APPENDIX J – CUYAMACA RANCHO STATE PARK
EQUESTRIAN FACILITIES PROJECT
ARCHAEOLOGICAL SUMMARY REPORT
(Other Photos in Report by A. Bevil, B. Bruce, K. Knabb, M. Mealey, D. Perez, E. Smith, M. Sweet,
and other CDPR staff and volunteers)
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INTRODUCTION

Over the past seven years, the California Department of Parks and Recreation (CDPR) has investigated numerous alternative locations for equestrian facilities within the Cuyamaca Rancho State Park area. The goal of the project was to find a location with the potential to accommodate equestrian family campground facilities including access for large trailer rigs, available utility hookups, and room for a number of campsites, with access to the trails throughout the park. CDPR, in consultation with various stakeholders, originally identified over 20 locations for consideration. Of these, three (Descanso Area Development, Green Valley Campground Loop A, and Paso Picacho Day-Use Area) are identified in the EIR as project locations. These locations were examined by archaeological survey during 2006, 2007, 2008, and 2009. The results of the archaeological work are presented herein. The Mack Ranch Property was also examined as an alternative, and is listed below, but is not considered a feasible alternative in the EIR.

The following report represents a compilation and summary of seven previous reports:

- Cuyamaca Rancho State Park Green Valley Campground Loop A Archaeological Investigations Report (Mealey 2009)
- Confidential Cuyamaca Rancho State Park Merigan Ranch Archaeological testing program for the Equestrian Facilities Project (Mealey et al. 2008)
- Archaeological Monitoring: Merigan Ranch Reptile Pitfall Trap Installation (Buxton 2008)
- Archaeological Monitoring: Merigan Ranch Equestrian Facilities (Perez 2007)
- Archaeological Monitoring: Paso Picacho Parking Study (Perez 2007)
- Merigan Ranch Additional Auger Testing (Mandich 2007)

ENVIRONMENTAL SETTING

Cuyamaca Rancho State Park is located in eastern San Diego County (Figure 1). Most of the park is shown on the Cuyamaca Peak USGS 7.5-minute quadrangle, but the portion that this project falls within is on the USGS 7.5-minute Descanso quadrangle. The portion of the park in which this project is proposed is surrounded by privately owned lands, Descanso Elementary School, and the community of Descanso. Access to this area is via Viejas Boulevard from Highway 79, which can be accessed via Interstate 8 in the south or Highway 78 in the north.

The area covered by this project is within the Peninsular Ranges Geomorphic Province. The peninsular ranges were formed in the Mesozoic Era due to a major collision between two large tectonic plates (Remeika and Lindsay 1992:24). The elevations in the survey areas range from approximately 3,420 to 3,530 feet above mean sea level. The Sweetwater River is approximately 100 meters to the southwest of the project area.

The area of the park examined during the project falls within the Transition zone (3,000 to 5,000 feet). Meteorological data from Cuyamaca indicates this region typically experiences temperatures in the 90s in the summer and below 0° in the winter. The warmest...
FIGURE 1
Location Map
month is July, and the coldest is January (California Department of Parks and Recreation [CDPR] 1986). At Cuyamaca Lake the annual precipitation is 36 inches, which is comprised mostly of snowfall, although summer thunderstorms also sometimes bring measurable rainfall. Annual rainfall for the past 8 seasons at Descanso averaged 17.5 inches (http://creekbed.org/ weather/totals.htm). A majority of the annual precipitation falls between October and April.

The predominant vegetation in the project area is non-native grass. The project area is a historic agricultural field that was also used for ranching activities. On the perimeter of this field there is mixed mountain chaparral with some oak woodlands. Common plants observed around the edges of the field included manzanita (*Arctostaphylos* spp.), elderberry (*Sambucus* sp.), California buckwheat (*Eriogonum fasciculatum* var. *foliolosum*), mountain mahogany (*Cercocarpus betuloides*), holy-leafed cherry (*Prunus ilicifolia*), scrub oak and oak (*Quercus* spp.). Some of the nearby drainages supported riparian vegetation including willows (*Salix* spp.) and cottonwoods (*Populus* spp.).

A few animals were observed during the project including birds (crows, hawks, and small songbirds), snakes, lizards, rabbits, and insects including spiders, ticks, ants, beetles, butterflies, flies, and bees. Other mammals such as deer, raccoons, bobcats, foxes, mountain lions, and coyotes, and a wide variety of birds, insects, and reptiles also inhabit the park.

**PROJECT LOCATIONS**

Figure 2 shows the locations of the three project areas (Paso Picacho Day-Use Area, Green Valley Campground Loop A, and Descanso Area Development), as well as the Mack Ranch Property.

**Paso Picacho Day-Use Area**

This area is located across Highway 79 from the existing campground at Paso Picacho. It is on the east side of the highway, on the west side of Stonewall Peak, and approximately 0.9 air miles from Los Caballos. This area is proposed as an equestrian day-use parking and trail access location. There are no existing facilities at this location aside from trails. This area was burned in the Cedar Fire.

**Green Valley Campground Loop A**

The area proposed for a family camping location is located within Loop A of the existing campground. The location is on the east/south side of the Sweetwater River, east of the campground entrance road and west of Highway 79. It is approximately 4.8 air miles from Los Caballos. This area was not burned in the Cedar Fire.
FIGURE 2
Project Area Locations
Descanso Area Development
This project site is also known as Merigan Ranch. It is located within the community of Descanso, north of Viejas Boulevard, and west of Highway 79. It is in the unsectioned Cuyamaca Land Grant in Township 15 south, Range 4 east of the San Bernardino meridian. An elementary school is located to the southwest. Water and power are currently present at this location. Improvements include planting of trees, grading of roads, and placement of campsites, corrals, and restroom facilities. This area was not burned in the Cedar Fire.

Mack Ranch Property
This parcel is located along Highway 79 within the community of Descanso. It was only acquired by State Parks in mid 2005, but was immediately added to the list of possible alternatives. The property is about 5.6 air miles from Los Caballos. Nine historic and recent buildings and structures are currently on the property. Access from Highway 79 is problematic due to issues with line-of-sight and large vehicles and trailers turning on and off Highway 79. This area was not burned in the Cedar Fire.
CULTURAL SETTING

Over the years there have been many cultural histories written about Southern California, San Diego, and the Cuyamaca Mountains. This section consists of simplified summaries that touch on the major points, but should not be considered exhaustive overviews. Please refer to the park’s general plan (CDPR 1986) for more detailed cultural histories for Cuyamaca Rancho State Park.

Precontact Era

According to the indigenous people of the San Diego region, they are descendants of the first people, and have lived in their ancestral lands since the time of creation (Cline 1979:103; Gifford and Block 1990:102-112). Tom Lucas, a Kwaaymii, said it this way: “We have all the belief in the world that creation made our people right here, not in Europe or anywhere else. Right here, where they belong…” (Cline 1979:103). Scientific studies have found evidence of people in the San Diego region over 9,000 years ago. Malcolm Rogers called the earliest cultural complex of southern California sites the “San Dieguito Complex” or “San Dieguito Tradition” (Rogers 1966). San Dieguito dates to the early Holocene and, although the San Dieguito people were previously thought to have been almost exclusively “big game hunters” (Pourade 1966), more recent evidence suggests that they also gathered plant resources and, along the coast, utilized marine resources (Galgos 1992).

Around 5,000 years ago rainfall in the deserts increased (making such areas more inhabitable), population increased, and specialized and selective utilization of particular environments became more common (Wallace 1978:35). In the southern California deserts, the rise and fall of Lake Cahuilla helped to dictate settlement patterns and availability of resources. When the lake dried up and resources became scarce, people may have had to travel into the foothills and mountains to obtain food, medicinal plants, and other materials.

Ethnographic Era

The project area falls within the ethnographic territories of the Kumeyaay, Kwaaymii, and Kamia (which some also call an eastern division of the Kumeyaay). The Kumeyaay were historically called the Diegueño after the Mission San Diego de Alcalá, and were split into the Ipai in the north and the Tipai in the south. Kumeyaay territory included a vastly varied terrain, ranging from coastal beaches and lagoons, across the mountains, and down into the arid desert. The Kumeyaay and Kwaaymii were mainly hunters and gatherers, making seasonal rounds to take advantage of various resources. However, they had also developed horticultural/agricultural techniques including burning, seed broadcasting, transplanting, and planting (Bean and Lawton 1973; Cline 1979; Gee 1972; Luomala 1978; Shipek 1982). Kumeyaay and Kwaaymii women used pottery bowls, pots, and jars; baskets; net bags; digging and gathering sticks; manos and metates; mortars and pestles; and various wood, fiber, stone, shell, and bone utensils for collecting and processing vegetal foods and materials (Cline 1979; Kroeber 1976:722-723; Luomala 1978). Terrestrial hunting was typically done by the men and boys using bow and arrow, throwing stick, or net. Brush burning to scare up and drive game was also used (Bean and Lawton 1973; Gee 1972; Gifford 1931:26; Luomala 1978:601). Bows were made of mesquite, screwbean, huckleberry, scrub oak, or willow with a sinew string, and arrows were made of arrowweed and/or cane with a wooden or stone point that was attached by sinew (Cline 1979; Gifford 1931:28).

