

3.6 Cultural and Paleontological Resources

This section describes the cultural resources that may be affected by the Proposed Action and project alternatives. For the purposes of this section, the area of potential effect (APE) is the same as the project site described in **Section 1.0**. The investigation of the APE is summarized herein and described in greater detail in the confidential *Cloverdale Rancheria Fee to Trust Project, Sonoma County, California - Cultural Resources Technical Report* completed by ESA (**Appendix F**, available under separate cover).

3.6.1 Setting

Archaeology

Fredrickson (1974) divided human history in California into three broad periods: the Paleoindian period, the Archaic period, and the Emergent period. This scheme used sociopolitical complexity, trade networks, population, and the introduction and variations of artifact types to differentiate between cultural units. The significance of prehistoric sites rests partly on their ability to help archaeologists explain the reasons for these changes in different places and at different times in prehistory. This scheme provides the analytical framework for the interpretation of the San Francisco Bay and North Coast Ranges prehistory and, with minor revisions (Fredrickson 1994), remains the dominant framework for prehistoric archaeological research in this region.

The Paleoindian period (10,000 to 6000 B.C.) was characterized by small, highly mobile groups occupying broad geographic areas. During the Archaic period, consisting of the Lower Archaic period (6000 to 3000 B.C.), Middle Archaic period (3000 to 500 B.C.), and Upper Archaic period (500 B.C. to A.D. 1000), geographic mobility may have continued, although groups began to establish longer-term base camps in localities from which a more diverse range of resources could be exploited. The addition of milling tools, obsidian and chert concave-base points, and the occurrence of sites in a wider range of environments suggests that the economic base was more diverse. By the Upper Archaic, mobility was being replaced by a more sedentary adaptation in the development of numerous small villages, and the beginnings of a more complex society and economy began to emerge. During the Emergent period (A.D. 1000 to 1800), social complexity developed toward the ethnographic pattern of large, central villages where political leaders resided, with associated hamlets and specialized activity sites. Artifacts associated with the period include the bow and arrow, small corner-notched points, mortars and pestles, and a diversity of beads and ornaments (Fredrickson 1994; Gerike et al. 1996:3.11–3.17).

Ethnographic Setting

Ethnographic literature indicates that at the time of historic contact, the APE was within the territory of the Southern Pomo-speaking peoples, which extended from approximately 5 miles south of Santa Rosa northward to approximately the Sonoma–Mendocino County border, and from the eastern drainage of the Russian River westward to Southwestern Pomo, or Kashaya territory (Barrett, 1908; Bean and Theodoratus, 1978; Kroeber, 1925; McLendon and Oswalt, 1978).

The primary sociopolitical unit was the village community, or tribelet. Pomo village communities consisted of a principal village, at which the chief resided, surrounded by several secondary settlements. Each village community averaged around 100 to 2,000 people (Bean and Theodoratus 1978:293). Within Southern Pomo tribelet territories, people were allowed to freely hunt, fish, and gather plant foods. Tribelet boundaries, however, were clearly defined in regards to rights of utilization of their territory by other groups (Kroeber 1925:228–230). The Makahmo Pomo, a tribelet of the Southern Pomo, occupied the area west of the Mayacamas Mountains and east of Dry Creek (Barrett, 1908; McLendon and Oswalt, 1978:280).

Ethnographic village sites near Cloverdale included *Kala'ñkō* and *A'ka'mōtcōlōwanī*. The general area was the location of several Pomo village sites that may have been occupied both simultaneously as well as in isolation at varying periods of time.

