
4.14 CULTURAL RESOURCES

This section assesses potential impacts on cultural and paleontological resources that could occur with development projected under the Updated Plan. Cultural resources can consist of buildings, structures, objects, archaeological sites, districts, landscapes, places, traditional cultural properties, manuscripts, and other resources deemed to be historically significant or significant from an architectural, engineering, scientific, economic, agricultural, educational, social, political, military, or cultural standpoint at the local, state, or national level. A cultural resource may be: the location of a prehistoric or historic occupation or activity; a locale which has been, and often continues to be of religious, mythological, cultural, economic, and/or social importance to an identifiable ethnic group; associated with events that have made a significant contribution to history or cultural heritage; associated with the lives of important persons; embody the distinctive characteristics of a type, period, region, or method of construction; represent the work of an important creative individual; possess high artistic values; or yield information important in prehistory or history.

Paleontological resources (fossils) are the remains and/or traces of prehistoric animal and plant life exclusive of human remains or artifacts. Fossil remains such as bones, teeth, shells, leaves are found in the geologic deposits (rock formations) within which they were originally buried. Fossil remains are important as they provide indicators of the earth's chronology and history. They represent a limited, nonrenewable, and sensitive scientific and educational resource.

The analysis is based on:

Burton, J.F. 1992. Further Investigations of the Snowcreek Archaeology Site, Mammoth Lakes, California. Trans-Sierran Archaeological Research to Trans-Sierran Archaeology No. 21. July 1992.

Furnis, C.L., 2001. An archaeological Reconnaissance Report for the Lake Mary Road Bike Route, Mammoth Lakes, Mono County, California, Final Report. December 18, 2001.

4.14.1 EXISTING CONDITIONS AND SETTING

The Town lies at the base of the Sierra Nevada range, and at the western edge of the Long Valley Caldera. To the north and east of the Town lie the resurgent domes of the Long Valley Caldera, which provide the Casa Diablo obsidian source. Mammoth Pass, an ethnographically-used trade route over the Sierra Nevada, is located to the west of Mammoth Creek about 0.5 miles south of the Town. The Mammoth Pass is a likely aboriginal trade route.

Numerous EIRs have studied the potential locations of cultural sites and the potential occurrence of prehistoric and historic resources within the Planning Area. The following information is taken from Furnis 2001⁶⁷ and Burton 1992.⁶⁸

The first site typology specifically for the Mono Basin-Long Valley region was developed by Emma Lou Davis in 1964. In 1977, Bettinger conducted a systematic stratified random sample of the Long Valley Known Geothermal Resource Area. His survey encompassed lands administered by the Inyo National Forest east of the Planning Area. Through his work, Bettinger was able to develop a model to predict site density and site taxonomy based on the presence of nine types of cultural material, such as projectile points and groundstone. In addition, Bettinger discussed subsistence and settlement patterns and apparent changes through time. Most apparent from survey data from Long Valley is the ubiquity of archaeological sites near the Casa Diablo obsidian quarries. Numerous sites have been recorded in the vicinity of Mammoth Lakes during several surveys. While most of these sites can be characterized as ethnic scatters, many also contain bedrock milling features or midden. The importance of the nearby Casa Diablo obsidian source is evident in excavation data. Most excavation work has focused on sites that are predominately stoneworking locations with only minor evidence of subsistence activities.

Sites with evidence of occupation or subsistence, such as hunting and plant collecting, are more rare, but a variety of subsistence, residence, and exchange activities have been revealed through excavations at other sites in the Mammoth Lakes area. Rockshelters have been excavated at Hot Creek, Mammoth Creek Cave, Little Hot Creek, Little Antelope Valley, and Whisky Creek. Subsistence activities are represented at hunting camps such as those at Doe Ridge, and at temporary camps where both obsidian reduction and subsistence activities occurred, such as Triple, the Minaret Road Site, and those in the Royal Gold and Sherwin Ski project areas. A variety of activities occurred at large sites with middens, such as the Chance

⁶⁷ Burton, J.F. 1992. *Further Investigations of the Snowcreek Archaeology Site, Mammoth Lakes, California. Trans-Sierran Archaeological Research to Trans-Sierran Archaeology No. 21. July 1992.*

⁶⁸ Furnis, C.L., 2001. *An archaeological Reconnaissance Report for the Lake Mary Road Bike Route, Mammoth Lakes, Mono County, California, Final Report. December 18, 2001.*

Well Site, the Snowcreek Site, the Hot Creek Hatchery Site, the Mammoth Junction Site, and at multi-purpose sites without middens. Although most sites excavated in Long Valley postdate 3500 B.C., some work has been located at an early site, the Komodo Site dated 11,000 BC northeast of Mammoth Lakes.⁶⁹

There are four known historic sites within the Planning Area (Hayden Cabin/Museum, Mill City, Mammoth City, and Mammoth Consolidated Mine). These sites are all located outside the UGB. Any proposal that could result in substantial adverse changes to any of these sites including demolition, destruction, relocation, or alteration of the buildings on these sites or their immediate surroundings would require preparation of an EIR pursuant to CEQA before any alteration could proceed.

4.14.1.1 Prehistoric Overview

The following chronology, based on time-sensitive projectile points, has been proposed by Bettinger for the Inyo-Mono region.⁷⁰

- Mohave complex (pre-5500 B.P.) – indicated by Mohave, Silver Lake, and Great Basin Transverse projectile point assemblages.
- Little Lake Period (5500 to 3200 B.P.) – indicated by Little Lake and Pinto series projectile points and Humboldt Concave-base bifaces.
- Newberry Period (3200 B.P. to A.D. 600) – indicated by Elko series projectile points.
- Haiwee Period (A.D. 600 to 1300) – indicated by Eastgate and Rose Spring series ("Rosegate") projectile points and Humboldt Basal-notched bifaces.
- Marana Period (A.D. 1300 to historic) – indicated by Cottonwood and Desert Side-notched projectile points and Owens Valley Brown Ware ceramics.