The Kumeyaay were organized into autonomous bands with a hereditary (patrilineal) clan chief as well as at least one assistant chief (Luomala 1978:597). Each band had a central primary village and a number of outlier homesteads located at small water sources, springs, or at the mouths of secondary creeks (Shipek 1982). Campsites were selected for accessibility to water, drainage, availability of boulder outcrops or other natural protection from weather and ambush, and the abundance of flora and fauna (Luomala 1978:597). Kumeyaay structures varied in shape and construction technique by region and use. The more permanent dwellings were domed or gabled, with a slightly sunken floor, and were constructed of a tied-pole framework overlain with brush thatch and sometimes a mud and grass covering (Kroeber 1976:721; Luomala 1978:597).

The Ipais and Western Kumeyaay practiced shamanism, utilizing the toloache (Datura) initiation customs that had been learned from the Luiseños and Gabriélinos to the north; while the Eastern Kumeyaay/Kamia practiced
the system of song-myth cycles that came from the Colorado River region (Kroeber 1971). Items such as stone, cane, or ceramic pipes; pottery, tortoise shell, gourd, and deer-hoof rattles; and crescentic stones were used in ceremonial rituals (Gifford 1931; Kroeber 1976; Luomala 1978).

The Kumeyaay and Kwaaymii cremated their dead. The body and its possessions were burned on a pyre over a pit (Luomala 1978:603). After the cremation of the body, the ash, bones, and unburned fragments of possessions were gathered up and placed in a pottery jar (olla) that was then capped and buried or hidden among remote rocks (Cline 1979; Kroeber 1976:716; Luomala 1978:603).

**Historic Era**

The earliest Europeans to come into the Cuyamaca region came in 1772 when Pedro Fages traveled through the Cuyamaca region in pursuit of deserters from San Diego. Ten years later, Fages again entered the region when his expedition passed through on their way to Mission San Gabriel. Augustin Olvera obtained the Cuyamaca Rancho land grant from Governor Pío Pico in 1845, although the grant was not confirmed until 1858. It was sold to a group of men in 1869 and then divided into 14 lots.

In 1857 James Lassator bought 160 acres in Green Valley. He and his step son, John Mulkins, built a stone house there and Mulkins continued to live there after Lassator’s death in the early 1860s. Bill Lockhart came to the area sometime around 1872 (Foster 1981b:68) and lived at the ranch after Mulkins.

In 1870 gold was discovered near Julian, and soon there were mining claims scattered all over including William Skidmore’s “Stonewall Jackson” and the Hensley brothers’ two claims in the same deposit on the south side of Lake Cuyamaca. These were soon incorporated together into the Hensley Mining District or Stonewall Mining District. The new owners of Cuyamaca rancho claimed that the land grant’s boundaries included the mines around Julian. They filed a lawsuit, claiming they were owed royalties on each ton of gold that was mined. The miners finally won the suit in 1874, and the northern boundary of the rancho was set about 4.5 miles south of Julian.

The Stonewall mine (as it came to be known) changed ownership several times until it was purchased in 1886 by Robert Waterman who also bought 26,000 acres of Cuyamaca Rancho. When Robert Waterman was elected governor in 1887, Waterman’s son operated the mine. A settlement called “Cuyamaca City” grew up around the mine and included many houses, a post office, a school, and a hotel.

The accessible ore ran out at the mine in 1893, and the Sather Banking Company of San Francisco took over the property to process the mill tailings.

Colonel A. G. Gassen bought the Cuyamaca Ranch and mine site in 1917. He sold it 6 years later to Ralph M. Dyar, who constructed a large stone house on the property near Lassator’s old ranch. Dyar used many of the stones from Lassator’s house, along with timbers from the mine buildings in constructing his house.

In 1933, Dyar sold 20,735 acres of the rancho to the State of California for creation of Cuyamaca Rancho State Park. During the 1930s the Civilian Conservation Corps (CCC) had a camp at Green Valley and they built campgrounds, trails, residences, fire lookout stations, erosion control measures, and other projects throughout the park.

The residence on the Merigan Ranch portion of Cuyamaca Rancho State Park was originally built by Allen T. Hawley sometime around 1930. Hawley sold the property as part of a 147.79-acre ranch to Lawrence Oliver in 1941. Oliver used the ranch for raising cattle. He sold the property to Haig C. Merigan in 1958. Merigan sold a 41.56-acre portion of the ranch, containing the existing residence to California State Parks in 1977.

The Mack Property was acquired by State Parks in 2005. Some of the structures date to the early 1930s. Please see the historical reports for this project (Bevil 2010, 2008a, and 2008b) for more details on the history of the park and the region.
**PREVIOUS WORK**

As of June 2006, approximately 580 archaeological sites were known to have been recorded within Cuyamaca Rancho State Park. Various persons, companies, and organizations have completed both survey and excavation work. A listing of these studies is presented in Table 1. For more details see the references section of this report and also see Foster 1981a, Hines 1994, Mealey 2004, and Parkman et al. 1981.

**TABLE 1**

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<td>Shackley 1980</td>
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Additional small-scale survey work, archaeological testing, and project monitoring, conducted by park staff, contractors, and volunteers, have also occurred within the park over its more than seventy year history. Many of these projects were unavailable for review or were never written up and therefore, are not included in the above table.

**Paso Picacho Day-Use Area**

Portions of this area were previously surveyed in 2004 by H. Thomson (Thomson 2005b). No sites or isolates were found within the project area at that time. The closest archaeological sites to this area include a bedrock grinding site (CA-SDI-9075) to the southwest, two unrecorded bedrock grinding sites (“Paso Milling” and an unrecorded milling feature) to the north & northwest, a large area of pottery scatters (CA-SDI-17760) to the east, an insulator stash site (CA-SDI-17351) to the north, and a flake isolate (P-37-026414) also to the north.
Green Valley Campground Loop A

The Loop A area of the Green Valley Campground was previously examined by Colorado Desert District Archaeologist Sue Wade in 2002, at which time she recorded CA-SDI-16294 (Wade 2002). The site originally consisted of two boulders at Campsite #6 and one at Campsite #16 that contained grinding basins and slicks. No artifacts were identified during the 2002 field examination.

Students from Palomar College, under the direction of Dr. Philip de Barros, examined the area and produced a more detailed site record update in 2004 (Hoogervorst et al. 2006). No new features or artifacts were identified at that time.

An additional bedrock grinding feature was identified by H. Thomson in January 2005 to the east of Loop A (Thomson 2005b). It was given the temporary field designation of “GVCG2” and included as a locus of CA-SDI-16294.

Additional sites in the area include CA-SDI-925, CA-SDI-1072, CA-SDI-8834, CA-SDI-11059, CA-SDI-12591, CA-SDI-14326, and CA-SDI-17790 through CA-SDI-17794. All of these sites are located across the Sweetwater River in the main area of the Green Valley Falls Campground. One, some, or all of these sites may represent the ethnographic village of Pam-Mum-Am-Wah. These sites include habitation debris, bedrock grinding features, potsherds, lithic debitage, and groundstone artifacts. The most recent survey of the area was completed by students from Palomar College in 2004 (de Barros & Paulson 2006).

Descanso Area Development

This area was first examined for cultural resources in 1974 by Westec Services (Carrico 1974). Two site loci were recorded within the current project area during that survey and given the field numbers of MR-3A and MR-3B. At the time it was postulated that MR-3 represented a late period village site or possibly a satellite village to a larger settlement to the southeast (SDM-W-200/CA-SDI-5621, 5622, 5627, 5628, 5629, 5630, 5631, and 8301) and that this large village complex may represent the ethnographic Kumeyaay village of Hum-poo Arrup-ma (“whip of the wind”). Testing was recommended to determine the full extent and significance of the site.

Additional work was done at the site in 1976 by Bradley Underwood, who assigned the field numbers of MRP-10 and MRP-11 to two areas of archaeological material. Based on information provided by Parkman (Parkman et al. 1982:Appendix 6), MRP-11 generally corresponds to the area that Carrico (1974) called MR-3, while MRP-10 represents the area around the Mergan Ranch house (see below).

In 1981, CDPR archaeologists visited the site during resource inventory surveys of the park (Foster 1981b). During that work, six loci were identified: Loci A, B, C, and D in the area of MR-3/MRP-11 and Loci E and F in the area of MRP-10. The site was given the field designation of Site 22. The site record was submitted to the Information Center and assigned a state trinomial of CA-SDI-8855 (Foster 1981c). E. Breck Parkman also looked at this site as part of the resources inventory work (Parkman et al. 1982:Appendix 6), giving it the designations of Site K (MR-3/MRP-11) and Site L (MRP-10).

In the 1990s, CDPR archaeologists Mike Sampson (1992) and Rae Schwaderer (1999) did some investigations and monitoring work at Locus E of CA-SDI-8855. Neither reported any new artifacts or features, although Sampson (1992) reported placement of some crushed gravel, some pieces of which resembled quartzite and rhyolite debitage. Schwaderer’s (1999) monitoring of a leach field along the trail to the west of the ranch house found no artifacts or cultural materials in the disturbed area.