Beginning around 1800, the Southern Pomo people were significantly diminished through missionization, Mexican slave raids, disease, and immigrant settlement in their territory (McLendon and Oswalt 1978:279). In 1921, the U.S. government officially recognized the Cloverdale Rancheria and purchased 27.5 acres of land south of Cloverdale for the “Cloverdale Band of Homeless Indians.” The Makahmo Pomo population at the time was about 40 individuals. In 1958 the U.S. government enacted the Rancheria Act of 1958, transferring tribal property into private ownership. Forty-four rancherias in California, including the Cloverdale Rancheria, were transferred. It took nearly 25 years before Pomo recognition was restored when a lawsuit, led by Pomo Tillie Hardwick, required the U.S. government to re-establish all terminated Rancherias, including Cloverdale. Ten years later, in 1994, construction of the Cloverdale Highway 101 Bypass forced Tribal landowners to sell part of their land, splitting the Rancheria on either side of the freeway. In order to gain self-reliance, the people of Cloverdale Rancheria, currently numbering nearly 500, are exploring the transfer of lands held in fee to federal trust overlapping with and just north of the historical Rancheria boundaries (Cloverdale Rancheria of Pomo Indians, 2008).

Historical Setting

The APE is located within the Mexican landgrant of Rincon de Musalacón. The land had been granted to Francisco Beryessa in 1846 by Governor Pio Pico. Beryessa sold two square leagues of the landgrant to Johnson Horrell in 1851. In 1856, R. B. Markle and W. J. Miller purchased eight hundred and fifty acres, which included the present site of Cloverdale, from Horrell. In 1859 Markle and Miller sold the land, buildings and livestock to James Abram Kleiser who established a trading post at Markle Place, as the area had become known. Kleiser had the town of Cloverdale officially surveyed and a street plan was developed. In 1872, Cloverdale was incorporated as a third class city, and in 1888 was incorporated again as a sixth class city with a population of less than 3,000.

In 1871, the North Pacific Coast Railroad (NPCRR), later the North Shore and later still the Northwestern Pacific Railroad, was formed and was completed in 1875. Though the NPCRR began as a means of transporting lumber to San Francisco, its presence in Marin and Sonoma Counties made those areas more accessible and hence land values rose. In 1906 the Southern Pacific Railroad Company gained control after an earthquake put the NPCRR out of business, and formed the Northwestern Pacific Railroad (NWPRR) the following year. The NWPRR generally served

the Highway 101 corridor from San Rafael to Arcata, and part of its line directly abuts the APE to the east.

In 1867 the APE was located within the Horrell property, about a mile south of Cloverdale (Bowers, 1867). In 1877 the property was owned by LB Gardener, although no historic structures are present on historic maps within the APE. By 1900 the property had come under the ownership of George Emery Lile. George Lile was born in Missouri in 1844, and married Sarah Christina Reeves and had seven children. Their son Joseph Lile was born in 1878, and the family moved to California in 1885, originally to Petaluma but later to Cloverdale (Cloverdale Historical Society, 1982). In Cloverdale, George Lile bought the property that encompasses much of the APE.

The property remained in the Lile family for much of the following century, passed down from George Lile to his son Joseph. In 1964, Joseph Lile distributed the property among his three children, Bernard, Clifford, and Isabelle. In 1930, Bernard Lile established a wholesale and retail milk route, although he eventually sold the dairy operation and purchased land to raise prunes and grapes. Prior to his father's death, Clifford Lile leased the property and raised prunes, grapes and sheep (Wilson, 1972). With the death of their father, Clifford and Bernard became partners and together farmed the Lile ranch. Highway 101, through most of Sonoma County, was constructed from 1954-1962; however its current route is a result of the Cloverdale Bypass which was constructed in the mid-1990s. The construction of the bypass bisected the original Lile property, as well as the historic site of the Cloverdale Rancheria. The property remained in the Lile family under the ownership of Joseph's grandchildren until the various parcels were sold through the mid 1990s and early twenty-first century.

The Cloverdale Rancheria was historically located in the southern portion of the APE. The Rancheria was created in 1921 when the United States government federally recognized the Tribe and deeded 27.5 acres on the southern edge of Cloverdale to the tribal members. In 1958 the Rancheria was terminated with the Rancheria Act of 1958, which transferred tribal communal property into private ownership.

