UPPER NORTH FORK FEATHER RIVER PROJECT
(FERC 2105)

REPORT E4
HISTORICAL AND ARCHEOLOGICAL RESOURCES

Table of Contents

Table of Contents (Continued)

Tables

Figures

Report E4

HISTORICAL AND ARCHEOLOGICAL RESOURCES

18 CFR § 4.51 (f)(4) Report on historical and archeological resources. The report must discuss the historical and archeological resources in the project area and the impact of the project on those resources. The report must be prepared in consultation with the State Historic Preservation Officer and the National Park Service. Consultation must be documented by appending to the report a letter from each agency consulted that indicates the nature, extent, and results of the consultation. The report must contain:

(i) Identification of any sites either listed or determined to be eligible for inclusion in the National Register of Historic Places that are located in the project area, or that would be affected by operation of the project or by new development of project facilities (including facilities proposed in this exhibit);

(ii) A description of any measures recommended by the agencies consulted for the purpose of locating, identifying, and salvaging historical or archaeological resources that would be affected by operation of the project, or by new development of project facilities (including facilities proposed in this exhibit), together with a statement of what measures the applicant proposes to implement and an explanation of why the applicant rejects any measures recommended by an agency.

(iii) The following materials and information regarding the survey and salvage activities described under paragraph (f)(4)(ii) of this section:

(A) A schedule for the activities, showing the intervals following issuance of a license when the activities would be commenced and completed; and

(B) An estimate of the costs of the activities, including a statement of the sources and extent of financing.

E4.1 INTRODUCTION

E4.1.1 Legal Authority

This report, referred to herein as the Cultural Resources Management Plan (CRMP), has been developed to manage historic properties within the Area of Potential Effects (APE) of the Upper North Fork Feather River Hydroelectric Power Project (the Project, FERC 2105). The licensing of the Project is a federal undertaking; the FERC license will permit activities that may "cause changes in the character or use of historic properties, if any such historic properties exist" (36 CFR § 800.16(d)). The FERC must therefore comply with Section 106 of the National Historic Preservation Act, as amended, which requires

the head of any federal department or independent agency having authority to license any undertaking to take into account the effect of the undertaking on historic properties, and afford the Advisory Council on Historic Preservation an opportunity to comment on the undertaking prior to the issuance of the license (16 U.S.C. § 470f). Historic properties are any prehistoric or historic district, site, building, structure, object, or Traditional Cultural Property (TCP) included in, or eligible for inclusion in, the National Register of Historic Places (NRHP) (36 CFR § 800.16(l)). For the purposes of this CRMP, "cultural resources" are any prehistoric or historic district, site, building, structure, object or Traditional Cultural Property regardless of the resource's individual NRHP eligibility.

The Advisory Council on Historic Preservation has promulgated regulations that federal agencies must follow in complying with Section 106. These regulations are found at 36 CFR Part 800. The CRMP has been developed to assist the FERC in meeting those requirements. The CRMP is an implementing mechanism for the consideration of historic properties as prescribed in "*Draft Programmatic Agreement Among the Federal Energy Regulatory Commission, the Advisory Council on Historic Preservation, and the California State Historic Preservation Officer for Managing Historic Properties that may be Affected by a License Issuing to Pacific Gas and Electric Company for the Continued Operation of the Upper North Fork Feather River Hydroelectric Project in Plumas County, California*" (Appendix E4-A). The executed Programmatic Agreement (PA), developed pursuant to 36 CFR § 800.14(b), establishes a process for the consideration of historic properties by the FERC and constitutes the comments of the Advisory Council.

This report was also developed to meet the requirements of FERC Order No. 513-A, "Hydroelectric Relicensing Regulations Under the Federal Power Act". The plan utilizes the FERC's "Guidelines for Preparing Cultural Resources of Exhibit E" and the Advisory Council on Historic Preservation's "Draft Guidelines for the Development of Historic Properties Management Plans for FERC Hydroelectric Project License Applicant" (September 21, 1999).

E4.1.2 Purpose

This report was developed to prescribe specific activities and processes to manage historic properties and cultural resources within the Area of Potential Effects (APE) for the current undertaking. The report will guide the Licensee, owner and operator of the facilities, in applying treatment options designed to address ongoing and future effects to historic properties that may be a result of the Project's operation and maintenance. The report also describes a process of consultation with appropriate state and federal agencies, as well as with Native Americans who may have interests in historic properties within the APE.

E4.2 BACKGROUND

E.4.2.1 Project Description

Currently, the Upper North Fork Feather River Project extends roughly 30 miles from the northern end of Lake Almanor near the community of Chester to the Belden Powerhouse on the East Branch of the Feather River. Hydroelectric structures within the Project system (the System) include four dams and four reservoirs, four powerhouses, associated

tunnels, surge chambers, and penstocks. These structures are identified in Table E4-1. All of the System's structures are connected through its linear features, such as the tunnels, penstocks, and small reservoirs. In addition, the Project includes three associated company camps that were previously utilized during Project construction. This camp, Camp Almanor is owned by the Licensee but leased to and managed by the Pacific Service Employees Association and for recreational purposes.