In 1999, CDPR historian Alexander Bevil recorded the historic ranch house (see photo to the right) that is situated within Locus E of the site.
Also known as the Allen T. Hawley Rental Cabin, it was built around 1930 by Allen T. Hawley, a previous owner of the ranch. Architecturally, its fieldstone and rubble-constructed walls and rustic vernacular Modern ranch style, are typical of traditional local building methods and materials. It has a “summer kitchen” consisting of an oven/stove in the back yard. Aside from the replacement of a number of the original wood-frame windows with aluminum-frame louvered windows along the rear elevation, the building has retained much of its original exterior historic fabric. CDPR has also stabilized and reinforced the southwest and southeast exterior wall footings and concrete porch and sidewalk that were slipping off the foundations and threatening structural stability (Bevil 1999).

Based on comments from the Merigan’s, their neighbors, and other long-time residents of the Descanso area, there were many artifacts that were turned up during plowing and use of the agricultural field. Some reports indicated that metates were removed from the center of the field to the edges (either tossed over or along the fenceline). It is unknown to what extent the previous agricultural use of this area damaged or impacted the cultural deposits.

Additional sites in the area are mostly outside the park boundaries. Those outside the park include SDMM-W-200/CA-SDI-5621, 5622, 5627, 5628, 5629, 5630, 5631 and 8301 (see above); CA-SDI-5626; CA-SDI-5741; CA-SDI-8297, CA-SDI-8298, and CA-SDI-8299. CA-SDI-5623 (SDMM-W-202) is located partially within the park boundaries to the east. There are two sites also to the west that do not have permanent trinomials: MR-8 and MRP-17. MR-8 was recorded by Carrico in 1975 as a bedrock grinding site with some associated lithic artifacts and potsherds. MRP-17 is reported to be a cache site with “stone rimmed enclosures” (Parkman et al. 1982:Appendix 6).

**Mack Ranch**

No formal record search was conducted for this portion of the park as part of this project, due to this location being excluded from the original project examination because of what were though to be unavoidable problems with access and other issues. The area was briefly examined by CDPR District Archaeologist S. Wade on August 3, 2002. Information obtained at that time indicated that there were archaeological sites present within the property, including a possible cave site (based on information from Mrs. Mack). Additionally, the historic complex of buildings and structures were investigated and recorded by State Parks Historian, Alexander Bevil in November 2005. The property was obtained by CDPR in mid 2005.

**Recreational Collecting**

“Recreational” artifact collecting, which by today’s standards is considered illegal and harmful to park resources, has been going on at Cuyamaca Rancho State Park since the land became a State Park and for many decades before. Local Kwaaymii Indian, Carmen Lucas tells a story about how her great-grandmother (who died in 1916) rescued her favorite metate by carrying it all the way from East Mesa to her home southeast of the park, because she did not want “the settlers to take [it]” (Lucas 1995). Granville Martin, who grew up in the Cuyamaca Mountains in the late 1800s and early 1900s, mentions how someone “pried a piece” off of a rock with mortars in it from a site on East Mesa (Foster 1981b:76). Harvey Moore, the first custodian of Cuyamaca Rancho State Park, also tells of various people collecting arrowheads and ollas (California Department of Parks and Recreation 1974:76, 86, etc.). Another example of artifact collecting in the Cuyamaca Mountains was in the 1940s and 1950s when the Luckman’s and Anderson’s of adjacent Lucky S Ranch did extensive collecting throughout the mountains (Lindsay 2002).

Artifacts have also been collected at many sites throughout the park by the Boy Scouts staying at Camp Hual-Cu-Cuish (located on archaeological site CA-SDI-945), the school children staying at Camp Cuyamaca (near several large ethnographic village sites and within a historic site), and probably the Girl Scouts at Camp Tapawingo (at Stonewall Mine/Cuyamaca City site), as well as “professional” and amateur artifact hunters (see comments regarding such collections in Clarke 1948; Clarke 1951; Sampson 1986a; Barfield 1996). Inventories of some of these “unauthorized” collections exist in park files (e.g., Sampson 1987), but they typically do not have much, if any provenience information.
Field notes and observations indicate that as recently as the mid 1980s school children were still visiting sites and picking up artifacts (for example, Sampson 1986b) and evidence points to recent illegal collecting occurring after the 2003 Cedar Fire (Mealey 2004; Mealey et al. 2005).

During the present project, illegal excavation, artifact piling, and a homemade “screen” were found within the Merigan Ranch area of the park (see photo). Photographs were taken of the damage and the screen was collected as evidence.
METHODS

Native American Consultation

In 2004 the Native American Heritage Commission was contacted to request a list of local Native American individuals and organizations that may have information or concerns relating to Equestrian Facilities projects within Cuyamaca Rancho State Park. Letters were sent out to all 22 persons on the list inviting them to a Native American consultation meeting in December 2004. Since then, nine additional consultation meetings have been held regarding Equestrian Facilities projects at CRSP. Representatives from six federally recognized tribes and bands, other local bands, and most-likely descendents (MLDs) have attended one or more of the ten consultation meetings that have been offered. The information obtained during these consultation meetings has been used to evaluate various proposed equestrian facility locations and determine areas of significant cultural impact. The Paso Picacho Day-Use Area was recommended by one of the Native Americans involved in the consultation process. Tribal representatives visited Paso Picacho Day-Use Area on June 12, 2006; the Descanso Area Development site on June 12, 2006 and December 17, 2007; and Green Valley on February 7, 2007. A separate field site visit for the Loop A area of Green Valley was scheduled for November 10, 2009, but no Tribal representatives attended.

Comments were generally favorable towards the locations that were visited. It was requested that construction and campground facilities be kept out of the adjacent archaeological site at Merigan.

Archaeological Survey

Archaeological survey work was undertaken at each proposed alternative location to determine presence or absence of archaeological resources and determine surface extent of known or newly identified sites or features. Survey work was carried out by archaeologists from both CDPR’s Southern Service Center (SSC) and the Colorado Desert District (CDD). Project personnel included: Sue Wade—Associate State Archaeologist (CDD), Marla Mealey—Associate State Archaeologist (SSC), Heather Thomson—Park Aide/Archaeologist (CDD), Patricia McFarland—Assistant State Archaeologist (SSC), Don Perez—Archaeological Specialist (SSC), Bonnie Bruce—Contract Archaeologist (CalState San Marcos), and Mel Sweet—Archaeological Volunteer (CDD). Gabe Kitchen—Native American monitor, assisted with some of the survey work at Mack Ranch. Work was carried out over the course of several months and years including July 15, 2006 (Paso Picacho Day-Use Area); August 14, 2006 (Descanso Area Development); January 7 and 10, 2008 (Mack Ranch); and June 11, October 22, and November 10, 2009 (Green Valley Campground Loop A).

Crewmembers walked 10- to 20-meter transects or zig-zag patterns through the areas identified for this project, checking bare ground and rock outcrops for artifacts and features. Visibility was mixed and varied from location to location and season to season. Most areas had moderate (30-60%) to good (60-100%) visibility. Lowest visibility (0-30%) was in the grassy portions of Merigan and Mack Ranches.

When a feature or artifact was found, the rest of the crew was alerted and an intensive examination of the area was completed. One or more digital photographs were taken of each feature and overall site and the view recorded on a Photo Log (DPR 523 I). Some features and diagnostic artifacts were also sketched in the field. Site Locations were recorded in the field with a Trimble GeoExplorer III or Trimble GeoXH global positioning system (GPS) rover unit, either by taking a datum point at a feature, walking a linear site such as a fenceline or trail, or by walking the perimeter of the site area. All features and some unique and/or diagnostic artifacts were also recorded with a GPS point, line, or area. Artifacts were not collected. Each GPS-recorded site, feature, or artifact was assigned a record number for data tracking and this number was written on a data-recording sheet along with a site number, feature designation, and other pertinent information.

Standard Southern Service Center procedures for GPS recordation include recordation of data using a minimum of four satellites, a signal-to-noise (SNR) ratio of 6 or higher, an elevation mask of 14 degrees, and a position dilution of precision (PDOP) of 6 or less. All GPS data were differentially corrected using online base station data, and recorded using a Universal Transverse Mercator (UTM) North American Datum 1983 (NAD83).
projection. The cultural geodatabase that is currently used by State Parks is included as Attachment A. The data recorded in the field with the GPS units were downloaded to a personal computer with Pathfinder Office software installed. Differential corrections were done using the UTM/North American datum 1983 projection (UTM/NAD 83) and the closest community base station that had adequate and available data. The resulting data were then exported as shapefiles into ArcGIS/ArcMap Version 9.2 for mapping and Geographic Information System (GIS) use.

Archaeological Testing


Work started with the laying out of auger hole locations at the Descanso Area Development site. The entire project area was gridded into 25-meter blocks and pin flags were placed to mark auger hole locations within those areas considered to either have a higher potential for archaeological deposits, or where proposed project impacts might be expected. Auger hole locations were spaced farther apart (50 to 100 meters) in areas considered lower potential for cultural deposits, and closer together (25 meters or less) in areas considered to have higher potential. Portions of the project area that were slated to be tested during the geotechnical explorations were not initially included in the archaeological testing program, but due to delays in carrying out the geotechnical work, those areas were subsequently included in the archaeological testing (see below).