3.6.2 Research Methods

Records and Literature Search

Methodology

A records search was conducted at the Northwest Information Center (NWIC) of the California Historical Resources Information System at Sonoma State University on March 24, 2008 (File No. 07-1363). Records were accessed by reviewing the Cloverdale and Asti 7.5-minute quadrangle base maps. Additional research was conducted using the files and literature at ESA. The records search included a 1/2-mile radius around the APE in order to (1) determine whether known cultural resources had been recorded within or adjacent to the APE; (2) assess the likelihood of unrecorded cultural resources based on historical references and the distribution of environmental settings of nearby sites; and (3) develop a context for identification and preliminary evaluation of cultural resources.

Included in the review were the *California Inventory of Historical Resources* (California Department of Parks and Recreation 1976), *California Historical Landmarks* (1990), *California Points of Historical Interest* (1992), and the *Historic Properties Directory Listing* (2007). The Historic Properties Directory includes listings of the National Register and the California Register of Historical Resources, and the most recent listing (December 4, 2007) of the California Historical Landmarks and California Points of Historical Interest. Historic-period maps (Bowers, 1867; Thompson 1876; McIntre and Lewis, 1908) were also reviewed. Research was also conducted at the Cloverdale Historical Society Museum and the Cloverdale Regional Branch of the Sonoma County Library.

Records Search Results

Results of the cultural resources records search conducted at the NWIC indicate that a small portion of the APE had been previously surveyed. The eastern and southern edges of the APE were surveyed in 1996 for a proposed sewer line between Santana Road and Porterfield Creek (Roop, 1996). No cultural resources were recorded.

Three additional cultural resources studies have been conducted adjacent to the APE. In 1973 a survey was conducted for the proposed Highway 101 corridor through Cloverdale that may have included the western edge of the current APE (Moratto, 1973). No cultural resources were recorded within ½-mile of the APE.

The same alignment was surveyed several years later (Buss and Bingham, 1981). An obsidian scatter was observed (but not formally recorded as a site) outside of the APE. During this same survey, two prehistoric sites (CA-SON-1344 and CA-SON-1345) were recorded outside of the APE (Buss et al., 1981; Melandry et al., 1981). CA-SON-1344 is a midden with obsidian and chert debitage, heat-affected rock, chert and obsidian cores, and one obsidian point fragment. CA-SON-1345 is a smaller site of surface scatter which consisted of three cores, three point fragments, chert and obsidian debitage, and three unmodified shell fragments. No midden soil was observed. The site complex has been proposed to be the dry-season village of *Kala'ñkō*.

In 2005, 21.4 acres on the west side of Highway 101 were surveyed for cultural resources (Greene 2005). No cultural resources were recorded.

The closest California Historic Landmark to the APE is the Icaria-Speranza Commune (CHL 981), a Utopian community established in 1881 by French immigrants. The community lasted until 1886 and was the only Icarian Colony in California and the last of seven established throughout the United States. The landmark is located approximately 1.3 miles from the APE on Asti Road. The closest site listed on the National Register of Historic Places is the Cloverdale Railroad Station, located approximately 0.75 miles from the APE.

Native American Consultation

Cultural institutions, lifeways, culturally valued viewsheds, places of cultural association, and other sacred places and trust assets must also be considered under the National Environmental Policy Act (NEPA) (40 CFR 1501.2), Executive Order 12898, and sometimes other authorities

(Executive Order 13175, Executive Order 13007, NAGPRA). Although Executive Order 13007 provides another avenue for consultation with tribes, it specifically deals with sacred sites.

The Native American Heritage Commission (NAHC) was contacted on April 17, 2008 to request a database search for sacred lands or other cultural properties of significance within or adjacent to the APE. A response was received on April 17, 2008. The sacred lands survey did not identify the presence of cultural resources in the APE. The NAHC provided a list of Native American contacts that might have further knowledge of the APE with respect to cultural resources. Each person or organization identified by the NAHC was contacted by letter on April 28, 2008.

The Cloverdale Rancheria of Pomo Indians is located near the APE. Correspondence with the tribe is ongoing and members assisted during the surface survey of the APE. Copies of all correspondence are provided in **Appendix L**.

