the City has adopted a demolition ordinance which interprets the razing of buildings to be a project under the California Environmental Quality Act (CEQA), and therefore subject to review. The city's General Plan contains an historic element.

County of Tuolumne

Several of the pertinent ordinances for Tuolumne County follow in this appendix. Among the more important are the Resolution 171-92 which establishes a County register of cultural resources and establishes procedures for implementation of the "Mills Act" (GC § 50280.1), the Historic Property Preservation Agreement (a contractual agreement between the County and the property owner regarding preservation of historic structures), two sections from Chapter 17 (Tuolumne County Uniform Zoning Ordinance) regarding historic districts and design preservation, and Chapter 2.38 providing the terms of the establishment of the Historic Preservation Review Commission. At the time of this publication the County is revising its General Plan, and has applied for a Certified Local Government (CLG) grant to add a cultural resources element.

As a CLG, Tuolumne County has applied for and received funding to conduct several cultural resources studies, including the present study, a historic survey of Chinese Camp, and a Geographic Information System (GIS) data base of information on cultural and other resources (more detailed information on the GIS system is included later in this appendix).

State of California

There are numerous State statutes, codes, and guidelines to guide the identification, documentation, evaluation, and protection of cultural resources. Many of these are being revised in 1993 and 1994, while new legislation is pending. It is important to be aware of changing legislation when speaking of cultural resources laws. CEQA is the most commonly referenced statute for cultural resources studies conducted on private land, but there have been many changes in California in the last few years and CEQA is currently under modification.

California has also enacted several bills recently. On September 30, 1992, Governor Pete Wilson signed Assembly Bill 3037 (Hauser) authorizing the official recording with the County Recorder of designated historic properties. Also in September of 1992, Governor Wilson signed Assembly Bill 2881, the California Register of Historical Resources. The "California Register is an authoritative guide...to be used...to identify the state's historical resources and to indicate what properties are to be protected, to the extent prudent and feasible, from substantial adverse change" (Public Resources Code 5024.1).

The various laws regarding Native American remains, cemeteries, and more can be found in the California Health and Safety Code (e.g. 7050.5 which discusses treatment of human remains) and the California Public Resources Code(e.g. 5097.94 which empowers the Native American Heritage Commission or 5097.99 which discusses the criminal aspects of obtaining or possessing Native American artifacts or human remains taken from a grave or cairn).

No. 171-92

Filed July 7, 1992

By [signature] Clerk of the Board of Supervisors

RESOLUTION

OF THE BOARD OF SUPERVISORS OF THE COUNTY OF TUOLUMNE establishing a Tuolumne County Register of Cultural Resources and establishing procedures for the implementation of the Mills Act

WHEREAS, Tuolumne County's historical built environment is a priceless legacy from previous generations that is an integral part of the County's identity and distinctive character;

WHEREAS, Tuolumne County's historical built environment is an important part of the County's tourism economy;

WHEREAS, this legacy, to be perpetuated to future generations, requires careful planning practices;

WHEREAS, many of Tuolumne County's homes and business buildings are over 50 years of age and need continued good maintenance and rehabilitation;

WHEREAS, the Mills Act provides owners of designated historical properties with an economic incentive, in the form of a property tax reduction, to preserve the authenticity of their buildings;

WHEREAS, it is necessary to establish a local register of historic properties to qualify the majority of the County's private properties for Mills Act incentives pursuant to Government Code Section 50280.1;

NOW, THEREFORE, BE IT RESOLVED that this Board of Supervisors does hereby:

1) establish a Tuolumne County Register of Cultural Resources, and;

2) establish the following rules for implementing the Mills Act being Article 12 (commencing with Section 50280), Chapter 1, Part 1, Division 1, Title 5, of the Government Code, in the unincorporated area of the County of Tuolumne:

Rule 1: A property shall be qualified to be considered for treatment under a Mills Act Contract if it is not exempt from property taxation, is privately-owned and meets at least one of the following criteria:

A. Is on the National Register of Historic Places;

B. Is in a district listed in the National Register of Historic Places;

C. Is on a State of CA official register of historical or architecturally significant sites;

D. Is on the Tuolumne County Register of Cultural Resources;

E. Is currently zoned :H (Historic Combining) or :HDP (Historic Design Preservation Combining) under Title 17 of the Tuolumne County Ordinance Code.

Rule 2: A property is eligible for consideration to be listed on the Tuolumne County Register of Cultural Resources if it meets one of the following criteria:

A. It exemplifies or reflects significant elements of Tuolumne County's cultural, social, religious, economic, political, engineering or architectural history;

B. It is identified with historic persons or with important events in local, state or national history;

C. It embodies distinguished architectural characteristics valuable for a study of a period style or method of construction or is a valuable example of the use of indigenous materials or workmanship;

D. It is representative of a notable work of a master builder or architect;

E. It meets one of the criteria listed in Rule 1.

Rule 3. The owner, or his or her authorized agent, of a qualified property, as defined in Rule 1, may apply to enter into a Mills Act Contract through the Planning Department of the County of Tuolumne on a form prescribed by that department and meeting the following requirements:

A. A copy of a recorded map or assessor's map showing the subject real property as a single parcel or contiguous parcels.

B. A legal description of the property which shows names and addresses of all the owners of legal or equitable interests in the property.

C. A written expression of willingness to enter into a contract signed by all parties having a legal or equitable interest in the property.

D. A list of property owners showing the names and mailing addresses of the owners of all property that lies within 300 feet of the subject property as shown on the latest assessment rolls of the County.

E. For all contracts: Site plan indicating the location of the qualifying structure within its parcel boundaries. Photographs of each view of the qualifying structure and its contextual setting (e.g. landscaping, surrounding buildings if located nearby, etc).

F. For rehabilitation and/or remodeling projects: A description of and proposed time frame for completing each phase of the rehabilitation or remodeling project. Exterior elevations of the qualifying structure clearly identifying all proposed changes.

G. For all projects: A description of the proposed maintenance program for the structure.

H. A fee to cover the costs of preparing and enforcing the Contract, holding public hearings and giving notices thereof as required by this Resolution, the Act, and the zoning requirement. The fee shall be established by the County's Master Fee Ordinance.

An application to enter into a Mills Act Contract shall be deemed an application to rezone the portion of the parcel covered by the Contract to the Historic Combining District (:H) and, if applicable, to the Historic Design Preservation Combining District (:HDP). An application to enter into a Mills Act Contract shall be deemed an application for inclusion on the Tuolumne County Register of Cultural Resources.

Rule 4: Upon receipt of an application to enter into a Mills Act Contract, the Tuolumne County Planning Department shall refer the application to the Tuolumne County Historic Preservation Review Commission for review to determine:

A. Whether the property in question is qualified for inclusion on the Tuolumne County Register of Historic Places;

B. If the property is eligible to enter into a Mills Act Contract;

C. If all or part of the parcel under application shall be included in the Contract. ;

D. If the request is for a property requiring rehabilitation, then, the Commission shall evaluate whether or not the project meets the rehabilitation standards according to the rules of the Office of Historic Preservation of the State Department of Parks and Recreation and according to the Secretary of the Interior's Rehabilitation Standards;

E. If the request is for a property which shall be preserved in its existing good condition, the Commission shall evaluate the maintenance schedule to determine if it is sufficient to maintain the property in its present good condition.

The Commission shall forward its recommendations with the Contract and proposed conditions to the Board of Supervisors.

The Board of Supervisors shall consider the recommendations and take action to approve a contract, with or without conditions, or reject a contract, and approve (with or without modifications) or reject the application for inclusion of the property on the Register of Cultural Resources.

Within 20 days after approval by the Board, the Clerk of the Board shall record a copy of the Contract with the County Recorder.

Rule 5: Property tax adjustments for that portion of the subject parcel included under Contract shall be calculated as prescribed in Section 439.2 through 439.4 of the Revenue and Tax Code in consultation with the Tuolumne County Assessor. Assessments shall be made annually by the County Assessor.

Rule 6: The Planning Director shall be responsible for enforcement of the Agreement.

ADOPTED BY THE BOARD OF SUPERVISORS OF THE COUNTY OF TUOLUMNE ON July 7, 1992

AYES: 1st Dist. Kotelly
2nd Dist. Campana
3rd Dist. Marks
4th Dist. Ferguson
5th Dist. Patten

NOES: Dist. None
Dist.
ABSENT: Dist. None
Dist.
ABSTAIN: Dist. None

Charles H. Kelly
CHAIRMAN OF THE BOARD OF SUPERVISORS

ATTEST: Lisa A. Brewer
Clerk of the board of Supervisors

No. 174-92

ORDINANCE NO. 1919

AN ORDINANCE AMENDING TITLE 2, CHAPTER 2.38 OF THE TUOLUMNE COUNTY ORDINANCE CODE EXPANDING THE DUTIES OF THE HISTORIC PRESERVATION REVIEW COMMISSION

THE BOARD OF SUPERVISORS OF THE COUNTY OF TUOLUMNE ORDAINS AS FOLLOWS:

SECTION 1. Section 2.38.090 of the Tuolumne County Ordinance Code is hereby amended by adding Subdivision F to read as follows:

F. Review and make recommendations to the Board of Supervisors regarding applications for historical property preservation contracts submitted pursuant to the rules adopted by the Board of Supervisors by resolution.

SECTION 2. This ordinance shall be effective 30 days from the date of its adoption. The Clerk of the Board of Supervisors is hereby authorized and directed to publish a summary of this ordinance in the Union Democrat, a newspaper of general circulation printed and published in the County of Tuolumne, State of California, prior to fifteen (15) days after its passage.

The foregoing Ordinance introduced on the 7th day of July 1992, and passed and adopted at a regular meeting of the Board of Supervisors of the County of Tuolumne, State of California, on this 14th day of July, 1992, by the following vote, to wit:

AYES: Rotelli, Simpson, Marks, Ferguson, Walter

NOES: None

ABSTAIN: None

ABSENT: None

Charles H. Walter, Chairman
Board of Supervisors,
County of Tuolumne,
State of California

ATTEST: RUBY HAWORTH,
Clerk of the Board of Supervisors

By ______________ (SEAL)

APPROVED AS TO LEGAL FORM:

COUNTY COUNSEL
COUNTY OF TUOLUMNE

By ______________
(Date)

HISTORIC PROPERTY PRESERVATION AGREEMENT

THIS AGREEMENT, is made between the County of Tuolumne (County) a general law county whose authority is vested by the State of California Constitution and Government Code, and _____ (Owner).

WHEREAS, Owner possesses certain real property located in the County of Tuolumne, described in EXHIBIT A attached and made a part hereof.

WHEREAS, the property is a qualified historic property in that it is privately owned property which is not exempt from property taxation and meets at least one of the following criteria:

A. Is on the National Register of Historic Places;

B. Is in a district listed in the National Register of Historic Places;

C. Is on a State of CA official register of historical or architecturally significant sites;

D. Is on the Tuolumne County Register of Cultural Resources;

E. Is currently zoned :H (Historic Combining) or :HDP (Historic Design Preservation Combining) under Title 17 of the Tuolumne County Ordinance Code.

WHEREAS, both County and Owner desire to carry out the purposes of Article 12 (Commencing with Section 50280) of Chapter 1 of Part 1 of Division 1 of Title 5 of the California Government Code and Article 1.9 (commencing with Section 439) of Chapter 3 of Part 2 of Division 1 of the California Revenue and Taxation Code.

WHEREAS, both County and Owner desire to limit the use of the property to retain its characteristics as property of historical significance in the manner described in EXHIBIT A attached and made a part hereof.

NOW, THEREFORE, both Owner and County in consideration of the mutual promises, covenants and conditions set forth herein and the substantial public benefits to be derived therefrom, do agree as follows:

1. AGREEMENT SUBJECT TO GOVERNMENT CODE SECTIONS 50280-50290. This agreement is made pursuant to California Government Code Sections 50280 through 50290 and Article 1.9 (commencing with

Section 439) of Chapter 3 of Part 2 of Division 1 of the California Revenue and Taxation Code and is subject to all of the provisions of those statutes.

2. PRESERVATION OF PROPERTY. Owner agrees to preserve and maintain the historical structures and land, as a qualified historic property, in no less than equal to the condition of the property as of the date hereof. Owner further agrees to preserve the property and, if necessary, to restore and rehabilitate the property to conform to the rules and regulations of the Office of Historic Preservation of the California Department of Parks and Recreation (OHP) and according to the Secretary of the Interior's Rehabilitation Standards in a manner described in attached EXHIBIT A.

Owner agrees to provide whatever information shall be required by the County to determine the property's continuing eligibility as a qualified historic property.

In addition to the requirements set forth in this Contract, Owner is subject to the requirements of the underlying zoning district(s).

Owner shall be responsible for replacement of the historic property unless destroyed or damaged exceeding 75 percent of its then current value through "Acts of God" such as fire, flood, tornado, lightning or earthquake or other damage beyond the control of the owner.

3. INSPECTIONS/REPORTS. Owner shall provide for such periodic examinations, by appointment, of the exterior and interior of the premises by the Planning Director, County Assessor, the State Department of Parks and Recreation, the State Board of Equalization or other representatives of the County, as may be necessary to determine Owner's compliance with this Agreement.

Every two years the owner shall report to the Planning Director on the progress of the rehabilitation or remodel or on actions which have been taken to maintain the structure in the state prescribed in section 2 above.

4. PAYMENT OF FEE. As a condition to entering into the contract, Owner shall pay County the fee established in the County's Master Fee Ordinance, which fee does not exceed the reasonable cost of administering the County's historical property program.

5. TERM. The term of this agreement shall be from ____, 19__, to and including _____, 19___.

6. AUTOMATIC RENEWAL. On the anniversary date of this agreement, one year shall be added automatically to the initial term of the agreement unless notice of nonrenewal is given as provided in this agreement.

7. NOTICE OF NONRENEWAL. If in any year either Owner or County desires not to renew this agreement, that party shall serve written notice of nonrenewal on the other party in advance of the annual renewal date. Unless the notice is served by the Owner at least 90 days or by the County at least 60 days prior to the renewal date, one year shall automatically be added to the term of the agreement. Upon receipt by Owner of the notice of nonrenewal from the County, Owner may make a written protest. At any time prior to the renewal date, County may withdraw its notice of nonrenewal.

8. EFFECT OF NOTICE NOT TO RENEW. If in any year either party serves notice of intent not to renew this agreement, this agreement shall remain in effect for the balance of the period remaining since the original execution or the last renewal of the agreement, as the case may be.

9. FURNISHING OF INFORMATION. Owner shall furnish County with any information County shall require in order to enable County to determine the eligibility of the property to be classified as qualified historical property.

10. CANCELLATION. County may cancel this agreement if county determines Owner has breached any of the conditions or covenants of this agreement or has allowed the property to deteriorate to the point that it no longer meets the standards for a qualified historical property. County may also cancel this agreement if it determines Owner has failed to restore or rehabilitate or maintain the property in the manner specified in this agreement.

11. NOTICE OF CANCELLATION. This agreement cannot be canceled until after County has given notice and has held a public hearing as required by the Government Code Section 50282. Notice of public hearing shall be mailed to the last known address of each owner of property within the historic zone and shall be published in accordance with Government Code Section 6061.

12. CANCELLATION FEE. If County cancels this agreement in accordance with Section 10, Owner shall pay a cancellation fee of twelve and one-half percent (12-1/2%) of the full value of the property at the time of cancellation. The full value shall be determined by the County Assessor without regard to any restriction on the property imposed pursuant to this agreement. The cancellation fee shall be paid to the Controller at such time and in such manner as the Controller shall prescribe and shall be deposited in the State General Fund.

13. NOTICES. All notices required by or provided for in this agreement shall be given in writing and may be mailed or delivered in person. If mailed, the address of Owner shall be the last known address on the County records and the County address shall be:

Tuolumne County Planning Department
2 South Green Street
Sonora, CA 95370
(209) 533-5611

Deposit of notice in the mail, postage prepaid, shall be deemed receipt of the notice.

14. NO COMPENSATION. Owner shall not receive any payment from County in consideration of the obligations imposed under this agreement, it being recognized and agreed that the consideration for the execution of this agreement is the substantial public benefit to be derived therefrom and the advantage that will accrue to Owner as a result of the effect upon the assessed value of the property on account of the restriction on the use and preservation of the property.

15. REMEDY IF AGREEMENT HELD NOT AN ENFORCEABLE RESTRICTION. In the event it is finally determined this agreement does not constitute an enforceable restriction within the meaning of the applicable provisions of the California Government Code and the California Revenue and Taxation Code, except for an unenforceability arising from the cancellation or nonrenewal of this agreement, for any tax year during the term or any renewal of this agreement, then this agreement shall be null and void and without further effect and the property subject to this agreement shall from that time be free from any restriction whatsoever under this agreement without any payment or further act of the parties to the agreement.