Auger Testing

Forty-nine locations (auger holes 1-49N) were initially identified for auger testing in the northern portion of the field at the Descanso Area Development site. Auger hole numbering started with the site datum. Lines were run to the north, east, and west of this datum and auger holes were placed every 25 or 50 meters depending on the potential for project impacts, site deposit locations, and geotechnical testing areas. A secondary datum was set up in the south and 9 auger holes (numbered 1-9S) were initially identified at that location.

After the first series of auger tests were excavated, additional auger hole locations were identified to fill in gaps or trace out site deposit boundaries. An additional 24 auger holes were placed in the north (50-73N) and an additional 5 auger holes were placed in the south (10-14S). This brought the project total to 87 auger hole locations.

Auger holes were dug by hand with a 10-centimeter diameter auger, to a maximum depth of 1 meter, although some had to be abandoned at a shallower depth due to rocks or other obstructions. Auger holes that did not make it to at least 30 cm below surface were re-excavated in a slightly offset location. All dirt from the auger holes was screened in the field through 1/8-inch hardware cloth and any artifacts or non-cultural constituents, except for modern trash, were collected, bagged by auger hole number, and returned to the Southern Service Center Lab for cleaning and cataloging.

All auger hole locations were recorded with GPS and standard Southern Service Center GPS procedures (see above).

Test Units

Once the initial auger testing was completed at the Descanso Area Development site (auger holes 1-49N & 1-9S), four 1x.5m test units (Units A-D) were placed to further define the site boundary and content. Test units were dug in arbitrary 10 cm levels to sterile soil or 1 meter in depth. Photographs were taken of each completed level. Auger holes were excavated to 1 meter below final level in the floor of Units A, B, & D to ensure that no
buried deposits existed. 10x10cm column samples were taken from Units A & D and used in determining Munsell soil color codes for each level.

Excavated materials were screened in the field through 1/8-inch hardware cloth “screens” and all artifacts and non-cultural constituents except for fire-affected rock were collected, bagged by level, and returned to the Southern Service Center Lab for cleaning and cataloging.

Large pieces of fire-affected rock and large artifacts were mapped in situ and photographed. Unit profiles were drawn after the unit excavation was completed. Units were then backfilled. Each unit datum nail was recorded using GPS and standard Southern Service Center GPS procedures (see above).

**Additional Auger Testing**

Original plans had called for monitoring of geotechnical drilling in place of digging additional auger tests within the southeastern portion of the field at the Descanso Area Development site. However, delays in the geotechnical drilling due to rainy conditions led to a decision to place eight additional auger holes within this area.

Archaeological testing fieldwork for the additional auger holes took place on December 14, 2007 and consisted of 11 hand-excavated auger holes (Mandich 2007). The project personnel included Archaeological Project leader Michael Buxton, Archaeological Specialist Matthew Mandich, and Native American Monitor Lael Hoff. Photographs were taken at each auger location, along with global positioning system (GPS) recordation using standard Southern Service Center GPS procedures (see above).

Eleven locations were selected for these auger holes. Eight of the auger holes (74-81N) were placed in the southern region of the project’s area of potential effect (APE) at 100m intervals, following the same grid alignment as the northern portion of the property. The remaining three auger holes (82-84N) were placed along the pre-existing trail in the northern region of the project’s APE at intervals of 25m. Each location was marked with a pin flag and given a number designation based on the site datum (a metal pipe) located in the field about 50m west of the pre-existing trail.

A hand auger with a bucket 20cm tall and a diameter of 10cm was used to excavate the test holes. The holes were excavated in 10-20cm levels to a maximum extent of 1m below surface. When large obstructions were reached, such as roots and rocks, a decision was made either to abandon or offset the auger hole in hopes of avoiding the obstruction.

All dirt excavated from the auger holes was screened in the field through a 1/8-inch wire mesh screen. No cultural evidence was recovered or observed during the excavation of these specific auger test holes.

**Geotechnical Test Monitoring**

Monitoring of geotechnical testing at the Descanso Area Development site occurred on December 27, 2007 (Perez 2007a). Don Perez, Archaeological Specialist, and Gabe Kitchen, Native American monitor, were present to monitor the work. The purpose of the geotechnical testing was to determine the stability of the soils and for ground water level inspection. A total of 9 holes (B-1 through B-9) were drilled: 7 to a depth of 5 feet and 2 to a depth of 20 feet. All were dug with a 6-inch diameter mechanical drill bit. A sample of the extruded sediment was collected from each hole for testing purposes, and the rest of the soil was screened by the archaeological and Native American monitors for cultural material using a 1/8-inch screen. See below for results.

Holes B-2 and B-6 were drilled to 20 feet for percolation and ground water testing. Long plastic tubing was left inside of the holes for testing purposes. The hole must sit for approximately 24 hours to produce an accurate reading. Although the final results of the ground water levels have not been reported, it was estimated that the drill hit ground water at approximately 11 feet below surface.

Monitoring of geotechnical testing at Paso Picacho Day-Use Area also occurred on December 27, 2007 (Perez 2007b). Don Perez, Archaeological Specialist, and Gabe Kitchen, Native American monitor, were present to monitor the work. The purpose of the geotechnical testing was to determine the stability of the soils. Six holes
were excavated (B-1 through B-6). All holes in this area were drilled to a depth of 5 feet with a 6 inch diameter drill bit. A sample of the extruded sediment was collected from each hole for testing purposes, and the rest of the soil was screened by the archaeological and Native American monitors for cultural material using a 1/8-inch screen. See below for results.

Each geotechnical bore hole location was recorded using GPS and standard Southern Service Center GPS procedures (see above).

Additional monitoring for geotechnical testing at the Descanso Area Development site took place on January 10, 2008. Don Perez, Archaeological Specialist and Gabe Kitchen, Native American, were monitors for the work. Eight additional auger holes were excavated by hand to a depth of 3 feet for the purposes of percolation testing. Water was poured in each hole after it was dug. All soils from the auger holes were screened through 1/8-inch hardware cloth.

**Biological Pit Trap Excavation Monitoring**

Monitoring of the excavation of biological pit traps at the Descanso Area Development site was conducted on February 7, 2008 (Buxton 2008). The work was monitored by Michael Buxton, Archaeological Project Leader, and Clint Linton, Native American monitor. Twenty-one pit trap holes were excavated using a portable, gasoline-powered mechanical auger with a 12-inch diameter bit. Holes were excavated to a depth of approximately 50 centimeters. Plastic 5-gallon buckets were placed within each hole. Three arrays of seven traps each were installed. Two of the arrays were located near the southeast corner of the property, and the third placed approximately 100 meters north.

**Laboratory Methods**

All Artifacts collected during the test excavations at CA-SDI-8855 were taken to the Southern Service Center archaeology lab. The accession number (P1556) was obtained for the collection. Each unit, auger test pit and each level within each test unit was assigned a unique lot number. Column samples were also each assigned a separate lot number.

The majority of the collection consisted of pottery sherds, charcoal, bone, groundstone, debitage and stone tools. A few intrusive historic/modern items were also collected. Only the debitage and the historic items were washed and air-dried. The other artifacts and cultural constituents were not washed in order to avoid damage to fragile artifacts, and to preserve potential information for protein residue and pollen analyses. The next phase of laboratory work consisted of sorting and cataloguing the artifacts by unit and level. The artifacts were sorted within each unit and level into broad categories, such as lithic debitage, lithic tools, groundstone, pottery sherds, charcoal, and bone. Some of the pottery sherds were able to be fitted together and were catalogued as one item. All items were then re-bagged in polyethylene zipper-locking bags by category within each lot, and each item or group of items was assigned its own catalogue number consisting of a trinomial made up of accession number, lot number, and item number. Paper tags listing the site number, catalogue number, level, screen size, and artifact type were filled out and included in each bag. These tags were placed in separate bags within the artifact bag for all items in the collection to promote an acid-free environment for items that may be subjected to future analysis, such as groundstone artifacts, tools, pottery and charcoal and soil samples.

After the materials were sorted, the cataloging process was started. This necessitated the sorting of some of the materials into narrower categories based on material type or species. Four material types were identified for cataloging the lithic materials from the site: Granitic, Quartzite, Quartz, and Volcanic. The Volcanic materials were further divided into porphyritic and fine-grained volcanic.

Cataloging was carried out in the Museum System (TMS) in the SSC Archaeology lab. The catalog was based on the Department of Parks and recreation archaeological catalog. Archaeological specialist Rachel Ruston cataloged all of the cultural material. The coloration of the column samples was determined by archaeological specialist Matthew Mandich, using Munsell soil color charts. Artifact identification was checked using visual inspection and examination using a 10-power hand lens. Artifact weights were measured in grams, weights were rounded up to the nearest tenth of a gram in the Museum system.
Cataloging began with the artifacts from Unit A, then units B, C, and D. Then the auger test pits and column samples were catalogued by unit and level. Each item or group of items was assigned an individual item number within the designated lot. Item numbers started at 1 and were continued across the entire collection (there are a few instances of overlap of item numbers within different lots). Groups of related items were weighed together and counted. Soil samples and charcoal were only weighed and given an estimated count.