Field Survey

Methodology

ESA staff Heidi Koenig and Kathy Anderson, along with members of the Cloverdale Rancheria of Pomo Indians, conducted an intensive survey of the APE on April 10, 2008 and May 7, 2008 to identify archaeological resources. Areas with surface visibility were traversed on-foot in a zigzag pattern in 10-meter transects. A cursory survey was conducted of paved or otherwise covered portions of the APE. Generally, ground visibility throughout the APE was good. Vegetation in the APE west of the railroad tracks was short due to grazing horses; with numerous rodent holes in the exposed soil. Where vegetation was dense, it was periodically scraped to reveal ground surface. Thick vegetation, including dense poison oak, obstructed the survey effort along the edge of Coyote Creek at the south of the APE and along Porterfield Creek in the north. In areas where the vegetation subsided, the perimeters of the creeks were examined for cultural resources. The APE east of the railroad tracks is currently a vineyard. Ground exposure was excellent as the rows were plowed the day of the survey.

A pedestrian field survey of the APE was also completed on the above dates to identify potentially historic architectural resources. Buildings located in the APE were photographed and evaluated for their historic significance, and are discussed below.

Results

No archaeological resources were recorded during the survey.

The pedestrian survey identified seven houses, two barns, a cattle corral and chute, a modular office building and two sheds within the APE. The modular office building, four of the residences, and barns were determined to be modern construction, and therefore not included in further analysis of the APE. The remaining three residences and three ancillary structures meet the 50 year minimum age threshold for National Register of Historic Places (NRHP) eligibility. None of these historic architectural resources was determined to meet the criteria for listing in the NRHP or California Register of Historic Resources (CR), and would not be considered an historic resource under

NEPA. The State Historic Preservation Officer sent a letter of concurrence for these findings on March 16, 2009, which can be found in **Appendix L**.

Paleontological Resources

Paleontological resources are the fossilized remains of plants and animals, including vertebrates (animals with backbones), invertebrates (e.g., starfish, clams, ammonites, and coral marine), and fossils of microscopic plants and animals (microfossils). The age and abundance of fossils depend on the location, topographic setting, and particular geologic formation in which they are found. Fossil discoveries not only provide a historic record of past plant and animal life, but may assist geologists in dating rock formations. Often, fossil discoveries constrain the time period and the geographic range of flora or fauna. On a regional scale, fossilized plants, animals and microorganisms occur primarily in marine and non-marine sedimentary rock units.

The geologic units underlying the APE are predominantly Holocene Alluvium, although portions of the Franciscan Complex outcrop within a mile of the APE (Wagner et. al, 1982). The University of California Museum of Paleontology Collections (UCMP) Database was accessed on December 3, 2008 and reviewed for any listed paleontological resources within the same formation as the project site. 503 paleontological resources have been identified within Sonoma County; however, only 10 of these resources date to the Holocene epoch and no resources have been identified within the Franciscan Complex. The Holocene resources were all identified in the western portion of the county.

3.6.3 Regulatory Setting

Federal

The cultural resources investigation completed for the APE was conducted to comply with the requirements of National Environmental Policy Act (NEPA) and Section 106 of the National Historic Preservation Act (NHPA). The NEPA review process for this cultural resources impact assessment was conducted concurrently and integrated with the requirements of Section 106 of the NHPA.

Section 106 of the National Historic Preservation Act

Section 106 requires that federal agencies consider the affects of their actions on properties that may be eligible for listing or are currently listed on the National Register of Historic Places (NRHP). These properties are known as cultural resources. In addition to federal projects, Section 106 also includes undertakings that receive federal funding or require federal permits. For this project, the Bureau of Indian Affairs (BIA) is responsible for compliance with Section 106 of the NHPA because that agency, pursuant to 25 Code of Federal Regulations Part 151, is charged with reviewing and approving tribal applications to take land into federal trust status.