TABLE E4-1. UPPER NORTH FORK FEATHER RIVER HYDROELECTRIC PROJECT FEATURES (THE SYSTEM)

Unit	Feature	State No.
Almanor	Almanor Dam	P32-001638-H
Almanor	Almanor Intake Tower	P32-001639-H
Almanor	Lake Almanor	--
Almanor	Prattville Intake Towers	P32-001640-H
Almanor	Butt Valley Tunnel	--
Butt Valley	Butt Valley Powerhouse	--
Butt Valley	Butt Valley Dam	--
Butt Valley	Butt Lake	--
Butt Valley	Butt Dam Intake Tower	--
Caribou	Caribou No. 1 Powerhouse	--
Caribou	Caribou No. 2 Powerhouse	--
Caribou	Caribou 1 Penstock	--
Caribou	Caribou 2 Penstock	--
Belden	Belden Dam	--
Belden	Belden Reservoir	--
Belden	Belden Powerhouse	--
Belden	Oak Flat Powerhouse	--

The Licensee is not proposing any physical changes to any of the hydroelectric facilities as part of this relicensing process.

E4.2.2 Project Area of Potential Effects

In general, the FERC Project boundary encompasses all elements necessary for the operation of the Project and includes an area of 0 to 100 feet from the Project features. According to federal regulations, a project's Area of Potential Effects (APE), is defined as "the geographic area or areas within which an undertaking may directly or indirectly cause changes in the character or use of historic properties if any such properties exist" (36 CFR § 800.16(d)). As mentioned in the First Stage Consultation Package prepared for the Upper North Fork Feather River, the APE has been defined as all lands within the current Upper North Fork Feather River Project boundaries that are under the jurisdiction of the Federal Energy Regulatory Commission. These lands include the boundaries of Project facilities, access roads, and other Project features (excluding tunnels) that are within the current license boundary. Project access road corridors extend 25 feet on either side of the road centerline and include turnouts. This definition includes the shorelines of Lake Almanor and Butt Valley Reservoir, the roads between Butt Valley Reservoir and the Caribou Powerhouse, Belden Forebay, the adit access road leading up from Caribou Road to the Belden tunnel, the access road leading up from Highway 70 to the Belden Tunnel siphon and approximately 15 acres located north of the rest stop facilities near the town of Belden on Highway 70. The lands within the Project Area of Potential Effects are shown in Figures E4-A through E4-Y of Appendix E4-D attached. In order to expand the APE beyond this area, it must be clearly demonstrated that Project-related activities are having a direct or indirect effect on lands outside of this area.

E4.2.3 Cultural Context

Prehistoric/Ethnographic Context

Archaeological work in the Sierras began in the 1950s. In addition to identifying the Martis Complex, Heizer and Elsasser (1953) also identified the Kings Beach Complex. Their work in the area continued as they incorporated data from many sites located in the vicinity of Lake Tahoe, Plumas and Sierra counties. Several other archaeological projects were conducted in the 1970s and 1980s, such as the Oroville Dam and Lake and Bucks Lake projects (Johnson et al. 1980; Peak and Associates 1983), as well as William Dreyer's (1983) and Randy Bethard's (1998) Masters theses in the northern Sacramento Valley and Oroville Lake areas. These have contributed to the refinement of the cultural sequence and the understanding of this region. A summary of the sequence is presented in Table E4-2. The following discussion of the prehistory of the region surrounding the project area is organized to employ the broad periods defined by Fredrickson (1973) and is refined further based on work conducted in the region surrounding the project area.

Paleo-Indian Period (9000 BC – 6000 BC)

This period is marked by the presumed predation by humans upon big game and particularly upon now extinct species such as mammoth, camels and the Pleistocene form of bison. Subsistence also focuses on hunting in local lakes and streams. The temporal span corresponds to the terminal Pleistocene and the very early Holocene. Evidence of this period can be found in the Great Basin; however, no direct evidence of human

TABLE E4-2. CONCORDANCE OF SELECTED CULTURAL SEQUENCES ESTABLISHED FOR THE NORTHERN SIERRA NEAR THE UPPER NORTH FORK FEATHER RIVER PROJECT AREA (ADAPTED FROM KOWTA 1988:46-182; AND MANIERY AND MANIERY 1985:3.9-3.10)

PERIOD	CULTURAL COMPLEX	DATE	GENERAL SETTLEMENT PATTERNS	GENERAL SUBSISTENCE PATTERNS	ARCHAEOLOGICAL MANIFESTATION
Upper Archaic	Martis	2500 BC to AD 500	Postulated Movement into the Northern Sierra.	Oak-woodland associated deer; secondary use of milling stones for grinding small seeds.	Points (Wide Stem), blades and scrapers, heavy reliance on basalt and metavolcanic material for artifact manufacture.
	Mesilla	1000 BC to AD 1	Seasonal occupation of the foothill areas.	Hunting/processing foods in bowl mortars, emphasis on milling stone and mano.	Atlatal and dart; mortars and milling stones; large heavy stemmed/side notched projectile points; basalt, slate, chert points.
	Bidwell	AD 1- AD 800	Relatively permanent villages from which small task groups moved out to hunt fish and process.	Deer hunting and small game; fishing with nets; processing hard seeds/acorns; collection of fresh water mussels.	Use of large slate/basalt points; steatite vessels for cooking; burial of dead in flexed dorsal or lateral position.
Emergent	Sweetwater	AD 800-AD 1600	Permanent villages.	Hunting with bow and arrow.	Olivella bead/Haliotis ornament forms, steatite cups, platters, bowls, tubular smoking pipes; lightweight projectile points—Gunther, Desert Side-Notched, and Cottonwood types.
	Oroville	AD 1600-1800	Protohistoric Maidu, Semi-permanent and permanent villages.	Hunting, fishing, and extensive use of bedrock mortars.	Bedrock mortars; incised bird bone tubes, gorge hooks, gaming bones; clam shell disk beads, large structures.
	Maidu	AD 1800 to Present	Native Americans living in towns established by Euroamericans on ranches, reservations, or rancherias.	Subsistence hunting and gathering still on-going but many people living acculturated lifestyles.	Mixture of material culture typically attributed to the Maidu and Euroamericans.

