

**APPENDIX F**  
**CULTURAL RESOURCES**



**CULTURAL RESOURCES INVENTORY FOR THE  
CITY OF CHINO SUBAREA 2 (CHINO VALLEY DAIRY PRESERVE),  
SAN BERNARDINO COUNTY**

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Study Area USGS 7.5' Topographic Quadrangles:

*Prado Basin  
Corona North*



## **I. INTRODUCTION**

This cultural resources inventory of the City of Chino Subarea 2 (Chino Valley Dairy Preserve) was compiled by Archaeological Associates at the request of Michael Brandman Associates. The preserve area comprises approximately 5,200 acres within the City of Chino's Sphere of Influence. The purpose of the study was to gather available information regarding previously recorded prehistoric and historic resources located within the boundaries of the planning area into a single document. Other than a windshield survey, no fieldwork was conducted in conjunction with the study.

The value of this document for general planning purposes lies in the fact that it identifies those areas where known resources exist. However, it is to be emphasized that this study will not serve as an appropriate substitute for the individual technical studies which are normally components to project-specific EIR's.

## **II. STUDY AREA LOCATION AND ENVIRONMENT**

Regionally, the Chino Valley Dairy Preserve lies just inside the San Bernardino County line north of the Prado Flood Control Basin. More specifically, the 5,200 acre preserve area lies southeast of the City of Chino and northeast of the City of Chino Hills in unincorporated San Bernardino County. Legally, the planning area is situated within portions of Townships 2 and 3 South, Range 7 West, San Bernardino Base Meridian as shown on portions of the USGS Prado Dam and Corona North 7.5' Topographic Quadrangles.

Subarea 2 is irregular in shape with the majority of the western boundary adjoining Euclid Avenue/State Highway 83. The northern boundary is delineated by portions of Kimball and Merrill Avenues. The entire eastern boundary abuts Hellman and Carpenter Avenues which parallel the Riverside/San Bernardino County line. The southern project limits abut the San Bernardino/Riverside County line. Pine Avenue bisects the study area from southwest to northeast.

The study area includes a large portion (approximately 1500 acres) of Prado Regional Park. Some of the recreational activities offered by the park include fishing and

boating on Prado Park Lake, camping, horseback riding, and a dog training facility. Outside the park to the northeast lies The California Institution for Women. The remainder of the study area comprises dairy and farmland.

Topographically, Subarea 2 lies east of the Chino Hills at the southern end of the Chino Plain. Major watercourses through the region comprise sections of Chino and Mill Creeks. These tributaries to the Santa Ana River flow to the southeast and southwest respectively bordering the southern tip of the Chino Plain. Immediately south of the study area, the plain terminates at the confluence of Chino and Mill Creeks with the Santa Ana River. The taking line or future high water line for the Prado Flood Control Basin comprises all land falling below the 566' MSL elevation. This area encompasses at least one-third of the southern portion of Subarea 2.

The native plant zone of the Chino Plain is characterized as Coastal Sage Scrub. However, since the 1800s, this plant community has been greatly impacted by historic activity (i.e. dry farming and cattle grazing). Today, dairies occupy much of the plain bordering the Prado Basin. Wetland/Willow Woodland habitat comprising willow, cottonwoods and sycamores can be found in the lower elevations of the Basin. Increasingly, these trees are being replaced by non-native eucalyptus trees.

## **II. CULTURAL SETTING**

The Prado Basin has been a focal point for human activity during prehistoric times and as well as in the more recent past. The availability of a permanent water source supplied by the Santa Ana River and its tributaries has resulted in the presence of numerous prehistoric and historic archaeological sites in the Basin. Sites range in age from 8,000-5,000 years B.P. (Milling Stone Horizon) to the mid 1900s (American Period). For a comprehensive discussion of the prehistory of the region, the reader is referred to Langenwalter and Brock (1985); Goldberg and Arnold (1988); and Greenwood and Foster (1990).

Creation of the Prado Flood Control Basin during the late 1930's and early 40's eventually led the U.S. Army Corps of Engineers to sponsor a number of cultural resource studies focusing on both the prehistory and history of the basin. Over the last three

decades, a surprisingly large body of data has been gathered, particularly with regard to pre-WWII small farms and dairies. That information is briefly summarized here.

Much of what follows is based on a single work, *The Dairy Industry of the Prado Basin*, by Mark T. Swanson and Roger G. Hatheway (1989). A second key study, heavily drawn upon by Swanson and Hatheway, is Paul Langenwalter and James Brock's *Phase II Archaeological Studies of Prado Basin and the Lower Santa Ana River* (1985). The reader is referred to these studies for other references and additional information on the farms and dairy operations within the study area.

