

4.9 CULTURAL AND PALEONTOLOGICAL RESOURCES

4.9 CULTURAL AND PALEONTOLOGICAL RESOURCES

This section of the Draft Environmental Impact Report ("Draft EIR"; "DEIR") considers and evaluates the potential impacts of the City of Ione General Plan Planning Area (Planning Area) on cultural and paleontological resources. Cultural resources include historic buildings and structures, historic districts, historic sites, prehistoric and historic archaeological sites, and other prehistoric and historic objects and artifacts. Paleontological resources include vertebrate, invertebrate, or plant fossils. This DEIR utilizes technical information and analyses from previous studies, which are supported by the State CEQA Guidelines (see Sections 15148 [Citation] and 15150 [Incorporation by Reference]). By utilizing these provisions of the State CEQA Guidelines, the City, in preparing this DEIR, has been able to make maximum feasible and appropriate use of this technical information.

CONCEPTS AND TERMINOLOGY FOR EVALUATION OF CULTURAL RESOURCES

The following definitions are common terms used to discuss the regulatory requirements and treatment of cultural resources:

Cultural resources is the term used to describe several different types of properties: prehistoric and historical archaeological sites; architectural properties such as buildings, bridges, and infrastructure; and resources of importance to Native Americans.

Historic properties is a term defined by the National Historic Preservation Act (NHPA) as any prehistoric or historic district, site, building, structure, or object included in, or eligible for inclusion on, the National Register of Historic Places (NRHP), including artifacts, records, and material remains related to such a property.

Historical resource is a California Environmental Quality Act (CEQA) term that includes buildings, sites, structures, objects, or districts, each of which may have historical, prehistoric, architectural, archaeological, cultural, or scientific importance, and is eligible for listing or is listed in the California Register of Historical Resources (CRHR). 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 of Section 5024.1(g) of the Public Resources Code, will 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.

Paleontological resource is defined as including fossilized remains of vertebrate and invertebrate organisms, fossil tracks and trackways, and plant fossils. A unique paleontological site would include a known area of fossil bearing rock strata.

4.9.1 EXISTING SETTING

PREHISTORY

The prehistory of the north central Sierra Nevada and Amador County has been described in several publications, especially those related to the Mokelumne River Project (e.g. Wirth Environmental Services, 1985) and numerous Caltrans investigations. Systematic investigations that provide a cultural historical sequence have not occurred in the Project Area, requiring researchers to rely on data from the surrounding areas to support chronological and cultural assessments. Most research in the county consists of archaeological surveys, which add to the inventory of archaeological sites but do not generally contribute to a greater understanding of prehistoric regional development. Archaeological data from the area suggest a similar prehistoric pattern to that found elsewhere in the Sierra Nevada.

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Early human occupation of the Sierra Nevada has not been well documented, and interpretations have been primarily influenced by the discovery of stone points that bear morphological similarity to Great Basin artifacts. Recently, a Clovis point was found in the lower foothills of Amador County (Levy and Wulf, 1998), and a "Clovis-like" fluted point was found at Ebbetts Pass (Davis and Shutler, 1969), suggesting to some that hunters may have ventured in the Sierra Nevada more than 11,000 years ago. 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. Sierra prehistoric habitation at the former Clarks Flat (CA-CAL-S342), located south of the City of Lone on the Stanislaus River, was dated at 11,720 to 6,250 years before present (B.P.) (Peak and Crew 1990). Excavations at CA-ALP-192 located in Alpine County, also revealed a Western Stemmed Series projectile point possibly associated with a hearth that yielded a date in excess of 9,505 years B.P. (Peak and Neuenschwander, 1990). Similarly, excavations in Calaveras County near Copperopolis at the Skyrocket Site (CA-CAL-629/630) yielded dates of $9,240 \pm 150$ B.P. and $9,040 \pm 250$ B.P. from dark, artifact-bearing strata some nine meters below the surface.

Archaeological investigations at New Melones in Tuolumne and Calaveras counties expanded our understanding of regional archaeology. 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, 1988). New Melones studies have provided a chronological sequence for the area, which begins prior to 8,000 years B.P. This time period beginning over 8,000 years ago is identified by the presence of stemmed series projectile points, but little more is known about this early period. The next temporal division in the New Melones sequence, 8,000-5,500 B.P., is also poorly understood. Sites in this time period exhibit an abundance of "backed" scrapers, with a paucity of groundstone, a low density of tools and debitage, and an emphasis on chert tool production (Riley and Moratto, 1986).

Humboldt and Pinto-like points characterize sites in the region dating from approximately 5,500-3,000 B.P. An important site associated with this time period is the Texas Charley Gulch Site (CA-CAL-286). Archaeological studies of the remaining 3,000 years of development in the area indicate a gradual increase in population. Features and artifacts at habitation sites include defined living floors, use of ornaments such as beads and pendants, and a wide variety of tool forms and materials. The acquisition of obsidian from far-ranging sources and the use of coastal shells in ornamentation suggest that trade and exchange systems were well established by this time and artifacts were moved over long distances. Temporal changes during this period are identified by changes in tool form (e.g., shaped milling implements are replaced by unshaped tools) and changes in projectile points (e.g. Elko Series and Sierra Concave Base points are replaced by small Gunther Barbed points). This change may be associated with adoption of the bow and arrow.

About 600 years ago, changes in the archaeological record suggest that a new group of people entered the area (Moratto 1984). This new group is generally considered to be the precursors of the ethnographic Me-Wuk. New cultural traits identified in the archaeological record consist of bedrock milling stations, increased use of acorns, and more permanent settlements. Steatite is found as vessels and as ornamentation, and Rosegate Series projectile points initially are common but are replaced by the use of Desert Side-Notched and Cottonwood projectile points in the more recent past.

ETHNOGRAPHY

The City of Lone lies within the traditional territory of the Eastern Miwok speaking groups. In the late prehistoric and early ethnographic periods, these people occupied the western slopes of

the Sierra Nevada between the drainages of Calaveras Creek on the south and the Cosumnes River to the north (Merriam 1907; Barrett n.d. 1906, 1908). The people who occupied the region where the Cosumnes and Mokelumne Rivers meet were referred to as the Plains Miwok (Levy 1978).

Nineteenth and twentieth century Miwok material culture, language, social life ways, and customs have been documented in several monographs or overviews (e.g. Barrett and Gifford 1933; Kroeber 1925; Levy 1978; Merriam 1898-1938). Since most ethnographic information about the Eastern Miwok was collected many decades after the disruption of their prehistoric life ways, such data more accurately reflect a transitional form of their culture. Nevertheless, these culture descriptions provide a detailed account of the Miwok culture and are the basis for most ethnographic summaries.

Powers (1877) noted that *Koni* was the name for people who lived on the south bank of the Cosumnes and *Yuloni* was the name for the people on Sutter Creek. Powers also noted that there was a great orator and storyteller from the Jackson area that he calls "Old Sam." This individual is most likely Casoose, also known as Jesus, or Sam Domingo, who was known in the area at the time Powers collected his data. At this time Casoose was a leader among the Miwok up and down the Sierra and would travel great distances to orate.

The basic social and economic group of Eastern Miwok was the family or household unit. The nuclear and/or extended family formed a corporate unit. These basic units were combined into distinct, named village or hamlet groups. Villages are described as headquarters of a localized patrilineage (Levy 1978:410). This social organization was further prescribed by individual lineage memberships in a moiety (Levy 1978:411). Lineage groups were important political and economic units that combined to form tribelets, which were the largest sociopolitical unit identified for Eastern Miwok (Levy 1978). Each tribelet had a chief or headman who exercised political control over all villages within it. Eastern Miwok chiefs appear to have exercised considerable authority over the tribelet group (Levy 1978:410). Tribelets assumed the name of the head village where the chief resided. The City of Ione is located in the territory that was occupied by either the Tauquimne or Tihuechemne tribelets (Levy 1978: 399). The office of tribelet chief was hereditary, with the chieftainship being the property of a single patrilineage within the tribelet. Indeed, the office usually passed from father to son, but in the absence of a male heir a daughter could assume the office of chief (Gifford 1955:262; Levy 1978:410). Each tribelet possessed at least one ceremonial roundhouse (*hañg*) and owned a bounded tract of land, exercising control over its natural resources (Levy 1978:398).

During most the year, Eastern Miwok occupied permanent villages located below 2,500 feet in elevation, but they also practiced seasonal transhumance, moving from one area or elevation to another to harvest plants, fish, and hunt game across contrasting ecological zones. The availability of resources influenced the location of permanent villages because Eastern Miwok acquired a large proportion of their food resources from the area surrounding their villages (Levy 1978). Other essential and critical food resources were obtained during the summer when groups left, but they did not abandon their permanent villages at lower elevations and traveled east into their "mountain territories" following streams and rivers (Levy 1978:402). During the summer small "base camps" were established at higher altitudes in close proximity to a water source. Expeditions were staged from these camps to acquire natural, faunal, and plant resources that are seasonally available at higher elevations. Jones (1981) suggests that transhumance mimics deer migration and that Eastern Miwok followed deer during their seasonal migrations.

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A wide variety of resources were exploited by communally organized task groups (Levy 1978). Communal hunting drives were undertaken to obtain deer, quail, rabbits, and grasshoppers. Bear were hunted in the winter when their hides were at their best condition. Runs of salmon in the spring and fall provided a regular supply of fish, while other fish such as suckers, pike, whitefish, and trout were obtained with snares, fish traps, or with various fish poisons such as soaproot. Birds were caught with nooses or large nets and were also occasionally shot with bow and arrow. Acorns were gathered in the fall and stored in granaries for use during the rest of the year. Buckeye, pine nuts, hazelnuts, and other edible nuts further supplemented the diet.

Eastern Miwok built residential dwellings, ceremonial structures, semi-subterranean sweat lodges, and menstruating huts (Levy 1978). The residential dwellings were either conical structures made by overlapping three or four thicknesses of bark with no interior support or thatched dwellings consisting of a conical framework of poles covered by brush, grass, or tules. Semi-subterranean earth lodge roundhouses were also built for ceremonial gatherings, assemblies, local feasts, and for housing visitors (Levy 1978:409). In addition, circular brush assembly houses and small conical grinding houses were built over grinding rocks during bad weather (Levy 1978:409).