16. EMINENT DOMAIN PROCEEDINGS. Upon the filing of any action in eminent domain by a public agency for the condemnation of the fee title of any land described herein or of less than a fee interest which will prevent the portion of the land condemned or other land or a portion of it which is the subject of this agreement from being used for any authorized use, or upon the acquisition in lieu of eminent domain by a public agency for a public improvement, the portions of this agreement by which Owner agrees to preserve and to restrict the use of property described herein shall be null and void upon such filing as to the portion of the land condemned or acquired and to the additional land the use of which for an authorized purpose will be prevented as a result of condemnation or acquisition.

If, subsequent to the filing of an action in eminent domain, the proposed condemnation is abandoned by the condemning agency as to all or a portion of the land subject to the agreement, the restrictions on the use of the property included in this agreement shall, without further agreement of the parties, be reinstituted and the terms of this agreement shall be in full force and effect.

17. SUCCESSORS AND ASSIGNS. This agreement is binding upon and shall inure to the benefit of all successors in interest of Owner. A successor in interest shall have the same rights and obligations under this agreement as the original owner who entered into this agreement.

18. The prevailing party in any action to interpret or enforce this Agreement shall be entitled to recover its reasonable attorneys' fees.

IN WITNESS WHEREOF, the parties hereto have caused this Agreement to be executed this _____ day of _____, 19___.

COUNTY OF TUOLUMNE

_____
Chair, Board of Supervisors

_____
Date

APPLICANT

_____

_____
Date

APPROVED AS TO RISK MANAGEMENT
Risk Manager
County of Tuolumne

by_____

_____
Date

THE SECRETARY OF INTERIOR'S REHABILITATION STANDARDS

1. Every reasonable effort shall be made to provide a compatible use for a property that requires minimal alteration of the building structure, or site and its environment, or to the use a property for its original intended purpose.

2. The distinguishing original qualities or character of a building, structure, or site and its environment shall not be destroyed. The removal or alteration of any historical material or distinctive architectural features should be avoided when possible.

3. All buildings, structures, and sites shall be recognized as products of their own time. Alterations which have no historical basis and which seek to create an earlier appearance shall be discouraged.

4. Changes, which may have taken place in the course of time, are evidence of the history and development of a building, structure, or site and its environment. These changes may have acquired significance shall be recognized and respected.

5. Distinctive stylistic features or examples of skilled craftsmanship, which characterize a building, structure, or site shall be treated with sensitivity.

6. Deteriorated architectural features shall be repaired rather than replaced, wherever possible.

In the event replacement is necessary, the new material should match the material being replaced in composition, design, color, texture, and other visual qualities. Repair or replacement of missing architectural features, should be based on accurate duplications of features, substantiated by historical, physical, or pictorial evidence rather than on conjectural designs or the availability of different architectural elements from other buildings or structures.

7. The surface cleaning of structures shall be undertaken with the gentlest means possible. Sandblasting and other cleaning methods that will damage the historic building materials shall not be undertaken.

8. Every reasonable effort shall be made to protect and preserve archaeological resources affected by, or adjacent to any acquisition, protection, stabilization, preservation, rehabilitation, restoration, or reconstruction project.

9. Contemporary design for alterations and additions to existing properties shall not discouraged when such alterations and additions do not destroy significant historic, architectural or cultural material and such design is compatible with the size, scale, color, material, and character of the property, neighborhood, or environment.

10. Wherever possible, new additions or alterations to structures shall be done in such a manner that if such additions or alterations were to be removed in the future, the essential form and integrity of the structure would be unimpaired.

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PLANNING DEPARTMENT

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Chapter 17.44

HISTORIC (H) COMBINING DISTRICT

Sections:

17.44.010 **Purpose.** The purpose of the historic (H) combining district is to preserve and enhance places and things of particular importance in local, state or national history. (Ord. 1299, Section 1 (part), 1983).

17.44.020 **Criteria.** For a parcel to be zoned historic (H) combining district, it must be determined that:

A. It exemplifies or reflects significant elements of Tuolumne County's cultural, social, religious, economic, political, engineering or architectural history;

B. The characteristics giving rise to the parcel's significance are at least fifty years old; and

C. The parcel:

1. Contains or can provide information needed to answer important scientific research questions and there is a demonstrable interest in that information; or

2. Is directly and significantly associated with a recognized prehistoric or historic event, person or group important in local, state or national history; or

3. Embodies distinctive characteristics of a type, period, or method of construction; or is a distinguished example of the use of indigenous materials or workmanship; or is a notable work of a master builder or architect; or has a special and particular quality such as oldest of its type or best available example of its type. (Ord. 1299, Section 1 (part), 1983).

17.44.030 **Uses allowed.** Uses allowed are those for the underlying zone with which the (H) zone is combined. (Ord. 1299, Section 1 (part), 1983).

17.44.040 When variance not required. It shall not be necessary to obtain a variance from any provisions of this title relative to setbacks, coverage, height, or parking provided a use permit is obtained. (Ord. 1299, Section 1 (part), 1983).

17.44.050 Use permit requirement for construction or alteration of exterior appearance. No structure in an historic (H) combining district may be constructed or altered in exterior appearance without first obtaining a use permit, except as provided herein. No use permit shall be required for ordinary maintenance and repairs of any structure which do not involve a change in design, a change in exterior materials or a substantial change in appearance. No use permit shall be required for construction or alteration which has been determined by the building department to be necessary to protect public health or safety. (Ord. 1299, Section 1 (part), 1983).

17.44.060 Use permit for demolition or removal.

A. No structure may be torn down, demolished or removed unless it is determined that such structure has become so damaged or dilapidated, whether from damage by fire or other causes not of the applicant's own making or from natural deterioration, that it is unusable and cannot reasonably be repaired or restored and a use permit is obtained. An environmental evaluation shall be required in each case prior to consideration of the permit.

B. All such permits must be approved by the Board of Supervisors. An application for such a permit must include a statement by the owner of the fair market value of structure in question.

C. The Board of Supervisors may condition approval of such a permit on the owner granting to any interested party an option to purchase and remove within a set period of time the structure in question. The option price shall be the amount determined by the board to be the fair market value of the structure. (Ord. 1299, Section 1 (part), 1983).

17.44.070 Application. Each application for a use permit shall be accompanied by a site plan showing the location of all structures, objects or improvements existing or present on the property, and showing the locations of all structures, objects and improvements to be constructed, altered in exterior appearance, demolished or removed. The application shall also include drawings, photographs and such written description as may be necessary to accurately illustrate the front, side and rear elevations of any structures or objects proposed to be altered in exterior appearance, the colors and materials to be used in the proposed change and any exposed utility hookups, connections or fixtures necessary for the provision of electrical power, liquid petroleum gas, domestic water, sewage disposal, or other necessary fuel or utility service. Additional information deemed necessary for evaluation of the impact of the proposal may be required. (Ord. 1299, Section 1 (part), 1983).

17.44.080 Consideration of application for use permit. When considering the application for a use permit for construction or alteration of the exterior appearance of a structure, the following shall be considered:

A. The siting of the structure upon the property as compared to the siting of other structures in the immediate neighborhood.

B. All structures shall be in good proportions; shall be harmonious with the historic character of the area; shall make appropriate and fitting use of materials; shall have colors in good taste and never harsh or garish, but in harmony with themselves and their environment.

C. The size, location, design, color, number, lighting and materials of all signs and outdoor advertising structures shall be reviewed. No signs shall be approved in excess of the limits or requirements of this code.

D. Landscaping shall be required on the site in keeping with the character or design of neighboring buildings, and existing trees shall be preserved whenever possible.

E. The size, location and arrangements of on-site parking and paved areas and their lighting.

F. Ingress, egress and internal traffic circulation.

G. Original appearance of structure.

H. All of the above factors shall be related to the setting or established character of the surroundings. (Ord. 1299, Section 1 (part), 1983).

17.44.090 **Action on application for use permit.** The procedure for action on an application for a use permit shall be that set forth in Chapter 17.68 of this code except that appeal of the decision shall be directly to the board of supervisors, except that a use permit for demolition or removal must be approved by the board of supervisors, and except that if there is not timely action on the application, it shall automatically be referred to the board of supervisors. If a use permit pursuant to Chapter 17.45 is also required for a project under this chapter, then the Historic Design Preservation District Committee shall act on the permit in place of the director. Prior to any action taken by the decision making body on an application for a use permit for construction, alteration of exterior appearance, demolition or removal, the application shall be referred to the Tuolumne County Historic Preservation Review Commission for comment and recommendation. (Ord. 1849, Section 1, 1991).

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Chapter 17.45

HISTORIC DESIGN PRESERVATION (HDP) COMBINING DISTRICT

Sections:

17.45.010 Purpose. The purpose of the historic design preservation (HDP) combining district is to preserve and enhance the historic character of areas containing a significant number of structures worthy of preservation. By attempting to ensure compatibility of construction and exterior alteration of structures, the county seeks to promote orderly and harmonious development so as to enhance the general historic appearance, tourism potential and land values in the area as a whole. (Ord. 1299, Section 2 (part), 1983).

17.45.020 Criteria for district. An historic design preservation (HDP) combining district may be established consisting of all the parcels in an area containing a significant number of parcels with structures worthy of preservation when it is determined that establishment of such a district will serve the purpose of this zoning district. Although each and every structure in the area need not be historically significant, the structures collectively must be determined to constitute an area worthy of preservation and special design consideration. (Ord. 1299, Section 2 (part), 1983).

17.45.030 Uses allowed. Uses allowed are those for the underlying zone with which the HDP zone is combined. (Ord. 1299, Section 2 (part), 1983).

17.45.040 District boundaries. The boundaries of each district shall be established by the board of supervisors by ordinance after public hearing. (Ord. 1299, Section 2 (part), 1983).

17.45.050 District committee.

A. For each district the board of supervisors shall establish a district committee appointed by the board of supervisors consisting of five voting members as follows:

1. Four (4) members who reside within the boundaries of the area containing the district as established by the board of supervisors.

2. One (1) member who is a member of a county recognized historical society and is nominated by that society.

Voting members shall declare a disqualification when there is a conflict of interest. Renters or lessees may not vote on a project proposed by their landlord or lessor.

B. The board of supervisors may appoint one or more nonvoting members who shall serve at the pleasure of the board and shall possess appropriate qualifications including but not limited to:

1. One licensed architect or building designer; or

2. One licensed structural or civil engineer; or

3. One person specially qualified by reason of training or experience in historical structural rehabilitation.

C. Terms of the members of the district committee shall be for a period of four years. To provide for staggered terms, two members of the first appointed committee shall be appointed for two years. The two-year office holders shall be determined by lot.

D. Notwithstanding the foregoing, the Jamestown Design Review Committee established pursuant to Chapter 2.36 shall perform all responsibilities of the district committee for those Historic Design Preservation (HDP) districts established within the Jamestown Area Plan boundaries.

(Ord. 1849, Section 3, 1991)

17.45.060 **When variance not required.** It shall not be necessary to obtain a variance from any provisions of this title relative to setbacks, coverage, height, or parking provided a use permit is obtained. (Ord. 1299, Section 2 (part), 1983).

17.45.070 **Standards, guidelines and picture file.** The district committee shall establish and maintain standards, guidelines and a picture file to aid applicants in designing an appropriate project. (Ord. 1299, Section 2 (part), 1983).

17.45.080 **Use permit requirement.** No structure in an historic design preservation (HDP) combining district may be constructed or altered in exterior appearance without first obtaining a use permit, except as provided herein. No use permit shall be required for ordinary maintenance and repairs of any structure which do not involve a change in design, a change in exterior materials or a substantial change in appearance. No use permit shall be required for construction or alteration which has been determined by the building department to

be necessary to protect public health or safety. (Ord. 1299, Section 2 (part), 1983).

17.45.090 **Use permit application.** Each application for a use permit shall be accompanied by a site plan showing the location of all structures, objects or improvements existing or present on the property, and showing the locations of all structures, objects and improvements to be constructed or altered in exterior appearance.

The application shall also include drawings, photographs and such written description as may be necessary to accurately illustrate the front, side and rear elevations of any structures or objects proposed to be altered in exterior appearance, the colors and materials to be used in the proposed change and any exposed utility hookups, connections or fixtures necessary for the provision of electrical power, liquid petroleum gas, domestic water, sewage disposal, or other necessary fuel or utility service. Additional information deemed necessary for evaluation of the impact of the proposal may be required. (Ord. 1299, Section 2 (part), 1983).

17.45.100 **Consideration of application for use permit.** When considering the application for a use permit for construction or alteration of the exterior appearance of a structure, the following shall be considered:

A. The siting of the structure upon the property as compared to the siting of other structures in the immediate neighborhood.

B. All structures shall be in good proportions; shall be harmonious with the historic character of the area; shall make appropriate and fitting use of materials; shall have colors in good taste and never harsh or garish, but in harmony with themselves and their environment.

C. The size, location, design, color, number, lighting and materials of all signs and outdoor advertising structures shall be reviewed. No signs shall be approved in excess of the limits or requirements of this code.

D. Landscaping shall be required on the site in keeping with the character or design of neighboring buildings, and existing trees shall be preserved whenever possible.

E. The size, location and arrangements of on-site parking and paved areas and their lighting.

F. Ingress, egress and internal traffic circulation.

G. Original appearance of structure.

H. All of the above factors shall be related to the setting or established character of the surroundings. (Ord. 1299, Section 2 (part), 1983).

17.45.110 Action on application for use permit.

A. The procedure for action on an application for a use permit shall be that set forth in Chapter 17.68 of this code except that the district committee shall act in the place of the director, except that appeal of the action of the district committee shall be directly to the board of supervisors, and except that if there is not timely action on the application, it shall automatically be referred to the board of supervisors. Prior to any action taken by the decision making body, the application shall be referred to the Tuolumne County Historic Preservation Review Commission for comment and recommendation.

B. Notwithstanding subsection A, appeal of any decision of the Jamestown Design Review Committee acting as the district committee shall be made in accordance with the appeals procedure outlined in Section 17.68.130.

(Ord. 1849, Section 2, 1991)

official recommendations to the planning commission concerning such proposals. (Ord. 855 § 1 (part), 1976: prior code § 12-8.7).

Chapter 2.38

HISTORIC PRESERVATION REVIEW COMMISSION

Sections:

2.38.010 Establishment of commission. There is established a commission to be known as the historic preservation review commission. (Ord. 1648 § 1 (part), 1988).

2.38.020 Membership. The commission shall consist of nine members with all members having demonstrated interest, competence or knowledge in historic preservation. Commission members shall be appointed from among professionals in the disciplines of architecture, history, architectural history, planning, archeology or other historic preservation-related disciplines, such as urban planning, American studies, American civilization, cultural geography or cultural anthropology, to the extent that such professionals are available in the community. Commission membership shall also include lay members who have demonstrated special interest, competence, experience, or knowledge in historic preservation, American studies, cultural anthropology, cultural geography, or other historic

preservation-related disciplines. Effort will be made to fill the positions on the commission with professional and lay members as highly qualified, and representing as diverse a range of disciplines as possible. (Ord. 1831 § 1, 1991; Ord. 1669 § 1, 1989: Ord. 1648 § 1 (part), 1988).

2.38.030 Terms—Appointment. Commission members shall be appointed by the chairman of the board of supervisors on approval by the board. The chairman of the board shall make interim appointments to fill unexpired terms in the event of vacancies occurring during the term of members of the commission. The county shall act within sixty days to fill a vacancy. Terms of office of the commission members shall be staggered. The term of office of each member shall be for three years and until the appointment of his successor. (Ord. 1831 § 2, 1991: Ord. 1669 § 2, 1989: Ord. 1648 § 1 (part), 1988).

2.38.040 Commission meetings. The commission shall meet at least four times per year, with meetings held at regular intervals, in a public place, advertised in advance, and open to the public, pursuant to the California Open Meeting Act. Written minutes of commission meetings shall be kept on file and available for public inspection. (Ord. 1648 § 1 (part), 1988).

2.38.050 Continuing education. Each commission member is required to attend at least one informational or educational meeting, seminar, workshop or conference per year that pertains directly to the work and functions of the commission and would be approvable by the state. (Ord. 1648 § 1 (part), 1988).

2.38.060 Special expertise. If a special expertise is not represented on the commission for the consideration of national register nominations or other actions which are normally evaluated by a professional in such discipline, the commission shall obtain professional technical expertise from established organizations, institutions, public agencies or other commissions, such as the State Office of Historic Preservation, State Historical Resources Commission, Regional Archeological Information centers, colleges or universities, AIA preservation officers, private preservation consultants or regional counsels of government. (Ord. 1648 § 1 (part), 1988).

2.38.070 Chairman – Rules and regulations. The members of the commission shall annually elect a chairman who shall serve for a term of one year. A commission shall make such rules and regulations as are necessary to conduct its business. (Ord. 1648 § 1 (part), 1988).

2.38.080 Compensation. The members of the commission shall serve without compensation, but may receive actual and necessary expenses as are incurred in carrying out their duties. (Ord. 1648 § 1 (part), 1988).

