CHAPTER 1

STUDYING THE LAKE SONOMA AREA

FLOOD CONTROL AND WARM SPRINGS DAM

Since the 18th century, major government-sponsored public works have been the responsibility of the U.S. Army Corps of Engineers. Even before California had been admitted to the Union, the Corps surveyed the San Francisco Bay with an eye to its military potential. In succeeding decades, the Corps became involved in a variety of water-related projects, ranging from the removal of Blossom Rock, a navigational hazard in San Francisco harbor, to improving the channel of the silt-clogged Sacramento River.

During the late 1930s, flooding throughout the Russian River basin prompted various local, county, and state bodies to petition the federal government to develop a flood-control plan for the area. Numerous studies and hearings during the next 20 years resulted in the construction of the first major Corps of Engineers project in the Russian River basin: Coyote Valley Dam-Lake Mendocino, completed in 1959. Plans for the second stage of the Corps’ program for flood control in the area—the construction of a dam on Dry Creek—were refined during the early 1960s, and in 1962, construction funds for the project were approved by Congress (1).

CULTURAL RESOURCE STUDIES

Cultural resource studies in the Lake Sonoma Area began in 1964, when Adan Treganza, an archaeologist from San Francisco State College, and his small crew surveyed the area for prehistoric sites. Although several sites were found during their brief reconnaissance, none was judged to be important enough to warrant excavation. Construction began on the Warm Springs Dam in 1967. Seven years later, however, the work was halted by a court order arising out of concern for the project’s overall safety and its effects on the environment, including cultural resources. Since the work on the dam had begun, new professional standards had been developed by archaeologists and two major pieces of federal legislation had been passed.

The National Environmental Policy Act (NEPA) of 1969 directed that, prior to a project’s approval, a report must be prepared that considers the project’s impact on a number of factors. This act mandated that federal agencies “preserve important historic, cultural and natural aspects of our national heritage and maintain, wherever possible, an environment which supports diversity and variety of individual choice.”

The requirement to consider cultural resources had been stipulated in even greater detail by the National Historic Preservation Act passed by Congress in 1966. It advised federal agencies that “the historical and cultural foundation of our Nation should be preserved as a living part of our community life and development in order to give a sense of orientation to the American people” (2).

Although the project was already under construction, the Corps of Engineers prepared an Environmental Impact Statement for Warm Springs Dam-Lake Sonoma. One of the points of contention was resolved when the Corps agreed to sponsor a comprehensive study to identify cultural resources in the Lake Sonoma Area and to take additional steps to mitigate the project’s adverse effects on these resources.

Some Early Studies

Early studies in the Lake Sonoma Area sought to identify and evaluate potential cultural resources. In the process, the researchers also identified many research domains which provided focus for subsequent studies. Archaeologists worked in the Lake Sonoma project area for nearly eight years between 1974 and 1984. Their aims were threefold: to discover all of the archaeological sites in the area; to evaluate damage that might be done to them as a result of construction, flooding, or recreational activities; and to determine how to minimize the damage or record information that would be lost. The first part of this job—finding the sites—is known as “survey” to archaeologists. In 1974, Robert Orlins and a crew of eight from the University of California at Davis spent two months surveying the Lake Sonoma Area. This involved the team members, spaced a few yards apart,
actually walking over the area, carefully inspecting the ground for signs of past human presence. A “site” was recorded at a location where this kind of evidence was found.

Although the period of interest to historical archaeologists—beginning in California with the first Spanish settlement—is not as distant in time as the prehistoric era, it is nevertheless distant in experience from modern Americans. For many years, the fact of its recent character caused some professionals to doubt the value of investigating the period archaeologically; in tune with the times, Treganza’s 1964 survey did not consider historic-period remains at all, and the 1974 team did not feel qualified to evaluate the historic sites they encountered. For this reason, historical archaeologist Lyle Stone was hired in 1976 to document and evaluate the project’s historic sites.

Eventually, more than 120 archaeological sites, ranging from several ancient prehistoric middens to 19th-century ranches, were recorded in the Lake Sonoma study area. Many were directly threatened by construction of the dam. Consequently, it was the archaeologists’ next job to evaluate these sites so that plans could be developed to salvage some of the information they contained.