#### A. Ranchero Range Land (Pre-1850)

Although agricultural enterprises, including raising cattle, were established in southern California during the Mission era, these activities were concentrated in the vicinities of the missions at San Gabriel and San Juan Capistrano and it is doubtful that they had any effect on the Chino/Prado Basins. However, in 1810 José Antonio Yorba, a Cataloñian volunteer who had come to California with Portolá in 1769, acquired possession of the Rancho Santiago de Santa Ana west of Santa Ana Canyon. Antonio's son, the famed Don Bernardo Yorba, received the Mexican grant to Rancho Cañon de Santa Ana in 1834. Don Bernardo immediately established a fully self-sufficient ranching operation at the western end of the canyon near modern day Yorba Linda. Although not technically Yorba land, it was probably Don Bernardo who was the first to range cattle in the Chino Basin.

The earliest ranchero to acquire formal possession of a portion of the Chino Basin was Juan Lorenzo Bruno Bandini who received El Rincon ("the Corner) grant in 1839. His new land included the entire study area south of Pine Avenue. Bandini, who had acquired the Jurupa grant to the northeast the year before, preferred El Rincon and proceeded to build a two-story adobe near the confluence of Chino and Mill Creeks, just south of the study area. The adobe, which was said to be the largest ranch house in the entire valley, was completed in 1841.

Rural life proved not to suit Bandini who moved to Los Angeles, selling El Rincon to David W. Alexander in 1843 (Johnson and Buchel 1983:68). Only a year later, the

rancho was said to range some 4,000 head of cattle. However, the land passed quickly through a number of owners until 1849 when it was finally purchased by Don Bernardo Yorba who is believed to have been ranging his cattle on El Rincon for many years (Swanson and Hatheway 1989:6). In 1850, Don Bernardo gave title to Bandini's adobe to one of his many children, a daughter who had just married Leonardo Cota. Thus, the oldest structure in the Chino Basin came to be known as the "Bandini-Cota Adobe."

In the meantime, the Rancho Santa Ana del Chino, which included the study area north of Pine Avenue, had been granted to Antonio María Lugo, owner of the Rancho San Bernardino, back in 1841. Thus, the entire study area became the property of rancheros during the 1840's and it seems safe to assume that it was ranged by thousands of cattle. Although the Bandini-Cota adobe was the only well-established residence, it was soon followed when Raymundo Yorba, a son of Don Bernardo, built a new adobe just west of the study area at the base of the Chino Hills (1850-1853; *ibid.*). Purchased by Fenton Slaughter many years later, Raymundo's home became known as the "Yorba-Slaughter" adobe.

#### B. Americanization (1850-1886)

The decade of the 1850's saw the beginning of the end of the Hispanic rancho system. The Mexican War, the Gold Rush, California Statehood, and, most important locally, the purchase of Rancho San Bernardino by the Mormons (1851) all combined to create a flood of Anglos into southern California. At first, most of the new settlers moved into Rancho San Bernardino territory, leaving the study area open for grazing by Yorba and Cota cattle.

Although cattle were still the dominant grazing animal during the 1850's, sheep were becoming more popular. Disastrous flooding occurred in 1862, seriously damaging the great cattle herds. The floods were followed by severe drought between 1862 and 1864, a condition which virtually wiped out the cattle. By the late 1860's sheep herding had become the dominant ranch activity in study area. It was also during this period that Anglo-Americans, spurred by the settlement at San Bernardino, finally began to filter into the Basin.

The first was Isham Fuqua, who, before 1860, had acquired 30 acres of land east of the Cota place, just south of the point where Mill Creek crosses the southern boundary of the study area. Whereas the Hispanic rancheros had always raised beef cattle exclusively, Fuqua is recorded as having 16 dairy cows (traditionally called "milch" cows; *ibid.* 10) which yielded 100 lb. of butter in 1859-60. Fuqua was a true diversified farmer in that he also had a horse, three mules, nine beef cattle, and five pigs. In addition, he grew wheat, corn and barley.

The first farmer within our study area appears to have been George Sparks who acquired property on the west side of Mill Creek south of Chino-Corona Road. The 1860 census shows that Sparks owned 30 milk cows but we have no other direct information regarding his operation. In all probability, it closely resembled Fuqua's.