2.38.090 Duties. The historic preservation review commission is charged with the following duties:

A. The commission shall maintain a system for survey and inventory of historic properties. The commission shall be

responsible for organizing, developing and administering an inventory of cultural resources within the county. The commission shall develop procedures for conducting an inventory of cultural resources. Survey activities shall be coordinated with and complementary to the state program to ensure that survey results produced by the commission will be readily integrated into the state-wide comprehensive historic preservation planning process. As part of any ongoing survey effort, procedural requirements must allow for periodic update of survey results on an annual basis as buildings gain maturity and as new areas are incorporated or annexed. The commission must adopt state guidelines for conducting its inventory of historic properties State-approved inventory forms (DPR 523), encoding sheets (DPR 660), and the California Historic Resources Inventory Survey Workbook shall be used to facilitate integration into the historic electronic data system and for state-wide comprehensive historic preservation planning purposes. Procedural standards for evaluation of properties must be consistent with the National Register of Historic Places criteria. The commission shall establish internal procedures to facilitate the use of survey results in the planning process by county officials and departments. The commission shall submit survey results to the county. Copies of the surveys shall be deposited and maintained at the county planning department and office of historic preservation.

B. The commission shall be responsible for overseeing the compiling, recording and updating of information on cultural resources within the county. The information shall be based on a comprehensive survey which is conducted in conformance with state survey standards and procedures.

C. The commission does not have the authority to nominate properties directly to the national register. The commission shall publish procedural rules for registering historical properties identified in a local cultural resources survey program for

the National Register of Historic Places, in accordance with the requirements of the National Historic Preservation Act, Section 101 (c) (2). The procedural requirements must include standards and criteria for individual properties and districts with boundary identification, property owner notification, public meeting format and appeal procedures in accordance with established National Register regulations.

D. The commission shall provide for adequate public participation in the local historic preservation program. The commission shall provide opportunities for public participation in all responsibilities delegated to it, in accordance with appropriate regulations, standards and guidelines. The commission shall encourage public participation in local historic preservation programs. Public participation shall be fully encouraged in direct involvement on the local historic preservation commission as professional or lay members. Commission meetings shall be open to the public, with published agenda and minutes in accordance with the California Open Meeting Act. The published agenda shall be mailed in advance of meetings to individuals and citizens' organizations interested in the commission's activities who have requested such notice. Each property owner shall be notified in writing prior to any action to include that property on a list of historic properties. Public participation shall be fully encouraged in the performance of the historic survey program at all levels of completion to identify and inventory significant cultural resources within the county. Survey results shall be of public record and on file at the county planning department, except in the case of sensitive resources, e.g., archeological sites subject to vandalism. Public participation and comment should be fully encouraged in the nomination process for the National Register of Historic Places. The commission shall publish the procedures by which assessments of potential national register nominations will be administered.

E. An annual report of the activities of the commission shall be submitted to the county and the state at the end of each calendar year. The report shall include, but not be limited to, such information as appointments to the commission, resumes of commission members and staff, attendance records of members, official minutes of the commission meetings, revisions in the enabling ordinance if applicable, sponsorship of special programs such as educational workshops or conferences, summaries of environmental review cases requiring commission comments, new landmarks and historic districts designated, review of national register nominations, cultural resources survey updates and other pertinent activities performed by the commission.

F. Review and make recommendations to the board of supervisors regarding applications for historical property preservation contracts submitted pursuant to the rules adopted by the board of supervisors by resolution. (Ord. 1919 § 1, 1992; Ord. 1648 § 1 (part), 1988).

Chapter 2.40

EMERGENCY SERVICES[5]

Sections:

Geographic Information System

Tuolumne County is creating a parcel-map based Geographic Information System (GIS). Once completed, the County's database will include information on cultural resources, wildlife resources, soil and vegetation types, slopes, geotechnical data, mineral resources, flood zones, high value range and timber lands, infrastructure including roads, water and sewer line locations and numerous other elements.

Ultimately, with an Assessor's Parcel Number, layers upon layers of information regarding soil type, flood zones, wildlife etc. may be obtained for a particular site, a quadrangle or the entire County. These layers may be used alone or combined. The resulting information will be used to channel development into those areas of the County with the fewest environmental constraints which are most economically developed, yet create the fewest impacts on the County's quality of life.

One information layer will include cultural resource data. Through a grant from the State Office of Historic Preservation, Tuolumne County is gathering its scattered cultural resource information from local sources to be combined with information from the Central California Information Center at Stanislaus State and the State Office of Historic Preservation. The GIS will provide for the information to be confidential and, through an agreement with the Office of Historic Preservation, site specific information will be accessible only by qualified persons. The County's GIS allows site specific information to be randomly hidden to protect the confidentiality of sensitive resources. The County's database will serve as a "trigger" to assist planners in determining when cultural resource investigations are necessary on a project specific basis. Further, the information is proposed to be used in reviewing minor permits including building permits, well permits and septic system permits. The GIS will "raise a red flag" when such a permit is proposed for an area where resources are known or expected to exist thus ensuring that known or suspected resources are not inadvertently destroyed through a lack of information.

The County anticipates incorporating the contents of the Tuolumne County Contextual History into its database. The information will be used to assist in the County's update of its General Plan which will include a Cultural Resource Element. The element will use information gained from the study and entered into the GIS to assist in the preparation of guidelines for determining the sensitivity of areas for cultural resources in the planning process.

The County uses an ARC/Info Version 6.1.1 on Sun work stations using Solaris 2.1, which is a Unix operating system. The primary work station, the Sun Sparc-10, accepts 3.5 inch floppies. The system can use UTM coordinates, but latitude/longitude or California State Plane Coordinates are preferred. All data points are being projected to California SPCS NAD 83.

Appendix B: Listed Historic Resources and Historical Properties in Tuolumne County

List of Historical Resources and Historic Properties in Tuolumne County

Sites and Properties are listed by location. The list, compiled from various documents, may not be complete. Some buildings have been demolished, but nevertheless, remain on various lists. Where a status change is known, it has been added below. Several inventories have been conducted within the county. Inventories are noted below, when present, and should also be consulted when conducted cultural resources investigations.

Key to Abbreviations:

CIHR:	California Inventory of Historic Resources
ESS:	Ethnic Sites Survey
HABS:	Historic American Buildings Survey
NRHP:	National Register of Historic Places
SHL:	State Historical Landmark
TCL:	Tuolumne County and City of Sonora Inventory/Historic Landmarks

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Big Oak Flat
(Inventory, Thornton 1988)

SHL No. 406; CIHR: Big Oak Flat (Savage Diggings) including several stone buildings, the Oak Tree Site and the I.O.O.F. Hall.
HABS CA-1578: I.O.O.F. Hall
CIHR: Mount Carmel Catholic Church and Cemetery
TCL; CIHR: Priests Grade and Priests Station Site
NRHP (1991): Wells Fargo Building

Cherokee

SHL No. 445; CIHR: Cherokee

Chinese Camp
(Inventory, Bloomfield et al. 1993)

SHL No. 423; CIHR: Chinese Camp, includes Chinese Camp School, Dr. Turner's House, Fandango Hall, Post Office, Rosenbloom Store, St. Francis Xavier Catholic Church, Chinese Graveyard.
SHL No. 140; CIHR: Wells Fargo Express Company Building
TCL; CIHR: Shawmut Mine

Columbia

SHL No. 123; CIHR: Columbia (Hildreth's Diggings)
NRHP No. 66000242 (1966): Columbia Historic District, 4 mi. NW of Sonora on CA 49
TCL; CIHR: Bannister Marble Quarry
HABS CA-1695: Brick Building
CIHR: Christian Science Church

(Columbia, con't)

HABS CA-1146: City Hotel, Main Street
HABS CA-1299: Commercial Buildings, Main Street
HABS CA-1693: I.O.O.F. Buildings, State and Broadway Streets
HABS CA-1872: Livery Stable, State and Columbia Streets
HABS CA-1573: Mills, D.O. Building, Main and Fulton Streets
HABS CA-38-11; CIHR: Mountain View Cemetery, School House Road,
HABS CA-1143: Old Trading Post, Main and State Streets
HABS CA-1145: Pioneer Saloon, Charles Street
HABS CA-1142: St. Anne's Church, Church Street
HABS CA-1144: Solari's Building, Main and Jackson Streets
HABS CA-1147: Store, Main Street
HABS CA-2000: Sun Ling Store, North Main Street
HABS CA-1873: Town of Columbia, Columbia State Historic Park
HABS CA-174: Tuolumne Engine House No. 1 and Office of Duchow Building, Wells Fargo & Co. Building, Main at Washington Streets
HABS CA-1667: Iron Stove

Confidence

TCL; CIHR: Confidence Mine
SHL No. 422; CIHR: Sonora-Mono Road

Gold Spring

TCL; CIHR: Gold Spring Site

Groveland
(Inventory, Thornton 1988)

SHL No. 446; CIHR: Groveland (First Garrote), including Groveland Hotel and Red and White Store.
CIHR: Groveland Hotel
CIHR: Red and White Grocery, Main Street
CIHR: Chaffee and Chamberlain House (Garrote)
SHL No. 460; CIHR: Second Garrote, including Hangman's Tree and Chaffee and Chamberlain House.
HABS CA-1568: Bret Harte Cabin
TCL; CIHR: Sugar Pine Ranch

High Country

TCL; CIHR: Donnell Overlook (Highway 108)
TCL; CIHR: Cooper's Cabin, Sanguinetti Ranch (Emigrant Basin)

Jacksonville

SHL No. 419; CIHR: Jacksonville (inundated by Don Pedro Reservoir).

Jamestown and Vicinity
(Inventory, Costello et al. 1983)

SHL No. 431; CIHR: Jamestown (Jimtown, American Camp), including B. F. Butterfield Store (site), Emporium, Sierra Railroad Roundhouse.
CIHR: Butterfield Store
NRHP No. 7800817 (1978): Emporium, 735 Main Street
CIHR: Mother Lode Belt of Mines, Rawhide to Stent
CIHR: Sierra Railroad Roundhouse
CIHR: Rosasco Corral and Irrigation Ditches at Mountain Pass/Yosemite Junction
TCL: Crimea House, Rock Corral, Keystone

Long Barn

NRHP No. 75000491 (1975); CIHR: Quail Site, north of Long Barn in Stanislaus National Forest

Martinez

ESS: Martinez (Mexican Americans in California)

Moccasin

CIHR: Ferretti Shrine
TCL; CIHR: Stevens Bar, includes Ferretti Shrine nearby.

Montezuma

SHL No. 122; CIHR: Montezuma, including motel and store.

Sawmill Flat

SHL No. 424; CIHR: Sawmill Flat (Mexican, Peruvian, American), site of two sawmills.

Shaws Flat

SHL No. 395; CIHR: Shaws Flat, includes Mississippi House and Post Office, the miner's bell, Lime Kiln, and Shaws Flat School.
HABS CA-1579; CIHR: Mississippi House and Post Office

Sonora and Vicinity

HABS CA-1195: Town of Sonora
TCL: Includes many listing below, but also Chinatown, Christian Science Church, and Sonora Business District.
CIHR: Sonora Gold Camp
CIHR: Sonora Historic District
ESS: Sonora (Mexican Americans in California)
CIHR: Burgson House, Green & Norlin Streets

(Sonora, con't)
HABS CA-116; NRHP No. 82002281 (1982); CIHR: Cady House, 72 N. Norlin Street
HABS CA-1566; NRHP No. 83001248 (1983): City Hotel, 145 S. Washington Street
HABS CA-1699: Commercial Building
HABS CA-1134; CIHR: Dorsey House, Theall and Stewart Streets (demolished 1950s)
HABS CA-1575: First (Frame) Post Office (demolished)
HABS CA-1688: Gem Cafe, east side Washington Street
CIHR: (Ross) Green House/Dennis; 99 West Snell
HABS CA-1135: Dr. Lewis Gunn Adobe, Italia Hotel
HABS CA-1139: House, Dodge and Stewart streets
HABS CA-1136: House, Washington Street (demolished)
CIHR: Inch House, 84 North Washington Street
HABS CA-38-7; CIHR: Jewish Cemetery, Yaney Avenue between Lower Sunset Drive and Seco Street
HABS CA-195; CIHR: Limekiln (demolished)
HABS CA-1512: Thomas Leonard House (demolished)
HABS CA-1111: McCormick House (demolished)
HABS CA-1137: McDonald (Sugg) House
HABS CA-1567; CIHR: Methodist Church, Yaney and Norlin streets (demolished 1922)
CIHR: Post Office Site, 36 South Washington (address in listing incorrect?)
CIHR: Rosasco House, Norlin and Dodge Streets
HABS CA-1140: Second House, Dodge and Stewart Streets
HABS CA-1141; SHL No. 139; CIHR: St. James Episcopal Church, Washington at Snell Street; listed as oldest Episcopal church building in California.
HABS CA-189; CIHR: St. Patrick's Catholic Church, 127 W. Jackson Street
CIHR: Morgan/Street Mansion, 19 West Snell
HABS CA-1690: Stockton Record Building (demolished)
HABS CA-188; CIHR: Stone Dam, Mill Villa
HABS CA-1137; NRHP No. 84001210 (1984); CIHR: Sugg McDonald House, 37 Theall Street
NRHP No. 81000182 (1981): Tuolumne County Courthouse, 41 West Yaney Avenue
NRHP No. 78000822 (1978): Tuolumne County Jail, 156 West Bradford Street
CIHR: The White House, 61 West Snell Street
CIHR: Wolfe's Drug Store, 106 South Washington Street
HABS CA-1691: Union Democrat Building (demolished 1982)
CIHR: Morgan Chapel and Cemetery, Sonora Area (Wards Ferry Road)

Soulsbyville
(Inventory, Marvin, et al. 1993)

SHL No. 420; CIHR: Soulsbyville

Springfield

SHL No. 432; CIHR: Springfield (Indian and American)
HABS CA-1871; TCL; CIHR: Springfield Brewery (Ruins)
TCL; CIHR: Brick Kilns
HABS CA-1148: Frame House (demolished?)
CIHR: Hydraulic Mining Remains
HABS CA-1149; CIHR: Springfield Methodist Church and School

Stanislaus River

CIHR: Stanislaus River
SHL No. 438; CIHR: Parrott's Ferry (site)
NRHP No. 75000492 (1975): Chinaman Creek Mortar Site (near Beardsley Reservoir); Stanislaus National Forest

Stent

HABS CA-1577: Town of Stent (Poverty Hill 2)

Tuolumne (Summersville)

SHL No. 407; CIHR: Summersville (Tuolumne City, Carters), including the West Side Flume and Lumber Company.
CIHR: Summersville
CIHR: Tuolumne Historic District
NRHP No. 75000494 (1975); CIHR: Niagara Camp, Cottonwood Road

Tuttletown

HABS CA-1272; SHL No. 124; CIHR: Tuttletown, including ruins of Swerer Store and Tuttletown Hotel.
HABS CA-1271; CIHR; TCL: Farm House (demolished)
SHL No. 138; HABS CA-1296; CIHR: Mark Twain Cabin (replica), on Jackass Hill.

Twain Harte

TCL; CIHR: Twain Harte
TCL: Sugar Pine (two miles east of Twain Harte)

Yosemite National Park

NRHP No. 78000382 (1978): Great Sierra Mine Historic Site
NRHP No. 77000359 (1977): McCauley Cabin
NRHP No. 78000371 (1978): Yosemite National Park Buildings No. 3010, 3011, 3012, 3013, 3014, and 3015
NRHP No. 78000370 (1978): Tuolumne Meadows Ranger Stations Comfort Stations, Buildings No. 3000, 3005, 3021, 3022, and 3023
NRHP No. 78000372 (1978): Tioga Pass Entrance Station, Buildings No. 3201 and 3203
NRHP No. 79000282 (1978): John Lembert Homestead (Soda Springs)

Appendix C: Time Line of Tuolumne County Events

Compiled by Carlo De Ferrari,
Tuolumne County Historian

and

The Genesis of Tuolumne County,
Carlo De Ferrari

Time Line of Events in Tuolumne County Through 1930

by Carlo De Ferrari

PREHISTORIC ERA

10,000 B.C.	Earliest known people in the Tuolumne County area.
6000-3500 B.C.	People use backed scrappers; emphasis on chert tools.
3500-1000 B.C.	People use points with similarities to those found in the Great Basin.
1000 B.C.	Large villages situated on major drainages.
1000 B.C.- A. D. 500	Increasing use of acorn as food item; concomitant increase in milling equipment.

A.D.	1350	Me-Wuk people arrive in Central Sierra Nevada?
	1770	Influx of non-Mewukan stock into Central Sierra.

