SITE MONITORING, AFFIRMATIVE CULTURAL RESOURCE MANAGEMENT
FOR CACHE CREEK PUBLIC LANDS, LAKE COUNTY, CALIFORNIA

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ABSTRACT
Prehistoric and historic resource inventory was carried out within the Cache Creek drainage as part of a Cultural Resources Program initiated by the Ukiah District of the Bureau of Land Management (BLM). From late 1986 through June of 1987, volunteers and BLM staff recorded, re-recorded, or confirmed 34 Native American sites, 5 with historic materials. Seven historic sites were also identified. A long-term program for managing these cultural resources has been implemented. The baseline inventory is being used to track resources through site and photo-monitoring. The monitoring program consists of 1) describing site conditions; 2) placing photo-points and erosion stakes for long-term site assessment; 3) establishing a management use (MU) classification for each site; and 4) disseminating the information.

INTRODUCTION
In late 1985, the Bureau of Land Management (BLM) acquired private lands known as Wilson Valley in Lake County (see Figure 1) as part of an ongoing federal and state land consolidation program to preserve sensitive and threatened wildlife. This became part of a larger public land holding, the Rocky Creek-Cache Creek Wilderness Study Area (WSA). A limited acreage remained in private ownership.

The presence of well-preserved prehistoric sites was soon apparent. Remains of house pits, ceremonial dance house depressions, and surface scatters of beads, lithics (mainly obsidian), hopper mortar slabs, and many other tools and cultural debris were noticed by Greg Mangan, a BLM wildlife specialist.

Early homesteaders in the area used horse drawn equipment which barely changed the landscape, leaving prehistoric sites in very good condition.

The surrounding area was designated a "Wilderness Study Area" for the Faunal values of bald eagles and tule elk, and also for primitive recreational potential such as "rafting." The waters flowing along the North Fork and the main stem of
Figure 1. Study area location map
Cache Creek originally dwindled as summer advanced; however, for irrigation purposes in Capay Valley and to the south, water is presently released summer long from the Indian Valley Reservoir into North Fork Cache Creek. Furthermore, sustained releases lasting up to a month are made from Clear Lake Dam, on the main stem, increasing the flow to near flood stage volume.

The BLM is developing an affirmative cultural resource program with specific goals for managing cultural resources on public lands. Program goals are being implemented in addition to regular project compliance with federal regulations. An attempt is made to achieve these goals early in the planning process. Main goals are recognition and interpretation of public values for the resources; preservation of a representative sample of resources; conservation of threatened resources; and management of resources for maximum but appropriate use. The values of these resources may be interpretive, research oriented, and/or socio-cultural.

To achieve the program goals, a complete cultural resource inventory was necessary. To this end, BLM utilized lay archaeologists Mark and Deborah Gary. As volunteers, they began an intensive archaeological reconnaissance in December, 1986. Hope Hamilton, a State Parks and Recreation employee, joined them when her time permitted. The author joined the survey crew in February of 1987. The resultant resource inventory covered 3500 acres and became the baseline both for establishing the resources at present and tracking them in the future. From this baseline, long-term trends become apparent, making it possible to categorize the resources and manage them.

Archaeological reconnaissance identified 34 Native American and seven Euroamerican sites in the study area. Five of the Native American sites have historic materials. The majority of sites are situated on river terraces from 20 to 60 feet above Cache Creek, often at confluences with intermittent drainages (See Table 1). The sites range from ethnographic villages to hunting areas.
### TABLE 1. PHYSICAL LOCATIONS OF SITES BY TRINOMIALS

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<th>VALLEY FLOOR</th>
<th>FIRST TERRACE</th>
<th>SECOND TERRACE</th>
<th>THIRD TERRACE</th>
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### METHODS

The survey crew spent approximately 2 days per week methodically inspecting the landscape, collecting specific samples of cultural materials, recording and mapping cultural resources, and photo-documenting site conditions. A mixed strategy survey was employed to fit the landscape. Crew members were spaced approximately 10 meters apart and used a zigzag transect within predetermined areas. In addition to basic survey work, a program of photo and site monitoring was developed in the field for long-term management purposes. Each site was revisited by the author for an in-depth evaluation of disturbances such as erosion, vandalism, and bioturbation. Basic monitoring tools are a 35mm camera with a zoom lens, a small sledge hammer and supply of orange.
fiberglass stakes, recordation materials, a tape measure, a hand held compass, and existing site records.