In keeping with the spirit of NEPA, the scholars who took part in the study were concerned not only with the area’s past, but also with its heritage importance to contemporary peoples, specifically local Indians whose ancestors had occupied the area in antiquity. In fact, this theme came to be preeminent in the ethnohistoric and ethnographic work that was done in the area.

While archaeologists surveyed the ground for archaeological sites, anthropologists Lowell Bean and Eugene Hurtle conducted surveys of the ethnohistoric and ethnographic literature on the area, and Dorothea Theodoratus implemented an extensive interview program. Knowledgeable local Indians “spanning five generations and ranging from fourteen to one hundred and thirteen years of age” were interviewed to record both historic and contemporary Native American use of the area (3). In this way, the most important continuing Indian use of the area was discovered: the cultivation of several species of plants for basketry, ceremonial use, and traditional healing. These ethno botanical (plant-collecting) sites were identified in the field and recorded.

In 1976, with these data in hand, much of the project’s lands were nominated for inclusion on the National Register of Historic Places, and in the following year, the Dry Creek-Warm Springs Valleys Archeological District was formally placed on the Register. The District included not only land owned by the Corps of Engineers, but also private properties located downstream in the Dry Creek Valley that were historically associated with the project area. The District contains 85 prehistoric, 24 historic, and 8 ethno botanical sites. The prehistoric sites ranged in size, type, and age. Many of the downstream sites had been occupied by local Pomoans into the early 20th century and were still known by name. Historic archaeological sites connected with known persons and activities included Skaggs Springs Resort, the Scott District School, and the homesteads of Louis Mead, James Pritchett, and John Ferry. The Peña adobe, built by the area’s first Mexican settlers, was also included in the National Register District. These 117 sites, particularly those that would be damaged or destroyed by the Corps’s project, provided the main focus for the subsequent cultural resource studies (4).

**Warm Springs Cultural Resources Study**

In 1978, the same year that work on the dam resumed, the Corps of Engineers began the first of its mitigation-phase cultural resource studies. This work was coordinated by Dr. Richard N. Lerner, Corps Anthropologist, and carried out by the newly created Warm Springs Cultural Resources Study, an organization made up of scholars from Sonoma State University, University of California campuses at Davis and Riverside, California State University at Sacramento, and Santa Rosa Junior College, as well as professionals working independently or with private research organizations.

The objective of the group, headed by Dr. David A. Fredrickson of Sonoma State University, was to design and implement a program, as required by law, to lessen the effect of the Corps’s project on the cultural properties included in the National Register District. The resulting program was later described by *New West* magazine as a “textbook example of cultural resources management, gathering together professionals of a multidisciplinary breadth never before contemplated by a government agency”: prehistoric and historic archaeologists, historians, ethnohistorians, linguists, ethnographers, geographers, botanists, ethnobotanists, geologists, folk-
lorists, and an anthropological museologist (5). Under the auspices of the Warm Springs Cultural Resources Study, these people studied the Lake Sonoma Area to a depth rarely achieved elsewhere.

The present volume’s geographical focus—what is referred to as the “Lake Sonoma Area” (also, “study area” and “project area”)—is composed of more than 17,000 contiguous acres in northern Sonoma County, California: the land purchased by the Corps of Engineers for the dam and reservoir site. Ethnographic research with the Dry Creek and Cloverdale Pomo included study of the use of lands near the project which had been held by these groups in the past. Additional studies in the Dry Creek uplands area to the northwest of Corps property and along Kelly Road, done in connection with biological and road relocation investigations, added much supplementary data about thousands of acres and provided a broader context for the Lake Sonoma Area investigations.

**Ethnographic and Ethnobotanical Studies**

By stressing the living, dynamic aspects of local Indian culture rather than treating it only historically, as a collection of cultural relics from an archaic way of life, the ethnographic studies were able to make contributions of great importance to scholarly knowledge. At the same time, this approach generated equally significant humanistic insights into the efforts of contemporary Native Americans to retain their cultural integrity. From the first such research in the area, conducted under the leadership of Dorothea Theodoratus by ethnographer David Peri, it was clear that many Dry Creek Indians still lived nearby; far from having melted into the cultural “pot,” they were both proud of their heritage and deeply attached, emotionally and spiritually, to the Lake Sonoma Area.