HISTORIC ERA

A.D.	1806	October 1-3, Gabriel Moraga expedition passes northward through western foothills and explores the Stanislaus River.
	1808	Moraga visits area again; found "Taulamne" Indians.
	1827-28	Jedediah Strong Smith and party in the western foothills area; cross Sierra from west to east.
	1829	Vallejo searches for Estanislao along Stanislaus River.
	1830	Ewing Young and trappers in area?
	1832-44	Hudson Bay trappers in the area seeking beaver.
	1833	October. Joseph Reddeford Walker party passes westward through southern portion of county (Yosemite area).
	1833	Epidemic devastated foothill populations.
	1837	Jose Maria Amador and party pursue Indians accused of stealing horses into the foothills and were later forced to retreat.
	1841	October. Bidwell-Bartleson overland party crosses the Sierra Nevada crest into Tuolumne County about October 18, and travels down Stanislaus River; passes westward through area during succeeding ten days. First overland party to come directly to California. Included in party is Nancy Kelsey and baby, first white American females to come overland directly to California.
	1848	January 24. Gold discovered at Sutter's Sawmill on the American River.
	1848	May-June. Indians employed by Charles M. Weber find gold along the Stanislaus River. July. Benjamin F. Wood, James D. Savage, et al. discover gold in Wood's Creek below Jamestown.
	1848	October. James D. Carson camps at Sonora with party of prospectors.
	1848	Summer-Autumn. Placer gold deposits discovered in Mormon Creek, Sullivan Creek and Wood's Creek; mining begins soon after on Morman Creek, Peppermint Gulch, Mountain Brow.
	1848-49	Winter. Most gold seekers leave to stay in more comfortable quarters along the coast. Some remain to mine and trade with the local Indians.
	1849	March-May. Gold seekers flock to the Southern Mines area. Wood's Diggings, Jamestown, Sonora, Mormon Camp & Sullivan's Diggins become well established mining camps.
	1849	June 3. General Bennet Riley orders California divided into ten districts. This area placed in the tenth, or San Joaquin District. He calls for election of delegates to draft

a state constitution or a plan for territorial government, and also for the election of certain local civil officers such as alcaldes.

1849 July 4. The Sonorian Camp at what was later to become the City of Sonora, destroyed by fire. Composed chiefly of ramadas and tents and a few log cabins, it was quickly rebuilt.

1849 August 1. First election to choose delegates to a constitutional or territorial convention. Alcaldes and sheriffs/constables also elected.

1849 November 7. Informal town government established at Sonora. First public hospital for indigents established with donated funds.

1849 November 13. Election held to approve or disapprove proposed California constitution; Constitution approved.

1849 November 14. Reported major fire at Sonora. Possibly did not occur.

1849 December 25. Shaws Flat named for Mandeville Shaw, a trader, who was also elected its alcalde.

1850 February 18. Tuolumne County established by California legislature.

1850 March 27. Gold placers opened at Camp of Columbia, first called Hildreth's Diggings.

1850 April 1. First judicial district officers elected.

1850 May 17. General L.A. Besancon, the collector of foreign miners' licenses, arrived to begin his duties of collecting $20 monthly from those affected. Attempt to enforce the law initiates six weeks of murder and other crimes. Many foreigners flee or are driven from the placers. Business concerns suffer heavy financial losses.

1850 June 1. Court of criminal sessions of Tuolumne County convenes.

1850 June 1. Court of sessions also formed to conduct county affairs. Replaced by a county board of supervisors on July 7, 1852.

1850 July 4. *Sonora Herald* newspaper established at Sonora.

1850 July 15. First session of Fifth District Court held; first grand jury empaneled.

1850 July 15. County court of Tuolumne County convenes.

1850 September 9. California enters the Union as a state.

1850 Gold mined in Columbia by Sonorans chased from Sonoran Camp.

1850 Sonoran Camp, Jamestown depicted on Lt. Derby's map.

1851 March 13. Holden Garden riot over mining rights. One man killed and four wounded, one of whom died a week later.

1851 May 1. City of Sonora incorporated by California legislature. First common council meeting held on May 26.

1851 June 24. Corner stone of Masonic Hall laid in Sonora.

1851 June 28. David (or James?) Hill hanged by a mob in Sonora.

1851 July 1. Late 1850 Federal Decennial Census county. Population of Tuolumne County set at 8,351 (7930 males, 421 females). Figure disputed locally as far too low. Census taken in 1850 was lost or destroyed somehow.

1851 July 1. Tuolumne County Water Company commences ditch to Five Mile Creek and South Fork of Stanislaus River.

1851 July 28. Post office established at Sonora; however, the *Sonora Herald* lists one there on November 9, 1850.

1851 October 11. Fire at Tuttletown. Loss $5,000.

1851 October 24. *Columbia Star* newspaper established at Columbia; of short duration.

1851 November 13. Historic Ramage press destroyed by arsonists at Columbia.

1851 December 4. Jose Corales legally sentenced to death. Executed January 2, 1852.

1851 December 9. Bull and bear fighting abolished in Sonora by common council.

1851 April 20. Provision made by California legislature for the disposal of public land by preemption. Replaced brief act passed in 1850. 1852 law the basis of many land claims in Tuolumne County.

1852 May 22. First water (originated from Five Mile Creek) arrives at Columbia from Tuolumne County Water Company ditch.

1852 June 18. Nearly all of Sonora south of today's Red Church destroyed by fire, following which many streets were realigned, widened, or opened and the plaza row of lots abolished. Estimated loss 1 million dollars.

1852 July 1. Special state census taken due to dissatisfaction with 1850 census (taken 1851). Population count revised to 17,657.

1852 July 7. First meeting of the Tuolumne County Board of Supervisors. Assumed most civil governing powers previously exercised by the court of sessions.

1852 August. Tuolumne County Water Company ditch completed to the South Fork of the Stanislaus River.

1852 August. The Clark-Skidmore company of overland immigrants arrived at Columbia. Emigrant trail opened.

1852 October 30. *Columbia Gazette* newspaper established at Columbia.

1853 January 24. Board of supervisors award bid to construct county courthouse to Bell & McBernie for $6,500.

1853 July 7. Simson B. Merril killed by Indians in mountains east of Sonora.

1853 September 5. Adams & Co. express box stolen from stage about one mile from Sonora. Contained $25,000. $10,000 reward offered for arrest of robbers and return of gold.

1853 September 21. Courthouse completed and occupied.

1853 October 4. Fire in Sonora. E.B. Lundy burned to death. Swept portion of city which survived June 18, 1852, fire north of today's Red Church. $300,000 in losses.

1853 November 1. Second fire in Sonora. Loss $50,000.

1853 Major Ebbetts leaves Sonora to explore trans-Sierran railroad route.

1854 January. Sonora Greys and Columbia Fusileers in the process of being organized as components of the California Militia, Second Brigade, Third Division.

1854 February 16. *Columbia Clipper* newspaper established in Columbia.

1854 April 1. Stanislaus County formed from western portion of Tuolumne County.

1854 July 3. Fire in Sonora. Twelve buildings burned and a Mexican lost his life.

1854 July 10. Fire in Columbia. Loss $500,000.

1854 September 20. Old Poverty Hill (Poverty Hill #1) destroyed by fire.

1854 September. Columbia & Stanislaus River Water Company formed.

1854 December 8. Robert Bruce hanged at Sonora for murder committed in 1853.

1854 December 20. Fire in Columbia. French bakery burned.

1855 February 17. First telegraph message sent to Sonora from Stockton.

1855 Feb 24. Page, Bacon & Co. and Adams & Co. banking houses suspended. Large loss to depositors.

1855 March 17. Columbia & Stanislaus River Water Company ditch completed from the South Fork of the Stanislaus River to Columbia. Called the "Miners Ditch".

1855 April 2. Vote held on removing county seat from Sonora to Jamestown. Defeated.

1855 October 6. Fire in Jamestown. Loss $75,000.

1855 November 10 *Columbia Gazette & Southern Mines Advertiser* issued semi-weekly.

1856 June 21. *The Weekly Columbian* newspaper established.

1856 July 7. *Daily Sonora Herald* first published; of short duration.

1856 August 13. Petition to incorporate Columbia approved.

1856 September 13 *Campaign Gazette* newspaper established at Columbia.

1856 October 25. War between two Chinese tongs near the Crimea House west of Chinese Camp. Four killed.

1856 November 30. Judge Richard C. Barry died near Oroville.

1857 May 21. Sonora Literary & Scientific Institution organized by Dr. Perez Snell.

1857 June 8. B. Stout awarded contract to build first county jail for $13,300.

1857 June 20. *Tuolumne Courier* newspaper established at Columbia.

1857 August 25. Fire in Columbia. $500,000 loss. H.N. Brown, Dennis Driscoll, J.M.B. Crooks, William Toomey and Capt. Rudolph killed by falling walls following an explosion.

1857 September 22 New county jail completed and accepted.

1857 November 11. Fire in Sonora.

1857 December 11. James G. Lyons, Robert Poer and Edward McCauley hanged at Sonora for murder. Man killed in argument over affair afterwards and a miner fell into a shaft and died on way home from the executions. Riotous conduct that day materially

affected state legislation of the following year to ban public executions and limit spectators.

1858 February. Jerry N. Perley killed by Indians at Donnell's Flat.

1858 June 15. An ex-convict named Marshall attempted to rob a bank at Shaws Flat.

1858 August 7. Fire in the Tigre section of Sonora. $40,000 to $50,000 loss.

1858 September 1. Convention of Tuolumne County quartz miners held.

1858 October 6. Fire in Jamestown. Loss $17,000.

1858 November 26. Police Officer H.H. McDonald murdered in Columbia.

1858 November 30. Constable John Leary murdered in Columbia.

1859 January 10. Miller's soap factory burned in Sonora.

1859 June. *Sonora Herald* suspended publication.

1859 November 5. *Democratic Age* newspaper established at Sonora; discontinued August 1861.

1859 November 17. Big Gap flume on the Golden Rock Ditch completed.

1860 January 9. Fire in Columbia. Loss $1,200.

1860 March 20. Water arrives at Big Oak Flat via the Golden Rock Ditch from the South Fork of the Tuolumne River.

1860 May 7. Big Oak Flat stage robbed. Wells, Fargo & Co. lost $650.

1860 May 10. Big Oak Flat incorporated as a town.

1860 July. Federal Decennial Census held. County population 16,229 (12,704 males, 3525 females).

1860 August 2. Fire in the Tigre section of Sonora. Losses $4,000 to $6,000.

1860 August 13. Fire in Sonora. Loss $8,000.

1861 March 22. Four Chinese executed by hanging in Sonora for murder committed upon one of their race at Big Oak Flat.

1861 March. Floods throughout county with great damage to mining property.

1861 July 27. Fire in Columbia. Loss $26,000.

1861 August 6. Fire in Sonora. Loss $100,000.

1861 September 12. "Tuolumne Rangers" organized at Sonora. Officially designated as Company E, Second Regiment of Calvary, California volunteers. Mustered out on June 2, 1866. Home guard units organized in several towns due to Civil War.

1861 November 28. *American Flag* newspaper established in Sonora. "Pro Union" journal bitterly opposed to the *Union Democrat* which favored the Southern Cause.

1861 December. Commencement of a series of heavy rain and snow storms which lasted through much of January 1862 and created tremendous damage. Heaviest rainfall in county recorded history.

1862 January 8. Phoenix Lake Dam burst. Many river ferry boats and bridges lost. Roads washed out. Tremendous property damage during the early part of January. County almost isolated for several weeks.

1863 Sonora-Mono Toll Road commissioned and built.

1863 June 26. Fire in Jamestown. Loss of $10,000.

1863 October 19. Big Oak Flat almost completely destroyed by fire. Only Catholic church and several stone and brick buildings and perimeter structures survived.

1864 February 18. *American Flag* newspaper suspended publication here and moved to San Francisco.

1864 March 5 *American Eagle* newspaper established. Successor to *American Flag*.

1864 June 30. Yosemite Valley and the Mariposa Grove of Big Trees ceded to the State of California by Congress.

1864 October 22. Sonora & Mono Wagon Road officially opened as a one track with turnouts. Contractor J.D. Patterson passed over the route in a buggy and arrived at Aurora, Nevada on October 24, 1864.

1865 February 18. *Tuolumne Courier* newspaper moved from Columbia to Sonora.

1865 June 17. Fire in Sonora. Several businesses destroyed.

1865 July 8. Chinese sluice robber killed at Browns Flat.

1865 July. S.O. Sleeper's bank in Columbia failed.

1865 September 30. Fire in the Tigre section of Sonora.

1865 October 28. *Sonora Herald* established at Sonora for second time. Became daily from August 15, 1867 to September 4, 1867. Reverted to weekly on September 14, 1867 and suspended publication October 26, 1867.

1865 December 20. County jail at Sonora destroyed by fire. Tom Horn, a prisoner, burned to death. Fire believed to have been started by the unfortunate man.

1866 January 1. Col. B.F. Moore, a county pioneer and member of the constitutional convention of 1849, died at San Francisco.

1866 July. Town of Montezuma destroyed by fire.

1866 July 16. *Tuolumne Courier* newspaper suspended publication.

1866 October 13. Fire in Columbia. Loss $4,200.

1866 Association of Tuolumne County Pioneers formed.

1867 March 22. Morgan's building in Columbia destroyed by fire with a loss of $2,000.

1867 May 27. Laurel Hill quartz mill at Cherokee Camp burned. Loss $3,000.

1867 June 15. Fence erected around Sonora's Jewish cemetery.

1867 July. Black Masonic Lodge established in Sonora. Landmark Lodge Number 6.

1867 July 6. Davis home burned in Sonora. Loss $2,000.

1867 July 15. Fire in Sonora. Tigre section burned again. Loss $18,000.

1867 July 29. Fire in Sonora. Homes of Dolores and Sugg burned. Loss $1,000.

1868 March 30. United States Hotel and theater building adjoining destroyed by fire. Nearby Episcopal Church damaged.

1868 June 17. Tuolumne National Guard mustered out of service.

1868 August 21. Fry & Comstock's mill at Calder Ranch burned. Insured for $6,000.

1868 August 21. Wehmeyer & Fuller's soap factory in Sonora destroyed by fire. Loss $2,025.

1868 October 9. Cochrane's sawmill at Garrote burned by arsonists. Insured for $5,000.

1868 October 21. Earthquake tremors.

1869 Dynamite first used in local mines.

1869 April 22. Harris & Rodden's store at Montezuma destroyed by fire. Loss $8,000.

1869 August 27. Fire in Sonora. Joseph Brothers store burned. Loss $15,000.

1869 September 1. Fire in Sonora. C. Burden's shop burned. Loss $1,450.

1869 September 19. Riot among Chinese at Jamestown. One Chinese killed and several wounded.

1870 January. Tuolumne County experienced a great exodus of its citizens during and following the Civil War due to the exhaustion of its placer gold mines. For more than 20 years there was extreme financial depression in the area.

1870 January 1. Earthquake tremors.

1870 July 1. Federal Decennial Census. County population 8,150.

1870 August 30. Fire at Chinese Camp. Loss $28,000.

1871 Wheaton Dam constructed on lower Tuolumne River.

1871 April. Fire in Sonora. Riffle Saloon and other buildings burned. Loss $21,000.

1871 June 9. M.H. Hyde's residence in Sonora destroyed by fire. Loss $800.

1871 July. Oppenheimer's store in Sonora burned due to explosion of kerosene. Loss $8,000.

1871 July 10. First message sent from Sonora to Yosemite Valley over the Yosemite Telegraph line via Garrote.

1872 March 26. Long, continued earthquake lasting from one to three minutes, shock running SE to NW. Frequent aftershocks continuing on March 27 and 28. Still shaking on April 3. Further tremors on April 24, May 6 and August 5. Connected to major earthquake in Inyo County.

1872 April 6. *Tuolumne Independent* newspaper established at Sonora.

1872 May 10. Congressional Mining Act of May 10, 1872, passed. Provided uniform rules and regulations regarding claiming and holding quartz claims, etc. Provisions implemented by committee of local miners. County recorder designated recorder of mining claims and district recorders generally no longer utilized.

1872 October 5. Tuolumne Mining District organized.

1873 October 17. The shaft of the Soulsby Mine burned out with a loss of $3,000 to $4,000. No lives lost.

1874 June 28. Fire in Sonora. John Wolfling's home burned. Loss $1,500.

1874 July 8. Fire in Soulsbyville. Augustus Authemann's store and stock lost.

1874 July 17. Big Oak Flat road to the Yosemite Valley completed and dedicated. Transferred to the County of Tuolumne on July 19, 1915, for $10,000, and by the county turned over to the State of California for maintenance.

1874 August 7. Fire at Catholic Church in Sonora. Loss $3,000.

1874 October 1. G.H. Ashe's house in Sonora burned with a loss of $2,000.

1874 November 7. Sonora and Milton stage, Miller's line, robbed of the express box containing $341 at Salt Spring Valley.

1875 February 10. G. H. Ashe's home in Sonora burned again.

1875 March. U. S. Mail stage robbed at Reynold's Ferry by three men. $6,000 loss.

1875 May. Catholic church in Columbia burned.

1875 July 8. Fire at Chinese Camp.

1875 July 16. Fire at Sonora. H. L. Street residence burned.

1875 July 26. Fire at Shaws Flat. Dickinson home burned. Loss $5,000.

1875 July 31. Sonora and Milton Stage robbed again at Reynold's Ferry by one man. $160 loss.

1875 September 1. Rose E. Morgan elected County Superintendent of Schools; first woman to hold county office.

1875 November. Heavy rains. Phoenix Reservoir filled to overflowing; dam burst, rush of water carried away the bridge across Sullivan Creek. Three or four Chinese miners drowned.