Flaked and ground stone tools were common among Eastern Miwok and included knives, arrow and spear points, club heads, arrow straighteners, scrapers, rough cobble and shaped pestles, bedrock mortars, grinding stones (metates), pipes, and charms (Levy 1978:405-406). Obsidian was highly valued and imported for use in the production of tools. In addition, wood was used for a variety of tools and weapons, including both simple and sinew-backed bows, arrow shafts and points, looped stirring sticks, flat-bladed mush paddles, pipes, and hide preparation tools. Cordage was made from plant material and was used to construct fishing nets and braided/twined tumplines. Soaproot brushes were commonly used during grinding activities to collect meal and/or flour. A variety of bone tools were also used by Eastern Miwok.

Specialized food processing and cooking techniques included the grinding and leaching of ground acorn and buckeye meal; burning of *Umbelliferae*, a plant with cabbage-like leaves to obtain salt; and roasting various foods in earth ovens (Levy 1978). The bedrock mortar and pestle (i.e., both rough cobble and shaped) were used to grind acorns, pine nuts, seeds and other plant foods, and meat. A soaproot brush was used to sweep "meal" into mortar cups and collect flour. Fist-sized, heated stones were used to cook and/or warm liquid-based foods such as acorn gruel and pine nut meal. Whole acorns were stored in granaries and pine nuts were stored in large brush and pine bough-covered caches.

Eastern Miwok, Nisenan, and Washoe Indians frequently interacted as trading partners, at ceremonial gatherings, and in armed conflict primarily due to perceived territorial encroachment. Most interactions among these groups, however, appear to have been civil and friendly in nature. It is not clear to what extent Eastern Miwok regularly traveled outside of their territory, although frequent mention is made of friendly interaction between Washoe and Miwok.

HISTORY

The Spanish occupied portions of California as early as 1769 and trappers were making intermittent forays into the Central Valley by the 1820s (Bean and Rawls, 1988). Regardless, the interior of the valley and the Sierra Nevada remained largely unexplored. Exploration of the region continued, but the area was considered to be at the fringes of the Spanish settlement in California. Even after Mexico gained its independence from Spain in the 1820s the Mexican government continued to consider the Sacramento Valley as the periphery of its territory and left it relatively unsettled.

John A. Sutter, a German-Swiss immigrant, passed through California in 1836 as a member of a group representing the American Fur Company on their way to Fort Vancouver. Sutter returned to California in 1839 and petitioned Governor Alvarado of Mexico for a land grant in the Sacramento Valley to establish a settlement. At the time, interior Native American groups were rustling cattle from coastal Mexican settlements, and the Mexican government viewed Sutter's potential settlement in the Sacramento area as a buffer between the Native Americans and their settlements. Consequently, Governor Alvarado agreed to allow Sutter to explore the area and granted him his "colony." In 1841, Sutter was granted 11 leagues of land in current Sacramento County to establish New Helvetia, also known as Sutter's Fort (Hoover et al., 2002). The settlement acted both as a safe haven and a trading post for Euroamericans in the area, and during the 1840s became a rest stop and/or destination for immigrants entering California along overland trails.

Early development of central California focused on the various industries and settlements of John Sutter. Sutter employed James Marshall to build a sawmill 40 miles east of Sacramento up the South Fork of the American River canyon. In January 1848, while passing a test run of water through the mill's tailrace a deposit of sand and dirt delayed Marshall's efforts. Marshall discovered flecks of placer or free gold in these deposits. Word of the discovery soon spread, and during the following year large numbers of men and women from around the world came to California and the streams of the Sierra Nevada in search of gold (Bean and Rawls, 1988).

The earliest miners focused on the loose form of gold found in sand and gravel beds, known as placer gold. Initially miners were using knives and spoons to pick out the gold, but Mexican miners used the *batea*, and it soon became a favored gold-washing pan. An Appalachian gold miner, Isaac Humphrey, purportedly introduced the American pan in Coloma, the Marshall gold discovery site, and it also became popular among miners. In response to this trend, Miwok women were commissioned to weave baskets in the shape of the *batea*, as the basket-pan was less expensive than the metal version. Other placer mining tools, including the rocker cradle, "long tom," and sluice soon appeared to facilitate the recovery of gold (Bean and Rawls, 1988).

One of the key waterways to become the focus of placer mining in Amador County was the Mokelumne River that divides Amador County from Calaveras County. Gravel bars rich in gold were first prospected in this area in 1848 by Indians and other individuals working for Charles Weber (Cenotto, 1988a). Camps at Middle Bar, French Bar, and Columbia Bar quickly became the center of intense mining activities. Lesser waterways, such as Dry Creek, Rancheria Creek, Sutter Creek, Jackson Creek, and unnamed drainages in the area also experienced extensive and early placer mining activity. Miners explored almost every river, creek, and drainage in the area, in search of gold.

Placer gold was the earliest focus of mining in California, but those knowledgeable about mineralization soon began a search of the parent rock where gold formed in the "hard rock." Gold veins are often identified by quartz and other rocks, and these formations were explored for gold that could be recovered from its "lode." Miners dug vertical shafts or horizontal openings (adits) into the ground following veins of gold bearing ore. In Amador County, Cornish miners introduced single-jack and double-jack drilling of holes into granite, into which black powder was packed and detonated. The fractured rock was then "mucked out" by hand and hauled by basket, cart, or bucket out of the mine.

Hard rock mining began in the California gold fields as early as spring of 1849, but lack of knowledge of the deposits, absence of skilled labor, and overcapitalization of surface plants led to the collapse of many early hard rock mines. Despite the early setbacks, it did not take long for experienced hard rock miners from England, Germany, Chile, and Mexico to facilitate the

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operation and expansion of hard rock mines. These mines were generally less than 300 feet in depth, enabling miners to focus on oxidized or “enriched” deposits that were easier to mill and mine. They were also able to avoid most of the groundwater and the expense of pumping it out. In the 1860s, mines began to probe deeper with the aid of technological advances such as dynamite, air-powered drills, and improved hoisting and power plants. Consequently, mining operations moved deeper underground.

When ore was removed from a mine it had to be milled to separate the gold from the ore body. Early mining relied heavily on the *arrastra*, which was originally developed in Mexico. An *arrastra* is a circular stone-lined basin into which ore is placed and crushed by a drag-stone hauled by a horse, mule, or power from a water wheel. A variation of the *arrastra* was the “Chilean Mill” that rolled large millstones over the ore instead of using a drag-stone. Langley and Morrison (1859) identified fifty *arrastras* in operation across Amador County in 1859. This technology was widely used through the 1880s, and its use continued in a limited fashion into the 1930s. Regardless, the signature mill used in California was the California battery stamp mill. This device was essentially a series of cam-operated hammers that crushed rock against an anvil. This technology was not new, but the California stamp mill was modified to include an automatic gravity-fed crusher and feeder with water and mercury injection into the amalgamation pan.

The California mill was nearly ubiquitous across California lode areas by 1853, and was used well into the twentieth century (Limbaugh 1999; Young 1970). The earliest mills dating to the 1860s consisted of two to five stamps. By the 1870s mills increased to 10 to 20 stamps, and by the 1890s, massive 80 to 100 stamp mills were in operation. Amador County had 32 quartz mills in operation by 1859, with a total of 402 stamps operated by steam and water power amounting to 15 percent of the total number in California (Langley and Morrison 1859). These mills were powered initially by water from the Amador Canal and Jackson (Kennedy) Ditch and by steam. By the late 1890s the mills began switching to electricity provided by the Blue Lakes Powerhouse, originally located downstream from the present Electra Powerhouse. The majority of mines closed during World War I due to increases in mining costs and extraction of lower-grade ore. Larger mines such as the Kennedy (located just north of Jackson and possibly the deepest goldmine in the United States reaching a depth of 5,912 feet), Argonaut (also located north of Jackson), Central Eureka, and Oneida continued to be in operation until World War II, when Executive Order L-208 was passed, which ended gold mining in the Mother Lode. The Central Eureka Mine was the only one to reopen after the war, but it closed again in 1953.

AMADOR COUNTY

Most immigrants to the area in the 1850s were actively searching for gold, but some of these individuals realized there were easier ways to make their fortunes in California rather than mining. Aside from mining equipment, miners also needed food, clothes, places to live, and entertainment. Enterprising individuals began to address these needs and businesses and towns quickly appeared across the region. By 1849, Amador City, Drytown, Sutter Creek, Jackson, and Lone were established. These were generally rough-and-tumble towns, composed mostly of wooden shanties occupied primarily by men.

While some settlers turned to mercantilism and service industries as a more lucrative form of employment, others looked to the land to provide a more secure form of income. Cattle prices at the gold fields escalated in 1849 from \$4.00 to \$500.00 a head and many individuals realized that the land provided options for lucrative incomes (Jelinek 1999). Soon the scramble was on to secure land for raising crops and livestock. Throughout the 1850-60s, speculators bought much of the public land made available for sale. This was a period of severe local government disorganization, with no state agency to oversee the sale of land, and widespread corruption

and collusion between government bureaucrats and land spectators. It was not until the passage of the Homestead Act of 1862 that the system became more organized (Jelinek 1999).

The federal government tried to ensure that land was available for every interested and willing party, but the system remained imperfect. Implementation of the program in California was particularly poor, and many large landholders gobbled up large tracts of land. Familiar names such as Chapman, Miller & Lux, and Beale soon held hundreds of thousands of acres of land, primarily in the central part of the state (Jelinek, 1999). While the large landholdings were concentrated in the Great Central Valley, other parts of the state, including Amador County, were not immune to the concentration of landownership. The Allen, Garibaldi, Plasse, and Belluomini families were just some of the large landowners in Amador County, holding tens of thousands of acres acquired through the Homestead Act and other means.