occupation of the project area and surrounding region during this period has been identified (Chartkoff and Chartkoff 1984; Kowta 1988; Fredrickson 1973; Moratto 1984).

Archaic Period (6000 BC to AD 500)

The Archaic period 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, marked by the appearance of groundstone milling equipment, including the mano and metate tool set, and later the portable mortar and pestle. Evidence of sedentary occupation increases particularly in the middle and later archaic (Chartkoff and Chartkoff 1984; Fredrickson 1973).

Kowta (1988:58) notes that there is little information from the Upper North Fork Feather River region that can be attributed to the early or middle Archaic periods. In the desert to the west and at various sites in California, evidence of a wide spread technological tradition known as the Western Pluvial Lake Tradition (WPLT) has been found. These include the Witt site in Tulare County and the Skyrocket site in Calaveras County (Bieling 1998), the Borax Lake site and the Black Butte Reservoir site (Harrington 1948; Johnson et al. 1984). The WPLT is distinguished by large stemmed projectile points and also by chipped stone crescent artifacts (Kowta 1988:50-58; Moratto 1984:90-103).

The Upper Archaic, the first period in the project region for which there is substantial archaeological data, is marked by the presence of Martis, Mesilla and Bidwell Complex assemblages. Particularly important studies have been conducted at Bucks Lake some 20

miles south of the project area, by Johnson et al. (1980), Peak and Associates (1983) and Maniery and Jackson (1991). Kowta (1988:105-122) provides an overview and description of the data recovered by Johnson at CA-PLU-113 and -114 and by Peak and Associates (1983) at CA-PLU-115. Johnson et al. attempted to address the replacement of populations at two sites on Rainbow Point, hypothesizing that CA-PLU-114 might be a later occupation by ancestral Maiduan speakers, while CA-PLU-113 was an earlier Martis occupation by Hokan speaking peoples. However, archaeological evidence conflicts with this and Johnson et al. found that they could not verify his hypothesis based on the archaeological record (1980:231).

Peak and Associates, working across the lake at CA-PLU-115, concluded that the assemblage at that site was distinct from those found at CA-PLU-113 and CA-PLU-114. Furthermore, site CA-PLU–115 (2500 BC – ca. AD 1850) appeared to be largely contemporaneous with occupations at both CA-PLU-113 (800 BC – 300 BC) and CA-PLU-114 (AD 500 – AD 1600). Peak and Associates (1983:142-143) seemed to regard the assemblage from the Archaic at CA-PLU-115 as more similar to the Mesilla Complex of the western slopes than to the Martis. Of particular interest is the fact that Peak and Associates recovered none of the distinctive Bucks Lake Wide-Stemmed points. The distinction across such a short geographic distance lead Peak and Associates to suggest that there was a cultural boundary through the area now occupied by Bucks Lake during the Archaic (1983:142-143).

The Middle to Late Archaic appears to be represented within the project area. Large Leaf-Shaped and Wide-Stemmed points, commonly associated with Mesilla Complex assemblages, were identified at sites CA-PLU-1709 and CA-PLU-1721. Martis series points (Corner-Notched, Contracting Stem and Expanding Stem) were identified at sites CA-PLU-33/H, CA-PLU-1718, CA-PLU-1719, and CA-PLU-1720/H. No Bidwell Complex artifacts were identified during the survey.

Emergent Period (AD 500 - Historic Contact)

This period marks the emergence of the identifiable ancestral forms of the societies that occupied California at the time of historic contact with Euroamerican cultures. Valley populations become nearly sedentary with permanent village sites. Subsistence is broadly based, employing a wide range of resources with focal staples. Particularly important resources were the acorn, deer, and anadromous fish, including the steelhead and salmon.

In the project region the Emergent period is marked by the presence of Gunther Stemmed points, Cottonwood Triangular points and Desert Side-Notched points, commonly associated with Sweetwater (AD 800-AD-1600) and Oroville (AD 1600 – 1850) Complex assemblages (Kowta 1988:150-153). It has been hypothesized that Gunther series points mark the movement of the Maidu into the area; however, as Kowta 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 (Kowta 1980, 1988:160).

Johnson et al. (1980:231) found possible evidence of Maidu arrival at the Rainbow Point sites (CA-PLU-113 and CA-PLU-114) on Bucks Lake around AD 1000. This was signaled by increased use of mortars, and the presence of small quantities of Gunther Stemmed, Cottonwood Triangular, and Desert Side-Notched points at both sites.