1875 December 1. Sonora and Milton Stage robbed near the Union Bridge at O'Byrne's Ferry. $600 lost.

1875 December 1. John Podesta's distillery at Yankee Hill destroyed by fire.

1876 January 29. E. M. Hampton's house burned at Roach's Camp.

1876 September 22. Fire in Sonora. Cuevas home burned. Loss $2,200.

1876 November 15. Unsuccessful attempt to rob the Sonora and Milton stage at Brown's Flat.

1876 December 11. Earthquake tremors.

1877 March. Sonora and Milton Stage again robbed at Reynold's Ferry. Loss $108.

1877 June 17. Terrence Brodigan's Sonora Hotel burned. Loss $14,600.

1877 July 9. Earthquake tremors. Two heavy shocks about one minute apart.

1877 July 14. Fire in Sonora. Reitz's saloon burned. Loss $1,100.

1877 July 18. Fire in Sonora. Losses $5,350.

1877 August 9. Sonora and Milton stage robbed by three men. $800 loss.

1877 August 15. Ohio Mining Company's works burned. Loss $3,000.

1877 August. Sonora and Milton stage robbed again. $600 taken. Two men arrested for crime.

1877 October 6. Fire at Knickerbocker Flat. L. Dondero's store burned. Loss $5,000.

1877 December 30. Earthquake tremors. Shocks of 20-30 seconds duration.

1878 January 15. Sonora and Milton stage robbed at Brown's Flat. $5,000 loss.

1878 February 2. Fire at Chinese Camp. Dr. Lampson's office and drug store lost. $5,000 loss.

1878 March 18. John Atler's house at Big Oak Flat burned. Owner died from burns received.

1878 March 23. Bradford & Way's planing mill in Sonora burned. Loss $5,000. Mill immediately rebuilt and operating.

1878 June 3. Congressional Timber & Stone Act passed providing for claims of 160-acre parcels of timber or stone land. Set the stage for the formation of large lumber corporations.

1878 December 31. Fire at Confidence. Mrs. Harms' hotel burned.

1879 May 27. Fire in Columbia. Louis Ley's residence consumed. Loss $1,600.

1879 July 23. House of John Williamson burned near Columbia.

1879	September. Discovery of huge pocket of gold at the Bonanza Mine in Sonora.
1879	September 1. Fire in Sonora. Baptist Church damaged.
1880	January 1. Fifth District Court superseded by Tuolumne County Superior Court.
1880	January 19. Fire at Columbia. P. B. Bacon's home burned.
1880	March 14. Flour mill of James T. Padderson at Mountain Brown destroyed by fire.
1880	July 1. Federal Decennial Census. County population 7,848.
1880	September 1. Fire in Chinese Camp. Egling, Wilson, and Morris properties destroyed.
1880	October 1. Stage accident above Priest's hotel. Father Treinor, a Catholic priest, mortally injured.
1880	October. J. C. Duchow residence in Sonora burned. Loss $3,000. Arson suspected.
1881	May 7. Fire in Sonora. Thomas McGee's house burned.
1881	July 28. Frank Way's lumber mill burned. Loss $30,000.
1881	September. Fire on Drew's ranch near Garrote (Groveland) John L. Morrison died from exhaustion fighting it.
1882	First official map of Tuolumne County prepared by A. B. Beauvais, County Surveyor.
1883	Tioga Road constructed.
1885	May 1. *Democratic Banner* (later *Banner*) newspaper established at Sonora.
1885	August 5. Sonora Flouring Mills burns in Sonora on site of later Opera Hall.
1886	First baseball games played in Tuolumne county.
1887	January. George Philip (G. P.) Morgan (brother of Rose Morgan) took office as County Superintendent of Schools. Served continuously until January, 1943, a national record for that office.
1888	August 7. Guild Mining Company articles of incorporation filed. Introduced the era of Captain W. A. Nevills and the birth of the second Gold Rush, the end of the long depression, and the revitalization of Tuolumne County during the following two decades.
1890	July 1. Federal Decennial Census. County population 6,082.
1890	October 1. Yosemite National Reserve (later Park) created. Did not include the Valley.
1890	October 6. Belleview Mining & Agricultural Company articles of incorporation filed.
1892	October 1. Sonora provided with electric power by Sonora Electric Company from generating plant at Browns Flat.
1892	November 10. Sonora's streets lighted with electricity.
1894	March. Tuolumne County gold exhibit at San Francisco's mid-winter fair, including giant ore specimen from the famous Rawhide Mine, draws great attention and heats up the rush to invest in county's quartz mines.
1895	March. First telephone service to Sonora via Chinese Camp. Sunset Telephone Company. First telephone book issued in 1897.
1895	August 24. Town of Stent named for E. A. Stent.
1896	April 19. Victoria Hotel (now Sonora Inn) opened. Owned by Mrs. W. A. Nevills.
1897	January. New Tuolumne County hospital opened.
1897	January 13. *Mother Lode Magnet* newspaper established at Jamestown.
1897	January 16. *Mother Lode* newspaper established at Jamestown.
1897	February 22. Stanislaus National Reserve of 691,200 acres established under the U.S. Department of the Interior. Transferred to the Department of Agriculture in 1905. Renamed the Stanislaus National Forest in 1907.
1897	November 8. First passenger train on Sierra Railway reaches Jamestown.
1898	August. Large forest fires in county. Big Oak Flat and Groveland saved from flames.
1898	Nevills Hotel opened at the depot in Jamestown. Finest in the Southern Mines. Burned in 1915.
1899	April 18. *New Era* newspaper established at Carters (Tuolumne). Ceased publication August 30, 1918.
1899	November 10. New Tuolumne County Courthouse completed and occupied by officials.
1899-1900	Western Federation of Miners organizing miners' unions in local mining towns.
1900	June 24. Mt. View Cemetery (St. Patricks) dedicated.

1900 July. Federal Decennial Census. County population 11,166.

1900 August 18. *Tuolumne Miner and Lumberman* newspaper established.

1901 January 26. *Groveland Prospector* newspaper established. Later moved to Tuolumne about 1918.

1901 June. Sonora Lawn Tennis Club formed.

1901 August 12. Large fire at Quartz Mountain.

1901 September 27. Captain W. A. Nevills regains control of App and Rawhide Mines after lengthy legal battle with former partners W. H. Martin and John Ballard.

1902 September 26. Second major fire at Quartz Mountain.

1903 June 8. Major fire at Stent.

1903 September 9. First classes of Tuolumne County High School held at courthouse.

1904 February 19. Miners strike at Rawhide and App Mines. Strike breakers brought in.

1905 Pacific Lime and Plaster Company begins operations south of Sonora.

1905 October 1. Contract let for construction of the narrow gauge Yosemite Short Line Railroad. Construction terminated in April 1906 due to financial losses incurred by promoters during the San Francisco (1906) earthquake.

1906 Official map of Tuolumne County, created by Robert Thom, C.E., printed by Sonora Abstract and Title Company.

1906 March 24. Phoenix Reservoir Dam burst.

1906 May 18. Large fire at Quartz Mountain.

1906 September. First Tuolumne County High School building erected.

1906 Summer Construction of Relief Dam commenced.

1906 October. Water running in the Golden Rock Ditch after many years of non-use.

1908 December 31. Groveland lighted by electricity.

1909 March. Charles Neff, 11 years old, struck and killed in Sonora by automobile driven by Dr. C. E. Wilson. First automobile fatality.

1909 June 10. *Big Oak Enterprise* newspaper established. Of short duration.

1909 September. *Sierra Daily Times* newspaper established in Tuolumne.

1909 July. Federal Decennial Census. County population 9,979.

1910 290 acres purchased by Mr. C. E. Kelsey, special agent for California Indians, for Tuolumne and Chicken Ranch rancherias.

1911 May 20. Voters approve formation of Summerville Union High School. First classes held following year. Voters approved $20,000 bond issue for building in 1912.

1911 October 10. Constitutional Amendment No. 4 approved by California voters. Women given the right to vote.

1911 November 20. Large fire in Sonora. $20,000 loss suffered by businesses.

1912 January 16. Women begin to register to vote. Many hold off until requirement to give age is amended to only indicating over 21 years.

1913 Indian families (six?) living at Tuolumne Rancheria; men working for West Side Logging Company.

1914 Commencement of World War I begins to drive up wages and the costs of fuel and materials required for quartz mining. County mines begin to close.

1914 County officers no longer partisan. Elected for four year terms.

1915 August 21. Tuolumne County High School renamed Sonora Union High School.

1917 June 5. World War I entered by the United States, and all males ages 21-31 required to register for the draft. 1,157 did so.

1917 July 3. Tuolumne County Library established.

1918 November 11. World War I ended.

1919 Large highway construction bond issue approved by state voters. Tuolumne County promised a share.

1919 June 19. Fire in Groveland with $60,000 loss.

1919 November. Movement started to erect memorial building in honor of the county's veterans. Dedicated spring of 1933.

1920 June 15. Large fire in Groveland. Estimated loss $100,000.

1920 July. Decennial Census. County population 7,768.

1921-22	State highway between Sonora and county line near Knights Ferry, with small section excepted, paved with concrete 15 feet wide and five inches thick. Washington Street in Sonora similarly paved.
1922	November 20. Spring Gap tramway constructed.
1923	June 25. Don Pedro Dam dedicated.
1923	July 7. O'Shaughnessy Dam dedicated as part of the Hetch Hetchy project.
1923-24	Hoof and mouth disease rages among cattle in part of the state. Reported spread to Tuolumne County and large numbers of deer and cattle destroyed as a measure to control the epidemic.
1924	Klavern of the Ku Klux Klan organized at Sonora and functioned briefly.
1925-26	Melones Dam spur railroad constructed from the Sierra Railroad mainline, and Melones Dam constructed. Powerhouse dedicated June 11, 1927 the year after the dam was completed.
1926	June 19. Remainder of Quartz Mountain and App Mine destroyed by huge fire.
1926	August 5. Priest Hotel destroyed by fire.
1928	August-September. Numerous wildfires in Groveland area. Arson suspected.
1929	May. New Sonora City Cemetery opened.
1929	July 18. Large fire in downtown Sonora. Heavy losses.
1930	July. Federal Decennial census. County population 9,271.

COUNTY OF TUOLUMNE

1850-1975

A Special Publication of the

TUOLUMNE COUNTY HISTORICAL SOCIETY

In Honor of the 125th Anniversary of the Formation of the County of Tuolumne

THE GENESIS OF TUOLUMNE COUNTY

By Carlo M. DeFerrari

MANY FORMIDABLE TASKS faced California's first Legislature which met at the Pueblo De San Jose on December 15, 1849 to organize a state whose legal existence was yet to be confirmed by the Federal government. Among them was the establishment of the framework for a system of local government so necessary to the security of life and property.[1]

The assembled legislators represented ten political districts which had been established on June 3, 1849 by proclamation of Brevet Brigadier General Bennet Riley in his capacity as **ex-officio** Civil Governor of California. The area now embraced by Tuolumne County was then part of the 10th, or San Joaquin District, which included most of the interior of California south of the Cosumnes River and lying between the Coast Range and the Sierra Nevada.[2]

EIGHTEEN COUNTIES PROPOSED

On December 21, 1849 a Committee on Counties and County Boundaries was appointed in the Senate and directed to study the problem of dividing California into counties. The committee did its work under the handicap of having almost no accurate maps and indeed, little reliable knowledge of the topography of large areas of the interior.

Two weeks later, on January 4, 1850, the committee chairman, Senator Pablo de la Guerra, filed a report recommending the formation of 18 counties. The committee candidly admitted that it was aware "of the great extent of several of the Counties," and explained that this was due to the sparseness of population in portions of them, but that they could be subdivided when they became more densely populated.

The committee added that it had not deemed it practical to form counties entirely of mining districts because of the "transitory character of the majority of the Mining Population," but had placed such mining districts within counties most convenient of access and with which their trade and communication was chiefly confined.[3]

ORO COUNTY

Among the 18 counties proposed by the committee was one designated as "Oro County" with boundaries which included much of the area to ultimately be formed into pioneer Tuolumne County. It was described as follows:

> Oro.—Beginning on the summit of the coast range at the S. W. corner of San Joaquin county, and following the southern boundary of said county to the summit of the Sierra Nevada; thence in a S. E. direction following the summit of said mountains to the head of the Merced river; thence down the middle of said river to its confluence with the San Joaquin river; thence in a S. W. direction to the summit of the coast range, and thence in a N. W. direction following the summit of said range to the place of beginning.
>
> The Seat of Justice to be determined in the manner to be prescribed by law.[4]

On January 18, 1850 the committee filed a supplemental report calling for the formation of eight additional counties and recommending different names for several of those included in its first report. Among the latter was "Oro County" which was changed to "Tuolumne County."[5]

DERIVATION OF NAME

Many of the county names were of Indian or Spanish origin and Senator Mariano G. Vallejo was appointed chairman of a select committee to report on their derivation and definition. Of Tuolumne County he wrote:

> TUALUMNE.—A corruption of the Indian word "talmalamne," which signifies cluster of stone wigwams. This County abounds in gold "placeres." Throughout its river and hollows, throughout its valley and hills, gold, gold, and more gold is found.
>
> Mr. Benjamin S. Lippincott, Senator from the district of San Joaquin, hailing from perhaps the richest County in the State in the precious metal, has exerted an influence in its creation. The County seems to be an integral portion of the "El Dorado," which has been for years so eagerly sought for by every lover of gold. Tualumne city is just springing up, and it is believed will shortly be a sort of "Juaja," the golden city of the fabulous region where rivers of milk and of honey flowed, and farinaceous fruits grew spontaneously.[6]

AN ORIGINAL COUNTY

The 27 original counties of California were formed by an Act of the Legislature approved on February 18, 1850, and Tuolumne County has the honor of being included within that pioneer group.

The original description of its boundaries was as follows:

Sec. 27. COUNTY OF TUOLUMNE—Beginning on the summit of the Coast Range at the southwest corner of Calaveras County, and following in an easterly direction the southern boundary of said county to the summit of the Sierra Nevada; thence in a southeasterly direction, following the summit of the Sierra Nevada, to the dividing ridge between the Tuolumne and Merced rivers; thence following the top of said ridge down to the plains at a point equally distant between the said rivers; thence in a direct line to the San Joaquin river, at a point seven miles below the mouth of the Merced river; thence up the middle of the San Joaquin river to the mouth of the Merced river; thence in a due southwest direction to the summit of the Coast Range, and thence in a northwesterly direction, following the summit of said range, to the place of beginning. The Seat of Justice shall be at the town of Stewart, formerly known as the Sonoranian Camp.[7]

THE COUNTY SEAT

When a copy of the law reached Sonora, little concern was expressed over any vagueness in the description of the boundaries, for no one had a very precise knowledge of the county's extremities; but when local eyes reached the last sentence reading "The Seat of Justice shall be at the town of Stewart, formerly known as the Sonoranian Camp," considerable excitement ensued.