At the time of California's annexation to the United States, the most important form of agriculture in the state was cattle ranching. Cattle were raised primarily to supply hides, tallow (a form of beef fat), and fresh meat. In the 1850s, cattle were raised free-range on large open *ranchos* across California. Historians generally agree that within a decade, the entire agricultural pattern in the state changed, with the importation of new American breeds of cattle and large numbers of European varieties of sheep. These livestock were raised not on the range, but in feedlots. Simultaneously, vast tracts of land were planted in wheat and other grains, to feed not only livestock, but as a major export commodity. This soon transitioned into the raising of nuts and fruits, and horticulture became more widespread. As noted by Jelinek (1999), "in 1872 a 'no-fence' law was passed, making ranchers responsible for damages caused by their unfenced livestock. Pastoral California had given way to agricultural California."

This agricultural pattern was more common on the coastal plains and in the Central Valley, rather than the Sierra Nevada foothills. The soil and topography across this region were not conducive to large-scale agricultural production. Indeed, irregular terrain and rocky soil made plowing and harvesting of grain impractical in many areas of Amador County, and the county did not produce a substantial amount of grain. Regardless, grains, hay, and other field crops were produced in the Amador County foothills into the twentieth century, but these operations were on a small scale compared to the Central Valley and relied on horse-drawn plows and other equipment rather than steam powered mechanical equipment. Currently, straw and hay are still grown in limited quantities across the county, but raising crops of commercial grain is no longer practiced in Amador County.

Horticulture became more important economically in the foothills. As early as 1851, Benjamin Burt was raising fruits and vegetables on Rancheria Creek north of the City of Ione. Here he cultivated 1600 grapevines and six acres of peach, pear, plum, apple, apricot, cherry, and almond trees. He sold his produce to miners in Jackson, Fiddletown, and Volcano. Horace Kilham also had an expansive fruit orchard in 1855 south of Jackson that was purchased and expanded by Samuel Page (Costa 1994). By 1857, nearly 10,000 fruit and nut trees and 44,000 grape and berry vines had been planted in the county (Langley and Morrison 1859). Early attempts at raising commercial quantities of fruits and vegetables had some success, with nearly every farm/ranch having a kitchen garden and host of fruit trees. Tomatoes, beans, red onions, and peppers were just some of the garden vegetables frequently raised in local gardens. Peach trees were the most popular fruit, outnumbering other varieties by more than 2 to 1 in the early days. Apple, almond, olive, plum, cherry, fig, and walnut trees were popular and grew well in Amador County.

One outgrowth of early horticultural attempts was the establishment of Amador County's wine industry. Initially based on transplanted mission grapes, other varieties were soon planted. Burt

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and Kilham were pioneer vineyard owners in the early 1850s, but Amador County's French and Italian immigrants soon found the area's soil and climate to be well suited to the growing of wine grapes. By 1870, Amador County was home to 15 wineries producing 58,000 gallons of wine per year (Costa 1994). This did not include the many small vineyards planted at people's homes and ranches or the homemade wine so commonly consumed by the county's immigrant families. The 1870s were hard on the local wine industry, and production was down to 38,000 gallons of wine per year by 1880.

Disease in France's vineyards in 1877-1889, combined with a bolstered local economy, led to renewed interest in Amador wines in the 1880s. During this time Angelo Marre spearheaded efforts to export locally made wines outside the area, eventually opening a wholesale house in Chicago and creating the trade name "Amador County Wines" (Costa 1994). Amador vineyards and wineries continued to prosper until Prohibition in 1919. Between 1922 and 1930, the total acreage of commercial vineyards dropped from 500 to 200 acres. It was not until the 1960s that Amador County wines and vineyards would again be back on track (Costa, 1994). Today, the wine business is expanding with the planting of new vineyards and the opening of new wineries.

Farming and horticulture expanded across the foothills of Amador County, but cattle ranching has remained the dominant agricultural enterprise in the area. Ranchers acquired large tracts of rolling oak woodland as pasture for cattle during the winter. In late spring, ranchers would drive their cattle into the mountains to graze on private and leased government land. In the fall the cattle would be returned to pasture lands at lower elevations. This pattern of agriculture is still practiced in the area with tractor-trailers being used to move cattle to and from summer and winter grazing lands. Cattle ranching activities were so important to the area that there were several meatpacking houses in the Jackson area until the 1940s. Suburban development is currently replacing cattle ranches, but there is still sufficient local cattle business to keep one meatpacking house in operation. Presently, much of the area surrounding the City of Ione is changing from a rural, agricultural area to a suburban area that includes retail facilities.

CITY OF IONE

Historically, Ione and the surrounding region were inhabited by the Northern Sierra Miwok, one of the five divisions of the Eastern Miwok. As many as 5,000 Native Americans are estimated to have lived within 10 miles of the Ione Valley in the 1840s (City of Ione, 1982).

Around 1848, William Hicks and Moses Childers settled near the present day City of Ione where they established a lucrative cattle business. The Gold Rush attracted additional settlers to the area and within a few years the town supported a post office, blacksmith shop, churches, and schools. In the mid-1850s, a large sawmill and flourmill were added to the city.

During the Gold Rush days, the City of Ione had several names including "Bed Bug" and "Freeze Out," but the city is believed to have been named by Thomas Brown in 1849 after the heroine Ione in the novel *The Last Days of Pompeii* by Edward Bulwer-Lytton (Hoover et al.; Cenotto, 1988). Other speculations include that the town was named after the city in Iowa and that the name stems from an early settler, William Hicks, who claimed ownership of the area, stating "I own it" (Hoover et al., 2002)). In contrast to neighboring mining towns, Ione was established as a supply center, stage and rail stop, and agricultural hub (Cenotto, 1988). Popular mines located near Ione included Muletown, Q Ranch, Irish Hill, and Quincy.

In the 1860s, the Methodist Episcopal Church was built in Ione exhibiting Gothic design and constructed of locally fired brick (Hoover et al., 2002; California State Parks 1996). One of the

oldest surviving buildings, the Daniel Stewart Store, was constructed in 1856 and was one of the earliest supply stores in Lone. In the 1890s the Preston Castle was constructed one mile north of Lone and served as a rehabilitation center for juvenile offenders. The building is the most significant example of the Romanesque Revival in the Mother Lode area of Northern California (California State Parks 1996). Although the “castle” no longer houses inmates, the building is part of the California Youth Authority Facility in the same location (Hoover et al., 2002).

At the centennial of 1876, Lone had a population of about 600, which included approximately 100 Chinese individuals who lived in Lone's Chinatown (Thompson & West, 1881). The town included many community buildings including a public school and four churches, as well as many business establishments including four general stores, a meat market, a laundry facility, a brewery, a restaurant, a millinery shop, an art gallery, six saloons, a drug store, and a barber shop (Cenotto, 1988). The centennial also celebrated the completion of the railroad to the town of Lone. The centennial celebration was the first event of what is now known as the Lone Homecoming. This annual celebration has been held during the month of May almost every year since that first centennial celebration in 1876 and is one of California's longest-established community events (Hoover et al., 2002). The discovery nearby of lignite (a substitute for coal) prompted the need to improve transportation in the region. This resulted in construction of better roads and extended rail service. Lone City held the county's first agricultural fair in 1862. Steady growth continued for the next two decades (Jones & Stokes, 2007). The City of Lone was incorporated as a general law city in 1953 and is now the largest city in Amador County.

KNOWN CULTURAL RESOURCES IN THE PLANNING AREA

A records search at the North Central Information Center at California State University, Sacramento identified 64 prehistoric, 5 prehistoric/historic sites, and 51 historic sites within the Planning Area (see **Table 4.9-1**). As shown in **Table 4.9-2** there are 58 historic properties in the Planning Area.

The D. Stewart Company Store (1856) is considered a State Historical Landmark and Point of Interest, and thus was automatically listed on the California Register of Historic Places. Two of the bridges in the Planning Area and several buildings associated with the Preston School on Waterman Road are considered eligible for the National Register. Additionally, there are multiple sites in the Planning Area that may be eligible for the National or California Register but need to be evaluated.

The racetrack at the City of Lone's Charles Howard Park is considered one of the earliest in Northern California, having been constructed prior to 1885. The use of the park dates back to the 1870s when the racetrack was developed and horse races were held in the park. Though the racetrack remains, the grandstand and associated buildings have been removed or renovated and the interior of the track has been developed as sports fields (ECORP, 2003).

Another historical feature is Preston Castle. The “castle,” built in 1890-1894, is the most significant example of Romanesque Revival architecture in the Mother Lode region. It was built to house the Preston School of Industry, established by the State Legislature as a progressive action toward rehabilitating, rather than simply imprisoning, juvenile offenders. The doors of the 120-room castle closed in 1960 after new facilities were completed. The Preston Castle is listed with the state as California Registered Historical Landmark No. 867 (<http://www.noehill.com/amador/cal0867.asp>). A private group called the Preston Castle Foundation is restoring the castle, to become an arts college.

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TABLE 4.9-1
KNOWN CULTURAL RESOURCES IN THE PLANNING AREA

Site Identification Number	Historic / Prehistoric Status
CA-Ama-349/H	Historic / Prehistoric
CA-Ama-350/H	Historic / Prehistoric
CA-Ama-628/H	Historic / Prehistoric
CA-Ama-716/H	Historic / Prehistoric
CA-Ama-827/H	Historic / Prehistoric
0733-H	Historic
0734-H	Historic
0735-H	Historic
0946-H	Historic
0948-H	Historic
1129-H	Historic
1130-H	Historic
1131-H	Historic
1132-H	Historic
1273-H	Historic
CA-Ama-348-H	Historic
CA-Ama-352	Historic
CA-Ama-356-H	Historic
CA-Ama-367-H	Historic
CA-Ama-368-H	Historic
CA-Ama-370-H	Historic
CA-Ama-371-H	Historic
CA-Ama-375-H	Historic
CA-Ama-376-H	Historic
CA-Ama-377-H	Historic
CA-Ama-378-H	Historic
CA-Ama-379-H	Historic
CA-Ama-381-H	Historic
CA-Ama-424-H	Historic
CA-Ama-538-H	Historic
CA-Ama-540-H	Historic
CA-Ama-556-H	Historic
CA-Ama-559-H	Historic
CA-Ama-560-H	Historic