The new Anglo-American diversified farming tradition entering the Basin was founded upon two factors. First, the Americans had a dairy tradition whereas the Hispanic rancheros did not. The old demand for olive oil was replaced by demand for butter, and, to a lesser extent, cheese. The second major contributing factor was that the farmers had control of relatively small amounts of land which created the need for a more efficient agricultural system. Significant numbers of milk cows could be raised on small parcels, fed on grain raised on small parcels, and produce butter which could augment the farm's cash income. In addition, the skim milk which remained after the butterfat and curd (for cheese) had been removed, was fed to the pigs (people didn't drink much milk in those days and they didn't drink any skim milk whatsoever).

Yet sheep grazing remained by far the most important agricultural activity in the Basin throughout the 1860's. The California 1870 census shows that Raymundo Yorba, a traditional ranchero, owned 2000 sheep producing 9000 lb. of wool. Even so, the effects of nascent farming are evident from other facts relating to Raymundo's operation. He grew 20 tons of hay, probably to sell to neighboring farmers and had, himself, acquired one milk cow and one pig.

Another early farmer in the area was Samuel Pine, who operated on 230 acres of public land a half mile north of the Yorba-Slaughter adobe. Pine may have been the first to operate anything resembling a full fledged dairy. By 1871, he owned a herd of 50 milk

cows producing a phenomenal (for the time) 3,000 lb. of butter, making Pine the largest butter producer in San Bernardino County.

During the late 1860's and early 1870's, acquisition of land in the El Rincon portion of the study area was complicated by disagreement among the heirs of Isaac Williams, who had come into possession of Rancho Santiago del Chino. One heiress, Francisca A. Carlisle, believed that she also owned El Rincon. One local resident, Jesse Mayhew, who had apparently squatted on land on the west side of Mill Creek as early as 1866, acquired 2200 acres at that location from Carlisle. By 1875, Mayhew was operating the first water-powered grist mill in the area.

Other Mormons from San Bernardino either purchased land from Carlisle or simply "squatted". However, in 1879, the El Rincon grant litigation finally terminated with the decision that the rancho belonged to the Cotas. Confirmed possession by the Cotas led to an exodus of the squatters, some of whom moved west across Chino Creek to the public land around the Yorba-Slaughter adobe, now owned by Fenton Slaughter who owned one of the area's largest sheep herds. There, they found a small community known as "Rincon" (not to be confused with the Rincon/Prado townsite to the south). Aside from the Yorba-Slaughter adobe, the town consisted of another residential adobe, a house, and Goldsmith's store.

From the village of Rincon, settlement began to expand once again, both along Pomona-Rincon Road and Pine Avenue. The former crossed public land and the latter formed the northern boundary of the contentious El Rincon Rancho. The names of some of these families became prominent in local history. They include McCarty, Mayhew, Pine, Slaughter, Goldsmith, Richenberger, Cavanaugh, Scully, Lester, and Fuqua among others.

### C. Family Farm & Early Dairy Operations (1886-1929)

In March of 1886, the California Southern Railroad, a subsidiary of the Santa Fe, completed tracks through Santa Ana Canyon (Bynon & Son 1894:24). This event spurred development of the town of Prado/Rincon along the tracks south of the study area. Back in 1882, Raymundo Yorba had sold the townsite to developer J. Newberry and associates (Greenwood *et al.* 1987:88). The presence of the railroad combined with the real estate

boom of 1887 contributed to Newberry's selling of \$80,000 worth of land in only a few days.

Almost the entire town was built in that year. It included a railroad station, post office, retail stores, and a school. Prado also had a newspaper and a hotel (the only two-story structure; Greenwood *et al.* 1990:75). However, the economic base of the new town was entirely agricultural and, with the passing of the land boom, its importance was quickly eclipsed by Corona. The Prado/Rincon region was destined to remain primarily agricultural in character.

By the 1890's only about 10 structures stood in Prado but there were another 50 standing in the Rincon Prado area. Many of these buildings were concentrated along the Pomona-Rincon Road and along Pine Avenue at the north end of El Rincon within our study area. In the southeaster sector, Cornelius McCarty established a ranch in 1880. This ranch expanded slowly during the ensuing decade but was to become one of the first Holstein dairy farms in the region by the turn-of-the-century. In this sense, the development of the McCarty Ranch was symbolic of the trend toward family farming in general, and the dairy industry in particular.

During the 1880's, the small family farmers typically had only a few milk cows and, since there were no creameries or cheese factories in the area, concentrated chiefly on production of butter for home consumption. This changed in 1889 when Daniel Durkee purchased some Cota bottomland and established a creamery, complete with steam-powered cream separator (Langenwalter and Brock 1985-8.61-62). By 1892, Durkee's "Rincon Creamery" was the largest such operation in San Bernardino County and many of the local farmers were traveling there daily to separate their milk, selling the cream to Durkee for butter manufacture and returning to their farm with the skim milk which was fed to the pigs. Durkee sold his ranch to the Anaheim Union and Santa Ana Valley Irrigation companies around 1900 but by then, the precedent had been set.