Peak and Associates (1983:139) also identified the presence of the Maidu at the Boathouse Point site (CA-PLU-115) on Bucks Lake between approximately AD 1200 and AD 1400. They found a localized late period assemblage with a wide range of artifacts dominated by Gunther Stemmed, Cottonwood Triangular and Desert Side-Notched points. Due to the variety of artifacts present, Peak and Associates concluded that this was a base camp occupied from the spring until the fall. They did not believe the site was occupied year round because of the lack of structural evidence (Peak and Associates 1983:151-152).

The presence of the Maidu has also been identified within the project area at archaeological site CA-PLU-33/H. Kowta (1980) analyzed approximately 14 burials and associated remains recovered from the site in 1975. Assemblages found associated with the burials consisted of Gunther Stemmed and Desert Side-Notched points, projectile point and biface blade blanks, obsidian nodules, and large ceremonial blades, all manufactured from chert and obsidian. Milling stones, manos, a steatite pipe, tubular

bone beads, abalone shell objects, and spire lopped and cupped Olivella shell beads, along with pine-nut beads and carbonized coiled basketry were also found (Kowta 1988:164). Due to the differences between assemblages associated with each burial, Kowta concluded that differences in status and age were represented (Kowta 1988:164). He also found that variations attributed to cultural role and/or gender, such as the placement of ceremonial blades with the burial of a shaman, conform to what is ethnographically known about the Maidu (Kowta 1988:165). Kowta placed occupation of this site at ". . . a period not later than AD 1750 and extending back at most to AD 500 and more probably no earlier than AD 1100" (Kowta 1988:162).

The cultural assemblages found at Bucks Lake and Lake Almanor are similar and indicate Emergent period occupation on a regional scale beginning no earlier than AD 1000. The Emergent period is represented in the project area by assemblages found by Kowta at CA-PLU-33/H in his 1980 analysis and by a Gunther variant point found at CA-PLU-284/H during the current survey. A Desert Side-Notched point was also noted at site NF-1 during the 2000 survey.

More information about the prehistory of the northern Sierras can be found in Arnold (1957), Bethard (1988), Caruso and Jensen (1978); Dreyer (1984); Elston (1982), Farber (1980), Jewell (1964), Johnson et al. (1980), Kowta (1980, 1987, 1988), Markley (1978), Martin (1998), Olsen and Riddell (1963), Peak and Associates (1983), Pritchard et al. (1966), Ritter (1968), and Rondeau et al. (1981).

Ethnographic Overview

At the time of Euroamerican contact Penutian speaking people, also known as the Northeastern Maidu or Mountain Maidu, inhabited the project area. They were dialectally and culturally distinct from their northwestern and southern Maidu neighbors (Dixon 1905:127). The Mountain Maidu inhabited a distinct topographic area that encompassed the steep slopes and mountain valleys in the vicinity of the upper reaches of the North and Middle Forks of the Feather River.

Mountain Maidu basic social organization was that of the village community consisting of a main village and/or a group of smaller settlements with a chief or headman. These communities tended to be permanent and contained three types of structures (Dixon 1905:168; Kowta 1988:13). One type was a large semi-subterranean structure that mainly served as a dance house, but also was known to serve as the sweat lodge and a dwelling for the head man (Kroeber 1976:407). Another structure was a small, conically shaped, bark-covered dwelling that was constructed over a shallow depression. Finally, a small dwelling with a roof made of open branches was used only during the summer months (Kroeber 1976:497). The latter two structures served only as dwellings (Dixon 1905:168; Kowta 1988:14; Kroeber 1976:407).

Since the topography of the area is steep, traveling, hunting, and gathering is difficult. Therefore the placement of villages may have been dictated by access to resources and topographic features such as springs, clearings, meadows, and benches (Dixon 1905:224; Kroeber 1976:395-396). The Mountain Maidu that lived in the vicinity of the project

area placed settlements on terraces along the edges of vegetation ecotones between the forests and mountain meadows (Kroeber 1976:396). These areas were chosen because most of the meadows in the area remained moist to swampy year round.

Due to the terrain, the villages were somewhat permanent; however, the Mountain Maidu followed a yearly cycle of hunting and gathering. Several types of terrestrial and aquatic faunal resources were common in their diet including deer, elk, rabbit, geese, pigeons, salmon and eel. Acorns were one of the primary staples of the Maidu diet, along with several species of seeds and berries. According to several ethnographic sources virtually every type of animal, except dogs, coyotes, wolves, buzzards, reptiles and amphibians, were consumed (Dixon 1905:183-184; Kroeber 1976:409). The Maidu tended to spend the winter in the warmer valley and foothill regions, while they hunted in the mountains during the summer. In spring the Mountain Maidu gathered grass seed and fished in the valley. Fishing and gathering acorns and other seeds were important activities in the fall months (Kowta 1988:14; Kroeber 1976:409-410). As seen in the archaeological evidence of the Sweetwater and Oroville complexes, the lifeways of the Maidu has left an imprint on the land in the form of permanent and temporary occupation sites as well as task specific sites.

