

## PREHISTORIC AND ETHNOGRAPHIC LAND USE AT LAKE ALMANOR: A TRIBUTE TO DR. MAKOTO KOWTA

LYNN COMPAS

Before Lake Almanor was created in the 1920's it was a mountain valley known as Big Meadow and was the center of Mountain Maidu culture. In 1999 Pacific Gas and Electric (PG&E) began a five-year relicensing process for the Upper North Fork Feather River Hydroelectric Project. Archaeologists from PAR Environmental Services conducted the archaeological work for the relicensing, including three successive surveys of the shoreline of Lake Almanor undertaken between April 2000 and December 2001. In this paper, data regarding prehistoric and ethnographic settlement patterns in the Lake Almanor area collected during the surveys are compared with Dr. Makoto Kowta's 1988 "The Archaeology and Prehistory of Plumas and Butte Counties, California: An Introduction and Interpretive Model."

## INTRODUCTION

Field surveys for PG&E's FERC relicensing of the Upper North Fork Feather River Hydroelectric Project were conducted by archaeologists from PAR Environmental Services between April 2000 and December 2001. The system consists of three reservoirs and four powerhouses, plus tunnels, penstocks, and various recreation facilities in Plumas County. The head of the system is Lake Almanor (Figure 1). Though the system is quite large, this paper focuses mainly on Lake Almanor, the largest feature of the system, and how the results of the survey tie into Dr. Mark Kowta's work in the northern Sierran region.

Historically, the Mountain Maidu that lived in the area knew Lake Almanor as Big Meadows, or *Nang Koyo*. According to ethnographic data gathered by Dixon (1905), Kroeber (1976) and Riddell (1974, 1978), at least 10 villages were located in the vicinity of the meadow.

Dr. Kowta's 1974 survey report for Lake Almanor, his excavation work at CA-PLU-33/H, and his 1988 overview of the prehistory of Plumas and Butte counties served as the foundation for PAR's studies. Dr. Kowta's 1974 survey was conducted in response to PG&E's application to the California Department of Water Resources to operate the lake. This survey was basically limited to the lakeshore, when the reservoir was almost full, and resulted in the identification of two previously recorded and six newly identified prehistoric archaeological sites. All contained lithics and were in varying states of degradation

from water erosion due to the lake and residential construction activities. It was also thought that one of the sites was related to the Mountain Maidu village of *Manimbaldiki* (Kowta 1974:30). In addition, Kowta's team identified seven other sites that were most likely inundated, six of which may have been related to the ethnographic villages noted earlier. Kowta concluded that more data were needed to reconstruct the environment and use of the area, and that the sites might contain information about the timing and nature of Penutian-speaking people into the northern Sierra (Kowta 1974:12-13).

In 1975 Dr. Kowta excavated a portion of CA-PLU-33/H, located near the northern end of Lake Almanor. Fourteen burials were recovered. The burials were found in several different positions and with a variety of artifact assemblages including Gunther Stemmed and Desert Side-notched points, fragments of twined basketry, cupped *Olivella* beads and pine nut beads (Kowta 1988:164). Through analysis of the various burial positions and accumulation of material wealth with each burial, Kowta posed that the site dated back to a period no later than A.D. 1750 and extended back at the most to A.D. 500 or, more likely, A.D. 1100 (Kowta 1988:162). He concluded that the variation in the amount and types of artifacts accompanying each burial might represent status or role differences; however, Kowta was cautious in pointing out that many of the assemblages did not follow ethnographically documented mortuary practices. He also proposed that this might have been due to a shift in attitudes that may have taken place between the time of the burials and the historic period when the ethnographic