It took no great imagination to connect the change of name to local Assemblyman Malcolm M. Stewart, and an indignant petition requesting the Legislature to reconsider its action and restore the name of Sonora was soon in circulation. On April 18, 1850 the law was amended as requested and after two months the county seat became officially known as "Sonora."[8]

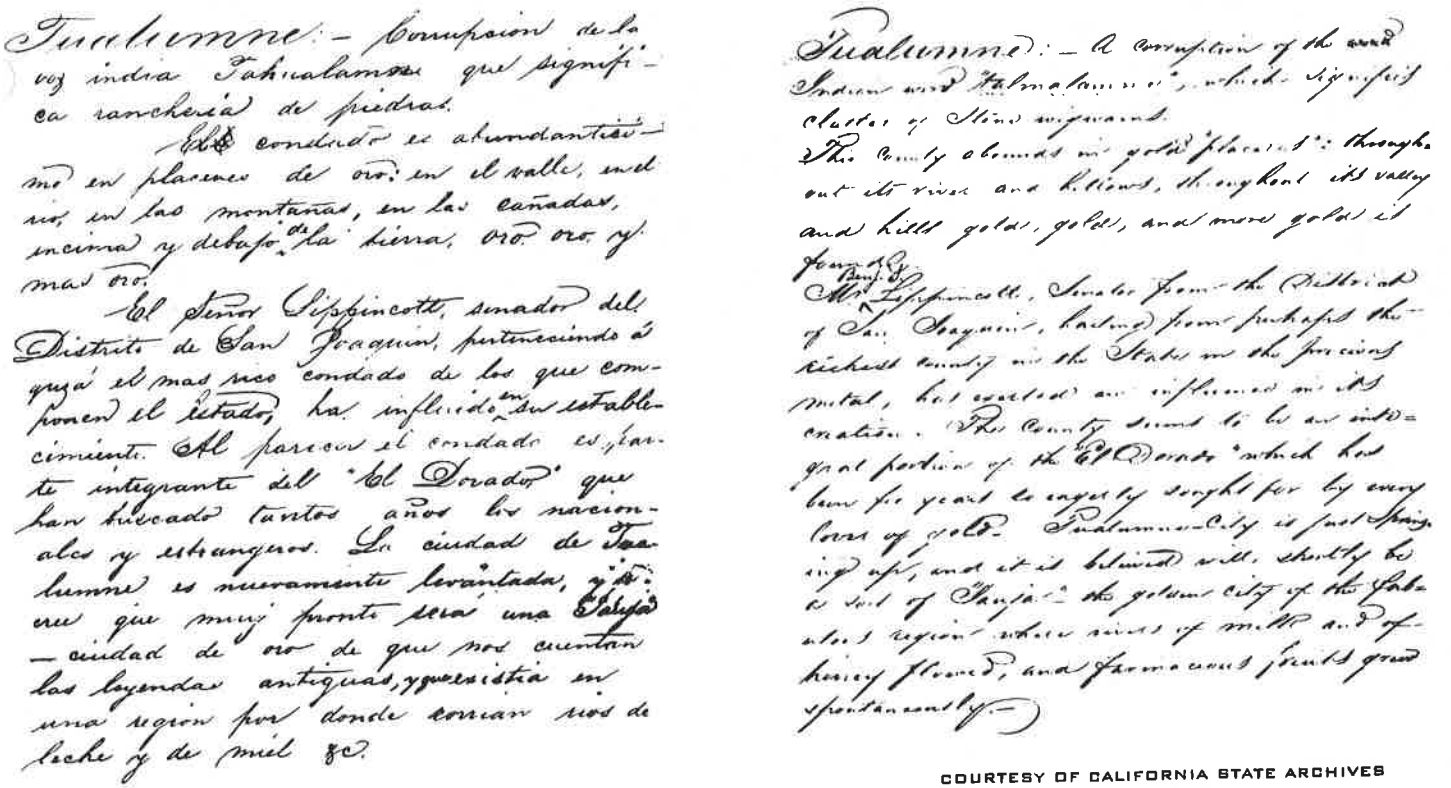
As the original formation act indicates, Tuolumne County once extended from the crest of the Sierra Nevada to the summit of the Coast Range where it shared a common boundary line with Santa Clara County. The area was too large for efficient administration and over the succeeding years a number of attempts were made to dismember the county, and several were successful.

LOUISA COUNTY

The first occurred on January 14, 1853 when the Legislature was unsuccessfully petitioned to form a new county from adjacent portions of Tuolumne and Mariposa Counties lying between the Tuolumne and Merced Rivers. It was proposed that it be named "Louisa County" and the town of Coulterville designated as the seat of justice. If formed, it would have been one of the strangest counties on record. Extending eastward from the crest of the Coast Range to the boundary line of Utah Territory, the county would have almost bisected California with a corridor 25 miles wide and 150 miles in length![9]

STANISLAUS COUNTY FORMED

Tuolumne County had been one of those formed with the thought that in the future it would be divided



COURTESY OF CALIFORNIA STATE ARCHIVES

Facsimile of the original report in Spanish on the derivation and definition of the name "Tuolumne" prepared for the California Senate by Senator Mariano G. Vallejo and filed with that body on April 16, 1850. Beside it for comparison, is the English translation.

Senator Vallejo spelled Tuolumne with an "a" although the original Act forming the county on February 18, 1850 uses the accepted spelling of today. Note that in the original manuscript report the Indian word for Tuolumne is spelled "Tahualamne," and is translated into the English version as "talmalamme" and finally appears in the printed Journal of the Senate as "talmalamne."

when the western portion lying in the San Joaquin Valley became sufficiently settled and able to support its own local government. On January 26, 1854 the Legislature received a petition requesting that this be done due to the great distance separating the lower sections of the county from the county seat, and also because of the sharp difference in the economy of the valley as opposed to that of the foothills, one being agricultural and the other mineral. At first it was proposed to call the new county "Merced County," but the name was soon amended to "Stanislaus County."

Distance and community of interests were not the only reasons causing the western portion of Tuolumne County to be separated and formed into Stanislaus County in 1854. Actually, the initiation of its formation was a by-product of an intriguing episode in California legislative history.

A POLITICAL PLOT

The state Democratic Party of 1854 was split into two factions of almost equal strength and incapable of reconciliation; one was led by David C. Broderick, a master politician, and the other by U. S. Senator William MacK. Gwin whose term of office would expire in March, 1855. In January of that year the state legislature was scheduled to meet for the purpose of either re-electing Gwin or choosing his successor.

The U. S. Senate seat was one of California's prize political plums and both Gwin and Broderick were determined to pluck it for themselves. The latter believed that he had the political strength to win the election if it was held in the 1854 legislature, and there being no legal bar to the selection of the U. S. Senator a year in advance, he had legislation introduced to that end.

Although Broderick controlled a solid Assembly majority, in the Senate the opposing forces were so evenly divided that one vote might be the slim difference between the success or failure of his scheme. While casting about for some means of securing any edge possible in the contemplated struggle, his attention was called to the aspirations of some of the settlers of lower Tuolumne County who desired to separate their section and form a new county.

As his partisans were in the ascendancy in that area, an agreement was soon reached by which Broderick promised to use his influence to secure the passage of legislation authorizing the formation of the new county with the provision that it would constitute a new senatorial district entitling it to immediately elect a state senator; in return, that newly elected officer was to be dispatched post haste to the state capitol to support Broderick when the legislative countdown came.

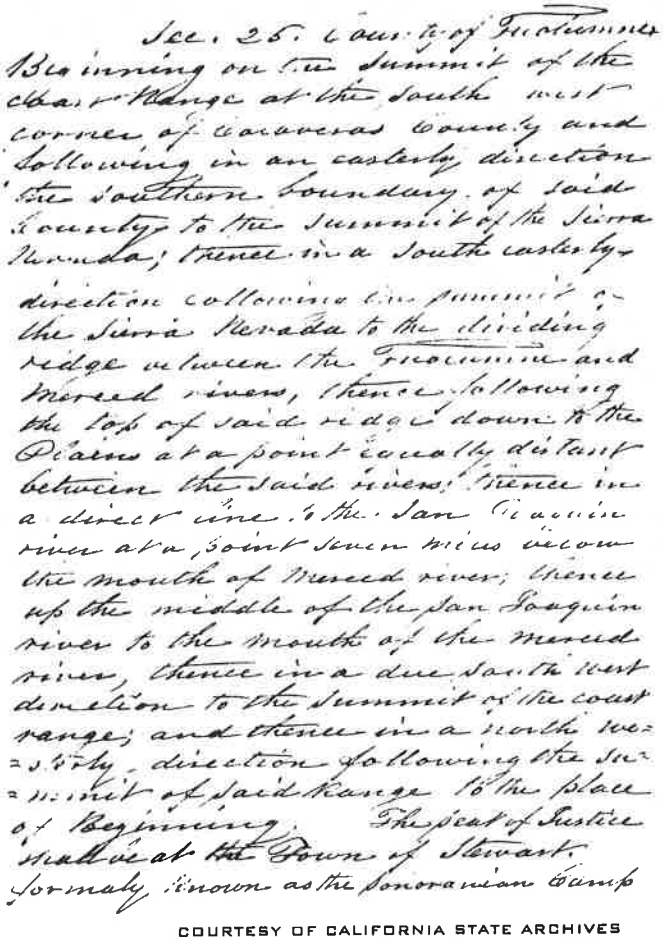
The act to form Stanislaus County slipped through the Legislature without opposition; but unfortunately for Broderick's plans, his opponents sensed the danger and defused the law by amending out the provisions for the county to constitute a new senatorial district.[10]

POLITICAL FREE-FOR-ALL

The political free-for-all which resulted from Broderick's attempt to elect a U. S. Senator in 1854 is unmatched in our state's legislative annals. Even today's sophisticated citizens, inured to the machinations of their elected representatives, would be impressed by what occurred then, and might find solace in learning that such episodes are not new or novel to this age, or dispair to learn that the quality of legislative timber has not improved during the intervening century.

The terse entries in the Senate Journal reflect none of the drama that actually took place, and the depth of the furious political struggle can be judged best through the charges and counter charges of bribery, physical threats, kidnapping and even the allegations of attempted murder that echoed from the councils of the principals involved.

Inside their chambers, armed Senators sparred for parliamentary advantage while outside the professional fighting men of both camps stalked the halls momentarily expecting a call for their services; in the end, however, Broderick's opponents won and the margin of their victory was such that the lone vote of a breathless new Senator from Stanislaus County would not have turned the tide.[11]



Sec. 25. County of Tuolumne
Beginning on the summit of the Chain Range at the South west corner of Calaveras County and following in an easterly direction the Southern boundary of said County to the Summit of the Sierra Nevada; thence in a South easterly direction following the summit of the Sierra Nevada to the dividing ridge between the Tuolumne and Merced rivers, thence following the top of said ridge down to the Plains at a point equally distant between the said rivers; thence in a direct line to the San Joaquin river at a point seven miles above the mouth of Merced river; thence up the middle of the San Joaquin river to the mouth of the Merced river, thence in a due South west direction to the Summit of the coast range; and thence in a North westerly direction following the Summit of said Range to the place of Beginning. The seat of Justice shall be at the Town of Stewart. Formaly known as the Sonoranian Camp

COURTESY OF CALIFORNIA STATE ARCHIVES

Facsimile reproduction of the original manuscript copy of the description of the boundaries of Tuolumne County as set forth in the Act forming California's 27 pioneer counties approved on February 18, 1850.

The last sentence designating the Town of Stewart as the Seat of Justice was amended in the Senate to indicate that said town was the same place formerly known as the "Sonoranian Camp."

INTERNAL DISSENSIONS

In early 1855 a petition was circulated by residents of the Jamestown area requesting that a county election be held to determine whether the county seat should remain at Sonora or be moved to their town. Delegations were dispatched to Columbia and other communities throughout the county asking for support, but when the election was held in April, Jamestown's hopes of becoming the county seat were crushed by a vote of over two to one.

The proposal to move the courthouse from Sonora to Jamestown had not received any enthusiastic support at Columbia, for that community also had county seat aspirations. Forewarned by Jamestown's failure, some Columbia citizens proposed instead to detach a substantial area on the northern edge of the county, and with possible additional territory from north of the Stanislaus River, form a new county with Columbia as the county seat! However, this proposal never got beyond the talking stage.

YO SEMITE COUNTY PROPOSED

In early 1858 a second unsuccessful attempt was made to form a new county from the area of Tuolumne and Mariposa Counties lying between the Tuolumne and Stanislaus Rivers and extending east from the boundary lines of Stanislaus and Merced Counties to the state line.

It was proposed that it be called "Yo Semite County," but no recommendation was made for the location of a county seat. The reasons given for its formation were similar to those supporting the formation of Louisa County.[12]

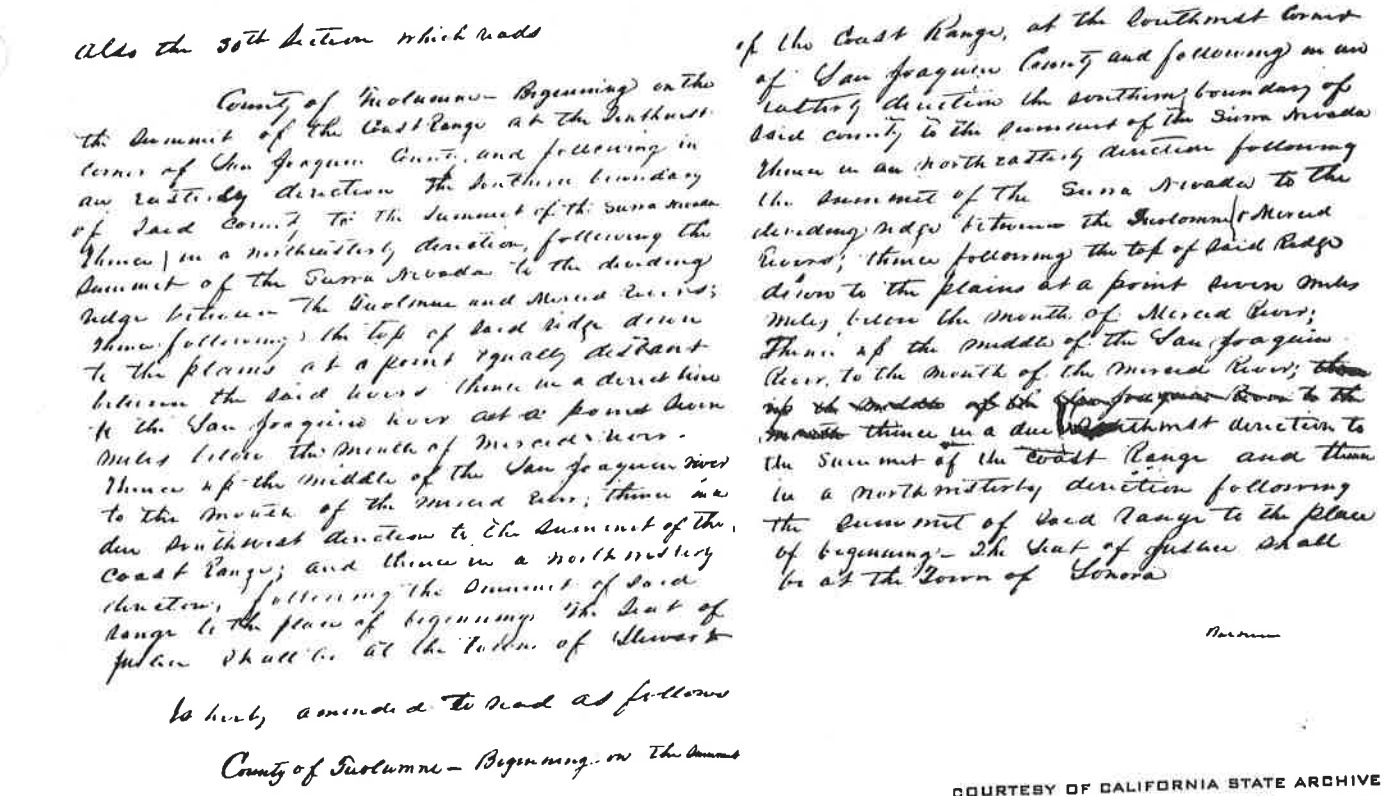
DETACHMENT PROPOSED

On January 31st of the following year, residents of the lower part of Tuolumne County filed a petition for the annexation to Stanislaus County of the area of Tuolumne County lying west of a line drawn directly from the southwest corner of Tuolumne County, near La Grange, to the middle of the Stanislaus River at O'Byrne's Ferry.

La Grange was then the county seat of Stanislaus County and for many citizens residing in the foothills of Tuolumne County that town would have been a much more convenient location to pay their taxes and transact their official business; however, the petitioners were too few in number to influence the Legislature to make the change.[13]

ALPINE COUNTY FORMED

On March 16, 1864 the minute County of Alpine, California's smallest, was formed to service a newly developed mineral area on the summit of the Sierra Nevada northeast of Tuolumne County. Although the



alls the 30th Section which reads

County of Tuolumne— Beginning on the the summit of the East Range at the Southwest corner of San Joaquin County and following in an Easterly direction the Southern boundary of said County to the Summit of the Sierra Nevada Thence in a Northeasterly direction following the Summit of the Sierra Nevada to the dividing Ridge between the Tuolumne and Merced Rivers; Thence following the top of said Ridge down to the plains at a point equally distant between the said rivers Thence in a direct line to the San Joaquin River at a point seven Miles Miles below the Mouth of Merced River. Thence up the middle of the San Joaquin River to the Mouth of the Merced River; thence in a due Southwest direction to the Summit of the Coast Range; and thence in a Northwesterly direction following the Summit of said Range to the place of beginning. The Seat of justice shall be at the Town of Stewart

is hereby amended to read as follows

County of Tuolumne— Beginning on the summit of the Coast Range, at the Southwest Corner of San Joaquin County and following in an Easterly direction the Southern boundary of said county to the Summit of the Sierra Nevada Thence in an Northeasterly direction following the Summit of the Sierra Nevada to the dividing Ridge between the Tuolumne & Merced Rivers; thence following the top of said Ridge down to the plains at a point seven Miles Miles below the Mouth of Merced River; Thence up the middle of the San Joaquin River to the Mouth of the Merced River; ~~thence up the middle of the San Joaquin River to the Mouth~~ thence in a due Southwest direction to the Summit of the Coast Range and thence in a Northwesterly direction following the Summit of said Range to the place of beginning. The Seat of justice shall be at the Town of Sonora

Passed

COURTESY OF CALIFORNIA STATE ARCHIVES

Following receipt of a petition demanding that the name of the county seat be changed from "Stewart" to "Sonora," Assemblyman Drury P. Baldwin presented the above amendment which was approved on April 18, 1850.