It is the federal agency's responsibility to consult with the State Historic Preservation Officer (SHPO) regarding the affects of their actions on cultural resources before granting permits, funding, or other authorization of the undertaking. The Section 106 review process normally involves a

four-step procedure described in detail in the regulations implementing Section 106 of the NHPA (36 CFR Part 800):

1. Identify and evaluate historic properties in consultation with the SHPO and interested parties
2. Assess the effects of the undertaking on properties that are eligible for inclusion in the NRHP
3. Consult with the SHPO, other agencies, and interested parties to develop an agreement that addresses the treatment of historic properties and notify the Advisory Council on Historic Preservation; and
4. Proceed with the project according to the conditions of the agreement

Archaeological and architectural resources (buildings and structures) are protected through the NHPA of 1966 (16 USC 470f) and its implementing regulation, Protection of Historic Properties (36 CFR Part 800), the Archaeological and Historic Preservation Act of 1974, and the Archaeological Resources Protection Act of 1979. Prior to implementing an “undertaking” (e.g., issuing a federal permit), Section 106 of the NHPA requires federal agencies to consider the effects of the undertaking on historic properties and to afford the Advisory Council on Historic Preservation (ACHP) and SHPO a reasonable opportunity to comment on any undertaking that would adversely affect properties eligible for listing on the National Register of Historic Places (NRHP). Section 101(d)(6)(A) of the NHPA allows properties of traditional religious and cultural importance to a tribe to be determined eligible for inclusion in the NRHP. Under the NHPA, a find is significant if it meets the NRHP listing criteria at 36 CFR 60.4, as stated below:

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

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

In addition to meeting the criteria of significance, a property must have integrity. Integrity is defined as “the ability of a property to convey its significance” (U.S. Department of the Interior, 1995). The National Register recognizes seven qualities that, in various combinations, define integrity. To retain historic integrity a property must possess several, and usually most, of these seven aspects. Thus, the retention of the specific aspects of integrity is paramount for a property to convey its significance. The seven factors that define integrity are location, design, setting, materials, workmanship, feeling, and association.

The American Indian Religious Freedom Act of 1978 allows access to sites of religious importance to Native Americans. On federal or tribal land, the Archaeological Resources Protection Act (ARPA) and Native American Graves Protection and Repatriation Act (NAGPRA) would apply. The ARPA assigns penalties for vandalism and the unauthorized collection of archaeological resources on federal land and provides for federal agencies to issue permits for scientific excavation by qualified archaeologists. The NAGPRA assigns ownership of Native American graves found on federal land to their direct descendants or to a culturally affiliated tribe or organization and provides for repatriation of human remains and funerary items to identified Native American descendants.

References

- Barrett, Samuel A., 1908. The Ethno-Geography of the Pomo and Neighboring Indians. *University of California Publications in American Archaeology and Ethnology* 6(1):1–332.
- Bean, Lowell John, and Dorothea Theodoratus, 1978. Western Pomo and Northeastern Pomo. In *California*, edited by Robert F. Heizer, pp. 289–305. Handbook of North American Indians, vol. 8, William C. Sturtevant, general editor. Smithsonian Institution, Washington D.C.
- Bowers, A.B., 1867. Map of Sonoma County. A.B. Bowers, Santa Rosa, California.
- Buss, Margaret, and Jeffery Bingham, 1981. *Archaeological Survey Report for the Cloverdale Bypass Project, Sonoma County*. On file (S-2719), Northwest Information Center of the California Historical Resources Information System, Sonoma State University, Rohnert Park, California.
- Buss, M., J. Bingham, and D. Gardner, 1981. Site Record for CA-SON-1345. On file, Northwest Information Center of the California Historical Resources Information System, Sonoma State University, Rohnert Park, California.
- California Department of Parks and Recreation, 1976. *California Inventory of Historical Resources*. California Department of Parks and Recreation, Sacramento, California.
- California Office of Historic Preservation, 2007. *Historic Properties Directory Listing by City (through December 2007)*. State Office of Historic Preservation, Sacramento, California.
- Cloverdale Historical Society, 1982. *Cloverdale then & now : being a history of Cloverdale, its environs, and families*. Cloverdale, CA: Cloverdale Historical Society.
- Cloverdale Rancheria, 2008. “History.” Available online < <http://www.cloverdalerancheria.com/who-we-are.php#history>>. Accessed July 17, 2008.
- Fredrickson, D.A., 1974. Cultural Diversity in Early Central California: A View from the North Coast Ranges. *Journal of California Anthropology* 1(1):41–53.
- Fredrickson, D.A., 1994. Central California Archaeology: The Concepts of Pattern and Aspect. In *Toward a New Taxonomic Framework for Central California Archaeology: Essays by James A Bennyhoff and David A. Fredrickson*, edited by R.E. Hughes, pp. 75–79. Contributions to the University of California Archaeological Research Facility 52. Berkeley, California.
- Gerike, Christian, Seana L.S. Gause, Suzanne Stewart, and Katherine Johnson, 1996. *Cultural Resources Study for the Santa Rosa Subregional Long-Term Wastewater Project*. Anthropological Studies Center, Sonoma State University, Rohnert Park, California, Submitted to Harland Bartholomew and Associates, Inc., Sacramento, California.