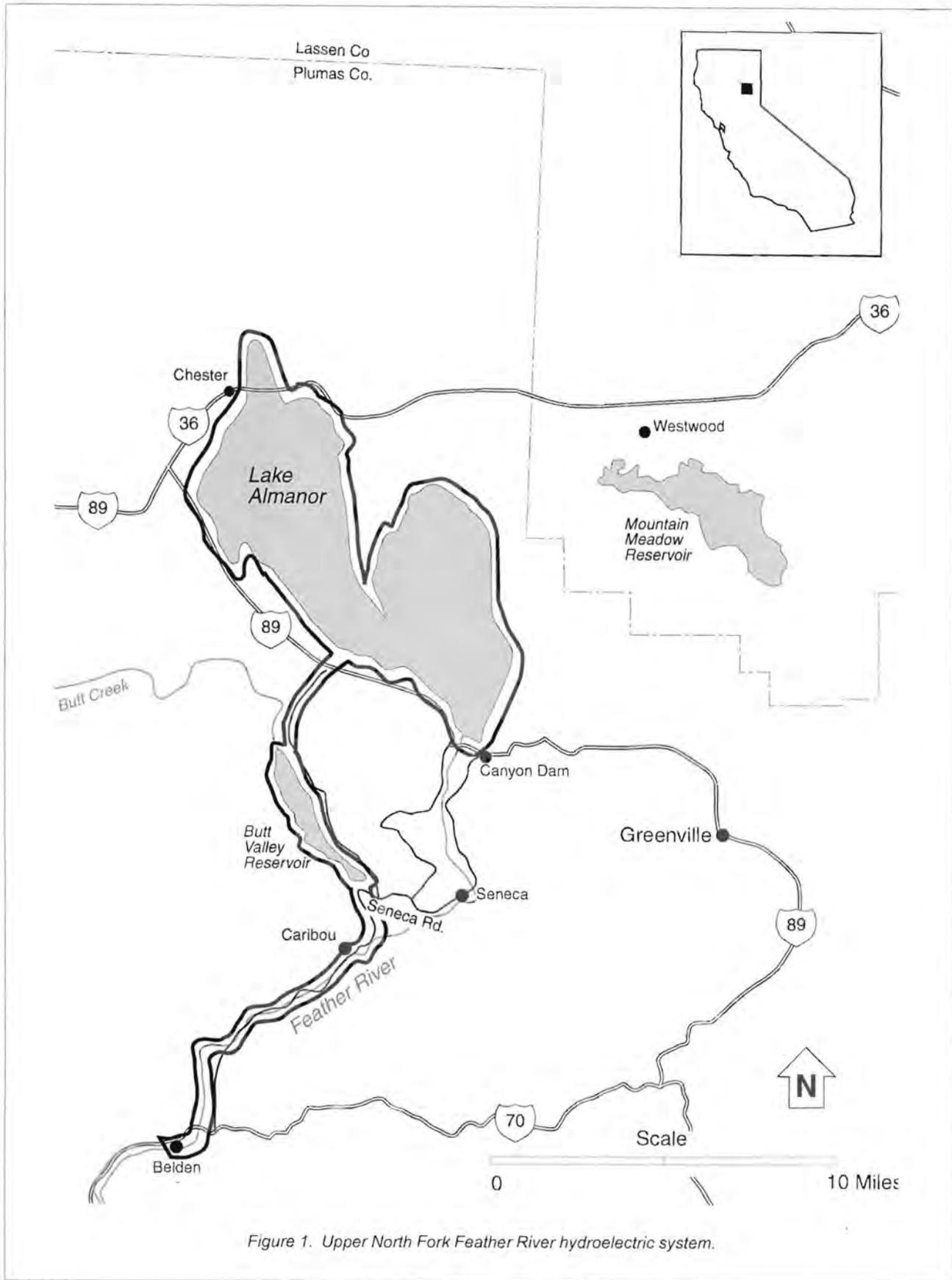


Figure 1. Upper North Fork Feather River hydroelectric system.

information was gathered (Kowta 1988:165-166). Overall, the mortuary complex was similar to those found in what A. B. Elsasser termed the Redding District (Elsasser 1978:41-81).

In 1988 Dr. Kowta combined the results of his work in the northern Sierra with the work of Keith Johnson, Fritz Riddell, and others in Plumas and Butte counties and copyrighted one of his authors favorites, *The Archaeology and Prehistory of Plumas and Butte Counties, California: An Introduction and Interpretive Model*. He used "... an amalgam of cultural materialism, cultural ecology and multilineal evolutionism . . ." to develop this overview. Some of the major questions Dr. Kowta posed in his studies included "when did Miduan (or Penutian) speaking people move into the area replacing the presiding Hokan-speaking population," and how and why did this come about. In order to arrive at answers, he coupled paleoclimatic reconstruction with chronological, linguistic, and ethnographic data.