Contact Period

The Maidu population and culture underwent many transformations as contact with Euroamerican explorers, trappers and miners increased. By the late 1820s and early 1930s, trappers, such as Jedediah Smith and men from the Hudson Bay Company, visited

the area (Dixon 1905:129). One of the most significant impacts to the Maidu during this period of exploration was a malaria epidemic that occurred in 1833. This epidemic virtually decimated the population of Maidu in the Sacramento Valley and lead to a severe population decline in the foothill and mountain regions (Cook 1955:322; Kroeber 1976:396). The epidemic was followed by a rapid influx of gold miners in the 1840s and 1850s. Food resources became scarce during this period as streams became silted and hunting and gathering areas became privately owned due to mining, ranching, logging and settlement. This produced conflicts between the Native inhabitants and non-Native settlers, as well as state militia. The result was a further declined in the Maidu population (Dixon 1905:130).

A treaty with the Mountain Maidu, as well as other local native Californians, was negotiated in 1851. This treaty would have established a 227-square-mile reserve located roughly between Chico and Oroville, with the North Fork of the Feather River as the eastern boundary (Baker and Shoup 1986:16). However, due to the interest in the gold deposits in this area, the U.S. Senate rejected the treaty in 1852. Therefore, the population and culture of the Maidu continued to be impacted and to change. Many of the Maidu were transferred to reservations in Butte, Nevada and Amador counties in 1851 (Dixon 1905:130). Six years later 500 Maidu were taken to the reservations of Nome Lackee and Nome Cult (Round Valley).

In spite of the reservation system, many Maidu remained in the Big Meadows (present day Lake Almanor) area, living side by side with the new settlers. John Hamilton

reportedly built his home on the east side of the Meadow near the winter camps of the Maidu in 1856 (Little 1983:16). Reuben and Thaddeus Stover built their first homestead on the western edge of Big Meadow near other Maidu camps in 1862 (Little 1983:22).

Many Mountain Maidu people returned from the reservations and were granted land allotments. They found employment in places such as local ranches, in the logging industry and with the Great Western Power Company. Kelsey's census of Maidu not living on reservations, taken in 1905-1906, enumerated 29 families owning land around Big Meadows and totaled 83 people. An additional 23 families (61 people) were living at Big Meadows, but did not own land. He also listed families in Greenville, Seneca, North Fork, Rich Bar, and other locations in Plumas County (Kelsey 1971:86-89).

At the present time, numerous Mountain Maidu families live in the Chester and Greenville areas. Many of them actively maintain their belief systems and cultural traditions, such as basket weaving and gathering plants in the project area, and pass their knowledge on to younger generations (Maniery and Maniery 1987:3-15). More information about the Mountain Maidu can be found in Dixon (1905), Kowta (1988), Kroeber (1976), and Riddell (1974, 1978).

Mountain Maidu Villages Within the Project Area

The Project APE is located within an area that was used by Native Americans during both the prehistoric and ethnographic periods. Very little written ethnographic information about the exact locations of Maidu settlements within the project area was

available at the time the current report was written. However, a new study containing more detailed ethnographic information is currently being prepared for the Upper North Fork Feather River Relicensing Project. Both Powers (1975) and Merriam (1967) mention Maidu living at Big Meadows, as well as in other mountain meadows, but do not give exact locational data on villages. According to Dixon (1905:plate 38) Kroeber (1976:398) and Riddell (1974), the villages of *Oidoing-Koyo* and *Nakang-Koyo* were the names of two large settlements located in the eastern part of Big Meadows near Big Spring. *Nakang-koyo* was also the name of the entire district (Kroeber 1976:398). Villages noted in the ethnographic literature are presented in Table E4-3.

TABLE E4-3. ETHNOGRAPHIC VILLAGES LOCATED WITHIN THE PROJECT AREA

VILLAGE	USGS QUADRANGLE	LEGAL LOCATION	POSSIBLE SITE ASSOCIATION
Oidoing-Koyo	Westwood West	N/A; Near Big Spring	Not located
Nakang-Koyo	Westwood West	N/A; Near Big Spring	Not located
Manimbaldiki	Canyondam	T27N/R8E, Sec. 10	CA-PLU-30
Kolyem	Westwood West	T28N/R8E, Sec 20	CA-PLU-31
Wisotpnim	Westwood West	T28N/R8E, Sec 20; Location also given at Big Spring	CA-PLU-32
Yotim	Westwood West	T28N/R8E, Sec 28	CA-PLU-87
Potadi	Almanor	T27N/R8E	Inundated
Taldinom	Almanor	Near Prattville	Inundated
Chambukunyim	Chester	T28N/R7E, Sec 8;	P-32-001714

Source: Kowta 1974:6-9; Riddell 1974

Historic Context

Historical land use in the project area has been dominated by the themes of mining, ranching, logging and hydroelectric generation. Two distinct geographical environments

characterize the region; mountain valleys (now covered by Lake Almanor and Butt Lake), and steep river canyon terrain. Despite this difference, or because of it, the two areas shared a common, if symbiotic, history. While settlements and agricultural production have been fairly limited to the flatter valley and meadowlands, much of the region's economic vitality has come from the Feather River canyon, including extensive mining and hydroelectric generation development. These economic forces relied, especially in the late nineteenth and early twentieth century, on the food, supplies and other resources of the farms and settlements located in Butt Valley and Big Meadows.