4.9 CULTURAL AND PALEONTOLOGICAL RESOURCES

Site Identification Number	Historic / Prehistoric Status
CA-Ama-561-H	Historic
CA-Ama-562-H	Historic
CA-Ama-614-H	Historic
CA-Ama-620-H	Historic
CA-Ama-621-H	Historic
CA-Ama-630-H	Historic
CA-Ama-631-H	Historic
CA-Ama-651-H	Historic
CA-Ama-654-H	Historic
CA-Ama-702-H	Historic
CA-Ama-705-H	Historic
CA-Ama-706-H	Historic
CA-Ama-707-H	Historic
CA-Ama-709-H	Historic
CA-Ama-710-H	Historic
CA-Ama-711-H	Historic
CA-Ama-712-H	Historic
CA-Ama-715-H	Historic
CA-Ama-717-H	Historic
CA-Ama-718-H	Historic
CA-Ama-720-H	Historic
CA-Ama-766-H	Historic
0023	Prehistoric
0024	Prehistoric
0403	Prehistoric
0404	Prehistoric
0405	Prehistoric
0406	Prehistoric
0430	Prehistoric
0432	Prehistoric
0436	Prehistoric
0437	Prehistoric
0438	Prehistoric
0951	Prehistoric
0952	Prehistoric
0954	Prehistoric

4.9 CULTURAL AND PALEONTOLOGICAL RESOURCES

Site Identification Number	Historic / Prehistoric Status
1017	Prehistoric
1029	Prehistoric
1274	Prehistoric
2080-GIS	Prehistoric
CA-Ama-056	Prehistoric
CA-Ama-138	Prehistoric
CA-Ama-139	Prehistoric
CA-Ama-141	Prehistoric
CA-Ama-142	Prehistoric
CA-Ama-143	Prehistoric
CA-Ama-144	Prehistoric
CA-Ama-145	Prehistoric
CA-Ama-146	Prehistoric
CA-Ama-147	Prehistoric
CA-Ama-150	Prehistoric
CA-Ama-151	Prehistoric
CA-Ama-152	Prehistoric
CA-Ama-160	Prehistoric
CA-Ama-161	Prehistoric
CA-Ama-165	Prehistoric
CA-Ama-166	Prehistoric
CA-Ama-351	Prehistoric
CA-Ama-353	Prehistoric
CA-Ama-354	Prehistoric
CA-Ama-355	Prehistoric
CA-Ama-369	Prehistoric
CA-Ama-487	Prehistoric
CA-Ama-488	Prehistoric
CA-Ama-489	Prehistoric
CA-Ama-544	Prehistoric
CA-Ama-563	Prehistoric
CA-Ama-616	Prehistoric
CA-Ama-617	Prehistoric
CA-Ama-618	Prehistoric
CA-Ama-619	Prehistoric
CA-Ama-622	Prehistoric

4.9 CULTURAL AND PALEONTOLOGICAL RESOURCES

Site Identification Number	Historic / Prehistoric Status
CA-Ama-623	Prehistoric
CA-Ama-624	Prehistoric
CA-Ama-625	Prehistoric
CA-Ama-626	Prehistoric
CA-Ama-627	Prehistoric
CA-Ama-629	Prehistoric
CA-Ama-632	Prehistoric
CA-Ama-650	Prehistoric
CA-Ama-653	Prehistoric
CA-Ama-708	Prehistoric
CA-Ama-714	Prehistoric
CA-Ama-719	Prehistoric
CA-Ama-761	Prehistoric
CA-Ama-765	Prehistoric

Source: PMC, 2008.

TABLE 4.9-2
KNOWN HISTORIC PROPERTIES IN THE PLANNING AREA

Historic Property Name	Address	Year Built	Year Evaluated	NRHP Code ¹
D. Stewart Company Store	32 E. Main St.	1856	11/21/63	1CL
Ione City Centenary Church	150 W. Marlette St.	1866	05/26/77	1S
Preston Castle	201 Waterman Rd.	1890	07/30/75	1S
Scully Ranch	W. Marlette Street	1850	11/21/78	1S
Bridge #26C-11	Cook Road	1895	12/24/85	2S
Five Mile Drive/ Sutter Cr. Bridge	5 Mile Dr.	1910	06/19/97	2S2
Henderson Forebay Preston School	Henderson Dam	1892		3B
Preston School Henderson Res.	Sutter Creek	1923		3B
Colonial Cottage, L. Preston School	201 Waterman Rd.	1912		3B
Preston School Power Plant	201 Waterman Rd.	1896		3B
M. Cottage Preston School	201 Waterman Rd.	1927		3B
Preston School Academic School	201 Waterman Rd.	1929		3B
Preston School Custodial Building	201 Waterman Rd.	1929		3B
Preston School Refectory, Kitchen	201 Waterman Rd.	1929		3B
Head House/Water Treatment	201 Waterman Rd.	1931		3B
The Oaks, Preston School	201 Waterman Rd.	1915		3B
Preston School	201 Waterman Rd.	1892		3D

4.9 CULTURAL AND PALEONTOLOGICAL RESOURCES

Historic Property Name	Address	Year Built	Year Evaluated	NRHP Code ¹
223 E. Main Street	223 E. Main St.	--	07/01/00	6Y
Winter/Sercy Family Dairy	10555 5 Mile Dr.	1910	05/01/06	6Y
	157 Oakridge Dr.	1947	01/08/03	6Y
10-Ama-88 Realignment	SR 88		04/20/00	6Y
	2930 SR 88		11/09/00	6Y
	4250 SR 88	1955	11/09/00	6Y
	4335 SR 88	1955	11/09/00	6Y
	4461 SR 88	1956	11/09/00	6Y
	4537 SR 88	1955	11/09/00	6Y
Lancha Plana (town site)	Lancha Plana Buena Vista	1932	08/01/32	7L
Preston Farm Cottage	201 Waterman Rd.	1927		7N
Preston Farm Foremans Cottage	201 Waterman Rd.	1927		7N
Farm Irrigation Pumping Station	201 Waterman Rd.	1920		7N
Preston Farm Storage Building #1	201 Waterman Rd.	1950		7N
Preston Farm Storage Building #2	201 Waterman Rd.	1950		7N
Preston Farm Reservoir	201 Waterman Rd.	1948		7N
Preston Farm	201 Waterman Rd.	1916		7N
Preston Farm Bull Pen	201 Waterman Rd.	1915		7N
Preston Farm Piggery #1	201 Waterman Rd.	1950		7N
Preston Farm Piggery #2	201 Waterman Rd.	1950		7N
Preston Farm Farrowing Pen	201 Waterman Rd.	1950		7N
Preston Farm Breeding Pens	201 Waterman Rd.	1950		7N
Preston Farm Silo	201 Waterman Rd.	1950		7N
Preston Farm Feed Barn #1	201 Waterman Rd.	1920		7N
Preston Farm Feed Barn #2	201 Waterman Rd.	1920		7N
Preston Farm Vehicle Shed	201 Waterman Rd.	1950		7N
Preston Farm Classroom	201 Waterman Rd.	1950		7N
Preston Farm Truck Scales	201 Waterman Rd.	1940		7N
Preston Farm, Farm Concrete Foundation	201 Waterman Rd.	1950		7N
Preston Farm Equipment Shed	201 Waterman Rd.	1950		7N
Preston Farm Ensilage Platform	201 Waterman Rd.	1960		7N
Preston Farm Breeding Barn	201 Waterman Rd.	1950		7N
Preston Farm Feed Barn #2	201 Waterman Rd.	1940		7N
Preston Feed Barn #1	201 Waterman Rd.	1940		7N
Preston Farm Milking Barn	201 Waterman Rd.	1950		7N

4.9 CULTURAL AND PALEONTOLOGICAL RESOURCES

Historic Property Name	Address	Year Built	Year Evaluated	NRHP Code ¹
Preston Farm Creamery	201 Waterman Rd.	1933		7N
Old G Company Cell Block	201 Waterman Rd.	1916		7N
Preston Farm Feed Warehouse	201 Waterman Rd.	1933		7N
Preston Farm Barn	201 Waterman Rd.	1950		7N
Preston Farm Garage	201 Waterman Rd.	1930		7N
Strohm Store, Buena Vista Store	Buena Vista Rd.	1850		7R

¹ National Register of Historic Places (NRHP)

Source: PMC, 2008.

KNOWN PALEONTOLOGICAL RESOURCES IN THE PLANNING AREA

Paleontology is defined as a science dealing with the life of past geological periods as known from fossil remains. Paleontological resources include fossil remains, as well as fossil localities and formations, which have produced fossil material in other nearby areas. These resources can be an important educational resource for the reasons mentioned before and are non-renewable once destroyed. CEQA offers protection for these sensitive resources and requires that they be addressed during the EIR analysis process.

A search of the University of California Museum of Paleontology (UCMP) collections database identified a location in Amador County where 61 paleontological resources have been identified. These resources consist of primarily fossilized plants, with several invertebrates and microfossils, and one vertebrate. Based on the database search, one fossilized plant was located within the Planning Area, one invertebrate was located in Lone Valley, and the rest of the paleontological resources were located outside of the Planning Area in Amador County (UCMP Locality Search, 2009.) Regardless, the entire Planning Area has not been subjected to formal paleontological investigation, and it is possible that paleontological resources could be identified during ground-disturbing activity within the Planning Area.

NATIVE AMERICAN COORDINATION

As of March 1, 2005, Senate Bill 18 (Gov. Code, Sections 65352.3, 65352.4) requires that, prior to the adoption or amendment of a general plan proposed on or after March 1, 2005, a city or county must consult with Native American tribes with respect to the possible preservation of, or the mitigation of impacts to, specified Native American places, features, and objects located within that jurisdiction.

4.9.2 REGULATORY FRAMEWORK

FEDERAL

National Environmental Policy Act

The National Register of Historic Places (NRHP) is the nation's master inventory of known historic resources. The NRHP is administered by the National Park Service and includes listings of buildings, structures, sites, objects, and districts that possess historic, architectural, engineering, archaeological, or cultural significance at the national, state, or local level.

4.9 CULTURAL AND PALEONTOLOGICAL RESOURCES

Structures, sites, buildings, districts, and objects over 50 years of age can be listed in the NRHP as significant historic resources. However, properties under 50 years of age that are of exceptional importance or are contributors to a district can also be included in the NRHP. The criteria for listing in the NRHP include resources that:

- a) Are associated with events that have made a significant contribution to the broad patterns of history;
- b) Are associated with the lives of persons significant in our past;
- c) Embody the distinctive characteristics of a type, period, or method of construction, or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction; or
- d) Have yielded or may likely yield information important in prehistory or history.