Due to the limitations of this article and the consequences that this author might suffer for plagiarism, the entire manuscript will not be relayed; however, this brief synopsis is offered. The cultural sequence for the area is as follows. The Paleo-Indian period (9000-6000 B.C.) is marked by predation by humans upon big game. Climatically this temporal span corresponds with a moist and cool period, hence a lower snow line and yellow pine zone as well as the retreat of the human population to lower elevations. Occupation of Plumas and Butte counties is represented by the presence of a single fluted point and a few Great Basin Stemmed points (Nilsson et al. 1996:8). Kowta referred to the humans who entered the area as belonging to the Western Pluvial Lakes Tradition, but noted that these people were highly mobile and organized into small groups, and that this area most likely was peripherally utilized as a hunting ground (Kowta 1988:50-58).

The Archaic Period (6000 B.C. to A.D. 500) marks an apparent shift in subsistence away from big game and a general broadening of the subsistence base. The processing of grass seeds and plant foods becomes important, and is denoted by the appearance of ground stone milling equipment, including the mano and metate tool set, and later the portable mortar and pestle. Kowta (1988:58) noted that subsistence

focused on both the valley floor and foothill zones in Butte County. This shift in adaptive strategies coincides with a more arid climate and upslope movement of the snow line, and an expansion into higher elevations of black oak and vegetation favored for browsing by deer. The more arid conditions led to an increase of populations in the foothill valleys of Butte County and movement of these Hokan-speaking people up river canyons, like the Feather, into the higher mountain valleys of Plumas County (Kowta 1988:58-65).

The Middle and Upper Archaic are the first periods in Butte and Plumas counties for which there is substantial archaeological data. These periods are characterized by the presence of Martis (2500 B.C. to A.D. 500), Mesilla (1000 B.C. to A.D. 1) and Bidwell (A.D. 1 to A.D. 800) assemblages. Kowta provides an overview and description of the data recovered by Keith Johnson and crew at two sites at Bucks Lake, by Peak and Associates also at a Bucks Lake site, and work by Ritter and Olsen in the Lake Oroville area (Johnson et al. 1980; Peak and Associates 1983; Ritter 1968). These complexes share many traits, including milling stones and manos; similar leaf-shaped, stemmed, and corner-notched points; and the introduction of mortar and pestle technology in the later Archaic Period. They differ in that Martis is marked by wide-stemmed points, blades and scrapers, and heavy reliance on basalt and metavolcanic material for artifact manufacture. Mesilla is characterized by the introduction of the atlatl and dart; the use of large, heavy stemmed and side-notched points, and a reliance on basalt, slate, and chert lithic materials. The Bidwell Complex is marked by large slate and basalt points, the use of steatite vessels for cooking, and flexed burials. Based on these data, as well as an analysis of linguistic data, population size, and climatic stress factors, Kowta concluded that the "...Martis tradition represents an 'Autochthonous' demographic and cultural mixture of both Great Basin and California elements with, however, the California contributions dominating." He continues by inferring that the main occupation of the northern Sierra involved Hokan—rather than Penutian—speaking peoples, as proposed by others before him (Kowta 1988:67-90, 130).

The Emergent Period (A.D. 500-Contact) is characterized by increasing aridity in Plumas and Butte counties until approximately A.D. 1200.

This increase in aridity coincides with an archaeologically recognizable retreat of populations southward towards Lake Tahoe due to the less dependable resources in the area. From A.D. 1200 through the Contact Period, the climate shifts to one much like the present. Consequently, the archaeological record reflects an increase in use of the areas of Butte and Plumas counties. Use of lower-elevation sites during the Emergent Period is characterized by the presence of Gunther Stemmed, Cottonwood Triangular, and Desert Side-notched points, commonly associated with Sweetwater (A.D. 800-1600) and Oroville (A.D. 1600-1850) Complex assemblages (Kowta 1988:150-153). Use of higher-elevation sites along the northern Sierran Crest is indicated by the presence of Rose Spring and East Gate points as well as the Desert Side-notched and Cottonwood of the Early and Late Kings Beach complex assemblages. Using a combination of climactic, archaeological, and linguistic data, Kowta hypothesized that Miduan-speaking people arrived in the area during the Sweetwater Period. He also proposed that Gunther-series points mark the movement of the Maidu into the area; however, he cautions, this is not a strictly one-to-one relationship, as Gunther-series points have been identified in other areas, such as in Wintuan territory to the west (Kowta 1988:159). Gunther, Cottonwood, and Desert Side-notched points have been identified in small quantities at Eagle Lake (Pippin et al. 1979:80-83), Bucks Lake (Johnson et al. 1980; Peak and Associates 1983) and Lake Almanor (Compas et al. 2001; Kowta 1980, 1988:130-160).