About the same time as Durkee's creamery closed, Louis Richenberger, whose ranch was at the southwestern corner of our study area, opened the area's first cheese factory. Local farmers could then sell their milk to Richenberger's "Rincon Cheese Factory" located in the village of Rincon (Swanson and Hatheway 1989:48). Specializing

in "Rincon Cheese," the factory's output is said to have averaged 200 lb. per day. In 1904, the local farmer's market for milk expanded further when E.R. Alter purchased the Yount property in Rincon and set up the "Greenfield Ranch and Rincon Cheese Factory" which also had a creamery.

Given this auspicious beginning, one would think that the future dairy industry of the Basin would have focused on cheese but this was not the case. In fact, cheese dominated for only about a decade. Several factors seem to have been behind the change in focus. One was the development of silos to store animal feed, thereby enabling smaller properties to house more cows. Another was the introduction of small, inexpensive separators which enabled farmers to process milk in their own farm creameries. Finally, government regulation of dairy industry standards had begun, thereby elevating the public's confidence. A market for whole milk was beginning to develop.

Thus, the family farm in El Rincon flourished during the first quarter of the 20th century. Milk houses and milking barns became commonplace as the focus upon dairying grew. Milk production in San Bernardino and Riverside Counties became millions of gallons per year and the effects of demand from the "Los Angeles milkshed" began to be felt. The new two-story frame house built on the McCarty Ranch in 1907 serves to illustrate the prosperity of local farms during this period.

During the 1920's, Jesse McCarty's ranch was becoming dairy-specialized. The ranch boasted 200 Holsteins and six milkers in addition to a milk house and milking barn set on concrete foundations, an indication that the facility was meeting current sanitation standards. Similarly prosperous ranches in or near the study area during this period included Flowers/Mayhew, Edward Pine, and Richenberger.

It was during the 20's that corporate dairy operations first moved into the area. The Excelsior Creamery Company, based in Santa Ana, purchased several hundred acres of bottom land at the bottom of the Prado Basin next to the Santa Ana River. There, Excelsior grew corn and alfalfa which fed its 200 cows. The presence of this corporate establishment forecast the rapid changes which were about to take place in the regional dairy industry. By 1930, the growing network of paved roads and accompanying changes in transportation, dairy and refrigeration equipment, and most important of all, the increase

in public demand for whole milk, combined to bring the Rincon into the greater Los Angeles milkshed.

#### D. Decline of the Diversified Family Farm (1929-1940)

During the 1930's several factors worked to make the small family farm less competitive. The first problem was growing government regulation, the requirements of which were becoming increasingly expensive to meet. Second, the stock market crash of 1929 led to a dramatic fall in dairy prices during the early years of the decade. Local cheese factories collapsed and some farmers went so far as to withhold milk from the market in a desperate attempt to stabilize prices. By 1935, the Milk Stabilization Act of California helped the financial situation but the cost of new licensing and inspection was becoming prohibitive for the small dairyman.

The most successful dairies during the 30's were corporate operations, the closest of which was Excelsior. Although some of the farms within the study area continued to operate (e.g., McCarty), many of the smaller farmers moved out, renting their property to others with the predictable decline in maintenance. This problem was compounded by the fact that it became well-known that the U.S. Army Corps of Engineers planned to create a flood control catchment in the Prado/Rincon basin. No habitable structures would be permitted below the elevation of the "taking line."

In 1938, a flood of the Santa Ana River caused millions of dollars in damage to residents and businesses in Orange County. This provided the government with the necessary resolve to pass the Flood Control Act of 1938 and the Army Corps began assessing the properties below the taking line. During the early 1940's, many of the dairies in the Prado Basin were dismantled as a result.

#### E. Post-World War II

While hard times had fallen upon the small farms in the Prado/Chino Basins, dairies operated by Dutch immigrants in the milkshed closer to Los Angeles continued to prosper. These dairies, which were concentrated in the Artesia-Hynes area, soon came under pressure from urban expansion of the city. Lacking pasturage, they became "dry-lot"

operations whereby alfalfa was brought in from as far away as the Imperial and San Joaquin Valleys. But during the 1950's, urban growth became too great and an attempt at creating "agricultural cities" to protect the dairies failed. In 1958, the first of the Los Angeles County dairies was moved. By 1966, there were so few dairies remaining that the County abandoned agricultural zoning in the area.