- Greene, Richard, 2005. *A Cultural Resources Evaluation of Assessor's Parcel Numbers 116-310-038, 116-310-041, 116-290-023, and 116-300-010, Cloverdale, Sonoma County, California*. Archaeological Resource Service, Petaluma, California. Prepared for Ryder Companies. On file (S-29841), Northwest Information Center of the California Historical Resources Information System, Sonoma State University, Rohnert Park, California.
- Kroeber, A.L., 1925. *Handbook of the Indians of California*. Bureau of American Ethnology Bulletin 78. Smithsonian Institution, Washington, D.C. Reprinted 1976 by Dover, New York.
- McIntre and Lewis, 1908. *Official Map of the County of Sonoma, California*.
- Melandry, M., D. Gardner, M. Buss, D. Mayfield, and J. Bingham, 1981. Site Record for CA-SON-1344. On file, Northwest Information Center of the California Historical Resources Information System, Sonoma State University, Rohnert Park, California.
- McLendon, Sally, and Robert L. Oswalt, 1987. Pomo: Introduction. In *California*, edited by Robert F. Heizer, pp. 274–288. Handbook of North American Indians, vol. 8, William C. Sturtevant, general editor. Smithsonian Institution, Washington D.C.
- Moratto, Michael J., 1973. *Proposed Highway Improvements Near Cloverdale: An Archaeological Evaluation*. Prepared for Caltrans. On file (S-1138), Northwest Information Center of the California Historical Resources Information System, Sonoma State University, Rohnert Park, California.
- Roop, William, 1996. *A Cultural Resources Evaluation of the Santana Sewer Project, Cloverdale, Sonoma County, California*. Archaeological Resource Service, Petaluma, California. Prepared for Carlile, Macy, Mitchell and Heryford. On file (S-18581), Northwest Information Center of the California Historical Resources Information System, Sonoma State University, Rohnert Park, California.
- Thompson, H., 1877. *Historical Atlas of Sonoma County, California*. Thomas H. Thompson & Company, Oakland, California.
- USGS, 1960. *Cloverdale, Calif. 7.5-minute topographical quadrangle*.
- U.S. Department of the Interior, 1995. *Guidelines for Evaluating and Registering Archeological Properties* bulletin. Available online <http://www.nps.gov/history/Nr/publications/bulletins/arch/index.htm>. Accessed November 5, 2008.
- Wagner, D.L. and Bortugno, E.J., 1982. Geologic map of the Santa Rose quadrangle, California, 1:250,000: California Division of Mines and Geology, Regional Geologic Map 2A, scale 1:250000.
- Wilson, William B., 1972. *Cloverdale: a history of the area*. Cloverdale, CA: Cloverdale Historical Society