STATE

California Register of Historical Resources

The State Historical Resources Commission has designed the California Register of Historic Resources (CRHR) for use by state and local agencies, private groups and citizens to identify, evaluate, register and protect California's historical resources. The CRHR is the authoritative guide to the state's significant historical and archeological resources. This program encourages public recognition and protection of resources of architectural, historical, archeological and cultural significance, identifies historical resources for state and local planning purposes, determines eligibility for state historic preservation grant funding and affords certain protections under the California Environmental Quality Act. Criteria for designation to the CRHR are described below.

California Environmental Quality Act

Under the California Environmental Quality Act (CEQA), public agencies must consider the effects of their actions on both "historical resources" and "unique archaeological resources." Historical resources generally include buildings, sites, structures, objects, or districts, each of which may have historical, architectural, archaeological, cultural, or scientific significance. Pursuant to Public Resources Code (PRC) Section 21084.1, a "project that may cause a substantial adverse change in the significance of an historical resource is a project that may have a significant effect on the environment." Section 21083.2 requires agencies to determine whether proposed projects would have effects on "unique archaeological resources."

"Historical resource" is a term with a defined statutory meaning (PRC, Section 21084.1 and determining significant impacts to historical and archaeological resources is described in the State CEQA Guidelines, Section 15064.5 [a], [b]).

Under CEQA Guidelines Section 15064.5(a), "historical resources" include the following:

- 1) A resource listed in, or determined to be eligible by the State Historical Resources Commission, for listing in the California Register of Historical Resources (Public Resources Code, Section 5024.1).

- 2) A resource included in a local register of historical resources, as defined in Section 5020.1(k) of the Public Resources Code or identified as significant in a historical resource survey meeting the requirements of Section 5024.1(g) of the Public Resources Code, will be presumed to be historically or culturally significant. Public agencies must treat any such resource as significant unless the preponderance of evidence demonstrates that it is not historically or culturally significant.
- 3) Any object, building, structure, site, area, place, record, or manuscript which a lead agency determines to be historically significant or significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political, military, or cultural annals of California may be considered to be a historical resource, provided the lead agency's determination is supported by substantial evidence in light of the whole record. Generally, a resource will be considered by the lead agency to be "historically significant" if the resource meets the criteria for listing in the California Register of Historical Resources (Public Resources Code, Section 5024.1), including the following:
 - a) is associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage;
 - b) is associated with the lives of persons important in our past;
 - c) embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of an important creative individual, or possesses high artistic values; or
 - d) has yielded, or may be likely to yield, information important in prehistory or history.
- 4) 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 an historical resource as defined in Public Resources Code Section 5020.1(j) or 5024.1.

Historic resources are usually 45 years old or older and must meet at least one of the criteria for listing in the California Register, described above (such as association with historical events, important people, or architectural significance), in addition to maintaining a sufficient level of physical integrity.

Properties of local significance that have been designated under a local preservation ordinance (local landmarks or landmark districts) or that have been identified in a local historical resources inventory may be eligible for listing in the CRHR and are presumed to be "historical resources" for purposes of CEQA unless a preponderance of evidence indicates otherwise (PRC, Section 5024.1 and California Code of Regulations, Title 14, Section 4850). Unless a resource listed in a survey has been demolished, lost substantial integrity, or there is a preponderance of evidence indicating that it is otherwise not eligible for listing, a lead agency should consider the resource to be potentially eligible for the CRHR.

For historic structures, State CEQA Guidelines Section 15064.5, subdivision (b)(3), indicates that a project that follows the Secretary of the Interior's Standards for the Treatment of Historic Properties with Guidelines for Preserving, Rehabilitating, Restoring, and Reconstructing Historic

4.9 CULTURAL AND PALEONTOLOGICAL RESOURCES

Buildings, or the Secretary of the Interior's Standards for Rehabilitation and Guidelines for Rehabilitating Historic Buildings (1995) shall mitigate impacts to a level of less than significant.

As noted above, CEQA also requires lead agencies to consider whether proposed projects will impact "unique archaeological resources." Public Resources Code Section 21083.2, subdivision (g), states that "'unique archaeological resource' means an archaeological artifact, object, or site about which it can be clearly demonstrated that, without merely adding to the current body of knowledge, there is a high probability that it meets any of the following criteria:

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

Treatment options under Public Resources Code Section 21083.2 include activities that preserve such resources in place in an undisturbed state. Other acceptable methods of mitigation under Section 21083.2 include excavation and curation or study in place without excavation and curation (if the study finds that the artifacts would not meet one or more of the criteria for defining a "unique archaeological resource").

Advice on procedures to identify cultural resources, evaluate their importance and estimate potential effects, and consult with Native Americans is given in several agency publications such as the Technical Assistance Series produced by the Office of Historic Preservation (OHP) and the Tribal Consultation Guidelines produced by the Office of Planning and Research (OPR). The technical assistance series and the consultation guidelines strongly recommend that Native American concerns and the concerns of other interested persons and corporate entities, including but not limited to, museums, historical commissions, associations and societies, be solicited as part of the process of cultural resources inventory. In addition, California law protects Native American burials, skeletal remains and associated grave goods regardless of their antiquity and provides for the sensitive treatment and disposition of those remains (Section 7050.5 of the Health and Safety Code and Public Resources Code 5097.9).

When human remains are discovered, the protocol to be followed is specified in California Health and Safety Code, which states:

In the event of discovery or recognition of any human remains in any location other than a dedicated cemetery, there shall be no further excavation or disturbance of the site or any nearby area reasonably suspected to overlie adjacent remains until the coroner of the county in which the human remains are discovered has determined, in accordance with Chapter 10 (commencing with Section 27460) of Part 3 of Division 2 of Title 3 of the Government Code, that the remains are not subject to the provisions of Section 27492 of the Government Code or any other related provisions of law concerning investigation of the circumstances, manner and cause of death, and the recommendations concerning treatment and disposition of the human remains have been made to the person responsible for the excavation, or to his or her authorized representative, in the manner provided in Section 5097.98 of the Public Resources Code.

State CEQA Guidelines Section 15064.5(e), requires that excavation activities be stopped whenever human remains are uncovered and that the county coroner be called in to assess the remains. If the county coroner determines that the remains are those of Native Americans, the NAHC must be contacted within 24 hours. At that time, the lead agency must consult with the appropriate Native Americans, if any, as timely identified by the NAHC. Section 15064.5 directs the lead agency (or applicant), under certain circumstances, to develop an agreement with the Native Americans for the treatment and disposition of the remains.

In addition to the mitigation provisions pertaining to accidental discovery of human remains, the State CEQA Guidelines also require that a lead agency make provisions for the accidental discovery of historical or archaeological resources, generally. Pursuant to Section 15064.5(f), these provisions should include "an immediate evaluation of the find by a qualified archaeologist. If the find is determined to be an historical or unique archaeological resource, contingency funding and a time allotment sufficient to allow for implementation of avoidance measures or appropriate mitigation should be available. Work could continue on other parts of the building site while historical or unique archaeological resource mitigation takes place."

Senate Bill 18 (Cal. Gov. Code Sections 65352.3, 65352.4) requires that, prior to the adoption or amendment of a general plan or specific plan proposed on or after March 1, 2005, a city or county must consult with Native American tribes with respect to the possible preservation of, or the mitigation of impacts to, specified Native American places, features, and objects located within that jurisdiction. Consistent with the requirements of SB18, letters were sent in July 2008 to Margaret Dalton, Chairperson for the Jackson Band of Mi-Wuk Indians, Debra Grimes, Cultural Resources Specialist for the Calaveras Band of Miwuk Indians, Matthew Franklin, Chairperson for the Lone Band of Miwok Indians, and Rhonda Morningstar Pope, Chairperson for the Buena Vista Rancheria. Additionally, a sacred lands search was conducted for the project for the quadrangles Carbondale, Ca., Irish Hill, Ca., Goose Creek, Ca., and Lone, Ca., and township and ranges (T5N, R9E; T5N, R10E; T6N, R9E; and T6N, R10E, and an unsectioned portion of the Arroyo Seco land grant MDBM).

Paleontological resources are classified as non-renewable scientific resources and are protected by state statute (e.g., Public Resources Code Section 5097.5 (a), Removal or Destruction; Prohibition), and Appendix G to the CEQA Guidelines. No state or local agencies have specific jurisdiction over paleontological resources. No state or local agency requires a paleontological collecting permit to allow for the recovery of fossil remains discovered as a result of construction-related earth moving on state or private land in a project site.

LOCAL

Amador County General Plan

The County of Amador General Plan was adopted by the County Board of Supervisors in 1973 and is currently undergoing an update. The County General Plan policies and implementation measures apply to development within the Lone General Plan Planning Area that is outside of the city limits, until such time as those areas are annexed into the city as part of the ultimate development under the City's updated General Plan development potential. The County's 1973 General Plan does not contain any policies or implementation measures related to cultural or paleontological resources. The County is now considering adoption of the 2008 draft Conservation Element in the Amador County General Plan update that includes the following preliminary policies relevant to cultural and historic resources impacts within Amador County:

4.9 CULTURAL AND PALEONTOLOGICAL RESOURCES

Policy C-11.3: Promote use of building envelopes or cluster development as a means of protecting historical resources when land is developed.

Policy C-11.4: Support the preservation of historic structures, including rehabilitation and adaptive reuse of structures. Encourage property owners to preserve and maintain historic structures.

Policy C-11.5: Promote the preservation of historically significant Gold Rush sites, mining sites and other identified sites.

Policy C-12.3: Promote clustering of development as a means of protecting cultural and archaeological resources when land is developed.

These draft policies may be adopted, modified or eliminated by the Amador County Board of Supervisors during consideration of the 2008 Amador County General Plan.