Many of the Los Angeles dairies moved to the Chino Basin which was the closest agricultural land remaining. This land, including the northern portion of our study area, became the new heart of the Los Angeles milkshed. In order to insure this use, the County of San Bernardino zoned the entire area for agricultural use, designating it the "Chino Agricultural Preserve." Much of the northern portion of our study area is included in this zone which is occupied by dairies with strong large dairy corporation connections.

In 1952, the central study area, after a century and a half of agricultural land-use, became home to an entirely new use. In that year, the California Institution for Women (CIW) first opened at 16656 Chino-Corona Road. Designed to house about 900 but currently housing 1500, CIW was California's only prison for female felons up until 1987. Originally called *Frontera*, a feminine derivative of the word "frontier," its campus-like layout was designed in keeping with the 1950's "progressive" notion of rehabilitation.

### **III. CULTURAL RESOURCES RECORDS SEARCH**

A records search of Subarea 2 (ChinoValley Dairy Preserve) was conducted in person at the Archaeological Information Center, San Bernardino County Museum by Robert S. White and Laurie S. White with the assistance of Ms. Robin Laska, Assistant Center Coordinator. The search entailed a review of all previously recorded prehistoric and historic archaeological sites within the planning area. The roles of the National Register of Historic Places, California Historic Landmarks, California Points of Historical Interest, and the Historic Properties Directory (Office of Historic Preservation) were also reviewed for the purpose of identifying any heritage properties.

#### **A. Previously Recorded Archaeological Sites**

A total of fifty-three archaeological sites (8 prehistoric, 45 historic) have been recorded within Subarea 2. With the exception of only a few historic sites, all prehistoric and historic resources are situated below the taking line or future high water line for the Prado Flood Control Basin (566' MSL elevation). Fourteen of the sites have permanent trinomials (identification number) prefixed with "SBR-" (San Bernardino County). However, the vast majority of sites are regarded as "Pending Sites". Pending sites are those sites whose existence and location have yet to be confirmed. Generally, their presence is based upon early maps, historic references and hearsay. These sites begin with the letter "P". More specifically, the "P" followed by a number designates sites that fall within a single USGS 7.5' Topographic Quadrangle.

The prehistoric sites comprise: habitation site (1), bedrock milling station (1), artifact scatters (1), lithic scatters (1), groundstone scatters (2), lithic and groundstone scatter (2). With the exception of one site (SBR-5274), all prehistoric sites are located adjacent to permanent watercourses within the southern half of the study area.

The forty-five historic resources largely consist of agricultural property dating from the mid to late 19<sup>th</sup> century. These sites comprise ranches (12), residences (10) and farms (7). Other resource categories include trash dumps, homesteads, barns, grist mill, schools, irrigation ditches, dairies, cemeteries, and service stations. Most of the historic sites are also concentrated near reliable water sources. Each of the recorded sites is listed and characterized in the following table.

**Table 1. Cultural Resources situated within Subarea 2 (Chino Valley Dairy Preserve)**

Site Number	Site Description
SBR-1543	Habitation site (The Pate Mesa Site)
SBR-1571/H	Historic trash dump. Prehistoric groundstone feature comprising a foundation remnant of the Pate Ranch
SBR-2259	Mano & bowl fragment (location now covered by park headquarters)
SBR-2260	Bedrock milling station
SBR-2845	Light lithic and groundstone scatter (Bandini Mountain site)

SBR-5241	projectile points and lithics reported by informant (site believed to be destroyed)
SBR-5243	Large light artifact scatter (Corral Site)
SBR-5244	Groundstone scatter reported by informant (site destroyed during construction of Vander Laan Dairy)
SBR-5274	Mortars, pestles, and projectile points reported by informant. Site destroyed by pumping station (Altadena Dairy site)
SBR-5573H	Britski Ranch site (1933)
SBR-7136H	Hartshorn Farm site (1890's)
SBR-7676H	Ross Ranch site (1899)
SBR-7679H	Olive grove at Le Gaye Ranch (1883)
SBR-8091H	Lester Homestead (1870's)
P871-1H	McCarty Ranch (1878)
P871-2H	Payne Hog Farm (1878)
P871-3H	Farm site (1899)
P871-4H	Kirby Farm site (1899)
P871-5H	The Songer Place (1899)
P871-6H	Ben Fugua Ranch site (1880's)
P871-8H	Remington Ranch (1900's)
P871-9H	Ranch House site (1926)
P871-10H	House site (1926)
P871-11H	Barn site (1926)
P871-12H	Chino Valley Grist Mill (1875)
P871-13H	The Brown Place (1899)
P871-14H	Arborn Ranch and Raab Farm (1857)
P871-15H	Willow Springs Ranch (1860's)
P871-16H	Mayhew House (1866)
P871-17H	Valley School (1887)
P871-18H	Eva J. Hall farm (1890's)
P871-19H	Spring Valley/Mayhew/Fugua Ditch (1875)
P871-20H	Cline Homestead (1870's)
P871-21H	Aguada Guapas House (1850's)
P871-22H	Mary Race Farm/Dairy (1900's)
P872-9H	unknown
P872-10H	Pioneer School/Cemetery (1887)
P872-11H	Cavanagh House site (1890's)
P872-12H	Richenberger Ranch (1898)
P872-22H	Cavanagh Ranch (1890's)
P872-24H	Moreno Ranch (1890's)
P872-25H	Aramousby Farm site (1900)
P872-27H	Stockwell Service Station and Store (1920's)
P872-41H	Indian/Grange Cemetery (1902)
P872-43H	House site (1920)