Based on chronologies developed from projectile point types and from obsidian hydration readings for them, the earliest human occupation of the Long Valley and Mono Basin areas is believed to have occurred at least 7500 B.P. A very few Great Basin Concave-base series and numerous Great Basin Stemmed series projectile points have been recorded within these two areas. They define the Early Holocene or Mojave Phase in the region. During this Pre-Archaic period, stone tools and the locations of these tools suggest that people primarily survived by hunting large game, including now-extinct species of megafauna and small game, and utilized lacustrine and marsh plants for food. The stone artifact assemblages are characterized by

⁶⁹ Nancy Walter, comment on previously circulated EIR, 2005.

⁷⁰ There are also Clovis sites according to Nancy Walter, comment made on previously circulated EIR, 2005.

crescents, large bifaces used as knives, choppers, steep-edged scrappers, perforators, gravers, and multiple-function flaked tools, in addition to the large projectile points that typically are edge-ground. Such implements usually are found on the surface, individually or scattered over large areas as an assemblage, and are often situated on gravel bars and other high places close to early Holocene marshes associated with shallow lakes, streams, and rivers. In the Mammoth area, the known Pre-Archaic sites are associated with the Mono Basin, which held a larger Mono Lake in earlier times than at present, with the southern Owens Lake shore, and with other locations.

Following the Pre-Archaic is the Archaic period, sparsely represented by sites in the Mammoth area, and dating from around 7500 B.P. to contact with whites, at around 1830. The Archaic period represents a different time with different human adaptations to the local environment and climate. The Early Archaic in the area is known as the Little Lake Phase, dating from ca. 7500 to 3150 B.P., although identified sites from Long Valley and Owens Valley conform to Clyde Phase assemblages that date between 5500 and 3500 B.P. Between 7500 and 5500 B.P. the period is not as well defined for the whole Western Great Basin. Pinto and Little Lake projectile points define the Little Lake Phase during which the early Holocene's wetter and cooler climate was warming and becoming drier. As a result, plant and animal communities were changing in response to the shrinking water sources. Most pluvial lakes, marshes, and megafauna disappeared during the early Archaic, so the few residential sites found in Long and Owens valleys for this period are often located in valley bottoms close to rivers with temporary locations and field camps in higher terrain, within desert scrub zones. Hunting of big game continued and more intensive use of plants, especially of seeds, is indicated by dart-sized projectile points (Pinto and Little Lake) and by ground stone food processing tools (manos and metates).

The Middle Archaic is represented by the Newberry Phase (3150 to 1350 B.P.), characterized by Elko series and Humboldt series dart points. Large game hunting, intensive seed gathering, and processing activities continued to dominate, based on archaeological remains from Mammoth Creek Cave and from Hot Creek Shelters. Middle Archaic sites in higher areas, such as the Casa Diablo and Long Valley Caldera, are located near by climate trends changed, bringing more cool and wet conditions than in the Early Archaic.

The Late Archaic in the region is subdivided into the Haiwee Phase (1350 to 650 B.P.) and the Marana Phase (650 B.P. to EuroAmerican contact). Rosegate projectile points, marking the transition to bows and arrows, are typical of the Haiwee Phase, while small Desert Side-notched and Cottonwood projectiles (arrow) points, as well as brownware pottery define the Marana. As the climate again oscillated to a warmer and drier regime, the area also experienced significant human population increase. The result, as evidenced by the archaeological record, is greater diversity of plant and animal resources exploited, broadening of ecozones utilized, and changes in several technologies including use of small projectile points (for small game) and abandonment of large dart points (for big game), introduction of pottery and of steatite disc

beads, a decrease in bifaced production by increase in simple flake tools, and an increase in types and numbers of grinding stones for processing plant foods. It was during the Late Archaic that flat slab schist milling stones, milling slicks, and bedrock mortars apparently first appeared. The Marana Phase sites are thought to represent Owens Valley Paiute pre-contact sites, as the Owens Valley Paiute were the occupants of the region at the time of contact.

Information compiled from the various excavations and surveys provides a glimpse of lifeways during these periods. The pre-Newberry occupation of Long Valley may have been sporadic. In the Newberry period, obsidian quarrying and biface production, apparently for trade, appears to have become intensive. During the Haiwee and Marana periods, biface production diminished and there is evidence of increasing direct subsistence activity. Long Valley has lacked evidence of the shifts in direct subsistence that appears to have occurred in Owens Valley, to the south. For example, occupation sites in Long Valley are usually associated with riparian settings and were used throughout the Medithermal. However, there is some evidence that piñon exploration did not begin on any intensive scale in Long Valley until the Haiwee period (after A.D. 600), and there may have been a partial abandonment or reduction in the use of upland and desert scrub areas after ca. A.D. 1000.

Dramatic environmental change in the Long Valley area could have been caused by recurrent volcanic eruptions. Obsidian tool manufacture and export trade over the Sierra Nevada may have been interrupted in the Late Archaic because of volcanic eruptions that occurred between A.D. 50 and 1450 in the Mono Lake and Long Valley Caldera highlands, in the same area that the obsidian was being quarried. Twenty eruptions at Mono Craters, within the last 10,000 years, have been dated through either radiocarbon or obsidian hydration analysis. Data partially generated from excavations hypothesizes that recurrent eruptions in the Inyo-Mono volcanic chain may have altered the region's plant, animal, and water resources drastically enough to curtail human use of the area for at least short periods of time.

4.14.1.2 Ethnographic Overview

Traditionally, groups of Owens Valley Paiute have occupied an area from Mammoth Lakes to approximately 60 miles to the east and 100 miles to the south. A ten to 15 mile-wide band of land immediately north-northeast of Mammoth was jointly used by Owens Valley Paiute and Northern Paiute groups from Mono Lake. This territory includes all of Owens Valley, Round Valley, Long Valley, Fish Lake Valley, and Deep Springs Valley. While both Paiute groups speak Western Numic languages, the Northern Paiute speak Northern Paiute and the Owens Valley Paiute speak Owens Valley Paiute.⁷¹ Other neighboring groups, on the west side of the Sierra Nevada (the Monache) and south of Mammoth on both flanks of the mountains

⁷¹ Nancy Walter, comment made on previously circulated EIR, 2005.