Ethnobotanical sites were particularly important. Interviews revealed that in recent years Indian people had been finding certain important plants increasingly difficult to obtain; as a result, collection sites on Warm Springs and Dry creeks were being utilized by people from as far away as Lake and Mendocino counties. In greatest demand was basket sedge, whose roots are used in making delicate twined and coiled baskets. In addition to sedge’s economic importance to several renowned Pomoan basketweavers, other plants contributed to the continuation of other aspects
of the area’s traditional Indian culture. To lessen the effect of the loss of these plants, thousands of sedge, willow, angelica, and lomatium plants were transplanted to new locations downstream from the dam. Initial harvests by the weavers suggest that the sedge relocation is a success. In recognition of this innovative mark, the Warm Springs Cultural Resources Study received a national award in 1982 from the Army Corps of Engineers.

Language was another element of local Indian culture that was documented as part of the study. Linguists have compared the degree of difference between three of the Pomoan languages—Southern Pomo, Kashaya (or Southwestern), and Central Pomo—to that of the Western European Romance languages, Spanish, French, and Italian. Dialects of each language were spoken by a number of small, politically autonomous groups, called tribelets by ethnographers. Of the Southern Pomo dialects, the variant spoken in the Santa Rosa-Sebastopol area died out early in the 20th century; that of the Healdsburg locality was lost after World War II. In fact, only two Southern Pomo dialects, Mihilakawna (Dry Creek) and Makahmo (Cloverdale), survived into the 1980s; fortunately, both were spoken by inhabitants of the Lake Sonoma project area. Project linguists soon discovered that even these were in danger, as only ten speakers of the Mihilakawna dialect survived, while only one speaker of the Makahmo dialect remained. Linguist Robert Oswalt summed up the critical state of things in these words:

The situation is quite analogous to that of an endangered species. Great sums have been spent to preserve species near extinction. . . . And yet there is another kind of living organism, more intimately a part of humankind, which grows and evolves, and in some cases dies, with no comparable effort being expended to preserve it: Language (6).

Accordingly, the linguists made numerous recordings of native speakers, compiled word lists, and analyzed the languages’ grammatical structure. There has been a renewed interest among people of Makahmo and Mihilakawna descent in learning the language of their ancestors. It is certain that the linguists’ work has made a priceless contribution toward the preservation and revival of these threatened “species.”

To provide the perspective of local Indians on these cultural studies, a Native American Advisory Council was formed. This group gave advice on a variety of Indian concerns, including the disposition of many of the petroglyph rocks, considered sacred by some, that were to be flooded by the reservoir.
Two of the boulders were selected for exhibition at the Visitors Center, while the remainder were moved from their original locations and buried to prevent vandalism and for possible later display.

A guiding principle of the ethnohistoric research was the perishable nature of the information: while much of the history of the area’s White population was available from written and archaeological sources, much of the experience of the Indian residents was contained only in the memory of tribal scholars and other elder citizens. The advancing years of many Indian consultants, together with changes in the landscape caused by dam and reservoir construction, combined to put this store of knowledge in peril. The generation who could recall firsthand the Indian lifestyle of the late 19th and early 20th centuries was passing away. Without their accounts, it would have been impossible to reconstruct, for example, the pattern of seasonal movements that allowed Indians to survive in a world dominated by hostile Whites, while retaining their own cultural identity. Stories passed down through the generations recall events that were ignored by contemporary historians, such as the forced relocation of Dry Creek Indians during the 1850s, known as the “Death March.”

**Ethnohistory and History**

Another contribution of the Warm Springs Cultural Resources Study was the approach taken to the study of the area’s historic-period residents. Small rural communities in the West had rarely been studied in this kind of breadth and depth. Not enough “important” happenings occurred here for the likings of many historians concerned principally with events described in written documents. Studies such as those for the Lake Sonoma project have helped to make researchers aware of the quantity and quality of data that exist for these overlooked areas.