City of Ione Zoning Code

Chapter 17.76 of the City's Zoning Code relates to Architectural Heritage and Historic Preservation and the protection, enhancement and perpetuation of the old and historical buildings of the city, Mother Lode architecture, and cultural aesthetic heritage. The chapter outlines provisions for the designation of historical properties and areas, including a portion of Main Street and other areas and properties designated by the City Council upon recommendation by the Planning Commission. It also includes provisions for preserving existing historic buildings of special historic or aesthetic value or of the Mother Lode type of architecture. Demolition, construction, repairs, remodels and signage conditions related to historic properties and districts are detailed in this chapter of the Zoning Code.

City of Ione Redevelopment Plan

The City is in the process of creating a redevelopment district. The redevelopment district would be identified in a Redevelopment Plan for Ione and would generally include the downtown and surrounding areas. The redevelopment plan, when adopted, will include provisions for preserving and enhancing the historic downtown area.

4.9.3 IMPACTS AND MITIGATION MEASURES

STANDARDS OF SIGNIFICANCE

Following PRC Sections 21083.2 and 21084.1, and Section 15064.5 and Appendix G of the State CEQA Guidelines, cultural resource impacts are considered to be significant if implementation of the project considered would result in any of the following:

- 1) Cause a substantial adverse change in the significance of a historical resource as defined in Public Resources Code Section 21084.1 and CEQA Guidelines Section 15064.5, respectively;
- 2) Cause a substantial adverse change in the significance of an archaeological resource as defined in Public Resources Code Section 21083.2, 21084.1, and CEQA Guidelines Section 15064.5, respectively;

- 3) Directly or indirectly destroy a unique paleontological resource or site or unique geological feature; or
- 4) Disturb any human remains, including those interred outside of formal cemeteries.

State CEQA Guidelines Section 15064.5 defines “substantial adverse change” as physical demolition, destruction, relocation, or alteration of the resource or its immediate surroundings such that the significance of a historical resource is materially impaired.

CEQA Guidelines, Section 15064.5 (b)(2), defines “materially impaired” for purposes of the definition of “substantial adverse change” as follows:

“The significance of an historical resource is materially impaired when a project:

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

CEQA requires that if a project would result in an effect that may cause a substantial adverse change in the significance of a historical resource, or would cause significant effects on a unique archaeological resource, then alternative plans or mitigation measures must be considered. Therefore, prior to assessing effects or developing mitigation measures, the significance of cultural resources must first be determined. The steps that are normally taken in a cultural resources investigation for CEQA compliance are as follows:

- Identify potential historical resources and unique archaeological resources;
- Evaluate the eligibility of historical resources; and
- Evaluate the effects of the project on eligible historical resources

METHODOLOGY

PMC cultural resources staff completed all archaeological and historical investigations associated with the proposed project. Archaeological and historical investigations included: a record search completed at the North Central Information Center at California State University, Sacramento; archival research at the North Central Information Center at California State University, Sacramento; archival research at other repositories (e.g., California State Library); a sacred lands search conducted by the Native American Heritage Commission; and consultation with the Native American community per the requirements of SB 18, conducted in July 2008. The results of the sacred lands search were received September 25, 2008, and did not identify any sensitive Native American cultural resources either within or near the proposed Planning Area.

4.9 CULTURAL AND PALEONTOLOGICAL RESOURCES

All Native American groups identified by the NAHC were contacted by letter regarding the proposed project. The reader is referred to **Appendix 4.9** for all correspondence and results associated with the archeological and historical investigations.

Archaeological and historical investigations for the Planning Area are adequate to identify typical prehistoric and historic resources that would likely be present in the Planning Area. These investigations identified 130 cultural resource or prehistoric/historic sites within the Planning Area (see **Table 4.9-1**) and 58 historic properties within the Planning Area (see **Table 4.9-2**).

A search of the University of California, Berkeley Museum of Paleontology collections database identified 61 paleontological resources in Amador County with one fossilized plant in the Planning Area and one vertebrate in Lone Valley.

The City of Lone General Plan is intended to be a “self-mitigating” document, in that the General Plan policies are designed to mitigate or avoid impacts on the environment resulting from implementation of the proposed project. To that end, the relevant GPU policies providing mitigation have been identified for each significant impact in this section. If the applicable General Plan policies were determined not to fully mitigate or avoid impacts, then additional mitigation measures have been provided. These additional mitigation measures have been written as policy statements that can be incorporated into the final General Plan. Each impact discussion includes a determination as to whether the impacts would be mitigated to a less than significant level or would remain significant and unavoidable after implementation of the updated General Plan policies.

PROJECT IMPACTS AND MITIGATION MEASURES

Prehistoric Resources, Historic Resources, and Human Remains

Impact 4.9.1 Adoption of the City of Lone General Plan update and associated project components could result in the potential disturbance of cultural resources (i.e., prehistoric sites, historic sites, and isolated prehistoric/historic artifacts and features) and human remains. This is considered a **potentially significant** impact.

General Plan Land Use Map

Areas Within Existing City Limits

The central portion of lands within the existing city limits of Lone is largely built out with retail and commercial businesses in the downtown core and residential uses surrounding the core. The areas that comprise the north/northwestern and south/southeastern lands within the city limits are still largely undeveloped. The proposed General Plan Update allows for the intensification of retail, office, and residential uses in the downtown core area, as well as new residential and commercial development in the undeveloped areas within the existing city limits. The City has been subject to archaeological and historic investigations and there are a number of known cultural resources within the city limits; however, the entire area has not been subject to investigation, and therefore, there could be undiscovered cultural resources. Therefore, implementation of the proposed General Plan Land Use Map could result in a substantial adverse impact on known cultural resources and could also adversely impact undiscovered cultural resources or human remains. This is a **potentially significant** impact.

Areas Outside of Existing City Limits

Lands within the Planning Area that are outside the existing city limits are largely undeveloped, with some agricultural land (primarily grazing lands) and three mining operations. The proposed General Plan update would primarily designate these areas as General Agriculture (AG), Open Space (OS), or Surface Mining (SM). Therefore, areas outside of the existing city limits would, to a significant extent, maintain current land uses. However, to the west of the of the city limits at the northern boundary, the proposed General Plan designates the land for residential use and a small portion of heavy industrial uses to the northwest. In addition, the Triangle Policy Area in the southeast is designated for industrial, office, and commercial uses in addition to the existing mining operations. Part of the Planning Area has been subject to archaeological and historic investigations but the entire area has not been subject to investigation. There are a number of known cultural resources outside of the existing city limits. Therefore, implementation of the proposed General Plan Land Use Map outside of the city limits could cause a substantial adverse impact on the significance of known cultural resources and could also adversely impact undiscovered cultural resources or human remains. This is a **potentially significant** impact.

Sphere of Influence Amendment/Annexation

As part of the proposed project, the City plans to amend its Sphere of Influence (SOI) to include the site of the Castle Oaks Water Reclamation Plant (COWRP), the City Corporation Yard and adjacent land and to expand the Old Stockton Road and Industrial Park Special Planning Areas. In addition, the City is proposing to annex three areas currently located outside the city limits. These areas are identified on Figure 3.0-6 in Section 3.0 and are referred to as (1) the Collins Road Annexation Area consisting of about 1 acre; (2) the Wastewater Treatment Plant Annexation Area consisting of about 9.7 acres; and (3) the State Property Annexation Area consisting of about 3.7 acres. The northwest parcel (Collins Road Annexation Area) will be rezoned C-3 Heavy Commercial, while the 3.7-acre parcel to the northeast (State Property Annexation Area), and the 9.7 acre Wastewater Treatment Plant Annexation Area will be rezoned PF Public Facilities.

There are several known sites located along the southern boundary of the current SOI. Part of the Planning Area has been subject to archaeological and historic investigations, including the proposed annexation area and sphere of influence, but the entire area has not been subject to investigation and therefore, there could be undiscovered cultural resources. There are several known cultural resources in the proposed annexation area and sphere of influence. Therefore, the proposed SOI amendment, annexation, and future expansion of the WWTP could cause a substantial adverse impact on the significance of known cultural resources and could adversely impact undiscovered cultural resources or human remains. This would result in a **potentially significant** impact.

Zoning Code Update

The proposed project also includes several updates to the City's Zoning Code. These updates involve the addition of new zoning districts, as well as amendments to development standards for several existing zoning districts as discussed in Section 3.0, Project Description, of this Draft EIR. The proposed Zoning Code updates are largely administrative and are intended to clarify the types of uses that are permitted under a particular General Plan land use designation. Therefore, the proposed Zoning Code updates would have **no impact** associated with cultural resources or human remains beyond those addressed for the General Plan.

4.9 CULTURAL AND PALEONTOLOGICAL RESOURCES

West Lone Roadway Improvement Strategy (WIRIS)

The proposed project includes the West Lone Roadway Improvement Strategy (WIRIS), which consists of both improvements to existing roadways and the construction of new roadway segments in order to create a bypass to provide traffic relief through downtown. The general alignment of the proposed bypass and other proposed roadway extensions shown on **Figure 3.0-11** and other proposed roadway extensions. The bypass will run immediately adjacent to or through several areas that are known to contain historic and prehistoric/historic sites in the Planning Area. Additionally, only part of the Planning Area through which the WIRIS will be constructed has been subject to archaeological and historic investigations but the entire area has not been subject to investigation. Therefore, implementation of the proposed WIRIS is likely to cause a substantial adverse impact on the significance of cultural resources and could adversely impact undiscovered cultural resources or human remains. The WIRIS project will require further, project-level CEQA analysis and documentation prior to its construction which will determine whether the alignment would adversely impact known sites. However, this impact is considered **potentially significant**.

Proposed General Plan Policies and Action Items that Provide Mitigation

The proposed General Plan update contains only one policy that would assist in reducing impacts to cultural resources, Policy CO-9.3.

Conservation Element

Policy CO-9.3: Where land designated or proposed to be designated for parks or open space contains Native American, historical, cultural and sacred sites, the City shall consult with the tribe as to the level of confidentiality required to protect the site and as to appropriate dignity to afford the site in any management plan.

Implementation of the proposed General Plan policy listed above will minimize impacts to cultural resources and human remains on lands within the Planning Area that are proposed for open space or parks use. However, the policy does not address land proposed for development or public improvements, such as roadway projects, that would impact cultural resources and human remains. This impact would be **potentially significant** without mitigation.