While Baldwin's legislation also corrected the error in the original legislation by substituting "San Joaquin County" for "Calaveras County," someone inadvertantly replaced "southeasterly" with "northeasterly" in the description of the eastern boundary line along the summit of the Sierra Nevada; however, the error caused no problem.

legislation which established Alpine County stated that it was being formed from portions of Amador, Calaveras, El Dorado and Mono Counties, actually it also included a healthy slice of northern Tuolumne County.[14]

Singularly, while the people of Tuolumne County were undisturbed by the loss of territory they sustained in the formation of their new neighbor, in later years some citizens of Alpine County became convinced that a gross error had occurred in interpreting the description of their southern boundary line, and that as a result said line was physically located considerably north of where the Legislature had intended.

Commencing at a point where the common boundary line between Alpine and Calaveras Counties struck the Big Tree Road in the latter county, a part of the description of the boundary line between Alpine and Tuolumne County, as set forth in the Act, read "thence easterly in a direct line to where the Sonora Trail strikes the Middle Fork of the Stanislaus River, thence easterly along said trail to the summit of the Sierra Nevada Mountains . . ."

EARLY TRAILS

Prior to 1862 the Old Emigrant Trail had been the only recognized, widely used route across the Sierra Nevada range through Tuolumne County; however, in that year, as a preliminary step to the construction of a wagon road to the mining camp of Aurora on the California-Nevada line, a new trail had been opened which diverged from the Old Emigrant Trail at Strawberry and crossed the summit by way of the Clark's Fork of the Stanislaus River. In 1863 the latter part of the route was changed so as to follow the Middle Fork the Stanislaus.

Unfortunately, in a directional sense all three routes were occasionally referred to as the "Sonora Trail."

Tuolumne County naturally accepted the northernmost route along the Clark's Fork as did most map makers who generally depicted the boundary line as following the stream itself. Alpine County, however, preferred to believe that the Legislature had meant a route farther south.

On October 17, 1949 the Board of Supervisors of Alpine County visited their counterparts of Tuolumne County at Sonora and held a cordial discussion on the subject of their common boundary line. Both Boards referred the matter to their respective district atorneys for study, an action which was to initiate nearly 14 years of controversy and expensive litigation.[15]

On June 16, 1950 Alpine County formally petitioned the State Lands Commission to survey and determine the common boundary line between the two counties. Following hearings before Col. Rufus Putnam of the Commission at which Tuolumne County's position was defended by Attorney Ross A. Carkeet with the research assistance of William F. Speer and James Rannie, Alpine County became convinced that there were also errors in the common boundary lines with Amador and Calaveras Counties as well.

LITIGATION COMMENCED

However, before Col. Putnam could render his decision, Alpine County filed suit in its own Superior Court for judicial relief, and the defendant counties demurred on the grounds that Alpine County had not yet exhausted its means of administrative remedies. While the demurrer was sustained and upheld in the District Court of Appeals, in 1958 the California Supreme Court ruled that although Alpine County had chosen the State Lands Commission as the initial forum to render a decision, it was not barred from concurrently pursuing its proper judicial remedy without exhausting its administrative remedies.[16]

By stipulation the suit was transferred to the Stanislaus County Superior Court for trial. Before the parties were seriously at issue, Amador and Calaveras Counties came to a stipulated agreement with Alpine County leaving Tuolumne County as the sole defendant.

Tuolumne County was represented by Attorney James R. Hardin, as Attorney Ross A. Carkeet had been elected to the office of Judge of the Superior Court of Tuolumne County in the interim, and due to the death of William F. Speer, Carlo M. De Ferrari appeared as expert witness in Tuolumne's behalf.

While Alpine County had originally claimed that the "Sonora Trail" referred to the route up the Middle Fork of the Stanislaus River, it later amended its position to allege that the Legislature had actually meant the old Emigrant Trail, and defined the point where said trail struck the Middle Fork of the Stanislaus River as being on a tributary near Saucer Meadow. Had this claim been sustained, Tuolumne County would have lost some 110,000 acres, or five percent of its area![17]

A lengthy trial was held in Department Four of the Stanislaus County Superior Court in the autumn of 1960 with the Honorable George Mellis presiding. Many days of historical and topographical testimony was presented accompanied by an exhaustive collection of maps and other exhibits before the matter was submitted for decision.[18]

On May 11, 1961 Judge Mellis rendered an opinion generally favorable to Tuolumne County's position that the boundary followed the Clark's Fork route, and ordered that a joint survey be made by the two counties to establish the line from the original field notes of 1862. On March 14, 1963 final judgment was entered and the matter concluded.

NOTES

1. State and local government was in full operation in California long before the state was admitted to the Union on September 9, 1850.

2. *Executive Document No. 17*, 31st Congress, 1st Session, pp. 776-780.

3. *Senate Journal*, 1850, "Report of Mr. de la Guerra on Counties and County Boundaries," pp. 411-419, dated January 4, 1850.

4. *Ibid.*, pp. 418-419.

The original proposal to call Tuolumne County "Oro County" was a compliment to the richness of its gold mines, for "Oro" in Spanish means "Gold."

5. *Senate Journal*, 1850, "Additional Report of Mr. de la Guerra on County Boundaries," pp. 420-421, dated January 18, 1850.

Subsequent to the date of Senator de la Guerra's supplemental report, Calaveras County was formed from the eastern part of San Joaquin County to complete the roster of 27 original counties formed by the Legislature on February 18, 1850.

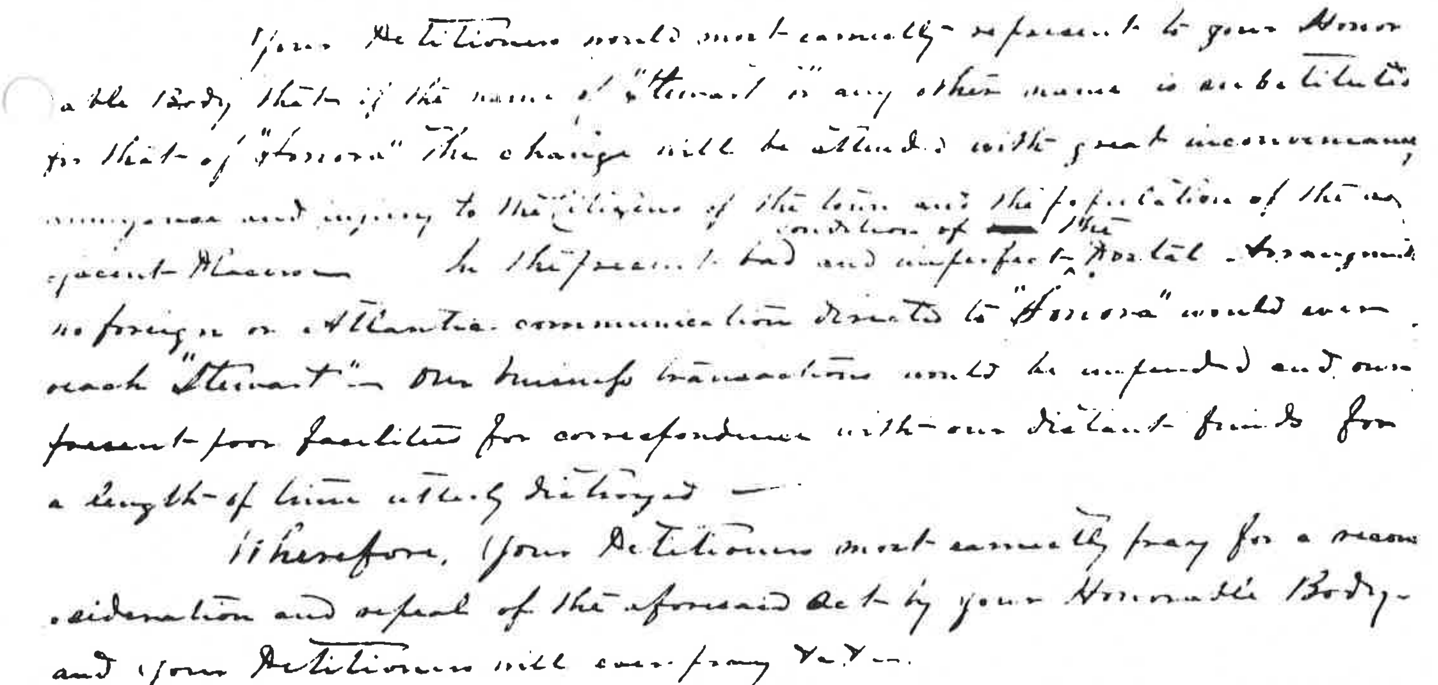
6. *Senate Journal*, 1850, "Report of Mr. Vallejo, on the Derivation and Definition of the Names of the several Counties of California," pp. 536-537, dated April 16, 1850.

[1850-23-1]

To the Honorable House of Assembly for the State of California, in Assembly convened. The Petition of the Inhabitants of the Town of Sonora in the District of Tuolumne most respectfully represents —

That on the day of during the present Session of the Legislature, your Honorable Body passed an act changing the name of the Town of Sonora to the name of "Algerine". — That the said change was undesirable and undesired by the Citizens of the said Town; and your Petitioners most earnestly remonstrate against the same and pray that your Honorable Body will reconsider your action thereon in consideration of the following facts —

That a year since the present site of our town was encamped upon by numerous Mexicans from the State of Sonora — it soon became the most populous, prosperous and salubrious encampment in all the Southern Mines — by universal consent it took its name from the character of its first settlers and from that time to the present has been known as the Sonorian or Sonoran Camp. From the spring of 1849 to the present the population of our town has most rapidly increased — its limits have widened — it has been surrounded by substantial houses — and it has grown into the most important point in the Sonorian region — the population in the neighborhood of its surrounding Placers, now filled and worked by many thousand Miners, in commercial activity and geographical position it is unsurpassed. With the improvement of the place and its increasing importance the name of the Sonorian or Sonoranian Camp was slightly changed in that of the town of "Sonora" and as such is now known throughout the State of Sonora in Chile and Peru — to a large portion of our countrymen in the Atlantic States and throughout the United States of California — to Sonora our friends and kinsmen in the old States direct their letters — to Sonora our foreign and Atlantic Commercial correspondents send us their advices — to Sonora our merchandize our provisions and tidings of every description are sent —


Your Petitioners would most earnestly represent to your Honorable Body, that if the name of "Stewart" or any other name is substituted for that of "Sonora" the change will be attended with great inconvenience, annoyance and injury to the citizens of the town and the population of the adjacent placers — In the present bad and imperfect condition of the Postal Arrangements no foreign or Atlantic communication directed to "Sonora" would ever reach "Stewart" — our business transactions would be impeded and our present poor facilities for correspondence with our distant friends for a length of time utterly destroyed —

Therefore, Your Petitioners most earnestly pray for a reconsideration and repeal of the aforesaid Act by your Honorable Body — and your Petitioners will ever pray &c &c.

COURTESY OF CALIFORNIA STATE ARCHIVES

Facsimilé of the body of the original petition filed with the State Assembly asking that ". . . an act changing the name of the Town of 'Sonora' to that of 'Stewart' " be reconsidered and the town's original name restored.

The unsolicited name changing was apparently the work of Assemblyman Malcolm M. Stewart who used his legislative power to bestow his family name upon the town of Sonora. This action was deeply resented by local residents and resulted in the circulation of the above petition which was signed by most of Sonora's (or Stewart's) prominent citizens. Upon receipt of the same, amending legislation was introduced, passed by the Legislature, and approved by the Governor on April 18, 1850.

As noted in the petition the mining camp had been founded by Mexicans from the State of Sonora and had been known from that date as the "Sonorian or Sonoranian Camp," or more commonly just "Sonora."

Senator Vallejo spelled the county's name "Tualumne" in his report.

7. *Statutes of California*, 1850, Chap. 15, Sec. 27, p. 63. This description should have read "Beginning on the summit of the Coast Range at the southwest corner of *San Joaquin County*" and this correction was made in 1851. *Statutes of California*, 1851, Chap. 14, Sec. 14, p. 175, approved April 25, 1851. The description of the southern boundary of the county was also altered for clarification by this Act.

Section 13 of the same Act refined the description of Calaveras County and described its common boundary line with Tuolumne County with more certainty. At that time Calaveras County included a large part of modern day Mono County and so it partially bounded Tuolumne County on the east as well as the north. Their common boundary line was described as running ". . . in a westerly direction along said summit to the north fork of the Stanislaus river; thence down the north fork of the Stanislaus river to a point one mile north of Knight's Ferry . . ." The summit referred to being, of course, the crest of the Sierra Nevada.

8. Petition filed with the Legislature on April 13, 1850. Designated as 1850-23 in the California State Archives.

Apparently some of the Senators were confused as to the location of the town of Stewart which was designated as the County Seat of Tuolumne County for it was amended in that body on January 21, 1850 by the addition of the words "formerly known as the Sonoranian Camp." *Senate Journal*, 1850, *Op. Cit.*, p. 101.

9. Petition filed with the Legislature on January 14, 1853. Designated as 1853-5 in the California State Archives. The name "Louisa County" is crossed out on the face of the petition. One of the petitioners, Judge Micajah McGehee of Big Oak Flat, added after his signature "Prefer the name Merced County."

10. *Statutes of California*, 1854, Chapter 81, Passed April 5, 1854, and Chapter 35 amending the same, approved May 3, 1854. Note: The General Laws and Special Laws were separately chaptered which explains why the amending statute was assigned a lower chapter number than the law it amended.

11. See James O'Meara, *Broderick and Gwin*, Chapters 7, 8; Sol P. Elias, *Stories of Stanislaus*, pp. 170-175; L. C. Branch, *History of Stanislaus County*, pp. 104-106 and the *Senate Journal* for 1854. Biographies of both Broderick and Gwin shed further light on this historical episode.

12. Petition field February 26, 1858. Designated as 1858-42 in the California State Archives.

13. Petition filed January 31, 1859. Designated as 1859-9 in the California State Archives.

14. *Statutes of California*, 1863-64, Chapter 180, approved March 16, 1864.

15. *Tuolumne County Supervisors Minutes*, Vol. 15, pp. 186-187, October 17, 1949.

16. *Alpine County v. Tuolumne County* (1958) 322 P. 2d 449, 49 C. 2d 787.

17. By description located in Section 36, Tp. 5 N., 20 E., M. D. B. & M.

18. *County of Alpine vs. County of Tuolumne, etal.* Stanislaus County Superior Court, No. 53559.

A SELECTION OF BOOKS ABOUT TUOLUMNE COUNTY HISTORY

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Branch, L. C. *History of Stanislaus County, California with Illustrations.* San Francisco: Elliot & Moore, 1881.

Buckbee, Edna Bryan. *The Saga of Old Tuolumne.* New York: The Press of the Pioneers, Inc., 1935.

Christman, Enos. *One Man's Gold*, the Letters and Journal of a Forty-Niner. Florence Morrow Christman, Ed. & Comp. New York: Whittlesey House, 1930.

Colton, Rev. Walter. *Three Years in California*. New York: A. S. Barnes & Co., Cincinnati: H. W. Derby & Co., 1850.

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Grigsby, Russell C. *Tales of California*. Sonora: The Mother Lode Press, 1971.

Harris, Benjamin Butler. *The Gila Trail*. Richard H. Dillon, Ed. Norman: University of Oklahoma Press, 1960.

Jefferds, Elizabeth Burden. *The Gold Rush Story of Elizabeth Burden Jefferds in Her Own Words* and "Memories of Auntie" by Carrie Inch Segerstrom. Sonora: Privately printed by Donald I. Segerstrom, 1962.

Jolly, John. *Gold Spring Diary*. Carlo M. De Ferrari, Ed. Sonora: Mother Lode Press, 1966.

Lang, Herbert O. *History of Tuolumne County, California*. San Francisco: B. F. Alley, 1882.

Lang, Margaret Hanna. *Early Justice in Sonora*. Sonora: The Mother Lode Press, 1963.

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Marryat, Frank. *Mountains and Molehills*, or Recollections of a Burnt Journal. New York: Harper & Brothers, 1855.

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Mulford, Prentice. *Prentice Mulford's California Sketches*. Franklin Walker, Ed. San Francisco: The Book Club of California, 1935.