### THE UPPER NORTH FORK PROJECT

Armed with Kowta's information, PAR began the Upper North Fork project in April of 2000, when the majority of the Project area was surveyed. Lake Almanor was surveyed an additional two times, due to the lowering of the lake level. Our survey resulted in the identification of 93 previously identified and newly identified prehistoric and historic archaeological sites within the entire Project area. Forty-four of these are prehistoric, 16 are multi-component sites, and 33 are historic. Though this paper focuses on Native American use of the area, it should be noted that the majority of the historic sites are related to railroad logging and the construction of the Lake Almanor and Butt Valley

dams. They consist of building foundations, trash scatters, and railroad grades.

Fifty-five of the prehistoric and multi-component sites were identified at Lake Almanor, while five sites containing prehistoric components were identified at Butt Valley Reservoir. Though the number of sites was a little overwhelming, the size of some was even worse. The smaller of the habitation sites cover an average area of approximately 500 square meters, while the largest two average 1.5 kilometers long x 350 meters wide. The lake level limited the size of one of the larger sites.

The majority of the sites are distributed at the northern end and along the western side of the lake. There are also a few located along the northeastern side of the lake east of the peninsula. This distribution is most likely due to the fact that the elevation of the northern end of the lake is higher, and this area was perhaps drier and more suitable for habitation than other parts of what used to be Big Meadow.

One item to note is that the ethnographic data shows a slightly different picture, because the villages identified were said to be in the vicinity of Big Springs and other places east of the peninsula. Only two sites, judging by the size and the variety of artifacts, may have been directly related to the seven villages recorded for this area. There are a few lines of logic that one could follow for this: either the area noted as Big Springs today is not the same place known to the Mountain Maidu; or, if more land were exposed on the east side, more sites would be found, especially near the confluence of the drainages.

Some patterning in habitation and site size was noted. As with most surveys, the sample of artifacts was small and nothing was collected; therefore, the information presented should be considered cautiously. There are 23 sites that appear to be large or small habitation areas with hearths, ground stone, hopper mortars, manos, pestles, bedrock milling stations, and a variety of lithics. The materials used consist mainly of basalt, chert, obsidian, and a small amount of petrified wood. The large habitation sites all are located in the highest elevations at the north end, along the western shore, and on the west side of the Lake Almanor peninsula. Smaller habitation sites are more evenly distributed on both the

eastern and western sides of the lake. Projectile points from these habitation sites date to the Middle and Upper Archaic as well as the Emergent period.

Thirty-two sites in the project area appear to be large or small lithic scatters lacking features or other artifacts. Many of these are more than 10,000 square meters in size, possibly because lithics have been spread by wave action from the lake. Large and small lithic scatters were located along the western and eastern sides of the lake, and their size and number increases as one moves in an easterly direction from the western shoreline. This may be due to the fact that the main stream channels were located near what is now the middle of the lake. Points from these small and large lithic scatters were all from the Middle to Upper Archaic periods. These periods appear to be represented at 12 sites within the project area. Large leaf-shaped and wide-stemmed points, commonly associated with Mesilla Complex assemblages, were identified at three sites; Martis- and Elko-series points (Side-notched, Corner-notched, Contracting Stem, Expanding Stem, Small Leaf-shaped, and Triangular) were identified at nine sites. As noted earlier, these sites are located primarily in the northwest portion of the lake and on the western shoreline; one site is located on the east side. The size and variety of artifacts at these sites indicate that they ranged from large habitation areas to small lithic scatters.

The Emergent Period is represented in the project area by Shasta, Sweetwater, Kings Beach, and Oroville assemblages, as noted by Kowta in his 1980 analysis of CA-PLU-33/H, and found during our surveys. Gunther-variants, Desert Side-notched, Eastgate and Rose Spring points were identified at seven sites, including CA-PLU-33/H. These sites are distributed somewhat differently, with two sites in the northwest portion of the lake, three along the western shore, and two along the eastern shore. This can most likely be attributed to the small amount of data that we have. Unlike the Archaic Period sites, those from the Emergent Period appear to be limited to large and small habitations. Two of the sites, both large habitation sites and located in the northwest portion of the lake within one mile of each other, appear to have been inhabited during both the Middle to Upper Archaic and the Emergent periods.