Mitigation Measures

MM 4.9.1a The following policies shall be incorporated into the Conservation Element:

When historic architectural resources that are either listed in or determined eligible for inclusion in the NRHP or the CRHR, or the local historical registry, are proposed for demolition or modification, require an evaluation of the proposal to determine whether the project proposal would result in an adverse impact on the historic resource. If an adverse impact to the resource is identified, feasible measures shall be identified to mitigate the impact, which may include modification of the design, reuse of the structure, or avoidance of the structure.

MM 4.9.1b The following policies shall be incorporated into the Conservation Element:

The Planning Department shall be notified immediately if any prehistoric, archaeologic, or fossil artifact or resource is uncovered during construction. All construction must stop and an archaeologist that meets the Secretary of the Interior's Professional Qualifications Standards in prehistoric or historical archaeology shall be retained to evaluate the finds and recommend appropriate action.

MM 4.9.1c The following policies shall be incorporated into the Conservation Element:

All construction must stop if any human remains are uncovered, and the County Coroner must be notified according to Section 7050.5 of California's Health and Safety Code. If the remains are determined to be Native American, the procedures outlined in CEQA Section 15064.5 (d) and (e) shall be followed.

Previous cultural resources investigations and the known prehistory and history of the Planning Area and surrounding region (i.e., City of Ione and Amador County) indicate that future projects being approved within the Planning Area have the potential to disturb prehistoric and historic resources and human remains. Implementation of mitigation measures **MM 4.9.1a** through **MM 4.9.1c** would reduce impacts to known and undiscovered cultural resources and human remains to a **less than significant** level.

Potential Direct Destruction or Damage to Historical Resources and Properties

Impact 4.9.2 Future development to implement the proposed project could potentially cause a direct substantial adverse change in the significance of an historical resource as defined in CEQA Guidelines Section 15064.5. This would be a **potentially significant** impact.

General Plan Land Use Map

Areas Within Existing City Limits

The central portion of lands within the existing city limits of Ione is largely built out with retail and commercial businesses in the downtown core and residential uses surrounding the core. The areas that comprise the north/northwestern and south/southeastern lands within the city limits are still largely undeveloped. The proposed General Plan update allows for the intensification of retail, office, and residential uses in the downtown core area, as well as new residential and commercial development in the undeveloped areas within the existing city limits. There are 58 historical properties in the Planning Area (see **Table 4.9-2**). Future development allowed under the proposed General Plan update could result in the destruction of historic properties and inappropriate alterations resulting in the loss of historic character-defining features of buildings. Therefore impacts from direct destruction or damage to historic properties are considered to be **potentially significant**.

Areas Outside of Existing City Limits

Land within the Planning Area that are outside the existing city limits are largely undeveloped, with some agricultural land (primarily grazing lands) and three mining operations. The proposed General Plan Update would primarily designate these areas as General Agriculture (AG), Open Space (OS), or Surface Mining (SM). Therefore, areas outside of the existing city limits would, to a significant extent, maintain current land uses. However, to the west of the city limits at the

4.9 CULTURAL AND PALEONTOLOGICAL RESOURCES

northern boundary, the proposed General Plan designates land for residential and a small portion of heavy industrial uses to the northwest. In addition, the Triangle Policy Area in the southeast is designated for industrial, office, and commercial uses in addition to the existing mining operations. There are 58 historical properties in the Planning Area. Future development under the proposed General Plan update could result in the destruction of historic properties and inappropriate alterations resulting in the loss of historic character-defining features of buildings. Therefore impacts from direct destruction or damage to historic properties are considered to be **potentially significant**.

Sphere of Influence Amendment/Annexation

As part of the proposed project, the City plans to amend its Sphere of Influence (SOI) to include the site of the Castle Oaks Water Reclamation Plant (COWRP), the City Corporation Yard and adjacent land and to expand the Old Stockton Road and Industrial Park Special Planning Areas. In addition, the City is proposing to annex three areas currently located outside the city limits. These areas are identified on Figure 3.0-6 in Section 3.0 and are referred to as (1) the Collins Road Annexation Area consisting of about 1 acre; (2) the Wastewater Treatment Plant Annexation Area consisting of about 9.7 acres; and (3) the State Property Annexation Area consisting of about 3.7 acres. The northwest parcel (Collins Road Annexation Area) will be rezoned C-3 Heavy Commercial, while the 3.7-acre parcel to the northeast (State Property Annexation Area), and the 9.7 acre Wastewater Treatment Plant Annexation Area will be rezoned PF Public Facilities.

There are several known sites located along the southern boundary of the current SOI. As shown in **Tables 4.9-1 and 4.9-2**, there are 51 historic sites and 58 historical properties in the Planning Area. Future development allowed under the proposed General Plan update could result in the destruction of historic buildings and inappropriate alterations resulting in the loss of historic character-defining features of buildings. Therefore impacts from direct destruction or damage to historic properties are considered to be **potentially significant**.

Zoning Code Update

The proposed project also includes several updates to the City's Zoning Code. These updates involve the addition of new zoning districts, as well as amendments to development standards for several existing zoning districts as discussed in Section 3.0, Project Description, of this Draft EIR. The proposed Zoning Code updates are largely administrative and are intended to clarify the types of uses that are permitted under a particular land use designation. These changes would not result in increased development or population in the Planning Area. Therefore, the proposed Zoning Code updates would have a **less than significant** impact on historic properties.

West Lone Roadway Improvement Strategy (WIRIS)

The proposed project includes the West Lone Roadway Improvement Strategy (WIRIS), which consists of both improvements to existing roadways and the construction of new roadway segments in order to create a bypass to provide traffic relief through downtown. The general alignment of the proposed bypass and other proposed roadway extensions shown on **Figure 3.0-11** and other proposed roadway extensions. The roadway improvements have the potential to impact historic properties.. The WIRIS project will require further, project-level CEQA analysis and documentation prior to its construction which will determine whether the alignment would adversely impact known sites. However, this impact is considered **potentially significant**.

Proposed General Plan Policies and Action Items that Provide Mitigation

The proposed General Plan update contains two policies that would assist in reducing impacts to historic properties, Policy ED-1.2 and Policy 5.2, and associated action items.

Economic Development Element

- Policy ED-1.2: The City shall improve the viability of commercial retail and office space within the community.
- Action ED-1.2.1: Offer incentives to business owners and property owners for facade improvements, historic rehabilitation, and other building improvement programs in the downtown.
- Policy ED-5.2: The city shall protect and enhance the historic character of the downtown.
- Action ED-5.2.1: Identify programs such as historic tax credits which could provide support to the City's preservation efforts.
- Action ED-5.2.2: Seek out grants and participate in federal and state historic preservation programs, including Main Street USA and Preserve America, in order to provide funding and resources for downtown redevelopment and improvement.
- Action ED-5.2.3: Develop historic preservation and sign ordinances that allow flexibility to property owners to maintain and enhance their buildings downtown while preserving their historic character.
- Action ED-5.2.4: Develop pattern books and other design manuals to assist property owners in developing effective and cost efficient facade enhancements of existing buildings.

Implementation of the proposed General Plan policies and actions listed above will minimize impacts to historic properties within the Planning Area. However, there is still potential for impacts to historic properties to occur as a result of the proposed General Plan update and associated development activities. This impact would be **potentially significant** without mitigation.

Mitigation Measures

- MM 4.9.2a** Policy ED-5.2 in the Economic Development Element shall be modified as follows:
- The city shall protect and enhance the historic character of the downtown and historic properties in order to preserve archaeologically significant resources (including Native American remains) in place if feasible, or provide mitigation (avoidance, excavation, documentation, curation, data recovery, or other appropriate measures prior to further disturbance.
- MM 4.9.2b** The following policies shall be incorporated into the Conservation Element:

4.9 CULTURAL AND PALEONTOLOGICAL RESOURCES

Develop and regularly update a comprehensive historic resources survey, in compliance with guidelines of the State Office of Historic Preservation. The survey shall include a historic context and inventory containing a list of all historically significant (contributing) properties and non-contributing buildings within the District and a map depicting their locations.

MM 4.9.2c The following policies shall be incorporated into the Conservation Element:

Promote community participation in the preservation of historic resources in the City.

Implementation of the above mitigation measures **MM 4.9.2a** through **4.9.2c** would ensure protection and preservation of significant historical resources by identifying resources and avoiding or mitigating potential impacts. Thus, this impact would be **less than significant**.

Paleontological Resources

Impact 4.9.3 Adoption of the proposed project could result in the potential disturbance of paleontological resources. This is considered a **potentially significant** impact.

General Plan Land Use Map

Areas Within Existing City Limits

The central portion of lands within the existing city limits of Lone is largely built out with retail and commercial businesses in the downtown core and residential uses surrounding the core. The areas that comprise the north/northwestern and south/southeastern lands within the city limits are still largely undeveloped. The proposed General Plan update allows for the intensification of retail, office, and residential uses in the downtown core area, as well as new residential and commercial development in the undeveloped areas within the existing city limits. A search of the University of California, Berkeley Museum of Paleontology collections database identified only one fossilized plant within the city. Development under the City of Lone General Plan could impact undiscovered paleontological resources. Therefore, implementation of the proposed General Plan Land Use Map could cause a substantial adverse impact to undiscovered paleontological resources in the Planning Area. This is a **potentially significant** impact.

Areas Outside of Existing City Limits

Land within the Planning Area that are outside the existing city limits are largely undeveloped, with some agricultural land (primarily grazing lands) and three mining operations. The proposed General Plan update would primarily designate these areas as General Agriculture (AG), Open Space (OS), or Surface Mining (SM). Therefore, areas outside of the existing city limits would, to a significant extent, maintain current land uses. However, to the west of the city limits at the northern boundary, the proposed General Plan designates lands for residential use, as well as a small portion of heavy industrial uses to the northwest. In addition, the Triangle Policy Area in the southeast is designated for industrial, office, and commercial land uses in addition to the existing mining operations. A search of the University of California, Berkeley Museum of Paleontology collections database identified only one fossilized plant in the Planning Area. Implementation of the proposed General Plan Land Use Map outside of the city limits could impact undiscovered paleontological resources though the likelihood of such paleontological resources existing in the Planning Area is considered low. This is a **potentially significant** impact.