The Monument Peak base station (Figure 4) is the closest continuously operating reference station (CORS) to the project area, and was used to acquire most of the differential correction data. Data from the Monument Peak base station were obtained via the CORS website (http://www.ngs.noaa.gov/CORS/California/california_monp.html). The data recorded in the field with the GeoExplorer were downloaded to a personal computer using Pathfinder Office software. Differential corrections were done using the UTM NAD83 projection. These data were then exported as shapefiles into ArcGIS/ArcMap Version 9.1 for mapping and Geographic Information System (GIS) use.

Archaeological site information was recorded on DPR 523 forms (January 1995 version). Forms were created using Microsoft Word 2000 software for Windows on a personal computer. The UTM coordinates and site dimensions were determined from the GPS data using NAD83 projection. Digital photographs were taken at most locations and pasted directly into the digital site forms. Site and location maps were compiled from the GPS data and various base data layers. Site records were sent to the South Coastal Information Center for assignment of primary numbers and trinomials.

Figure 4: Monument Peak (MONP) Continuously Operating Reference Station (CORS) Base Station Location.
RESULTS

The survey work at the four examined alternatives (Figure 2) resulted in the identification and recordation of five newly recorded cultural resources and reexamination and/or expansion of two previously recorded archaeological sites.

The archaeological testing work at the Descanso Area Development site and Paso Picacho Day-Use Area resulted in the excavation of 98 hand auger holes, and 4 test units (1x.5m). In addition, 15 mechanical bore holes, 8 hand auger holes, and 21 hand excavated pit traps were monitored in these two locations.

There were 502 artifacts and cultural constituents recovered during archaeological testing at CA-SDI-8855. These consist of stone debitage, groundstone tools and fragments, stone tools, pottery, modified pottery, bone, and charcoal. Of the 331 prehistoric artifacts, 53 were found within the Auger holes and 278 were found within the four units.

PASO PICACHO DAY-USE AREA

No archaeological resources are known to exist within this proposed location. The archaeological survey of this area was negative (Mealey 2007). A few sites have been recorded farther to the north and east, but the proposed facilities will avoid them.

The archaeological and Native American monitoring of the geotechnical boreholes that were excavated within this location was negative for archaeological resources.

GREEN VALLEY CAMPGROUND LOOP A

The one known archaeological site in this area (CA-SDI-16294) was re-identified during the 2009 survey work, and additional features were documented. The below is summarized from the archaeological survey report (Mealey 2009).

CA-SDI-16294

During the 2009 archaeological field investigations, six newly identified features and one possible artifact were documented and recorded within site CA-SDI-16294.

Feature 1 was originally identified by S. Wade in 2002 it consists of two large boulder outcrops, containing grinding basins and slicks, situated at Campsite #6.

Feature 1A [2002 & 2004 Feature A] is a large granitic rock measuring approximately 6x7x2m containing two shallow grinding basins (see photo).

Feature 1B [2002 & 2004 Feature B] is a large granitic rock measuring approximately 9x6.5x3.5m containing seven grinding slicks.

Feature 2 [2005 GVCG2] is a granitic rock that measures 6.8x5.8m and containing at least one grinding slick. It is located to the east of Campsites #13 and #14. There is a possible lithic flake located approximately 20 meters south-southwest of Feature 2.

Feature 3 [2002 & 2004 Feature C] is a small granitic rock measuring 3.3x1.4m, containing one grinding slick. It is located at Campsite #16.

Feature 4 is newly identified in 2009. It is a granitic rock measuring approximately 4x3m, containing one eroded slick. It is located within the small triangle at the point of the intersection of the road around Loop A.
Feature 5 is newly identified in 2009. It is a large, low-lying granitic rock outcrop measuring 15.5x6m. It contains at least 10 grinding slicks, and three shallow basins (see photo below). It is located behind Campsites #16 and #17.

Feature 6 is newly identified in 2009. It is a large, tall granitic boulder measuring approximately 14x7.5m. It contains at least three eroded slicks, two of which are in natural depressions. It is located behind Campsites #16 and #17.

Feature 7 is newly identified in 2009. It is a granitic boulder measuring approximately 4x1.5m. It contains at least one remnant slick. It is located behind Campsites #16 and #17.

Feature 8 is newly identified in 2009. It is a granitic boulder measuring approximately 2x1m. It contains at least one eroded slick. It is located at Campsite #17.

Feature 9 is newly identified in 2009. It is a granitic boulder measuring approximately 4x2m. It contains at least one remnant slick. It is located behind Campsites #16 and #17.

No midden soils or other artifacts or features were observed. The one possible flake is highly suspect and is most likely a piece of gravel. No evidence of archaeological material was identified at Campsite #9, where the district had indicated abandonment of the campsite due to cultural concerns. It is possible that this was supposed to be Campsite #6 (where Feature 1 is located) and the number got turned upside down at some point by accident. There is no archaeological reason to abandon Campsite #9.

DESCANSO AREA DEVELOPMENT

The below is a summary based on the results of the work detailed in the Archaeological survey report (Mealey 2007) and the confidential Archaeological testing report (Mealey 2008). Additional details including test locations, artifact analysis, and research questions are covered in the confidential testing report.

Survey Results

One previously recorded site (CA-SDI-8855) is located within this area of the park. It consists of six loci, spread over a wide area. The archaeological survey also identified three other small cultural resources. It is thought that campground development at this location could be designed to avoid impacts to the archaeological resources.
CA-SDI-8855

This site was originally recorded in 1974 during a study of Merigan Ranch carried out by Westec Services. No site record was submitted at that time. The site was recorded again in 1981 by D. Foster, who added some additional areas and divided the site into six loci. Updates to the site record were completed by M. Sampson and R. Schwaderer in 1992 and 1999 respectively. Also in 1999, the historic ranch house and related historic features were recorded by A. Bevil. The 2006 archaeological survey relocated all 6 loci but found a broad break of over 150 meters between the four northern loci (A-D) and the two southern ones (E-F).

**Locus A** consists of more than 11 bedrock features with numerous grinding elements (mortars, slicks, ovals) as well as a wide variety of artifacts (potsherds, stone drill, debitage, groundstone tools, etc.). Midden-like soil was also observed in a few locations throughout this locus. Time constraints prevented a thorough investigation so additional features and artifacts may be present. Evidence of pothunting (metal mesh “screen”, stacked artifacts, dug up soils) was observed near the middle of the locus.

**Locus B** consists of two distinct outcrops. Bedrock grinding slicks were observed on some of the boulders that make up these outcrops. Potsherds and lithic flakes were also recorded, and a fine-grain volcanic stone drill was observed.

**Locus C** consists of a few outcrops with bedrock grinding features, and a large concentration of artifacts including potsherds, lithic debitage, marine shell fragments, and historic debris. The existing trail cuts through this locus.

**Locus D** consists of a single, eroded grinding slick on a low bedrock outcrop. It is located on the eastern side of the trail up the slope between the trail and the fence (park boundary).

**Locus E** contains the historic ranch house, barn, and other historic features and artifacts, as well as more than five bedrock outcrops with bedrock grinding elements including slicks and ovals. The trail cuts through this locus and there has been considerable historic damage to the prehistoric deposits here. The 2006 survey crew was unable to relocate some of the features, including a possible rock art panel that was recorded in 1981.

**Locus F** consists of at least one outcrop with bedrock grinding slicks. Additional features were recorded in 1981, but were either buried by duff and/or soil, or eroded away.

Based on comments from the Merigan’s, their neighbors, and other long-time residents of the Descanso area, there were many artifacts that were turned up during plowing and use of the agricultural field. It is unknown to what extent the previous agricultural use of this area damaged or impacted the cultural deposits. It is recommended that archaeological testing occur here prior to campground development to identify where subsurface deposits may exist. The campground will be designed and sited to avoid significant impacts to cultural features and deposits.

**The Merigan Ranch House** was recorded as part of CA-SDI-8855 (Bevil 1999). It is also known as the Allen T. Hawley Rental Cabin and was built around 1930 by a previous owner of the ranch, Allen T. Hawley. Architecturally, its fieldstone and ruble-constructed walls and rustic vernacular Modern ranch style, are typical of traditional local building methods and materials. It has a “summer kitchen” consisting of an oven/stove in the back yard. Aside from the replacement of a number of the original wood-frame windows with aluminum-frame louvered windows along the rear elevation, the building has retained much of its original exterior historic fabric. California State Parks has also stabilized and reinforced the southwest and southeast exterior wall footings and concrete porch and sidewalk that were slipping off the foundations.
and threatening structural stability (Bevil 1999). The campground will be developed to avoid the house and its associated features.

**Pipe and Tank Site (CA-SDI-18118/P-37-027872)**

Numerous segments of iron pipe, a cement water tank, a pumphouse/well, and other water conveyance features were identified throughout the open field. Although many of these features are widely dispersed, they were recorded as a single noncontiguous site due to their similarity and presumed association. The age and cultural significance of this site are unclear. Campground development will affect these resources and it is recommended that additional research be completed prior to development to determine if these elements represent a historically significant resource.