(Monache and Owens Valley Paiute) speak other dialects of Mono and share many cultural bonds with each other.

The Owens Valley Paiute occupied the Owens Valley on a year-round basis with many semi-sedentary settlements located on major rivers and streams along the valley's west side. Closer to Mammoth, in Long Valley and in Mammoth Basin, the pre-contact and historic use of the area by the Owens Valley groups has been only vaguely documented. However, according to Wally Woolfenden, ethnographic notes of F.S. Hules and F.J. Essene from the 1930s and oral interviews of local people from the 1970s clearly document the year-round occupation of Long Valley by the Long Valley Paiute, a subgroup of the Owens Valley Paiute, during the 1800s and 1900s. Jeff Burton cites the work of Emma Lou Davis, Matthew Hall, E.W. Gifford, and Helen Doyle in suggesting that Long Valley included an indigenous population of Northern Paiute in historic times, and provided resources and refuge on an occasional basis to Northern Paiute from Mono Lake, to Monache and Miwok from the west side of the Sierra, and to surrounding Mono-speaking groups of Paiute from Benton, Round Valley, and Owens Valley.

In contrast to the Owens Valley Paiutes, the Long Valley Paiute (a subgroup of the Owens Valley Paiute) are said to have been highly mobile in historic times, constantly moving in search of food resources, often utilizing resources beyond Long Valley. This movement included frequent trips over the Sierra crest, through Mammoth Pass, in order to collect acorns and to fish and hunt in the San Joaquin River drainage, and area within North Fork Mono Territory. Such trips sometimes occurred in winter, at which time moccasins and snowshoes were worn for snow travel.

In Mammoth itself, Mammoth Mountain is reported by Julian Steward as being a sacred place, as it stands on the border between the Monache (western Mono) and the Owens Valley Paiute (eastern Mono), and is considered to be the place of origin in all Mono-speakers' traditional myths. The actual locations of human origin there are marked by particular geographic features. Elsewhere in Mammoth Basin, ethnographic use by Long Valley Paiute and others is assumed to be seasonal rather than year round.

A number of food resources were available in Long Valley. Creeks in springtime contained Owens sucker, Tui chub, and specked dace. Antelope, deer, rabbits, and other small game could be hunted, while some edible plant roots and leaves could be harvested in spring. Summer foods might include grass seeds. In autumn, piñon nuts from the large region would be gathered, as well as harvesting and processing of Pandora moth larvae, known as ~~Piagt~~^{Piagi}, that were collected from Jeffery pine trees and elderberries. Long Valley Paiute men routinely traveled through Mammoth Pass to fish and hunt along the San Joaquin River.

Extensive trading with their neighbors was done by Owens Valley Paiute groups in order to acquire additional foods as well as ornaments, money, and other commodities. Owens Valley

Paiute traded salt, piñon pine nuts, seeds, obsidian, sinew-backed bows, rabbit skin blankets, deerskins, moccasins, mountain sheepskin, fox skin leggings, balls of tobacco, baskets, basketry water bottles waterproofed with pitch, wooden hot rock lifters, and red and white pigments, in exchange for shell money (e.g., disc beads, tubular clam beads, and more recently, glass beads), acorns and acorn meal, finely-constructed Yokuts baskets, cane for arrows, manzanita berries, squaw berries, and elderberries from the Monache. The Mono Paiute traded salt, piñon pine nuts, piagi, brine fly larvae, rabbit skin blankets, baskets, pumice stones, and red and white pigments to the Sierra Miwok, in exchange for shell money, acorns, baskets, arrows, a fungus used in paints, manzanita berries, elderberries, and squaw berries.

From prehistoric through historic times, Mammoth Pass has played a large part in the social and economic interactions of the Long Valley Paiute, of their precursors, and of the western Sierra Nevada peoples. In the process, it enabled indigenous peoples to widely distribute products well beyond their home territories.

Ethnographic information on the inhabitants of Long Valley is limited. Long Valley is near the intersection of several ethnic groups: the Mono Lake Paiute lived to the north, the Owens Valley Paiute to the south, Benton and Round Valley Paiute to the east, Monache to the west, and Southern Sierra Miwok to the northwest. The Paiute and Monache are Numic speakers, of the Uto-Aztecan language family, while the Miwok are a branch of the Utian language family.

Long Valley was used for seasonal resource exploitation by at least several of these groups. For example, Sterud cites unpublished material collected by Emma Lou Davis that the Mammoth Junction Site was used by Mono Lake Paiute in ethnographic times. Hall cites evidence that the Northern Paiute generally regarded their borders as fluid, which may have precluded exclusive use of Long Valley by a single group due to friendly relations with the Paiute. Small groups of Monache or ~~Miwok~~ Miwok from the west slope of the Sierra Nevada might spend extended visits on the east side and inter-group marriage did occur.

Long Valley does appear to have been occupied year round by an indigenous population. Steward mentions two or three Northern Paiute who claimed to have come from a village on Hot Creek, Farwihumadu (fish creek place). Doyle reported a large fandango at Hot Creek in the 1880s, which was attended by local Paiute as well as Washo, Shoshone, and Indians from Tulare. Hall discusses other evidence for permanent occupation of Long Valley and comments that in all likelihood there were probably some Paiute who spent the better part of their lives in and around Long Valley. In fact, Frank Essene's unpublished ethnographic work conducted in the 1930s documented year-round residence, with one Paiute informant mentioning a camp at the Thompson Ranch (now Alpers' Owens River Ranch).

Information is also available about the sociopolitical organization of some of the groups that may have frequented Long Valley. The Mono Lake Paiute were organized around the nuclear family, with perhaps one or two additional relatives completing the household. Most subsistence activities were performed by these independent small groups; families would come together in the winter, but composition of these larger extended families was fluid, varying from year to year depending on resources. While an individual might be designated a group leader for individual events, leadership was ascribed, based upon talent, and temporary.