The first Euroamericans arrived in 1848 when Peter Lassen led a group of emigrants through the rugged mountains on their way to California. With both humans and animals exhausted and hungry, the party stopped in the pastoral valley that would become known as Big Meadow and found it a welcome relief. The group lingered to recuperate before heading on to the Sacramento Valley. The news of the little oasis spread to other travelers and the meadow soon became a regular stop on the Lassen Overland Emigrant Trail (Fariss and Smith 1882:144-145).

Gold and Green Pastures

While the earliest travelers lingered long enough to regain their strength, none of them intended to stay. Their goal was to reach the Sacramento Valley below. However, the gold fever that seized California in 1848 and 1849 made it inevitable that miners would eventually try their luck along any waterway available. Those that tested the gravels and sandbars along the Feather River were not disappointed. By the spring of 1851, the

project area was becoming crowded with miners. Ill equipped in their canvas tents and crude cabins for the harsh winters, most gold seekers retreated to the Sacramento Valley to wait for another spring. This migratory movement between the two elevations would soon become a pattern for more than just miners (Fariss and Smith 1882:152).

By the spring of 1853, the abundant water and fertility of the high valleys were attracting the attention of newly emigrated cattle and dairy ranchers. Local meadows provided plentiful pasturage when the grasses of the lower valleys were drying out in the withering heat. Large ranches consisting of hundreds of acres were quickly established throughout the project area bearing family names that would remain with the land forever, including Hamilton, Stover, Bunnell, Bidwell and Benner. Soon, self-sustaining year-round settlements dotted favorable areas around the region (Fariss and Smith 1882:156; Morris 1985).

As the Gold Rush flood of immigrants began to settle into towns in the Sacramento Valley, many sought relief in the mountains from the valley's oppressive summer heat. A physician, Dr. Willard Pratt, established a 550-acre ranch and hotel at Big Meadows in 1867, offering tourists a climate conducive to good health. His hotel became the center of the little settlement of Prattville, later moved to its present location after the original site was inundated under Lake Almanor (Morris 1985).

This mixed use by ranchers and vacationers continued for decades. Mining did as well, although it quickly dwindled to concentrated sites on the gravel beds and drifts in the

Feather River Canyon. While in the 1850s and 1860s miners used pans and rockers to wash the gravel found in the natural streambeds, these sources had soon became depleted. Men then looked to the ancient streambeds in the hillsides and canyon walls, sometimes capped with a cement-like volcanic layer. Miners pooled their efforts to either wash away the hillside using hydraulic mining or to dig tunnels into the gold-bearing gravel using drift mining techniques. In the project area, both drift and hydraulic mining techniques were used after gold was discovered along the river at Sunnyside and Seneca in the 1870s. This area became part of the Seneca Mining District (Desmond n.d.; Lawson 1991:1).

Down in the canyon, within the Butt Valley mining district, the Caribou town site on the North Fork Feather River was a booming settlement in the 1870s. There were apparently as many as 1,000 transient miners working out of the little town consisting of cabins, a boarding house, saloons, hotels, a blacksmith shop and a store. Three bridges crossed the river in this area, part of a transportation network of trails and small roads (Keddie 1866, 1892; Nugent 1984).

By the 1880s, mining began to decline. Although the majority of gold seekers had left, by the turn of the century some retained working their claims either independently or in small partnerships. Most of the work centered on hard rock mining. This type of mining required more effort and capital than placer mining and often led to partnerships (M. Maniery and J. G. Maniery 1985:28).

The Twentieth Century: Power and Timber

While ranching and mining continued into the twentieth century, the emerging logging and hydroelectric generation operations soon overshadowed their importance to the county's economy. These two, for the most part unrelated, industries utilized mountain resources to produce commodities vital to the growth of the rest of northern California. From Redding to San Francisco, California towns and cities had an unquenchable thirst for both lumber and electricity.

Hydroelectric Context

Hydroelectric generation began to take hold in California during the 1890s. As high voltage transmission technology evolved, the transportation of electrical power over hundreds of miles became possible and development surged. No restrictions on energy prices had been instituted and, other than steam plants, the only fuel readily available was oil, which fluctuated radically in price. In response to this new hydroelectric technology and increasing interest in water rights, the State of California by 1911 passed laws to control water appropriation for power development. Soon after, the Railroad Commission Act created the public control of power rates, eventually evolving into the Public Utilities Commission (Hockett 1927:I; Means 1949:7-8).

In the 1880s, a group of geologists from Harvard University led a field trip to the Mt. Lassen area. One member of the group, a civil engineer named Julius M. Howells, realized the project area was an ideal location for a water storage reservoir. The 50-square-mile basin around Big Meadows received the drainage from 500 square miles of

surrounding mountains, as well as the flow of the North Fork of the Feather River. Howells knew that even a small dam across a narrow gorge at the lower end of the meadow would create an expansive reservoir (Coleman 1952:211-212).