**Y&B (CA-SDI-18119/P-37-027873)**

A small historic trash scatter that may be associated with the historic ranch house. This scatter includes a fragment of blue glass, a piece of clear glass, a yellow-glazed earthenware sherd, a medium-sized tin can, a segment of water pipe (that may be associated with Pipe and Tank Site to north), a piece of milled wood and a wooden slat. Campground development may affect this site but the site does not appear to have any historical significance and in fact may represent a redeposit of these materials by water runoff as they are located in a shallow swale.

**Shell Isolate (P-37-027895)**

This isolate may either be associated with the historic ranch house to the northeast, or to the prehistoric deposit at Locus E. It is a single tiny fragment of unidentifiable marine shell. This isolate will be affected by campground development, but it is not considered to be a significant resource.

**Auger Tests**

Only nine of the 87 Auger holes were positive for prehistoric cultural material. Four also had historic or modern materials. Fifty-three artifacts were recovered from the Auger holes including thirty-eight pieces of pottery, twelve pieces of debitage, two pieces of groundstone, and one stone tool. There were also 16 pieces of medium and small mammal bone (mostly rabbit), 22 pieces of charcoal, and two pieces of historic metal recovered and catalogued.

**Test Unit A**

Test Unit A was a 1-x-.5-meter test pit, set up on true north with the long axis on the east-west line. It was excavated in 10-cm arbitrary levels to a depth of 1 meter at which point an auger was excavated in the bottom of the unit down an additional 1 meter. A 10-x-10-cm column sample was collected from the southern wall, 10 cm offset from the southeast corner. Rodent disturbance was noted throughout the unit and in the auger hole, all the way down to 180 cm below surface.

The unit contained 189 artifacts, including 29 pieces of lithic debitage, 8 pieces of groundstone or groundstone tools, 1 multifunctional tool, 152 pieces of pottery, and a piece of modified (edge-ground) pottery. There were also 70 pieces of charcoal and 27 pieces of bone recovered of which 3 were identified as possibly human during laboratory analysis. The remaining bone from this unit was identified as small and medium mammal.

The three pieces of bone from Unit A that were identified as possibly human by Rose Tyson of the San Diego Museum of Man were reburied on site, along with several pieces of burned pottery that were found in association with the bone. These items were reburied by the project’s Native American monitor in accordance
with the wishes of the Native Americans and the Memorandum of Agreement described below under Test Unit C.

**Test Unit B**

Unit B was placed to the southeast of Unit A. It was a 1-x-.5-meter test pit oriented with the long axis on true north. It was excavated in arbitrary 10-cm levels down to 60 cm, at which point an auger hole was put into the bottom. The auger was dug down to 1 meter below the unit floor. No column sample was collected from this unit. Rodent disturbance was observed down to the bottom of the unit.

Unit B contained only 25 artifacts, consisting mostly of pottery (24 pieces) and one piece of groundstone. There were also 7 pieces of charcoal that were also recovered.

**Test Unit C**

Test Unit C was placed to the west of Unit A. It was a 1-x-.5-meter test pit, set up with the long axis on true north. It was excavated in arbitrary 10-cm levels down to a depth of 30 cm. Excavation of the Unit was stopped after the discovery of a fragment of burned human bone.

The bone was recovered by the Native American monitor and taken to Rose Tyson at the Museum of Man for positive identification. Once the bone was identified as human, the San Diego County Medical Examiner’s office was contacted and the bone was confirmed to be Native American. The Native American Heritage Commission (NAHC) was contacted and the Kumeyaay Cultural Repatriation Committee (KCRC) was named as most likely descendent (MLD) for the remains.

A Memorandum of Agreement (MOA) exists between California State Parks, the San Diego Medical Examiners Office, NAHC, KCRC, Carmen Lucas, Rose Tyson, and Dr. Arion Mayes for the procedures to be undertaken in the event of inadvertent discovery of human or suspected human bone within an archaeological context. Based on the procedures outlined in this MOA, the bone was returned to the site the following day, and the Native American monitor on site reburied, back within the unit, the one piece of positively identified human bone, along with two additional fragments of bone that were also recovered from Unit C. The unit was then backfilled.

Prior to halting the excavation of Unit C, and the reburial of the three pieces of bone, 28 artifacts had been recovered including 27 pieces of pottery and 1 piece of lithic debitage. One piece of glass was also found within this unit. An additional piece of unburned small mammal bone was identified during laboratory analysis.

**Test Unit D**

Unit D was placed to the west-southwest of Unit C. It was a 1-x-.5-meter unit that was oriented with the long axis on true north. It was excavated in arbitrary 10-cm levels to a depth of 90 cm. An auger hole was excavated to a depth of 100 cm below the unit floor. A 10-x-10-cm column sample was collected from the west wall, offset from the southwest corner by 10 cm. Rodent disturbance was also noted throughout the unit all the way to the bottom.

There were 36 artifacts recovered from Unit D including 26 pieces of lithic debitage, 9 pieces of pottery, and 1 piece of groundstone. Twenty pieces of Charcoal were also recovered. There were additionally one piece of glass and one piece of metal recovered from this unit.
Additional Auger Testing
The additional 11 Auger holes that were excavated on December 14 did not show any evidence of cultural materials.

Geotechnical Monitoring
No cultural materials were found in any of the 9 mechanically-drilled bore holes. Eight additional hand-augered geotechnical test holes were excavated for percolation testing purposes on January 10, 2008. All holes tested sterile for cultural remains except for a possible piece of quartz debitage found in auger hole P-4. The quartz was collected and brought back to the Southern Service Center’s archaeology laboratory. After further analysis it is still unclear if this quartz piece is truly a cultural artifact. The questionable debitage was cataloged as P1556-55-01.

Biological Pit Trap Excavation Monitoring
No historic or prehistoric artifacts or features were observed during the monitoring of the excavation of the 21 pit trap holes. Soils were examined in each of holes and found to consist of medium brown silty sands mixed with a small amount of sub angular and rounded gravels.

Mack Property
The historic complex of buildings and structures were investigated and recorded by State Parks Historian, Alexander Bevil in November 2005. Cursory examination of the property in 2007 identified one site and one isolated artifact.

Mack Prehistoric Site (P-37-029072/ CA-SDI-18621)
This site consists of at least two bedrock grinding features (A1 & A2) and a scattering of potsherds and lithic debitage. The bedrock in the area is highly exfoliated and eroded and there are signs of disturbance in the form of modern fire pits and broken glass. This outcrop most likely had more grinding features than the ones that remain. The extent of the site is defined by a low density scatter of pottery sherds and lithic debitage spread out over a 4,300 square meter area. There is a large amount of quartz debris in the area that may also be cultural. The area was not intensively examined and additional features or artifacts may be present.

Mack Pot Sherd (P-37-029073)
A single brownware potsherd found in low visibility in a grassy meadow.

Mack Ranch Complex
The Mack Ranch complex includes nine buildings and structures connected either architecturally or through common ownership and historic use from 1930 to 1963. It includes the Main House, Caretakers House, Well Pump Shed, Water Tower, Formal Garden, Fences, and Dirt Road. It also includes the stone and concrete mortar ruins of a possible gatehouse. The two ranch buildings’ low-pitched multi-gabled roofs, open plans, and unreinforced stone rubble masonry construction possess a certain rustic charm suggesting a Post-Medieval Tudor farmhouse adapted to modern use. The auxiliary Colonial Revival style 2-car garage, as well as the Well Pump Shed and Water Tower also suggest that the area served as the headquarters of the ranch.
CONCLUSIONS AND RECOMMENDATIONS

Based on the archaeological survey work at the three proposed locations, two (Green Valley Campground Loop A and Descanso Area Development) were found to contain cultural resources. Cultural resources were also recorded at the Mack Ranch Property. A short summary of the potential for impacts to cultural resources at each proposed location and the recommendations for avoidance or mitigation is presented below.

PASO PICACHO DAY-USE AREA

There are no known archaeological sites within or immediately adjacent to this location. No impacts are expected to cultural resources from proposed equestrian facilities.

GREEN VALLEY CAMPGROUND LOOP A

Archaeological sites have been recorded within and adjacent to this project location. Site CA-SDI-16294 was found to contain nine bedrock grinding stations. No midden soils, artifacts, or other features were identified. It is not anticipated that project work will adversely impact any significant cultural resources at this site. However, there is a slight potential for buried artifacts and/or features, so archaeological monitoring of any subsurface work within or around Campground Loop A is recommended. Archaeological testing of certain areas may be informative in regards to potential for buried cultural deposits prior to designing campground/campsite layout and future development projects especially if any development involving subsurface work is proposed around or near the outcrops at Campsites #6, #16, or #17.

DESCANSO AREA DEVELOPMENT

The results of the testing program were used to redesign the campground layout, to avoid significant impacts to the archaeological site, and to assist in designing protection measures as part of the project. The intent for site CA-SDI-8855 is protection and preservation. The study was completed to test for presence and extent of cultural materials within and adjacent to the proposed project, and to get a general idea of types of artifacts and site content within the specific area. It was not intended to determine site function, size, period of occupation, condition, or significance. If it is deemed necessary to make such determinations, it is recommended that additional testing and specialized analysis be conducted. However, based on the limited testing results, the survey results, the site does appear to represent a moderately-sized village or satellite to a larger village complex.