P872-44H	Maguire Ranch (1892)
P872-45H	Cavanagh Residence (1899)
P872-46H	Cavanagh House (1933)
P872-49H	Blinn Property
P872-52H	Farm site
P872-58H	Taylor Ditch (pre-1888)
P872-76H	Wilkinson Dairy (1900's)
P872-81H	Reichmuth Dairy (mid 1930's)

## **B. Isolated Finds**

In addition to the aforementioned recorded sites, seven other locations contained a total of 8 isolated finds. Officially, an isolate consists of less than 3 artifacts in association. They are designated with an "A" followed by a map number for the specific USGS 7.5' quadrangle and then an artifact number. All of the isolates are prehistoric in nature and comprise mano/mano fragments (4), metate/metate fragments (2), flaked tools (1), and waste flakes (1).

## **C. Heritage Properties**

### 1. National Register of Historic Places (NRHP)

According to the records search, no National Register listed properties exist within Subarea 2. However, in 1988, Infotec Research Incorporated (IRI), under contract with the U.S. Army Corps of Engineers (COE), Los Angeles District, evaluated the significance of numerous prehistoric sites in the Prado Basin area for the purpose of determining National Register of Historic Places (NRHP) eligibility (Goldberg and Arnold 1988:98f.). They recommended that 22 prehistoric sites located in the Prado Basin be considered as part of a **proposed** archaeological district (the Prado Basin Archaeological District). Eight of the twenty-two sites are located within Subarea 2. They comprise SBR-1543, 1571/H, 2259, 2260, 2845, 5241, 5243, and 5244. With the exception of SBR-2259, 2260, and 5244, all of these sites were tested by Langenwalter and Brock in 1985. According to the COE, the status of the proposed district is presently in a state of limbo as concurrence with regard to eligibility has yet to be sought (Dibble 2000:pers. comm.).

## 2. California Historical Landmarks (CHL)

No California Historical Landmarks (CHL) are located within Subarea 2.

## 3. California Points of Historical Interest (CPHI)

No California Points of Historical Interest lies within Subarea 2.

## 4. Historic Property Directory (Office of Historic Preservation)

According to the Historic Property Directory, no standing structures or buildings within Subarea 2 have been evaluated for historical significance.

### **D. Previous Research within Subarea 2**

The records search revealed that approximately 85% of Subarea 2 has been previously surveyed for cultural resources. Collectively, these surveys date from 1975 to the present. With the exception of a few hundred acres, the entire area south of Pine Avenue (encompassing approximately 2/3 of Subarea 2) has been previously investigated. Furthermore, much of the northeastern portion of the study area has been studied in conjunction with the proposed expansion of the Chino Airport.

The types of surveys conducted within the study area have included several linear surveys (roads, power lines, and pipelines), acreage surveys (e.g. Prado Regional Park and Prado Regional Golf Course) , and several large scale flood control projects. The vast majority of prehistoric and historic studies were associated with the Prado Flood Control Basin sponsored by the U.S. Army Corps of Engineers, Los Angeles District. The most comprehensive investigation conducted within the southern portion of the study area included Paul Langenwalter and James Brock's *Phase II Archaeological Studies of Prado Basin and the Lower Santa Ana River* (1985). This study included background research, survey, test excavation, and evaluations for NRHP eligibility for numerous Prado Basin sites (including several within Subarea 2 [see Section C]). Two other important studies undertaken for the COE which included excavation and evaluations of sites within the study area (P871-1H, SBR-5573H, 7136H, 7676H, and 7679H) comprise *The McCarty Ranch: History, Architecture, and Archaeology* (Foster et al. 1987) and *Archaeological and Historical Investigations of Seven Sites in the Prado Basin* (Foster et al. 1995). For

additional information on the study area, the reader is referred to the following works: *Prehistoric Sites in the Prado Basin, California: Regional Context and Significance Evaluation* (Goldberg and Arnold 1988), *Archival Research and Site Documentation, Prado Basin, California* (Hatheway 1989), *The Dairy Industry of the Prado Basin* (Swanson and Hatheway 1989), and *Context and Evaluation of Historical Sites in the Prado Basin* (Greenwood and Foster 1990).