Sphere of Influence Amendment/Annexation

As part of the proposed project, the City plans to amend its Sphere of Influence (SOI) to include the site of the Castle Oaks Water Reclamation Plant (COWRP), the City Corporation Yard and adjacent land and to expand the Old Stockton Road and Industrial Park Special Planning Areas. In addition, the City is proposing to annex three areas currently located outside the city limits. These areas are identified on Figure 3.0-6 in Section 3.0 and are referred to as (1) the Collins Road Annexation Area consisting of about 1 acre; (2) the Wastewater Treatment Plant Annexation Area consisting of about 9.7 acres; and (3) the State Property Annexation Area consisting of about 3.7 acres.

The proposed SOI amendment and annexations are policy actions that would not directly increase demand for fire protection or emergency medical services. However, these actions would allow for the future development of these areas. The northwest parcel (Collins Road Annexation Area) will be rezoned C-3 Heavy Commercial, while the 3.7-acre parcel to the northeast (State Property Annexation Area), and the 9.7 acre Wastewater Treatment Plant Annexation Area will be rezoned PF Public Facilities.

A search of the University of California, Berkeley Museum of Paleontology collections database identified one fossilized plant within the Planning Area and one vertebrate in Lone Valley; the remaining paleontological resources were located elsewhere in Amador County. The proposed SOI and annexation could impact undiscovered paleontological resources though the likelihood of such paleontological resources existing in the Planning Area is considered low. This would result in a **potentially significant** impact.

Zoning Code Update

The proposed project also includes several updates to the City's Zoning Code. These updates involve the addition of new zoning districts, as well as amendments to development standards for several existing zoning districts as discussed in Section 3.0, Project Description, of this Draft EIR. The proposed Zoning Code updates are largely administrative and are intended to clarify the types of uses that are permitted under a particular General Plan land use designation. Therefore, the proposed Zoning Code updates would have **no impact** associated with paleontological resources beyond what is identified for the General Plan.

West Lone Roadway Improvement Strategy (WIRIS)

The proposed project includes the West Lone Roadway Improvement Strategy (WIRIS), which consists of both improvements to existing roadways and the construction of new roadway segments in order to create a bypass to provide traffic relief through downtown. The general alignment of the proposed bypass and other proposed roadway extensions shown on **Figure 3.0-11** and other proposed roadway extensions. A search of the University of California, Berkeley Museum of Paleontology collections database identified one fossilized plant within the Planning Area and one vertebrate in Lone Valley, but the exact locations were not mapped or described. Implementation of the proposed WIRIS could impact undiscovered paleontological resources though the likelihood of such paleontological resources existing in the Planning Area is considered low. The WIRIS project will require further, project-level CEQA analysis and documentation prior to its construction which will determine whether the alignment would adversely impact known sites. However, this impact is considered **potentially significant**.

4.9 CULTURAL AND PALEONTOLOGICAL RESOURCES

Proposed General Plan Policies and Action Items that Provide Mitigation

The proposed General Plan update does not contain any policies related to paleontological resources.

Mitigation Measures

Even though only one known paleontological resources exists in the Planning Area, the potential exists for future projects being approved within the Planning Area to disturb paleontological resources. Implementation of mitigation measures **MM 4.9.1a** through **4.9.1c** and **4.9.2a** would reduce impacts to paleontological resources to a **less than significant** level.

4.9.4 CUMULATIVE SETTING, IMPACTS AND MITIGATION MEASURES

CUMULATIVE SETTING

The cumulative setting associated with adoption of the General Plan update includes proposed, planned, reasonably foreseeable, and approved projects within the region (see Section 4.0), as well as

The cumulative setting associated with the project includes proposed, planned, reasonably foreseeable, and approved projects within the Planning Area and the surrounding area within Amador County. The cumulative setting also includes full buildout of the City of Lone General Plan Planning Area as proposed by the project (occurring after year 2030). Regional growth and development, including proposed and approved development projects in the Planning Area, including adoption of the City's General Plan update and any development projects associated with it would contribute to potential conflicts with cultural and paleontological resources. These resources include archaeological resources associated with Native American activities and historic resources associated settlement, farming, and economic development.

CUMULATIVE IMPACTS AND MITIGATION MEASURES

Cumulative Impacts to Prehistoric Resources, Historic Resources, and Human Remains

Impact 4.9.4 Adoption of the proposed project, its associated subsequent projects and specific plans within the Planning Area, in combination with all other foreseeable development projects within Lone and the surrounding areas of Amador County, has the potential to disturb cultural resources (i.e., prehistoric sites, historic sites, historic buildings, and isolated artifacts and features) and human remains. This would be a **cumulatively considerable** impact.

Archaeological and historical investigations have identified cultural resources in the Planning Area and Amador County. However, archaeological and historical investigations have not been conducted within all areas encompassed by the Planning Area. Based on the results of previous archaeological and historical investigations within the Planning Area, it is likely that development in these areas would likely discover previously unidentified cultural resources and human remains. Consequently, development within the Planning Area under the proposed project and development in Amador County over the next 30 years and beyond could impact known and undiscovered cultural resources and human remains and could contribute to the cumulative loss of cultural resources. Future development in Lone under the proposed General Plan update would expand development outward from the existing city limits into the SOI, and

at some point in the future, beyond year 2030, additional development outside the SOI within the Planning Area can be anticipated to occur. The contribution of development under the General Plan update could be considerable, when combined with other past, present, and foreseeable development in Amador County. Therefore impacts from the destruction or damage to known and undiscovered historic and prehistoric resources and human remains are considered to be **cumulatively considerable**.

Proposed General Plan Policies and Action Items That Provide Mitigation

The proposed General Plan update contains several goals, policies, and action items that would assist in reducing this potential impact to prehistoric resources, historic resources and human remains. The following list contains those policies and action items that contain specific, enforceable requirements and/or restrictions and corresponding performance standards that assist in reducing (though not eliminating) this impact. Since these policies and action items have been described in detail in prior impact discussions for this section, the following is limited to only listing the policy and action item numbers.

Conservation Element

Policy CO-9.3

Mitigation Measures

Mitigation measures **MM 4.9.1a** through **4.9.1c** as proposed, would add a policy and associated action items to the Conservation Element of the City of Ione General Plan update that would outline procedures and methods for the identification, avoidance, protection, and preservation of cultural resources. Implementation of the policy and action items would reduce any impacts to cultural resources associated with development under the General Plan update to a less than significant level. Therefore, implementation of the mitigation measures proposed would reduce the contribution of development under the General Plan to cumulative impacts on cultural resources and human remains to a **less than cumulatively considerable** level.

Cumulative Potential Direct Destruction or Damage to Historical Resources and Properties

Impact 4.9.5 Adoption of the proposed project, its associated subsequent projects and specific plans within the Planning Area, in combination with all other foreseeable development projects within Ione and Amador County, has the potential to cause a direct substantial adverse change in the significance of an historical resource as defined in CEQA Guidelines Section 15064.5. This would be a **cumulatively considerable** impact.

There are 58 historical properties in the Planning Area. Future development allowed under the proposed project and cumulative development in other areas of Amador County could expand development outward from the existing city limits into the SOI, and at some point in the future, beyond year 2030, additional development outside the SOI within the Planning Area can be anticipated to occur. This could result in the destruction of historic buildings and inappropriate alterations resulting in the loss of historic character-defining features of buildings. The contribution of development under the General Plan update and associated project components could be considerable, when combined with other past, present, and foreseeable development in Amador County. Therefore impacts to historical resources and properties are considered to be **cumulatively considerable**.

4.9 CULTURAL AND PALEONTOLOGICAL RESOURCES

Proposed General Plan Policies and Action Items That Provide Mitigation

The proposed General Plan update contains several goals, policies, and action items that would assist in reducing this potential impact to historic properties. The following list contains those policies and action items that contain specific, enforceable requirements and/or restrictions and corresponding performance standards that assist in reducing (though not eliminating) this impact. Since these policies and action items have been described in detail in prior impact discussions for this section, the following is limited to only listing the policy and action item numbers.

Economic Development Element

Policy ED-1.2, Action ED-1.2.1, Policy ED-5.2, Action ED-5.2.1, Action ED-5.2.2, Action ED-5.2.3, Action ED-5.2.4

Mitigation Measures

Mitigation measures **MM 4.9.1a-c** and **MM 4.9.2a** as proposed, would revise Policy ED-5.2 and add action items to the Economic Development Element of the City of Lone General Plan update that would outline procedures and methods for the protection and preservation of historic properties. Implementation of these mitigation measures would reduce this impact to a **less than cumulatively considerable** level.

Cumulative Impacts to Paleontological Resources

Impact 4.9.6 Adoption of the proposed project, its associated subsequent projects and specific plans within the Planning Area, in combination with all other foreseeable development projects within Lone and Amador County has the potential to disturb paleontological resources (i.e., fossils and fossil formations). This would be a **cumulatively considerable** impact.

A search of the University of California, Berkeley Museum of Paleontology collections database for the Planning Area identified 61 paleontological resources in Amador County. Future development allowed under the proposed project and cumulative development in other parts of Amador County could expand development outward from the existing city limits into the SOI, and at some point in the future, beyond year 2030, additional development outside the SOI within the Planning Area can be anticipated to occur. This could result in impacts to undiscovered paleontological resources in all areas encompassed by the Planning Area because they are present in Amador County. Therefore impacts from the destruction or damage to known and undiscovered paleontological resources are considered to be **cumulatively considerable**.

Proposed General Plan Policies and Action Items That Provide Mitigation

The proposed General Plan update does not contain any policies related to paleontological resources.

Mitigation Measures

Implementation of mitigation measures **MM 4.9.1a** through **4.9.1c** and **4.9.2a** through **4.9.2c** would outline procedures and methods for the identification, avoidance, protection, and preservation of paleontological resources. Implementation of these policies would reduce any

impacts to paleontological resources associated with development under the proposed project to a less than significant level. Therefore, implementation of these mitigation measures would reduce the contribution of development under the General Plan Land Use Map to cumulative impacts to paleontological resources to a **less than cumulatively considerable** level.

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