## DISCUSSION

Archaeology is a very messy thing, and nothing ever fits nicely with the information gathered and analyzed by the archaeologists that preceded you. In this case, possibly due to the limited size of the sample, it does fit with Dr. Kowta's overview. A very reliable source also reported that Dr. Kowta thought about this for 20 years and then wrote his overview. That may explain the nice fit.

His study and analysis of data from sites in this region indicate that the area was used peripherally during the climatically moist Paleo-Indian period. We found no evidence of use of the area during this time. Our data indicate instead that habitation began during the Middle to Upper Archaic, and this correlates nicely with Dr. Kowta's overview. According to his model, the Emergent Period began with an arid climate, the retreat of people southward, and a decrease in the use of the study area until the climate shifted to one much like the present, at about A.D. 1200. Our data indicate habitation during the Emergent Period; however, our sample is too small to detect increased or decreased use of the area before A.D. 1200.

At this point one has to ask if we would find such a nice correlation if a more comprehensive project was undertaken. It might be interesting to find out, and maybe someday that will happen. Considering that relatively few studies have been conducted in the northern Sierra, the overall archaeological value of the sites at Lake Almanor is very high. Hopefully in the future more comprehensive studies can be conducted at the sites. Until then, we at least know that the sites exist, that their potential archaeological value is very high, and that on the surface (pun intended) they appear to correlate with Dr. Kowta's model.

## REFERENCES CITED

- Compas, L., with C. Baker, J. Dougherty, T. Bakic, M. Maniery, and K. McIvers  
 2001 *Cultural Resources Inventory For The Pacific Gas And Electric Company Upper North Fork Feather River FERC Relicensing Project, Plumas County, California (FERC #2105)*. On file, Pacific Gas and Electric, Chico.

- Dixon, R. B.  
1905 The Northern Maidu. *Bulletin of the American Museum of Natural History*. No. 17(3):119-346. New York, New York.
- Elsasser, A. B.  
1978 Development of Regional Prehistoric Cultures. In *Handbook of North American Indians, Volume 8, California*. Edited by R.F. Heizer, pp. 37-57. Smithsonian Institution, Washington D.C.
- Johnson, K., A. Farber, M. Kowta, J. Manning, R. Markely, J. Myers, and A. Ratcliff  
1980 *Rainbow Point Revisited: Archaeological Investigations at Bucks Lake, Plumas County, California*. Report on file, Pacific Gas and Electric Company, San Francisco.
- Kowta, M.  
1974 *Society For California Archaeology District 2 Clearinghouse: Report of Archaeological Field Reconnaissance of the Lake Almanor Shoreline*. Report on file, California Historical Resources Information System, Northeast Information Center, California State University, Chico.  
1980 *A Late Prehistoric Mortuary Complex from Lake Almanor, Plumas County, California*. On file, Pacific Gas and Electric, Chico.  
1988 *The Archaeology and Prehistory of Plumas and Butte Counties, California: An Introduction and Interpretive Model*. Report on file, California Historical Resources Information System, Northeast Information Center, California State University, Chico.
- Kroeber, A. L.  
1976 *Handbook of the Indians of California. Bureau of American Ethnology Bulletin 78*. Smithsonian Institution, Washington, D.C. Reprinted 1976 by Dover Publications, New York.
- Nilsson, E., K. Hull, and R. Bevill  
1996 Archaeological Investigations at CA-PLU-984 (FS# 05-06-51-893), Humbug Valley, Almanor Ranger District, Lassen National Forest, California. On file, Northeast Information Center, California State University, Chico, California.
- Peak and Associates  
1983 *Archaeological Investigations At CA-PLU-115, Boathouse Point on Bucks Lake, Plumas County, California*. Report on file, Pacific Gas and Electric Company, San Francisco.
- Pippin, L. C., J. O. Davis, E. Budy, and R. Elston  
1979 *Archaeological Investigations at the Pike's Point Site (4-LAS-537), Eagle Lake, Lassen County, California*. Social Sciences Center, Desert Research Institute. University of Nevada, Reno.
- Riddell, F. A.  
1974 *Ethnographic Villages at Lake Almanor*. Unpublished Manuscript in Possession of the author.  
1978 Maidu and Konkow. In *California*, Edited by R. F. Heizer, pp. 370-386. *Handbook of North American Indians*, vol. 8, William G. Sturtevant, general editor. Smithsonian Institution, Washington, D.C.
- Ritter, E. W.  
1968 *Culture History of the "Tie Wiah" (4-BUT-S84), Oroville Locality, California*. Unpublished Masters Thesis, University of California, Davis.