### III. MANAGEMENT CONSIDERATIONS

It is likely that as yet unidentified prehistoric and historic resources are present within the Chino Subarea 2 planning area. Historic resources are generally situated in the southern half of the study area since that area was settled first. By in large, prehistoric archaeological resources are found in the vicinity of areas that contain any water source which existed during antiquity. The problem is that some watercourses have been filled in to accommodate modern land-use. Thus, many indications of old water sources are no longer visible on the surface.

Doubtless there are undiscovered prehistoric sites within Subarea 2 which could shed a good deal of light on prehistoric life in the region. In the case of most undeveloped properties, it is not possible to determine whether they include prehistoric or historic archaeological resources without conducting a survey in the field. However, there are some cases where the usefulness of such a survey is obviated by circumstances. Developed areas or properties which have been used as borrow areas or have been filled might represent good examples. The only sensible way to determine which properties should be surveyed and which should not is to consider each property on a case-by-case basis.

Furthermore, such consideration seems to be mandated by CEQA which requires that prehistoric and historic resources subject to adverse effects as a result of a development must be identified and assessed. Thus, the lead agency has an obligation to determine whether such archaeological sites are present on a property. In other words, the fact that a property is not likely to contain cultural resources does not excuse the lead agency from determining whether or not such resources exist. Theoretically, discovery of

such resources after they have been adversely affected could lead to liability on the part of the overseeing agency.

On the other hand, it makes no sense to conduct a cultural resources survey of a paved area or a borrow pit since no resources could be seen at the former and none could survive at the latter. Therefore, in order to insure that no important resources are overlooked without subjecting the public to needless studies, we suggest the following: as a matter of policy, the lead agency should require cultural resources surveys of all properties for which development applications are submitted. However, if the lead agency believes that particular circumstances peculiar to the property obviate the need for such a survey, the lead agency should waive the requirement.

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**CHINO SUBAREA 2  
PALEONTOLOGICAL RESOURCES**

**1.0 INTRODUCTION**

This brief report summarizes the results of a paleontologic field survey of Chino Subarea 2, located adjacent to the on the northeast side of the Chino Hills at the Prado Flood Control Basin, San Bernadino County, California. A records search on April 27 preceded this field assessment. Prior geologic mapping and the current field assessment indicate that the geologic units exposed on the project site are late Pleistocene and Holocene alluviums. The only unit of paleontologic concern is the older (Pleistocene) alluvium, which comprises about one-quarter of the site and is mostly confined to the southern half of it. The older alluvium is best exposed along the banks of Mill Creek and on the northeast side of State Route 71 (Corona/Chino Hills Expressway). Elsewhere, a veneer of soil and vegetation obscures the alluvium. Late Pleistocene alluviums elsewhere in San Bernadino and adjacent have yielded significant fossils. Thus, mitigation monitoring for paleontologic resources is recommended for the Chino Subarea 2 project.

## **2.0 ENVIRONMENTAL SETTING**

Chino Subarea 2 is located in the southeastern part of the City of Chino Hills, at the Prado Flood Control Basin. It is in S½ Sections 21, 29, and 30 and all of Sections 28, 31, 32, and 33, T2S, R7W, and N½ Sections 7, 8, and 9 and all of Sections 4, 5, and 6, and T3S, R7W, San Bernadino Base and Meridian (USGS 7.5 minute series topographic map).

### **2.1 Geology**

This area is within the Peninsula Ranges geomorphic province. The geology of Chino Subarea 2 is detailed on a map (1:24,000 scale) produced by Psomas (3/16/00) and in a report by Wilson Geosciences (4/18/00).

Most of Chino Subarea 2 is underlain by 300-800 feet of alluvial sands, but soil and vegetation currently obscure nearly all of its surface expression. Detailed surface mapping by Cox and Morton (1978) identified four units on the site (see Psomas 3/16/00 map), differentiating them by grain size and age:

- Medium-Grained Holocene Alluvium
- Fine-Grained Holocene Alluvium
- Medium-Grained Pleistocene Alluvium
- Fine-Grained Pleistocene Alluvium

Only the two late Pleistocene (>12,000 years old) units are old enough to have paleontologic potential. The late Miocene bedrock of the Puente Formation, which is exposed in the southwest-adjacent Eastern Puente Hills, is deeply buried by alluvium in Chino Subarea 2.