In Owens Valley, on the other hand, the population was more sedentary, with year-round occupation in permanent villages and short-term visits to temporary camps for resource procurement. Leadership was hereditary, and headmen were responsible for organizing communal work projects and festivals that may have served to redistribute resource surpluses as well as to fulfill other social functions. As for the other groups using Long Valley, the Monache and the Southern Sierra Miwok groups were probably similar in their social organization to the Owens Valley Paiute, with at least some hereditary rulers and semi-permanent villages. Some researchers have postulated that any indigenous Long Valley groups that may have existed would have followed a pattern closer to that of the Mono Lake Paiute (and other Great Basin groups) than that of Owens Valley Paiute, due to similarities in environmental constraints. However, Long Valley residents may have been closely tied to the Owens Valley Paiute through kinship and trade.

Long Valley offered a variety of food resources during snow-free months. In the spring, Tui chub, speckled dace, and Owens sucker may have been dished from creeks, while roots, wild onions and greens along creeks and meadows might have replenished dwindling winter stores. Small game, deer, and antelope could have been hunted nearby. In the summer, grass seeds may have been collected from meadows and drier upland areas. Fall subsistence activities of both the Mono Lake and Owens Valley Paiute revolved around the collection of piñon. Piagi or pieaggie were another food resource available every two years in the Jeffery pine forests. The larva of the Pandora moth, Piagi, were collected as they descended the Jeffery pine trees during mid to late summer.

Much of the trade and travel likely occurred during the summer months, when the high Sierran passes were free of deep snow. Inter- and intra-regional trade may have had extensive ramifications for subsistence and settlement systems of the Owens Valley and Long Valley areas. It is proposed that an elaborate redistributive exchange system might account for the relatively complex sociopolitical organization of the Owens Valley Paiute.

4.14.1.3 Historic Overview

EuroAmerican contact with Owens Valley Paiute is first thought to have occurred when the English fur trapper Peter Ogden Skene wandered into Owens Valley thinking he had reached

the Great Salt Lake en-route to the Colorado River in 1829 to 1830. Four years later, the explorer Joseph Walker crossed the Sierra Nevada at Walker Pass, then proceeded north through Owens Valley, then over to Benton Hot Springs, and east into present day Nevada. In the 1840s and 1850s, various emigrant guides and U.S. military personnel passed through the region, but few said it was an inviting place to settle. Their reports of the eastern Sierra front probably saved the Owens Valley Paiute from earlier intrusion by white settlers, which began in earnest in the early 1860s.

Ranching began in Owens Valley in 1861 as a way of supplying food to the early mining camps in Inyo and Mono counties. European-American settlement soon supplanted most Paiute settlements, with conflict and concomitant forced removal of most Owens Valley Paiute to Fort Tejon, California, by the United States troops.

It was not until the late 1870s that permanent settlement took place within the project area at Mammoth Lakes, though a few individuals had combed the area in search of the Lost Cement Mine in the summer of 1861. A gold mining claim, the Alpha, was staked on the slope of Mineral Hill (now called Red Mountain) in June 1877, initiating the formation of the Lake Mining District. Soon other claims followed and in 1878 most of these were purchased by a group of San Francisco investors who formed the Mammoth Mining Company. The company headquarters, mill, and a small settlement were established approximately 0.5 mile north of the mines at Mill City. In the late 1870s, four camps were founded near the mining activity. These were Mineral Park, located about one mile north of Mineral Hill in a meadow, Mill City, located about 0.5 mile north of Mineral Hill, the largest camp, Mammoth City, located at the foot of Mineral Hill, and finally, Pine City, located west of the mines and approximately 1,500 feet north of Lake Mary.

A sawmill built at Mineral Park provided most of the industry for the camp, though a brewery, saloons, stores, hotel, stable, boardinghouse, and toll house represented other commercial endeavors, in addition to some 12 or so cabin residences. Mammoth City reportedly had 400 or 500 residents in 1880, while the smaller Pine City (also called Lake City) boasted a population of 17 persons in the same year, which included one engineer, one grocer, one toll road operator, one laborer, two miners, three blacksmiths, and four housewives. An unknown number of Paiute were said to have participated in mining and settlement at the Mammoth area in the 1870s and 1880s. There are accounts of Paiute men selling fish that they had caught in the San Joaquin River to the white miners, suggesting participation in the economy of the mining camps in various ways.

Though surrounded by lakes, the mining camps and the mill were situated so that they required water to be transported to them by means of ditches and flumes. In 1878, one covered flume was constructed from the north end of Twin Lakes to Mill City, while a second flume and diversion works were erected bringing water for domestic use to Pine City and to Mammoth

City, farther up the road. Presumably, the ditches continued in use until the mining camps were abandoned, mostly by the early 1880s.

In order to move people, draught animals, food, equipment, and supplies in and out of the area, roads were needed; however, roads did not exist in the area prior to 1877. There were established Paiute trails over the Sierra, to the east, north, and south along the valleys; however, these could not support wagons and stagecoaches. Fortunately, mining towns established in the 1860s already had links to the outside world. Roads were soon constructed to Benton (east) and to Bodie (north), each town already had connections with Carson City, and indirectly with Reno, and the transcontinental railroad. Jim Sherwin constructed a toll road south from Mammoth City to Round Valley in the late 1870s that connected to the road he had already built from Bishop ~~Creed-Creek~~ to Round Valley in the early 1870s, providing the Lake District with access to railroads and markets and larger population centers through the Mojave Desert.

Forging links to the west was another matter. This required a route directly over the crest of the Sierra Nevada, traversing elevations of over 9,000 feet through Mammoth Pass. The result was the Fresno Flats Road which became a toll trail west of Lake Mary. J.S. French located and developed the 54-mile long trail and led saddle trains over the mountains to Fresno Flats (now Oakhurst) and back twice a week. This service and trail enabled miners and other goods from the San Joaquin Valley of California to directly travel to Mammoth City and the other camps. Beef cattle were moved over this trail, providing fresh meat for the Mammoth mountain-dwellers. According to Adele Reed, the Fresno Flats Trail was still in use in the 1930s, serving prospectors, sheepherders, USFS personnel, and Native Americans. In later years, more roads were constructed and older ones were improved so as to provide access for early touring automobiles coming to the area for summer recreation.