After he returned to the area in 1901 to gather project feasibility information, Howells began to seek the technical and financial backing necessary to make hydroelectric development possible. The financiers, Edwin and Guy Earl, began buying nearly 15,000 acres in the Big Meadows and Butt Valley areas. By 1902, the Earls held options for 11,481 acres in the Big Meadows area and 3,139 acres in nearby Butt Valley. This land was acquired for the Earls by Arthur H. Breed (a real estate specialist and City Assessor for Oakland) and Augustus R. Bidwell (a nephew of the pioneer John Bidwell) (Bidwell 1956:58). Their total purchases eventually amounted to 30,063 acres. Howells and Bidwell then rushed to secure water appropriation claims, which were filed at the recorders office in Quincy at 8:25 pm, April 9, 1902 (Bidwell 1956; Coleman 1952:213-214).

The Earls incorporated the Western Power Company (WPC) on March 24, 1902, the first corporation of what would soon become the Great Western Power Company of California (GWP), incorporated on September 18, 1906. Their plan recognized the potential for both numerous powerhouses along the North Fork and for large reservoirs at Big Meadows and Butt Valley to feed them. Eastern financiers eventually added their investment capitol to the project. With sufficient capitalization in place, the development of a major hydroelectric generation system got underway.

As demand for electricity surged during the 1910s, the GWP began making plans to expand their power generation capacities. GWP began surveys of the entire project from Big Meadows to Big Bend, located approximately 65 miles downstream. GWP's first priority was to develop Big Meadows, a goal that required electricity. To accomplish this task, the GWP had a work force of 160 men build a small rock-fill dam, sawmill, and powerplant in Butt Valley. The powerhouse, with two 800 kW generators and a transmission line to the Almanor Dam construction site, was finished by the spring of 1912.

Construction of a multiple arch dam designed by John S. Eastwood began in 1910. Eastwood's dam never became a reality though. Eastwood's multi-arched concrete dam was designed to be 120 feet high and 1,150 feet long. It could have impounded nearly 1.5 million-acre feet of water over 29,000 acres, the largest hydroelectric reservoir in the world at that time. The project was immense in scale and resulted in extensive excavation into the hard layers of volcanic deposits at the dam site. Despite an extensive outlay of capital and construction of mammoth concrete structures, work on this dam was halted in November 1912 when concerns over the safety of the design arose. Five of the proposed 22 arches had been constructed when clay was discovered beneath what was thought to be bedrock, making the foundation potentially unstable (Coleman 1952:271-273; Fowler 1923:354, 359; Hay 1991:52; Murray 1962:3; Shoup and Cornford 1987:13). The next year, GWP began constructing a hydraulic-fill dam designed by John Ripley Freeman of Boston.

The Red River Lumber Company (RRLC), a local business, cleared much of the forest from the future lake site. The RRLC constructed a rail line and sawmill at Big Meadows, which produced 300 million board feet of lumber. The little town of Prattville on the west side of Big Meadows, including the Prattville cemetery, was relocated on higher ground just west of its original site. (Coleman 1952:271-272).

Construction of the hydraulic-fill dam approximately 987 feet upstream from the abandoned Eastwood Dam began in 1913. This new dam consisted of a clay core deposited underwater, surrounded by stabilizing sandy material with rock toes and a 3 to 1 slope on both faces (Coleman 1952:271-273; Galloway 1930:2; Geomatrix 1995:2). The dam was finished in June 1914, creating a 220,000-acre-foot capacity lake, less than a fifth of its current size. Despite this, it was the largest reservoir of its kind in the world and was a major element of the Feather River hydroelectric development system. The new lake was named Lake Almanor, an amalgamation of the names of the company president's daughters. The success of their efforts, combined with an ever-increasing demand for electricity, led the GWP to continue to develop the system's overall potential. Plans were made to begin building another massive powerhouse.

Once Almanor Dam was completed, power from the Butt Valley powerhouse was no longer needed. Beginning in October 1915, power from Butt Valley Powerhouse was sold commercially to local copper mines. It closed six years later when the Caribou No. 1 Powerhouse was completed in 1921 (Coleman 1952:271-272; Fowler 1923:354, 359; Geomatrix 1995:2; Shoup and Cornford 1987:13).

The Caribou Project: 1919-1921

As demand for electricity surged, GWP decided to implement the remainder of their plans. The site for the next powerhouse was directly below Butt Lake at an abandoned mining town called Caribou. This next large plant would be the Caribou Powerhouse. Water from Lake Almanor would be conveyed by tunnel to Butt Creek in Butt Valley. From there, it would flow six miles through the creek until the dam at the south end of the valley impounded the two-mile-long Butt Valley Reservoir. This reservoir would then feed a penstock leading to the powerhouse in the canyon over 1,000 feet below. Construction of the project began in 1919 under the direction of the Stone and Webster Company of Boston (Coleman 1952:274; Lippincott 1915:7; Shoup and Cornford 1987:15, 17).

GWP president, Mortimer Fleishhacker, chose the Boston firm out of a group of five construction firms who bid on the job, largely because of their excellent reputation in the waterpower generation field. Stone and Webster agreed to provide labor for construction of the Butt Valley dam, intake towers, tunnels, penstocks, powerhouse building, a railroad from the main line to the powerhouse, and other work connected to the Caribou project at a fixed fee of $125,000 (JRP 1986:300-301).