The presence of human bone and possible human bone within CA-SDI-8855 indicates the sensitivity and sacredness of this site to the Native American community, and also the potential for additional burials or cremations to be present within the site area. Due to the sensitive nature of these remains, all proposed development was removed from within the site area. Additionally, any subsurface work within this general area must include both archaeological and Native American monitors, to ensure avoidance of significant impacts to any unknown buried cultural deposits.

In order to help prevent inadvertent or intentional damages from off-trail use, vandalism, or artifact collection, it is recommended that fencing be placed along the perimeter trails for the campground. Signage may also help dissuade visitors from going off-trail into those areas with the most sensitive resources.

Site CA-SDI-8855 should be included within Colorado Desert District’s site stewardship program, so that it is visited and evaluated for archaeological resources and condition issues on a regular basis. An archaeological site condition assessment record (ASCAR) or other such condition report should be filled out for the site, and updated every few years, or as the level or threat of impact or damage warrants.

Rangers and other park personnel should be made aware of the presence and extent of the archaeological site and features within this portion of Cuyamaca Rancho State Park in order to watch for suspicious activities that may indicate illegal collecting, and to monitor natural erosion effects. The Merigan Ranch House has been proposed as a residence for a park ranger. It is recommended that if a ranger is housed there, that the ranger in
residence be made aware of the presence and location of the archaeological resources in the area, to help deter visitor-use damages or vandalism. Any evidence of damages should be brought to the attention of a CDPR archaeologist.

**Mack Ranch Property**

Although this area was not intensively surveyed, a cursory examination identified one previously unrecorded site and one isolated artifact in addition to the documented historic structures, features, and landscape. Although this project location was dropped from the original list of alternatives, it has received support from the equestrian community. Should this property be identified as a future equestrian facility location, or for any other use, additional archaeological and historical investigations of the property must occur.
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Attachment A
(California State Parks Cultural GeoDatabase)
### Cultural Resource GIS Feature Classes and Attributes Summary v5.2

#### Cultural Resource GeoDatabase Feature Classes (“Layers”)

<table>
<thead>
<tr>
<th>Feature Class</th>
<th>Data Type</th>
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<tr>
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</tr>
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</table>

**Note:** Cultural preserve boundaries digital spatial information is captured within the Parks ownership and boundary GIS layers.

### FEATURE CLASSES (LAYERS) and ATTRIBUTES DESCRIPTIONS

#### Districts — (Poly)

"A significant concentration, linkage, or continuity of sites, buildings, structures, or objects united historically or aesthetically by plan or physical development."

**Attributes:**

- **DistEra:** Era of Districts. [Domain, Short Integer]
  
  1. Historic
  2. Prehistoric
  3. Prehistoric & Historic
  4. Undetermined

- **ResourceName:** District name (DPR 523a). [Text, 50]

- **PrimaryNumber:** Primary Number (assigned by Information Center (IC) on submission of DPR523). [Text, 14]

#### Cultural Landscape — (Poly)

"Geographic area, including both cultural and natural resources and the wildlife or domestic animals therein, associated with a historic event, activity, or person or exhibiting other cultural or aesthetic values." There are four general types of cultural landscapes, not mutually exclusive:
Attributes:

**CLType**: Types of Cultural Landscapes  
[Domain, Short Integer]

1. Historic sites
2. Historic designed landscapes
3. Historic vernacular landscapes
4. Ethnographic landscapes
5. Other

**ResourceName**: Name or number (DPR 523a).  
[Text, 50]

**PrimaryNumber**: Primary Number assigned by Information Center (IC) on submission of DPR523.  
[Text, 14]

**Site**— (Poly, Line, Point): Location of a significant event, a prehistoric or historic occupation or activity, or a building or structure, whether standing, ruined, or vanished, where the location itself possesses historic, cultural, or archeological value regardless of the value of any existing structure. Can overlap with Cultural Landscapes:

Attributes:

**SiteEra**: [Domain, Small Integer]

1. Prehistoric
2. Historic
3. Prehistoric & Historic
4. Undetermined

**SiteClass**: [Domain, Small Integer]

1. Archaeological
2. CHL -- (California Historic Landmark)
3. NHL -- (National Historic Landmark)
4. NRP -- (National Register Properties)
5. Other

**SiteUse**: Classify by use or function. Modified from NR Bulletin 16A, Part III: How to Complete the National Register of Historic Places Registration Form, "Data Categories for Functions and Uses" list  
[Domain, Small Integer]

1. Administrative [State Parks] -- (ranger station, office, park residence, garage, maintenance facility)
2. Agricultural/Horticultural -- (field, orchard, irrigation ditch, fencing, silo, barn, outbuilding)
3. Commerce/Trade -- (office, store, restaurant, commercial storage, concession, trade route)
4. Community/Educational/Institutional -- (school, meeting hall, clubhouse, hospital)
5. Cultural/Art -- (sculpture, mural, folk art, graffiti)
6. Food Procurement -- (hunting blind, gathering location)
7. Funerary/Burial -- (cemetery, grave, mortuary)
8. Government -- (non-parks administration, post office, fire station, police station, power facility, water facility, CCC or WPA camp)
9. Habitation/Domestic -- (dwelling, secondary structure, hotel/boarding house, village site, camp)
10. Industrial/Processing/Extraction -- (quarry, mine, tailing pile, material procurement area, workshop, bedrock grinding station, knapping location)
11. Military/Defense -- (bombing range, ammo dump, field maneuvers feature, rake station, camp, palisades, defensive wall)
12. Ranching/Livestock -- (corral, fence, stock pen, loading chute, coop, grain hopper, feeder, trough, barn, grazing pasture)
13. Recreational -- (campground, bathroom/combo building, interpretive structure, entrance station, landmark plaque, parking area, picnic/day-use area)
14. Religious/Ceremonial -- (mission, church, ceremonial site, sacred area or location, convent, rectory, pictograph, petroglyph, geoglyph [intaglio])
15. Transportation/Communication - -(road, trail, railroad, airstrip, telephone, telegraph, communication tower)
16. Unknown
17. Other
**ResourceName**: Site name or number (DPR 523a).  [Text, 50]

**Description**: Brief description of the resource (max 30 character text field) [Text, 30]

**PrimaryNumber**: Primary Number (assigned by IC) [Text, 14]

**Trinomial**: Three-part archaeological site number (assigned by IC) [Text, 14]

**BSO — (Poly, Line, Point)**: Building, Structure or Object, per National Register definitions. Represented together due to general similarities and the fact that these are treated on a single form in the DPR523 inventory package.

**Attributes**:

**BSOType**: [Domain, Short Integer]
1. Building -- a resource created principally to shelter any form of human activity, such as house
2. Structure -- a functional construction made for purposes other than creating shelter (bridge, etc.)
3. Object -- a construction primarily artistic in nature or relatively small in scale and simply constructed, such as a statue or milepost. (Historic Monuments go here)

**BSOSTyle**: Architectural style: [Domain, Short Integer]
1. Arts & Crafts
2. Early American
3. Modern Styles
4. Native American
5. Other Styles
6. Park Rustic (NPS/CCC)
7. Park Standard
8. Revival Styles
9. Spanish colonial
10. Vernacular
11. Victorian

**ResourceName**: BSO name or number (DPR 523a).  [Text, 50]

**Description**: Description of BSO [Text, 30]

**PrimaryNumber**: Primary Number (assigned by IC) [Text, 14]

**Feature — (Poly, Line, Point)**: The term "feature" is used to refer to minor components of historical resources. Features generally consist of small constructed works, discrete activity areas, landscaping, earthworks, non-portable natural objects modified by human use, and other similar cultural entities. Features can be recorded during different types of events (e.g. Survey, Excavation, etc)

Note: An isolated feature should go in both the SITE layer and the FEATURE layer

**Attributes**:

**ResourceName**: References the Site name or number with which the feature is associated  [Text, 50]

**ItemID**: Name/Number (ID) of the Feature (DPR523c A4) [Text, 30]

**Description**: Brief description of the Feature (DPR523c A4) [Text, 30]

**FeatureEra**: Sets Subtype field for FeatureType [Short Integer]
1. Prehistoric -- [Domain: FtTypePrehist]
2. Historic -- [Domain: FtTypeHist]
3. Undefined -- A selection from #1 or #2 must be selected to open up the FeatureType domain lists.
Feature Type: [Small Integer]