The Lake Mining District boom was short-lived. By 1880, the Mammoth Mining Company had folded, taking the surrounding mining camps with it for the most part. A few people lingered on after this. Other mines a few miles south of Pine City operated through the 1880s, while renewed attempts at working the Mammoth Mine on Red Mountain took place in the 1890s. In the early 1900s, new people came to the area, establishing a few hotels, sawmill, stores, and barns. Around the turn-of-the-century, Charles Wildasinn and his family built the Wildasinn Hotel, log cabin, sawmill, and store in the meadow near the current Town, creating the first resort at Mammoth. It was well-established by at least 1906. In 1918, Mammoth Camp was established next door by Charles Summers who built a hotel and boardinghouse. In the early 1920s, more summer residents came to the area to camp and fish. Small cabins were built, as well as a post office. Most of Mammoth Camp was destroyed in a 1927 fire.

In Olive Barker's reminiscences of the 1917 to 1920 period, she mentions Indians camped at Casa Diablo Hot Springs, just a few miles east of Mammoth Lakes. They were people from the west side of the Sierra Nevada who had come over the Fresno Flats Trail to take in the hot

waters and to gather basket-making plant materials, as well as seeds, pine nuts, and Pandora moth larvae ~~piagtiagi~~.⁷² Olive and her husband later employed a local Paiute woman from Whisky Creek to do housework. Traditional practices, including travel and sharing of resource areas, seem to have continued into the 20th Century with adaptations to the new conditions and white settlement in the area.

The construction of Lake Mary Road in 1920 opened up the Lakes Basin to automobile traffic. From then on, this region experienced increasingly intense development and seasonal recreational use. After 1920, several resorts and campgrounds were established around the lakes and hundreds of small family cabins were built. One such cabin and accompanying studio was constructed by Beatrice and Stephen Willard. Mr. Willard was a well-known artist and master photographer for the region and beyond. In 1925, the first rented tent houses were erected at Lake Mary, followed in a few years by the Crystal Trap Lodge, situated at the south end of Lake Mary. In 1923, Wildyrie resort was developed at Lake Mary, and around this same time, the Tammarack Lodge housed fishermen at Twin Lakes. Support and related services followed, including packers, guides, ice-harvesting, dairies, gas stations, restaurants, bakeries, and more. SR 203 was constructed into Mammoth from U. S. Highway 395, making the area more easily accessible to summer tourists. Winter skiing became a new major attraction at Mammoth in the 1940s, bringing enthusiasts and additional, specialized developments to the area from that time forward to the present.

4.14.2 REGULATORY FRAMEWORK

4.14.2.1 Federal Laws and Regulations

There are several federal statutes that address cultural resources which are discussed below.

Antiquities Act of 1906 (16 USC 431-433)

The Antiquities Act of 1906 indicates that if any person appropriates, excavates, injures, or destroys any historic or prehistoric ruin or monument, or any object of antiquity, situated on lands owned or controlled by the United States Government, without the permission of the Secretary of the Department of the Government having jurisdiction over the lands on which said antiquities are situated, shall be fined or imprisoned.

⁷² Clarification provided by Nancy Walter on previously circulated EIR, 2005.

Although there is no specific mention of natural or paleontological resources in the Act itself, or in the Act's uniform rules and regulations (Title 43 Part 3, Code of Federal Regulations [43 CFR 3]), "objects of antiquity" has been interpreted to include fossils by the National Park Service (NPS), the Bureau of Land Management (BLM), the U.S. Forest Service (USFS), and other Federal agencies. Permits to collect fossils on lands administered by Federal agencies are authorized under this Act.

Statute 23 USC 305 amends the Antiquities Act of 1906 and allows funding for mitigation of paleontological resources recovered pursuant to Federal aid highway projects, provided that "excavated objects and information are to be used for public purposes without private gain to any individual or organization" (Federal Register [FR] 46(19): 9570; [Also see FHWA policy section, below]).

National Environmental Policy Act of 1969 (42 USC 4321)

The National Environmental Policy Act (NEPA) directs federal agencies to use all practicable means to "Preserve important historic, cultural, and natural aspects of our national heritage..." (Section 101(b) (4)). Regulations for implementing the procedural provisions of NEPA are found in 40 CFR 1500 1508. If the presence of a significant environmental resource is identified during the scoping process, Federal agencies and their agents must take the resource into consideration when evaluating project effects. Consideration of paleontological, pre-historical or historical resources may be required under NEPA when a project is proposed for development on federal land, land under federal jurisdiction, or has federal bank funding.

National Historic Preservation Act of 1996, as amended (16 USC 470(a))

The National Historic Preservation Act (NHPA) establishes as federal policy the protection of historic properties or places and their values in cooperation with other nations and with state and local governments. It establishes a program of grant-in-aid to state governments for historic preservation activities. Subsequent amendments designated the State Historic Preservation Officer (SHPO) or the Tribal Historic Preservation Officer (THPO) as the individual responsible for administering programs in the states or reservations. The Act also created the Advisory Council on Historic Preservation. Federal agencies are required to consider the effects of their undertakings on historic resources and to give the SHPO/THPO and, if necessary, the Advisory Council a reasonable opportunity to comment on those undertakings.

The NHPA regulation with the most impact on agency planning and operations is 36 CFR Part 800, Protection of Historic Properties. This regulation, governing compliance with Section 106, must be followed in planning any agency activity and in the ongoing management of agency

resources. Other applicable NHPA regulations are 36 CFR 60, National Register of Historic Places; and 36 CFR 65, National Historic Landmarks.

Section 101 prescribes how state, local, and Indian tribal governments participate in the national historic preservation program; establishes how the National Register of Historic Places is maintained and expanded; and directs the Department of the Interior to promulgate various standards and guidelines. Section 106 requires federal agencies to identify historic properties their actions could affect. Section 110 requires federal agencies to designate qualified federal preservation officers to document historic properties that must be damaged or destroyed; give preference to the use of historic properties for mission purposes; and to establish and implement a historic preservation program. Section 111 requires federal agencies to establish and implement alternatives for historic properties. Section 304 allows federal agencies, in consultation with the Secretary of the Interior, to withhold disclosure to the public information relating to the location or character of historic resources.