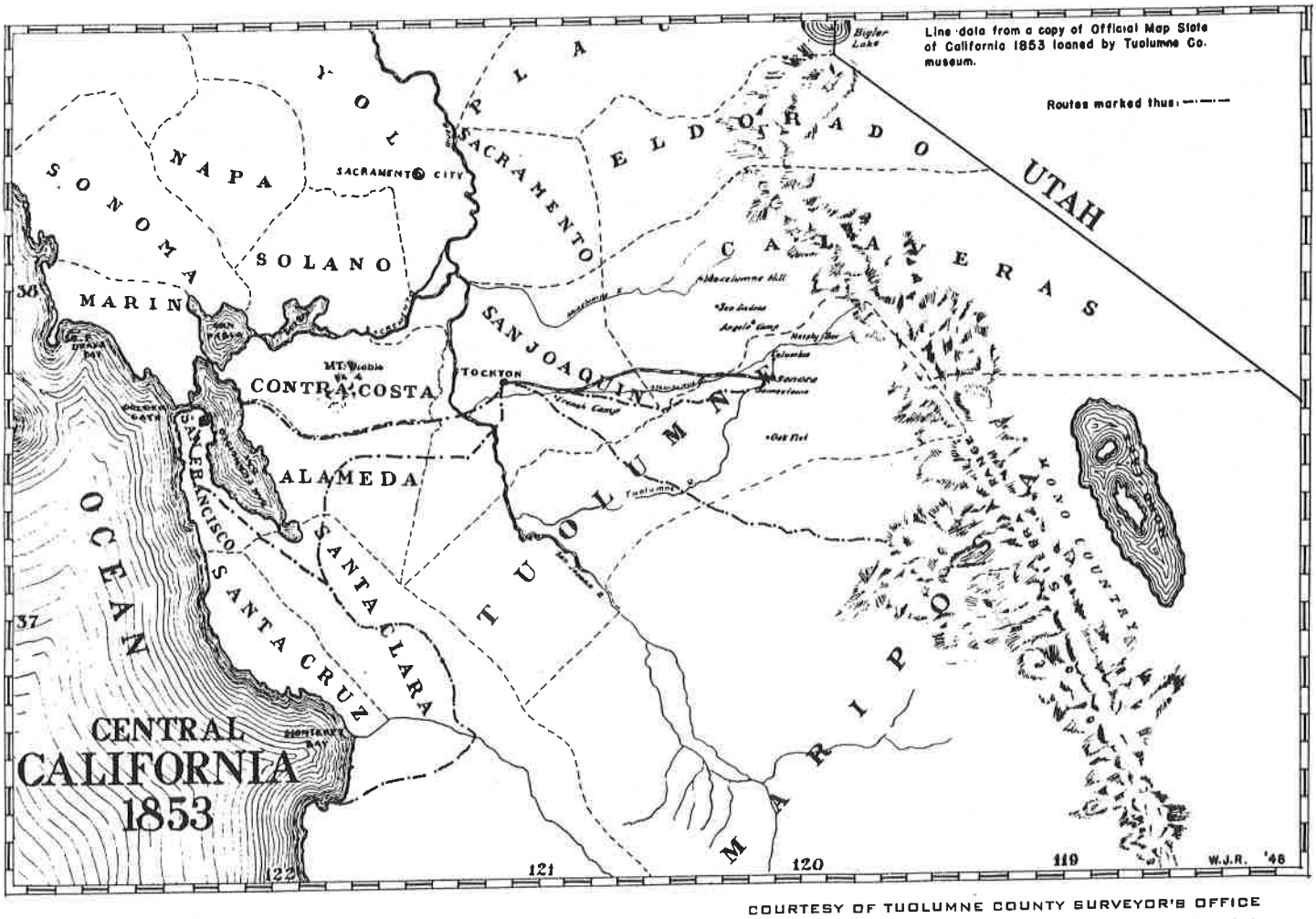
Paden, Irene D. & Margaret E. Schlichtman. *The Big Oak Flat Road*, an Account of Freighting from Stockton to Yosemite Valley. San Francisco: 1955.

Perkins, William. *Three Years in California*, William Perkins' Journal of Life at Sonora, 1849-1852. Intr. and Annotated by Dale L. Morgan and James R. Scobie. Berkeley & Los Angeles: University of California Press, 1964.

Stoddart, Thomas Robertson. *Annals of Tuolumne County*. Intr. and Annotated by Carlo M. De Ferrari. Sonora: The Mother Lode Press, 1963.

Wurm, Ted. *Hetch Hetchy and Its Dam Railroad*. Berkeley: Howell-North Books, 1973.

——— *Tuolumne County, California*, Being a Frank, Fair and Accurate Exposition of the Resources and Possibilities of this Magnificent Section of California. Sonora: The Union Democrat, 1909.



COURTESY OF TUOLUMNE COUNTY SURVEYOR'S OFFICE

The above map shows Tuolumne County with its original boundaries which included nearly all of present day Stanislaus County and part of southwestern Alpine County.

The State of Nevada was still in the distant future and California shared a common boundary line with Utah Territory on the east. Tuolumne County's present neighbor across the Sierra Nevada range, Mono County, was then part of Calaveras and Mariposa Counties whose boundaries ran to the state line.

Appendix D: Primary Record Form and Instructions for Completion

The State Office of Historic Preservation (SHPO) has prepared the "Draft Final: Instructions for Recording Historical Resources." As part of this report, new historical resources forms for documentation have been presented to the public for comment and will be presented to the State Historical Resources Commission for their approval at the November 1993 meeting. By agreement with Mr. William Seidel (SHPO) and the Tuolumne County Historic Resources Commission, the authors of the Tuolumne County Contextual History used the new forms to test the format, nature, and structure of the minimum Primary Record. We feel that the experiment was successful, as we were able to document close to 100 resources in Tuolumne County in the same time it might have taken to document less than 15 on the currently used forms. The most recent guidelines for documentation, issued by SHPO on 19 July 1993 have been included here for reference, but should be replaced when the final version is issued.

State of California — The Resources Agency
DEPARTMENT OF PARKS AND RECREATION

PRIMARY RECORD

Primary # _____
HRI # _____
Trinomial _____
NRHP Status Code _____

Page _____ **of** _____

Other Listings _____
Review Code _____ Reviewer _____ Date _____

P1. Resource Identifier: _____

P2. Location: a. County _____ **and (Address** and/or **UTM** Coordinates. Attach Location Map as required.)

b. Address _____

City _____ **Zip** _____

c. UTM: USGS Quad _____ **(7.5′/15′) Date** _____; **Zone** ___, _____ **mE/** _____ **mN**

d. Other Locational Data (e.g., parcel #, legal description, directions to resource, additional UTMs, etc., when appropriate):

P3. Description (Describe resource and its major elements. Include design, materials, condition, alterations, size, setting, and boundaries):

P4. Resources Present: ☐ Building ☐ Structure ☐ Object ☐ Site ☐ District ☐ Element of District

P5. Photograph or Drawing (Photograph required for buildings, structures, and objects.)

P6. Date Constructed/Age:
☐ Prehistoric ☐ Historic ☐ Both

P7. Owner and Address:

P8. Recorded by (Name, affiliation, and address): _____

P9. Date Recorded: _____

P10. Type of Survey: ☐ Intensive ☐ Reconnaissance ☐ Other
Describe: _____

P11. Report Citation (Provide full citation or enter "none."): _____

Attachments: ☐NONE ☐Map Sheet ☐Continuation Sheet ☐Building, Structure, and Object Record ☐Linear Resource Record ☐Archaeological Record ☐District Record ☐Milling Station Record ☐Rock Art Record ☐Artifact Record ☐Photograph Record ☐ Other (List): _____

State of California — The Resources Agency
DEPARTMENT OF PARKS AND RECREATION

MAP SHEET

Primary # _____

HRI#/Trinomial _____

Page _____ of _____

Resource Identifier: _____

Map Name: _____ Scale: _____ Date: _____

Note: Include bar scale and north arrow on map.

THE MINIMUM LEVEL OF DOCUMENTATION

The Primary Record and a Location Map provide the minimum level of information needed to include a record in the OHP's filing system. The Location Map is optional for resources located on small parcels of land when an address is provided. This minimum level of documentation is designed to provide an initial record of all types of historical resources including buildings, structures, objects, sites, and districts, as well as cultural landscapes (sites) and traditional cultural properties (many of which are classified as sites).

How to Prepare a Primary Record

The following are step-by-step instructions for completing the Primary Record. Please note that **required information is indicated with an asterisk and bold type** in the instructions that follow.

***Header Block**: Information provided in the header block will be used to track resource records and the decisions made about a documented resource. Enter the appropriate information in the spaces provided for Primary Number, Trinomial/HRI Number, and Other Listings when known. The NRHP Status Code must be filled in before a record will be included in the OHP's filing system. The space provided for Review Code, Date, and Reviewer will be completed by the OHP or Information Center staff and should **always be left blank.**

Primary Number: Enter a number only if it has already been assigned by OHP or an Information Center.

Trinomial/HRI Number: Enter a number only if one has already been assigned by OHP or an Information Center.

***NRHP Status Code**: Enter the appropriate code that best defines the relationship of the resource to the National Register using the list in Appendix 2. Use the lowest initial number if more than one applies. For example, if a resource can be rated both "3S" and "5D1," put "3S." Enter "7" in this space if no evaluation has been completed.

Other Listings: Enter any national, state, and/or local designation program(s) in which the resource is listed. Provide a reference number if applicable. Enter only those designations already approved at the time a record is submitted for inclusion in OHP's filing system. Use the following abbreviations: HABS (Historic American Building Survey), HAER (Historic American Engineering Record), NHL (National Historic Landmark), SHL (State Historical Landmark), CPHI (California Point of Historical Interest), CRHR (California Register of Historical Resources), or the name of the local register.

***P1. Resource Identifier**: Use this field to provide an identifier which will link all the pages of the record together. The identifier can be a historic or common name, address, parcel number, or any other designator which will consistently refer to the same resource.

***P2. Location**: Provide the name of the county (or counties) in which the resource is located and give the address and/or UTM coordinate(s). When possible, provide both the address and UTMs. A Location Map must be attached to the Primary Record for sites, as well as other resources that do not have a street address. Locations Maps are also recommended for resources on large parcels where an address does not satisfactorily pinpoint the location of the resource within the parcel.

***P2a. County**: Give the name of the county or counties in which the resource is located. If it is located in more than one county, put the county containing the majority of the resource first. Include the appropriate county and state for resources that extend outside of California.

***P2b. Address**: Enter the complete address for the parcel on which the resource is located, if one exists. Include the street or highway number and name, town or city, and zip code. For numbered highways, use "State Route" or "County Road" followed by a number.

***P2c. UTM**: UTM coordinates are required for sites, and should be used for other resources that either do not have a street address or cannot be accurately located by the address because of the large size of parcel. For example, linear structures rarely have addresses and many rural buildings are located on large parcels. In such cases, UTMs should be provided to accurately describe the location of the resource.

Begin by entering the name of the U.S. Geological Survey quadrangle(s). Circle the map scale and list the date the map was published or photorevised. For resources less than 10 acres, enter the UTM reference for the point corresponding to the center of the resource. Four UTM references are required for the corners of a quadrangle encompassing larger resources. UTM references should be provided for both ends of linear structures and sites (or for the recorded segment of that resource). When more than one UTM reference is given, each reference point should be depicted on the Location Map. Refer to Appendix 3 for further information about how to calculate UTMs.

P2d. Other Locational Data: While no further locational data is required, it may be helpful to supply additional information such as a parcel number, legal description (e.g. lot, block, and subdivision; or township, range, and 1/16th section), and directions to a resource. Parcel numbers may be useful to local governments that make decisions affecting historical resources. Legal descriptions may facilitate historical research, while directions to a resource often help others locate it. For resources that are particularly hard to find, it may even be useful to supplement the Location Map with an Access Map showing how to get to the resource from an easily identifiable landmark.

P3. Description: Provide a concise, well-organized description of the resource. Describe its physical characteristics and appearance and summarize any features that are associated with it. Where possible, note all aspects of the resource you observe, even if some of those elements are not recorded in detail.

Descriptions of buildings, structures, and objects should identify construction details, materials, workmanship, and alterations. Buildings are often described in terms of overall shape, number of stories, siding type, roof shape and materials, dormer shape, window location and pattern, door location, porch type, and ornamentation. Information on the nature and extent of any alterations should also be included. Boundary descriptions may be brief and may refer solely to the resource's parcel. Describe the area outside the boundaries, mentioning as appropriate landscape, use, architecture, and other aspects related to setting.

Descriptions of linear structures and linear sites should include an overview of the entire resource when possible, even in cases where only a segment of that resource is recorded. The overview should describe the type of resource, when it was constructed, how long it is, its shape, its origin and destination, how it was constructed (e.g., materials, workmanship, special engineering accomplishments, etc.), its setting and physical condition, and its function. The function of a linear

resource should encompass not only its specific use, but also how it contributed to larger historical developments and the use of other resources. When only a portion of a linear resource has been examined in the field, that segment should be identified on the Location Map.

Descriptions of sites should summarize observed physical characteristics and major cultural and natural features (e.g., midden, lithic scatter, shell mound, housepits, rock art, bedrock milling features, etc.). While interpretive comments may also be included, the principal goal of this section is to describe the site in as much detail as possible.

When recording traditional cultural properties, the description should be based on information provided by members of the community historically associated with that resource. Refer to National Register Bulletin 38 (National Park Service n.d.) for further information about recording TCPs.

Descriptions of districts should briefly summarize overall characteristics, setting, and the numbers and types of contributing and non-contributing resource elements. Discuss the characteristics that link the elements of the district and give it coherence. Mention natural and cultural features as appropriate.

If you are describing an element of a district, provide the Primary Number and/or the resource identifier of the district, if known.

*P4. Resources Present: Check the category or categories that best describe the resource being documented using Appendix 4 and National Register Bulletin 15, How to Apply the National Register Criteria for Evaluation (National Park Service 1990a) for reference. When documenting a resource with superimposed elements such as a building located on top of an archaeological site, check all categories that apply. If the resource is part of a district, check the box for "Element of District" in addition to the appropriate box (or boxes) that define the kind of resource. If the record is being prepared to document a district, check the district box.

*P5. Photograph or Drawing: A clear and descriptive glossy 3-1/2"x5" black and white photograph is **required for all records documenting buildings, structures, and objects.** It may also be provided when documenting sites (including isolated finds and minor features). Write the address and/or resource name, subject, view, and date the photograph was taken on a label and affix it to the back of the print. Place the print in a clear polyethylene or polypropylene envelope and affix the envelope to the record in the space provided using transparent tape.

Photographs of buildings, structures, and objects should provide either an overview of the resource in its setting or a

detailed view of the resource itself, as appropriate. One contemporary photograph showing the front and one side of the resource is usually sufficient. For some resources it may also be useful to provide additional photographic documentation, such as photographs of details, photographs of ancillary structures, and supplementary historical pictures. These should be placed on Continuation Sheets.

When not used for photographs, this space might contain a drawing, plan, or map of minor resources and isolated archaeological finds.

***P6. Date Constructed/Age:** List the construction date or period of use and briefly describe how that date or period was determined. Indicate whether the date or period of use is factual (F) or estimated (E). Also indicate whether the resource is prehistoric, historic, or both. The term "historic" applies to all historical resources associated with non-indigenous peoples and those resources used by Native Americans after direct contact with non-indigenous peoples. The term "prehistoric" applies to all historical resources used by Native Americans prior to direct contact with non-indigenous peoples.

P7. Owner and Address: Give the name and address of the resource's current owner(s). If the owner is a government agency, you may give the name and address of the managing unit. Enter "unknown" or "withheld by owner" if appropriate. Ownership information is often required before a historical resource can be listed on various state and national registers.

***P8. Recorded By:** Enter the name of the person who prepared the record, indicating their agency or organizational affiliation, if appropriate, and provide a complete address.

***P9. Date Recorded:** Indicate the date the record was prepared.

***P10. Type of Survey:** Indicate whether the resource was recorded as the result of an intensive survey, reconnaissance survey, or other activity (e.g., volunteer effort) and describe the purpose of that effort. The terms "intensive survey" and "reconnaissance survey" are defined for the purposes of this entry in relation to the Secretary of the Interior's Standards and Guidelines for Archeology and Historic Preservation (National Park Service 1983). Appendix 6 briefly summarizes those definitions and the basic report contents that are recommended by the Secretary of the Interior for each type of survey.

***P11. Report Citation:** Provide a complete citation for any report or publication documenting the discovery of the resource, if one has been completed or is under preparation. If no survey report or publication exists or is planned, enter "none." List the name of the author, date of the report or publication, title, and

the name of the government agency, private firm, university department, publisher, etc., that the report was prepared for or published by.

*Attachments: Check any forms that are attached to the Primary Record and list any other attachments if appropriate. Check "None" if there are no attachments.

How to Prepare a Location Map

The purpose of a Location Map is to accurately depict the location of the resource on a U.S. Geological Survey topographic quadrangle or other government map. A Location Map is optional for resources located on small parcels when an address is provided. The Location Map differs from a Sketch Map in that it generally does not depict the internal arrangement of a resource. The only exceptions to this rule are the Location Maps created for linear resources and districts, which may depict component features and/or elements.

Provide the name, scale, and publication date of the map(s) used to depict the location of the historical resource, and include a copy of the appropriate portion(s) of that map or maps on the Map Sheet record. If the map has been photorevised, place the date of the revision in parentheses following the original date the map was published. The OHP recommends using maps published by the government, particularly U.S. Geological Survey topographic quadrangles (for rural areas) and assessor's regional index maps (for urban areas). Because privately published maps are subject to copyright restrictions, you should check with the OHP before submitting such materials.

All Location Maps should include a bar scale and north arrow. Accurately plot the shape and location of the resource on an appropriate map. Very small resources may be depicted with a dot, while the exact configuration of larger resources should be drawn to scale using a heavy black line to indicate the perimeter of the resource. When possible, show the entire alignment of a linear resource, even if only a segment is recorded in detail. Do not obscure map details by filling in the areas covered by large resources solidly.