By and large, the people who were studied were ordinary folk, although large landowners left the most information about themselves. Some segments of the population—such as the landless or transient—were barely represented in the historic records. Despite these gaps, the work provided insights into many aspects of 19th- and early 20th-century rural life. This was achieved on a variety of levels, ranging from compiling episodic, oral history accounts, to analyzing historical processes that affected the area’s long-term development. Most important for the latter goal was the opportunity to study the histories of individual families over many years and to chart their responses to certain broad historic changes. A major focus was their changing finances, as reflected in landholding and acquisition practices and agricultural
diversification versus specialization. By following the careers of families, researchers could also discover relationships between the families’ size and composition and economic changes on both the household and regionwide level.

We can speculate that the history of the Lake Sonoma Area is that of a typical part of rural California. At the same time, it is clear that the area was much more strongly articulated into county, state, and national networks during the 19th-century period than during the mid-20th, by which time it had moved to the periphery. We might also think about the degree to which this may have been true of much of 19th-century rural California, and how this would substantially change our view of this period. To date there has been little in-depth study of this problem in other areas of the state, which once more highlights the importance of the Lake Sonoma Area studies.

Archaeology: Prehistoric and Historic

The 1974 U.C. Davis survey began a period of in-depth archaeological examination that made the district one of the most heavily studied rural areas of its size in northern California. For prehistorians, the Lake Sonoma project represented a rare opportunity. Generally, researchers cannot study in depth more than a few sites in any region—the time, logistical problems, and costs involved are prohibitive. In the case of the Warm Springs Dam project, however, many of these problems were surmounted through the Corps of Engineers’ support.

The study gave head prehistoric archaeologist Martin Baumhoff and his colleagues the chance to examine changes that occurred over thousands of years within the area, including the occupants’ relationships with other groups. From the survey, the archaeologists knew the sites’ locations on the ground. Excavation allowed them to date the sites’ occupation. Brought together with information about the area’s topography and ecology, this information was used to study the changing relationship of human uses of the area to the natural environment. The prehistorians were interested in reconstructing the size, location, and types of sites in the various sections of their study area during particular periods in the past. This interest is based both on a desire to describe particular living patterns, in both historical and geographical terms, and to identify the environmental and social forces that influence groups to adopt one pattern over another.

Relationships between groups of people, as well as those between people and their natural environment, formed important topics of study whose manifestations can be recognized archaeologically. On the basis of various indicators, archaeologists determined that intensive human use of the area began about 3000 B.C. They hypothesized that, with the development of trade, the society became socially stratified and occupationally specialized, with traders, priests, and artisans living in separate communities away from low-status individuals. Eventually, this system is thought to have broken down when, as a result of religious innovation, the social structure changed to the more egalitarian system that characterized the period immediately preceding Euroamerican contact.

In addition to changes in relationships within the area, archaeologists also found evidence of fluctuations in the relationships between the Lake Sonoma Area people and their neighbors. This was determined by studying the trade in obsidian. This volcanic glass, which does not occur naturally in the project area, is a common feature of the prehistoric sites, whose inhabitants used it to make various cutting, piercing, and scraping tools. The presence of obsidian is evidence of either trade or of a relationship that allowed people from the Lake Sonoma Area to enter others’ territory and collect this valuable resource. If obsidian is chemically analyzed, its geographic source can be pinpointed. By studying the sources of obsidian artifacts of known dates, the archaeologists were able to determine that the main obsidian procurement site changed over time from the Clear Lake area’s Mount Konocti, to Glass Mountain in the Napa region. With this information now in hand, future research can focus on refining the causes of the change, which may relate to major political or economic movements in prehistoric north-central California.

The approach taken by historical archaeologists toward their sites is necessarily quite different, as many of the questions about the historic period can be answered without the use of archaeology. Often, valuable insights are reached by examining the “fit” between artifacts excavated from a particular site and information from other sources. Consequently, the Lake Sonoma project historical archaeologists were familiar not only with archaeology and material remains, but also with other ways of researching local history.
As historical archaeology was a relatively young discipline in northern California at the outset of the project, the potential of some sites was not recognized by Corps of Engineers officials in time to save them from their own personnel: in the project’s early stages, some sites were bulldozed and several historic structures were burned to the ground for fire-control practice before they could be evaluated or recorded. In spite of these difficulties, chief historical archaeologist Roberta Greenwood and her associates were able to draw important conclusions about past lifeways in the Lake Sonoma Area. By studying the arrangement of ranches, farms, fields, and fences on the historical landscape, the archaeologists found subtle links between the local land-use pattern and the ways in which people viewed the natural environment. A number of local building techniques were also discovered, including the use as posts and piers of redwood logs, often with the bark intact, and the construction of stone dugouts for cold storage.