The NHPA comes into play when a federal agency is involved and requires special consideration of sites eligible for listing on the NRHP. The criteria for listing on the National Register are contained in 36 CFR Section 60.6. The quality of significance in American history, architecture, archaeology, and culture is present in district sites, buildings, structures, and objects that possess integrity of location, design, setting, materials, workmanship, feeling, and association, and the following:

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

4.14.2.2 State Laws and Regulations

The following state laws and regulations are applicable to development projects.

California Native American Historical, Cultural and Sacred Sites Act

State law establishes protections for Native American Historical, Cultural and Sacred Sites. (Public Resources Code Sections 5097.9 - 5097.991). Under this law, no public agency or private party is permitted to cause severe or irreparable damage to any Native American sanctified cemetery, place of worship, religious or ceremonial site, or sacred shrine located on public property, except on a clear and convincing showing that the public interest and necessity so require. Cities and counties are exempt from this prohibition with respect to property under city or county ownership.

In addition, when human remains are found during excavation or construction of a site, whether the work is on public or private property, the landowner is required to notify the County Coroner and no further excavation or disturbance of the site or nearby area is permitted until the County Coroner determines that no investigation of the cause of death is required (Health & Safety Code Section 7050.5). If the remains are determined to be Native American, the coroner is required to notify the California Native American Heritage Commission (CNAHC) of the discovery. The CNAHC notifies the most likely descendants of the discovery and those descendants have 24 hours to inspect and make recommendations to the landowner as to the appropriate means for removal and nondestruction of the remains and artifacts found with the remains. If an agreement cannot be reached between the parties on these issues, and the Commission is unable to mediate a resolution to the disagreement, the landowner is required to reinter the human remains and items associated with Native American burials with appropriate dignity on the property in a location not subject to further subsurface disturbance. Landowners can enter into prospective agreements with one or more Native American groups, which provide guidance as to the treatment and disposition of Native American human remains that are encountered during development. Actions taken in accordance with the Commission's protocol or with an agreement between the Native American Group and the developer regarding the disposition of Native American human remains are exempt from CEQA and from other laws regarding the disturbance of human remains (Public Resources Code Section 5097.98 (c)).

The Native American Historic Resource Protection Act (Public Resources Code Section 5097.993 - 5097.994) prohibits the unlawful and malicious excavation, removal, destruction, injury or defacement of a National American historic, cultural, or sacred site, that is listed or may be eligible for listing in the California Register of Historic Resources, if the act was committed with the intent to vandalize, deface, destroy, steal, convert, possess, collect or sell a Native American historic, cultural or sacred artifact or site and the act was committed on public land or on private land by someone other than the landowner. Exemptions to this prohibition exist for

actions taken for proper removal in accordance with the Native American Heritage Commission's established protocols, in accordance with authorized agreements entered into between landowners and Native American Groups, and for actions taken in accordance with CEQA.

California Environmental Quality Act

Archaeological resources require impact analysis under CEQA (Public Resources Code Sections 21000 et seq.). As defined in Section 21083.2 of the Public Resources Code a “unique” archaeological resource is an archaeological artifact, object, or site, about which it can be clearly demonstrated that without merely adding to the current body of knowledge, there is a high probability that it meets any of the following criteria:

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

In addition, CEQA Section 15064.5 broadens the approach under CEQA by using the term “historical resource” instead of “unique archaeological resource.” Under CEQA, a “project that may cause a substantial adverse change in the significance of a historical resource is a project that may have a significant effect on the environment.”⁷³ This statutory standard involves a two-part inquiry. The first involves a determination of whether the project involves a historical resource. If so, then the second part involves determining whether the project may involve a “substantial adverse change in the significance” of the historical resource. To address these issues, guidelines that implement the 1992 statutory amendments relating to historical resources were adopted in final form on October 26, 1998, with the addition of CEQA Guidelines Section 15064.5. The new CEQA Guidelines specify that for purposes of CEQA compliance, the term “historical resources” shall include the following:⁷⁴

- A resource listed in, or determined to be eligible by the State Historical Resources Commission, for listing in the California Register of Historical Resources.
- A resource included in a local register of historical resources, as defined in section 5020.1(k) of the Public Resources Code or identified as significant in a historical resource survey meeting the requirements in section 5024.1(g) of the Public

⁷³ *California Public Resources Code Section 21084.1—Added in 1992 by AB 2881.*

⁷⁴ *State CEQA Guidelines, 14 CCR Section 15064.5(a).*

Resources Code, shall be presumed to be historically or culturally significant. Public agencies must treat any such resource as significant unless the preponderance of evidence demonstrates that it is not historically or culturally significant.

- Any object, building, structure, site, area, place, record, or manuscript which a lead agency determines to be historically significant or significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political, military, or cultural annals of California may be considered to be a historical resource, provided the lead agency's determination is supported by substantial evidence in light of the whole record. Generally, a resource shall be considered by the lead agency to be "historically significant" if the resource meets the criteria for listing on the California Register of Historical Resources.
- The fact that a resource is not listed in, or determined to be eligible for listing in the California Register of Historical Resources, not included in a local register of historical resources (pursuant to section 5020.1(k) of the Public Resources Code), or identified in a historical resources survey (meeting the criteria in section 5024.1(g) of the Public Resources Code) does not preclude a lead agency from determining that the resource may be a historical resource as defined in Public Resources Code sections 5020.1(j) or 5024.1.

If a lead agency determines that an archaeological site is a historical resource, the provisions of §21084.1 of the Public Resources Code and §15064.5 and §15126.4 of the CEQA Guidelines apply. If an archaeological site does not meet the criteria for a historical resource contained in the Guidelines but does meet the definition of a unique archaeological resource in §21083.2 of the Public Resources Code, then the site is to be treated in accordance with the provisions of Public Resources Code §21083.2. The Guidelines note that if an archaeological resource is neither a unique archaeological nor a historical resource, the effects of the project on those resources shall not be considered a significant effect on the environment. (CEQA Guidelines §15064.5(c)(4)).