The first step in photo and site monitoring is assessment of site conditions; these depend on the environment and other variables. Are terrace faces being eroded by creek actions? Two sites, CA-LAK-11 and CA-LAK-8, have house pits cut in half by erosion; another site, CA-LAK-6, has an eroding terrace face with human remains. Are jeep, hiking, and/or game trails crossing the sites? Several sites have one or more of these trails; one site, CA-LAK-9, has a jeep trail through the burial area. Is bioturbation a problem? Almost all the sites have ground squirrel populations which cause much stratigraphic mixing. Pigs are an ongoing problem, causing extensive damage to the sites. Have looters and vandals disturbed or damaged sites? One site, CA-LAK-9, has been repeatedly disturbed by looters and vandals. Hopper mortar slabs, tools, beads, and ornaments have been removed by such persons during the 1987 to 1988 period.

All disturbance factors such as these are carefully noted. Where creek erosion is a possible problem, erosion stakes, such as orange fiberglass ones, are placed for measuring the rate of erosion. Careful recordation of stake placement is expected to facilitate the follow-up monitor's job. Measurements between stakes and from stakes to data points are necessary; their locations are marked on site maps.

Photo points are more difficult to establish. First, a suitable overview of the site has to be located. Occasionally a good photo point cannot be found. Photo points are set with the same high visibility orange fiberglass stakes and referenced to the site or a permanent datum. Locations are marked on area maps.

Current staff consensus is that black and white photos are best to begin with for comparative purposes. However, color prints and slides may be more explicit in revealing cut terrace faces and depressions. It should be noted that black and white negatives can be made from color slides. As sites are monitored over the years, photos are used to assess changes, determine necessary actions or new management decisions, and provide feedback on past management.

When a site is subject to severe or ongoing disturbance, sometimes a simple action can accomplish a great deal. In one case, a jeep trail through a site was used regularly, creating erosion problems and surface disturbance. This was corrected by placing fallen trees across the path and posting it with a road closure sign.
MANAGEMENT USE CLASSIFICATION

Based on an evaluation of visible site contents, possible threats, public versus private ownership, and best use at the moment, each cultural resource is assigned to a single management use classification (MU):

2. Experimental use.
3. Socio-cultural uses.
4. Public use values.
5. Discharged use.
6. Current scientific study or use.
7. Potential scientific value.

The MU classifications are prioritized from 1 to 4, highest to lowest, according to the greatest needs, rates of impacts, and value of site data, or, if located on private land, as Priority P. Consideration is also given to sites having multiple data classes.

Frequency of monitoring is based on the prioritized MU classification scheme; intervals vary from annual inspection to every three, five, or ten years. Each site can be reclassified based on stabilization actions, changing relative values, test and/or data recovery programs, loss of site due to natural conditions, or new information that changes significance of the site.

DISSEMINATION OF INFORMATION

The last step in site monitoring is dissemination of the information. Basically, this step involves filing inventory data with the local Information Center for the California Archaeological Inventory; sending all new management action information to the California State Historic Preservation Office and local Information Centers; and sending final reports, in part or complete, to interested parties. All of this information is incorporated briefly in an annual report. A field book is kept with: 1) a map of the area and site locations; 2) individual site records; 3) most recent photos; 4) location maps for erosion stakes and photo points; 5) resource condition information; and 6) management use classification. The permanent office book contains the results of all monitoring inspections and includes all original photographs. Presently, interpretive displays and
protective signs are being designed to be placed in areas for public education, appreciation, and awareness the cultural resources located on public lands.

Once in place, the monitoring system can be maintained by almost anyone. Archaeological technicians and other Bureau professionals can monitor sites while carrying out their regular duties in the field.

RESULTS

Results of this site monitoring program will not become available until 1989, after the first trial year. However, preliminary results suggest primary disturbance is caused by pigs, ground squirrels, vandals, creek erosion, and vehicular use. Secondary disturbances are caused by game trails and colluviation. Vandalism and looting has increased since the area opened for public use in 1987; further surveillance is planned. Vehicles are no longer allowed within the area. Stabilization and conservation measures are in the planning process.

CONCLUSIONS

Preliminary results indicate site monitoring to be an important tool in the early planning stages of management. The baseline has been established from this initial site inventory and monitoring program. Using this baseline, management decisions are being made, changes assessed, and further monitoring will take place as appropriate.