On a more limited material level, the archaeological work provided a partial inventory of the artifacts kept on 19th- and early 20th-century rural ranches and farms. Most of the artifacts that historical archaeologists extract from their sites have little monetary worth or even curio value; many are only broken parts of what were once common objects. Indeed, if individual pieces are taken out of the context of their place of discovery, few retain much value at all, even to archaeologists. Yet with some knowledge of the way in which a group of artifacts came to be discarded in a certain place during a given time period, useful insights can be garnered from even the most simple remains, while good artifact assemblages enable archaeologists to make important contributions to historical knowledge. The homestead of Louis Mead, for example, yielded a wide range of glass, ceramic, and metal artifacts that attest to the quality of Mead’s day-to-day existence. The lack of any female-associated artifacts among the clothing
fasteners or shoe parts found on the site is consistent with the results of historical research, which indicated that Mead was a bachelor.

The degree to which Lake Sonoma Area residents participated in regional, national, and international trade networks was also assessed by means of archaeological finds. Archaeology can provide information about trade networks that is unavailable elsewhere. Historical sources sometimes contain accurate listings of the origins, amounts, and types of everyday goods imported to California at various times. Archaeological work, however, is generally the only way of reconstructing the pattern of these goods’ distribution within communities and, especially, in individual households. But this is not an end in itself. These patterns indicate the nature and degree of integration of the local community into the larger world. Ceramic tableware, for example, is often stamped with the maker’s mark; these were used by the Lake Sonoma project archaeologists to study trade during the 19th and 20th centuries. By studying ceramics from dated deposits, the archaeologists were able to compare acquisition practices within the study area with trends on the national level. They also noted a distinct difference between the ceramics used at the Skaggs Hot Springs hotel, a project-area resort, and those used on the homestead sites. The hotel had a wider variety of vessel forms used for serving and toiletary purposes, but a smaller range of decorative types, relying mainly on the plain or green-banded, heavy, white ceramics marketed by potters as “Hotel Ware.”

Ultimately, the importance of the historical archaeology program did not depend on the results of any of its individual aspects, but rather on its contribution as a whole to a well-rounded knowledge of the past. In particular, the method of articulating oral and written information with that forthcoming from the ground itself provided a more complex and human picture of the area than would have been possible from any single source.

As with most problems that are addressed by scientists and scholars, the conclusions of the research at Lake Sonoma will inevitably be taken up as the questions for studies in the future. Consequently, the success of all aspects of the studies will be judged not only by their own substantive results, but also by the quality and quantity of leads they have provided to guide future research.

Cultural Resources Studies and This Volume

Webster’s dictionary has defined a resource as “something that lies ready for use or that can be drawn on for aid.” The information collected by scholars over the years as part of the mitigative efforts fits this category well. As knowledge in the minds of Indian tribal elders, words in dusty, leather-bound volumes, and uninterpreted objects and “data” in the ground, the cultural resources of the area were largely unavailable for “use” by society at large. The research work was done for the purpose of historic preservation. However, the spirit of the law recognizes and demands that to do justice to the resources we must do more than merely preserve and record them in highly technical professional reports of limited circulation.

Information gathering has to be taken one step further before its value can be realized: the information has to be organized and put in a format that is readily available and understandable. This volume is one of four that have been prepared by the Warm Springs Cultural Resources Study to present the results of its research into the prehistory, history, and ethnography of the Warm Springs Dam-Lake Sonoma project area. It seeks to serve at least three audiences: the general public, which is entitled to the benefits of these studies as it is to those from the work of any other public agency; professionals—anthropologists, historians, archaeologists, and other social scientists—who often do not receive unpublished information generated by studies such as this; and those with a particular interest in the area itself, either out of avocational interest in its history or because the information pertains to their own community or heritage.

It is hoped that all of these groups will find something of value in these things that lay “ready for use.”
Skaggs Springs Resort on Warm Springs Creek (photo from the Obed Bosworth collection)