4.14.3 THRESHOLDS OF SIGNIFICANCE

Based upon Appendix G in the CEQA Guidelines, the Project would be considered to have a significant impact on cultural resources, if the project would:

- Cause a substantial adverse change in the significance of a historical resource as defined in Section 15064.5;
- Cause a substantial adverse change in the significance of an archaeological resource as defined in Section 15064.5;
- Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature; or

- Disturb any human remains, including those interred outside of formal cemeteries.

4.14.4 IMPACTS AND MITIGATION

Issue 4.14-1: *Would the Project cause a substantial adverse change in the significance of a historical resource as defined in §15064.5?*

Discussion: Implementation of the Updated Plan would allow for new development as well as redevelopment of sites within the UGB. There are no known historic resources within the UGB. However, new development or redevelopment could result in the demolition or alteration of physical characteristics of an unknown historical resource that has historical significance that justifies its inclusion in, or eligibility for inclusion in, the California Register of Historical Resource. Therefore, the Updated Plan could result in the discovery of historical resources and potential impacts to historic resources.

Policies and Implementation Measure in the Updated Plan

The Updated Plan proposes the adoption of the following policy and implementation measures to reduce potential impacts associated with cultural resources:

- L.U.3.a.1 The Town shall develop and maintain a cultural resources database that includes data regarding historic and archaeological resources within the Planning Area as that information is developed through project reviews or other archaeological/historical surveys. The database shall be used to ensure that protection and preservation of historic and archeological resources within the Planning Area.
- IV.2.B.a.1 The Town shall continue to support the efforts to facilitate and enhance understanding and appreciation of the cultural, natural, and historical resources of the region.

The proposed implementation measure expresses support for the preservation of historical resources in the region. However, in order to ensure the preservation of historic resources, the following mitigation measures are provided.

Mitigation Measures

- 4.14-1 A qualified historic archaeologist approved by the Town shall perform the following tasks prior to development approvals on any part of the Town:

- Subsequent to a preliminary Town review, if evidence suggests the potential for historic resources, a field survey conducted using methodology that meets or exceeds state and federal guidelines for historical resources within portions of the project area not previously surveyed for cultural resources shall be conducted.
- Subsequent to a preliminary Town review, if evidence suggests the potential for historic resources, the Town Archives shall be contacted for information on historical property records. A qualified cultural resources professional shall be contracted to review the records search data collected by PCR Services Corporation on behalf of the Town of Mammoth Lakes as part of the Draft General Plan Update process.
- Subsequent to a preliminary Town review, if evidence suggests the potential for sacred land resources, the Native American Heritage Commission shall be contacted for information regarding sacred lands.
- Inventory all historical resources within the project area, including archaeological and historic resources older than 50 years, using appropriate State record forms and following guidelines in the California Office of Historic Preservation's handbook "Instructions for Recording Historical Resources". The archaeologist will then submit two (2) copies of the completed forms to the Town for the assignment of trinomials.
- Evaluate the significance and integrity of all historical resources within the project area, using criteria established in the CEQA Guidelines for important archaeological resources and/or 36 CFR 60.4 for eligibility for listing on the National Register of Historic Places.
- Propose mitigation measures and recommend conditions of approval to eliminate adverse project effects on significant, important, and unique historical resources, following appropriate CEQA and/or National Historic Preservation Act's Section 106 guidelines.
- Prepare a technical resources management report, documenting the inventory, evaluation, and proposed mitigation of resources within the project area, following guidelines for Archaeological Resource Management Reports prepared by the California Office of Historic Preservation, Preservation Planning Bulletin 4(a), December 1989. Submit one copy of the completed report, with original illustrations, to the Town for permanent archiving.

4.14-2 If cultural materials or archaeological remains are encountered during the course of grading or construction, the developer shall cease any ground disturbing activities near the find. A qualified archeologist approved by the Town will be retained to evaluate significance of the resources and

recommend appropriate treatment measures. Treatment measures may include avoidance, preservation, removal, data recovery, protection, or other measures developed in consultation with the Town and the developer. In addition, the Town shall:

- Enact interim measures to protect undesignated sites from demolition or significant modification without an opportunity for the Town to establish its historic value.
- Require, where appropriate, the incorporation of historic sites and buildings within new developments, using their special qualities as a theme or focal point.
- Encourage the use of the State Historic Building Code on buildings of historic significance that can allow modification without imposing some of the potentially detrimental provisions of the current building codes.
- Educate the public about the area's archaeological heritage.

4.14-3 Prior to the approval of any projects that propose to demolish or significantly alter a potentially significant historic resource as defined pursuant to applicable state and federal laws, the applicant shall complete an historic survey report using methodology that meets or exceeds state and federal guidelines to determine potential historic significance. The determination of resource significance shall be made in accordance with CEQA Guidelines Section 15064.5. Where appropriate for a standing historic structure that will not be preserved in place, conservation can include documentation to Historic American Building Survey (HABS) standards and/or relocation.

Level of Significance After Mitigation

With incorporation of mitigation measures, the Updated Plan would not cause a substantial adverse change in the significance of a historical resource as defined in §15064.5.

Issue 4.1314-2: *Would the Project cause a substantial adverse change in the significance of an archaeological resource as defined in §15064.5?*

Discussion: Implementation of the Updated Plan would allow for new development as well as redevelopment of sites within the UGB. New development or redevelopment could impact an archaeological site(s) during grading and excavation activities. Due to the primarily developed and disturbed condition of the lands within the UGB, where development would occur, the potential number and distribution of such sites or resources is anticipated to be limited.

Nevertheless, future development within the Town could result in the discovery of cultural sites and potential impacts to prehistoric and historic resources.

Policies and Implementation Measures in the Updated Plan

The Updated Plan proposes the adoption of the following policy and implementation measures to reduce potential impacts associated with cultural resources:

- L.U.3.a.1 The Town shall develop and maintain a cultural resources database that includes data regarding historic and archaeological resources within the Planning Area as that information is developed through project reviews or other archaeological/historical surveys. The database shall be used to ensure that protection and preservation of historic and archeological resources within the Planning Area.
- IV.2.B.a.1 The Town shall continue to support the efforts to facilitate and enhance understanding and appreciation of the cultural, natural, and historical resources of the region.