1. Prehistoric feature types: [Domain FtTypePrehist, Short Integer]

   1. Artifact Concentration / Scatter -- (multiple types of artifacts)
   2. Burial -- (human remains)
   3. Cache
   4. Cemetery -- (numerous human remains)
   5. Cremation -- (human cremains)
   6. Faunal Concentration / Scatter -- (shellfish, bone, etc.)
   7. Flake Concentration / Scatter -- (lithic reduction area, flaking station, etc.)
   8. Geoglyph -- (intaglio)
   9. Groundstone Concentration / Scatter -- (manos, portable metate/slick/etc.)
   10. Groundstone Feature -- (mortar, basin, slick, cupule, etc.)
   11. Habitation Feature -- (house pit, post hole, rock enclosure, “sleeping circle”, etc.)
   12. Hearth/Fire Feature -- (hearth, roasting/firing pit, roasting platform, fire/smoke/charcoal-blackened feature, etc.)
   13. Landscape Feature -- (earthworks, vegetation [e.g., ocotillo fence], etc.)
   14. Living Surface
   15. Midden
   16. Other
   17. Pottery Concentration / Scatter -- (pot drop, etc.)
   18. Pounding Feature -- (bedrock anvil stone, pounding area, etc.)
   19. Procurement Area -- (quarry, lithic procurement area, clay procurement area, etc.)
   20. Rock Art -- (pictograph, petroglyph, yoni, cupule, etc.)
   21. Rock Feature -- (cairn, rock circle, rock alignment, hunting blind, trail marker, fish trap, etc.)
   22. Shelter -- (rock shelter, cave, rock enclosure, rock overhang, etc.)
   23. Shrine
   24. Trail
   25. Unknown

2. Historic feature types: [Domain FtTypeHist, Short Integer] and examples

   1. Artifact Concentration – (scatter, cluster, concentration, trash scatter)
   2. Cemetery/Grave
   3. Circulation/Transportation – (road, trail, path, railroad grade, highway)
   4. Cooking/Heating – (hearth, fire pit, ash lens, fireplace)
   5. Dump
   6. Industrial/Mining – (mine, quarry, tailings, machinery, arrastra, machine mount)
   7. Landscape Furnishings – (fence, yard wall, gate, bench)
   8. Object (per NR)
   9. Other
   10. Privy
   11. Structure Remains – (footing, perimeter foundation, foundation wall, pier, pad, post, sill, etc.)
   12. Structure Standing – (outbuilding, bridge, pier, wharf, etc.)
   13. Topographic – (earthworks, terrace, berm, cut, fill, retaining wall, furrows, pit, depression, etc.)
   14. Vegetation – (introduced trees, vegetation, orchard, landscaping, etc.)
   15. Water Conveyance – (ditch, canal, aqueduct, pipe line, tail race, penstock, culvert, etc.)
   16. Water Supply – (well, cistern, dam, reservoir, pump, etc.)

**Artifacts — (Point):** Note: An isolated artifact should probably go in both the SITE layer and the ARTIFACT layer. Clusters or concentrations of artifacts best recorded as polygons should be included on the FEATURE layer.

**Attributes:**

- **ResourceName:** References the Site name or number with which the artifact is associated [Text, 50]
- **ItemID:** Name or ID number of Artifact (DPR 523c A5/DPR523h). [Text, 30]
**ArtifactEra:** Sets Subtype field for ArtifactType [Short Integer]

1. Prehistoric -- [Domain: ArtTypePrehist]
2. Historic -- [Domain: ArtTypeHist]
3. Undefined – Selection of ArtifactEra #1 or #2 must be selected to open up the ArtifactType domain lists.

**ArtifactType:**

Prehistoric Artifact Types [Domain ArtTypePrehist, Short Integer]
1. Debitage – (flake, shatter, etc.)
2. Flaked-Stone Tool – (biface, projectile point, blade, core, flake tool, core tool, etc.)
3. Battered Stone – (anvil stone, pounder, hammerstone, etc.)
4. Groundstone Tool – (mano, metate, mortar, pestle, abrader/scrapper)
5. Multi-use Tool – (mano/pounder, chopper/scrapper, etc.)
6. Pottery Vessel – (whole vessel [olla, bowl, jar, bottle, etc.], potsherd)
7. Non-pottery Vessel – (stone bowl, shell bowl, basket [including impressions], etc. -- excludes pottery vessel)
8. Beads & Ornaments – (stone, shell, bone, wood, fiber, etc.)
9. Pipe – (stone, ceramic, etc.)
10. Worked bone – (awl, gorge, gaming pieces, etc. -- excludes beads/pendants)
11. Worked shell – (fishhook, sea-urchin spine drill, etc. -- excludes beads/pendants)
13. Shellfish Remains/Refuse – (unworked shell)
14. Human Remains – (bone, tooth, cremains, etc.)
15. Fire Remains – (fire-affected rock, charcoal, etc.)
16. Unique Items – (items not covered by other categories)
17. Unidentified Items

Historic Artifact Types [Domain ArtTypeHist, Short Integer]
1. Agricultural Implements – (all farm machinery: plow parts, harrow parts, chain belting, cultivator parts, mower parts, hay rake parts, threshing machine parts, manure spreader parts, tractor parts, etc.)
2. Architecture and Building Materials – (nails and spikes, window frame & glass, construction hardware, door locks & knobs, electrical hardware, counter glass, asphalt, plaster, concrete, ceramic drain pipe, bricks, floor tiles, roof tiles, adobe flue lining, brea, wall or floor boards, carpet tacks, molding, wallpaper, adobe, tarpaper, shingles, etc.)
3. Coins – (all coinage and tokens)
4. Consumer Items – (items purchased and consumed on regular basis: bottles, jars, tin cans, tins, bottlecaps, newspaper, etc.)
5. Forge Materials – (all forge, furnace and stove wastes: coal, klinkers and slag)
6. Furniture Parts – (upholstery tacks, springs, cabinet hinges, drawer pulls, scroll trim, trunk parts, bed and furniture frames, etc.)
7. Garment – (shoe parts, cufflinks, collar stays, hat and scarf pins, strap slides, buttons, garter clasps, hook and eyes, suspender clasps, straight pins, snaps, buckles, clothing rivets, clothing pieces, etc.)
8. Hardware (nuts and bolts, screws & washers, chain links, metal bands, cotter pins, rivets, bailing wire, wire fencing, etc.)
9. Household – (household ceramics, household glassware, lamp parts, light bulbs, medical items, batteries, flower pots, insulators, etc.)
10. Intrusive – (items intrusive to a discrete dated deposit)
11. Kitchen – (stove, flatware, canning jars & lids, jelly tumblers, glass tableware, ceramic kitchen tableware [platters, tureens], cooking items, butchered bone, shellfish shells, seeds, etc.)
12. Livery – (horse & horse-drawn vehicle items: bridle parts, saddle parts, harness parts, horseshoes & nails, wagon parts, buggy parts, etc.)
13. Machinery – (all machine parts except agricultural)
14. Munitions – (firearms & related items: shell casing, bullets, gun parts, etc.)
15. Other Occupations – (specialized occupations: Farmstead, Mining, Factory, etc.)
16. Personal Items – (watches, jewelry, toys and gaming items, musical instruments, eyeglasses, toiletry items [toothbrush, razor, comb, hairbrush, etc.], smoking pipe, dolls, etc.)
17. Tools – (gardener's tools, carpenter's tools, mason’s tools, fishing gear, mechanic's tools, jeweler's tools, artist's tools, other miscellaneous hand tools, etc.)
18. Unique Items – (not included in other groups)
19. Unidentified Items – (items that cannot be identified)
20. Unidentified Metal – (Unidentified metal fragments)
**Description**: Description of Artifact (DPR 523c A5/DPR523h). [Text, 30]

**Material**: Material type [Text, 30]

**CatID**: Catalog number (TMS). [Text, 14]

**EventArea— (Poly)**: An "Event" as identified here is any activity undertaken to record, assess, test or recover cultural resource data or artifacts. An Event is of limited duration and takes place within an identifiable Event Area. Many cultural resource management “Events” would be referred to in common parlance as “archaeological projects.” We have avoided the use of the term “project” here, however, as it has acquired very specific meanings in planning, budgeting and environmental review contexts. We want to avoid confusing these cultural resource management “Events” with the development “Projects” with which they are frequently associated.

Attributes:

- **EventType** [Domain, Short Integer]
  1. Survey
  2. Excavation
  3. Monitoring
  4. Condition Assessment
  5. Resource Recordation

- **EventName** [Text, 30]
- **EvenDate**: [Date, 8] MM/DD/YYYY format
- **EventBy**: Director/principal investigator [Text, 30]
- **Description**: [Text, 30]
- **ReportCitation** [Text, 50]

**Datum Locations — (Point)**: Survey benchmarks and other reference points used to record spatial data about properties during an event, such as site datum.

Attributes:

- **DatumName**: [Text, 30]
- **Recorder**: [Text, 30]
- **DatumDate**: [Date, 8] MM/DD/YYYY format
- **Description**: [Text, 50]

**Excavations — (Poly, Line, Point)**: Archaeological excavations conducted during various phases of cultural resource management work (e.g. test excavations, data recovery excavations)

Attributes:

- **ExcavationUnitID**: [Text, 30]
- **Excavator**: [Text, 30]
- **ExcavationDate**: [Date, 8] MM/DD/YYYY format
- **Description**: [Text, 30]
- **EventName**: References the EVENT with which this EXCAVATION is associated [Text, 30]
- **UnitSize**: [Text, 30]
ExcavType [Domain, Short Integer]

1. Auger
2. Shovel Test Pit
3. Excavation Unit
4. Trench
5. Other

Other— (Poly, Line, Point): Layers for spatial features that do not fit elsewhere.

Attributes:

ResourceName: [Text, 50]

Recorder: [Text, 30]

RecordedDate: [Date, 8] MM/DD/YYYY format

Description: [Text, 50]