### **2.2 Paleontologic Literature and Record Searches**

On April 27, 2000, Eric Scott, Curator of Paleontology at the San Bernadino County Museum, conducted a records search in the Regional Paleontologic Locality Inventory (RPLI). Although the museum has no record of paleontological resources recovered from Chino Subarea 2, Scott notes that "late Pleistocene alluvium has demonstrated a high potential to yield significant nonrenewable paleontologic resources subject to adverse impact during development related excavation throughout the Inland Empire." Thus, Scott assigns a high paleontologic sensitivity to this site.

Pleistocene land mammals have been recovered from stream deposits in Chino Hills, Jurupa, Rancho Cucamonga, Fontana, Riverside, and other areas within the northern margin of the Peninsular Range (Reynolds and Reynolds, 1991). In western San Bernadino County, including Chino off Highway 71, Pleistocene vertebrates have been uncovered at relatively shallow depths of 5-15 feet below the surface. This Pleistocene fauna includes mammoth (*Mammuthus* sp.), grazing ground sloth

(*Paramylodon harlani*), camel (*Camelops* sp.), bison (*Bison* cf. *B. antiquus*), horse (*Equus* sp.), and deer (*Odocoileus* sp.). In the Diamond and Domenigoni Valleys, four miles southwest of Hemet in Riverside County, near-surface late Pleistocene alluvium recently yielded a diverse assemblage of vertebrate fossils (Spinger and Scott, 1994; Pajak et al., 1996), Scott, 1997; Springer et al., 1998, 1999). It includes two kinds of grazing ground sloth (*Paramylodon harlani*), flat-footed ground sloth (*Megalonyx jeffersoni*), dire wolf (*Canis dirus*), American lion (*Panthera atrox*), sabre-toothed cat (*Smilodon fatalis*), American mastodon (*Mammuth americanum*), Columbian mammoth (*Mammuthus columbi*), two species of horse (*Equus* "occidentalis" and *E. conversidens*), peccary (*Platygonus compressus*), large camel (*Camelops hesternus*), and two species of bison (*Bison antiquus* and *B. latifrons*?).

### **2.3 Paleontologic Field Survey**

MBA's Project Scientist and Certified Paleontologist, Dr. Kenneth L. Finger, conducted a paleontologic field survey on April 28 and May 2, 2000. Most of the Chino Subarea 2 site consists of farms (primarily dairy cattle), Prado Regional Park, and the relatively undeveloped portions of the Prado Flood Control Basin. In the flatlands of the northern sector, farming is extensive and alluvial deposits are mostly young and rarely exposed. Proceeding southward, the terrain has more relief, but soil and abundant vegetation usually obscure the alluvial substratum. Vertical sections are short and few, and confined to excavated areas (e.g., road cuts, borrow pits). The most extensive outcrops of Pleistocene alluvium flank Mill Creek, but high streamflow and steep cutbanks rendered most of them inaccessible for close examination.

No fossils were observed during this paleontologic field survey.

### **3.0 CONCLUSIONS**

Late Pleistocene vertebrates are known from numerous localities throughout southern California (e.g., Jefferson, 1991). Although the world's richest finds have been in the asphalt deposits of Rancho La Brea (a National Historic Site), most vertebrate-bearing sites consist of alluvial sands. Hence, both late Pleistocene alluvial units underlying Chino Subarea 2 have high paleontologic sensitivity ratings.

Vegetation, soil, and younger alluvium obscure most of this older alluvium that accounts for nearly one-quarter of the surficial geology of the project site. The paleontologic field study did not observe and fossils on Chino Subarea 2.

Excavations anywhere on the site could encounter the older alluvial units that are buried just a few feet below the surface. Thus, Chino Subarea 2 may yield significant vertebrate fossils during earth disturbing construction activities. In his records search report, Scott liberally referred to the site as

having a high paleontologic potential, which implies a high likelihood of encountering fossils. However, most alluvial sediments are devoid of fossils, and without documented finds on or immediately adjacent to the site, the real potential of the late Pleistocene units of Chino Subarea 2 is currently unknown.

#### **4.0 OPPORTUNITIES AND CONSTRAINTS**

Paleontological resources do not pose any constraints to development however, mitigation is recommended during all earth-disturbing activities in an effort to avoid any adulteration to possible unknown or unidentified paleontological resources.

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