Mitigation Measures

- 4.14-4 A qualified archaeologist shall perform the following tasks prior to development activities on any part of the Town:
- Subsequent to a preliminary ~~City~~Town review, if evidence suggests the potential for prehistoric resources, a field survey for prehistoric resources within portions of the project area not previously surveyed for cultural resources shall be conducted.
 - Subsequent to a preliminary ~~City~~Town review, if evidence suggests the potential for sacred land resources, the Native American Heritage Commission for information regarding sacred lands shall be consulted.
 - Inventory all prehistoric resources using appropriate State record forms and submit two (2) copies of the completed forms to the Town.
 - Evaluate the significance and integrity of all prehistoric resources within the project area, using criteria established in the CEQA Guidelines for important archaeological resources.
 - If human remains are encountered on the project site, the Mono County Coroner's Office shall be contacted within 24 hours of the find, and all

work should be halted until a clearance is given by that office and any other involved agencies. If the Coroner determines that the remains may be Native American, contact the Native American Heritage Commission for notification to the most likely descendants of the decedent and follow the required protocols specified in Public Resources Code Section 5097.98.

- All resources and data collected within the project area should be permanently curated at an appropriate repository within the Town or County.

4.14-5 If cultural materials or archaeological remains are encountered during the course of grading or construction, the developer shall cease any ground disturbing activities near the find. A qualified archeologist will be retained to evaluate significance of the resources and recommend appropriate treatment measures. Treatment measures may include avoidance, preservation, removal, data recovery, protection, or other measures developed in consultation with the Town and the developer. With the assistance of the archaeologist, the Town shall:

- Consider establishing provisions to require incorporation of archaeological sites within new developments, using their special qualities as a theme or focal point.
- Educate the public about the area's archaeological heritage.
- Propose mitigation measures and recommend conditional of approval to eliminate adverse project effects on significant, important, and unique prehistoric resources, following appropriate CEQA guidelines.
- Prepare a technical resources management report, documenting the inventory, evaluation, and proposed mitigation of resources within the project area. Submit one copy of the completed report, with original illustrations, to the Town for permanent archiving.

4.14-6 If during grading and excavation an archaeological resource is found, construction shall be temporarily diverted, redirected or halted as appropriate. Any discovery of such resources shall be treated in accordance with federal, state, and local regulations, including those outlined in the CEQA Guidelines Section 15064.5 (e) and as appropriate, the Native American Historical, Cultural and Sacred Sites Act. For archaeological remains, conservation of a resource for which preservation in place is not feasible, relocation and if that is not feasible, documentation shall be required.

Level of Significance After Mitigation

With incorporation of mitigation measures, the Updated Plan would not cause a substantial adverse change in the significance of an archaeological resource as defined in §15064.5.

Issue 4.13-3: *Would the Project directly or indirectly destroy a unique paleontological resource or site or unique geologic feature.*

As indicated above, implementation of the Updated Plan would allow for new development as well as redevelopment of sites within the UGB. There are no known unique paleontological resources or sites, and no known unique geologic features in the developable portions of the community. The soils within the UGB are glacial till and relatively recent volcanic materials; no paleontological resources would be expected. Therefore, the Updated Plan would not result in an impact to paleontological resources.

Policies and Implementation Measures in the Updated Plan

The Updated Plan proposes the adoption of the following policy and implementation measures to reduce potential impacts associated with cultural resources:

IV.2.B.a.1 The Town shall continue to support the efforts to facilitate and enhance understanding and appreciation of the cultural, natural, and historical resources of the region.

Mitigation Measures

Implementation of the Updated Plan would result in a less than significant impact with regard to paleontological resources. Therefore, no mitigation measure would be required.

Level of Significance

Impacts to paleontological resources would be less than significant.

Issue 4.13-4: *Would the Project disturb any human remains, including those interred outside of formal cemeteries?*

Discussion: Implementation of the Updated Plan would allow for new development as well as redevelopment of sites within the UGB. New development or redevelopment could result in the discovery of human remains during grading and excavation activities. However, due

to the primarily developed and disturbed condition of the lands within the UGB where development would occur, the potential location of such sites or resources would be minimal. Nevertheless, future development within the Town could result in the discovery of human remains and potential impacts to these resources.

Policies and Implementation Measures in the Updated Plan

The Updated Plan proposes the adoption of the following policy and implementation measures to reduce potential impacts associated with cultural resources:

- L.U.3.a.1 The Town shall develop and maintain a cultural resources database that includes data regarding historic and archaeological resources within the Planning Area as that information is developed through project reviews or other archaeological/historical surveys. The database shall be used to ensure that protection and preservation of historic and archeological resources within the Planning Area.

- IV.2.B.a.1 The Town shall continue to support the efforts to facilitate and enhance understanding and appreciation of the cultural, natural, and historical resources of the region.

Mitigation Measures

- 4.14-7 Should the existence of, or the probable likelihood, of Native American or other human remains be found during development of a site, the landowner shall contact the County Coroner and no further excavation or disturbance of the site or nearby area shall be permitted until the County Coroner determines that no investigation of the cause of death is required. If the remains are determined to be Native American, the Coroner shall, as required by Public Resources Code Section 5097.98, notify the Native American Heritage Commission, which shall contact the most likely descendants and those descendants shall have 24 hours to inspect and make a recommendation to the landowner as to the appropriate means for removal and nondestruction of the remains and artifacts found with the remains. If an agreement cannot be reached between the landowner and the descendants, the Native American Heritage Commission shall mediate the disagreement, and if resolution is not reached, the landowner shall reinter the remains and items associated with Native American burials with appropriate dignity on the property in a location not subject to further subsurface disturbance. The applicant may develop a prospective agreement for treating or disposing of, with appropriate dignity, the human remains and any items associated with Native American burials

with the appropriate Native Americans as identified by the Native American Heritage Commission.

Level of Significance After Mitigation

With incorporation of the mitigation measure, impacts to human remains would be less than significant.