The first work phase included building construction supply railroads and 12 construction camps. (*Plumas National-Bulletin* 21 September 1911). Railroad construction consisted of building a 9.2-mile branch line of standard gauge from the Western Pacific line at

Listo (later renamed Howells) to the Caribou powerhouse site. A narrow gauge railroad proceeded from the Caribou site to the Butt Valley Dam. The railroad then proceeded about four miles along the eastern edge of the valley, past Camp 4 (the GWP sawmill camp), which supplied lumber for concrete forms and buildings. The valley narrow gauge section ended at the end of Tunnel

Construction camps dotted the project area. Each camp housed a different work crew. Camps 1, 2, and 3 were the base of operations for those men working on Tunnel 1, the massive tunnel leading from the Prattville intake site at Lake Almanor to Butt Creek. Camps 5, 6, and 7 had crews working on the second tunnel from Butt Lake to the Caribou penstock. The penstock crews resided in Camps 7, 8, and 9, sharing Camp 9 with the tailrace crew.

Despite these problems, the company planned on improving living conditions, including building more housing and general clubhouses. At the time, there were two kinds of camp. Portable camps were basically tents with cots and cooking equipment. Stationery camps had mess and bunkhouses, a commissary, stable, kitchen and dining equipment, furniture (including mattresses and bedding) and first aid, including the centrally located hospital at Butt Dam (Galloway 1920:4-6, 21).

After completing the camps and railroads by January 1920, actual project construction took center stage. This second phase concentrated on the incredibly difficult work of carving out the two massive tunnels. Construction of the tunnels was a tremendous

undertaking. Tunnel 1, the Prattville Tunnel, sloped at a gentle one-degree angle through the hills between Lake Almanor and Butt Lake. Water exited Tunnel 1 into Butt Creek, then flowed six miles to Butt Valley reservoir. Dam improvements underway at Butt Valley raised it to 26 feet high. Tunnel 2 carried water from the intake at Butt Valley to the Caribou penstock.

The Caribou Powerhouse was a substantial reinforced concrete structure 104 feet wide and 308 feet long and 105 feet tall. Its large generator room was 42 feet floor to ceiling and 47 feet wide. While the plant was designed to accommodate three generators, only two were installed initially (Anderton 1920:263; Fowler 1923:363; Northrop 1922:475; Shoup and Cornford 1987:18).

With completion of the Caribou project in 1921, GWP became a major player in California's electric generation industry and the North Fork Feather River System became an integral part of the northern state's infrastructure (Coleman 1952:267-269; Shoup and Cornford 1987:20).

Perfecting the System: 1921-1926

GWP paid close attention to their North Fork operations, constantly seeking to increase its generation capacity and efficiency. Perfecting the efficient use of its water storage at Lake Almanor between its two powerhouses became its a major concern. In 1923, the third generator was added to Caribou, raising its capacity to 66,670 kilovolts. Adding the

generator meant also adding a third penstock, waterwheel, and transformer (Shoup and Cornford 1987:21).

Improvement of Butt Valley Dam: 1923-1924

The Caribou powerplant began operation May 6, 1921, producing electricity for the San Francisco Bay region. This production made GWP serious competition for PG&E's market in northern California. A new construction project was designed to improve Butt Valley Dam and reservoir to ensure a continued supply of water to Caribou, work that was completed in March of 1924 (Geomatrix 1995:3).

GWP made efforts to convert Camp 9 at Caribou powerhouse into a more permanent settlement at the same time. In 1926, they made needed repairs to the small cottages that were desperately needed for employee housing and also built a large dormitory and a clubhouse with dining facilities (PG&E 1939).

Almanor Dam Construction: 1925-1927

Lake Almanor itself was also increased. A higher hydraulic-fill dam was added 600 feet downstream of the original to raise reservoir capacity from 300,000 to 1,308,000-acre feet. This construction project lasted 21 months. When the work was finished, Lake Almanor could hold as much water as all reservoirs in California combined and enough water to supply San Francisco at that time for 28 years (Krafft 1926:7; Shoup and Cornford 1987:23).

In addition to the actual dam construction, work included raising the regulating tower for a second outlet tunnel by 33 feet. Construction of an additional gate and channel excavation at the tower was also completed. (Krafft 1926:13). New construction included warehouses and living quarters near the dam site at the anticipated higher lake level. These included a cookhouse, 20 ten-man bunkhouses, a commissary, an oil storage house, an eight-unit garage, an emergency hospital and a cottage for the superintendent. Two plastered houses were built for the operating department. When the work was completed, the permanent camp that was left included an office, barn, the best of the four cottages, a warehouse, cook house, eight bunk houses, a garage, a new unplastered cottage and two plastered houses. The camp area was fenced with wire mesh and barbed wire, with a separate area of the barn and corral (Krafft 1926:13, 59). The Prattville Cemetery was also relocated again to higher ground (Krafft 1926:13, 59).

The first Almanor dam had been 600 feet long at the top and 500 feet thick at the base. The new dam was 45 feet higher, 1,300 feet long at the top and 1,300 feet thick at the base and consisted of a silt core surrounded by stabilized material butted with rock toes at each end. The outlet tunnel was lengthened to exit from the new dam (Galloway 1928:1, 1930:15; Geomatrix 1995:2; Shoup and Cornford 1987:23).

Acquisition by PG&E: 1930

Pacific Gas and Electric Company (PG&E) purchased GWP in 1930 as part of its on-going efforts toward consolidation through acquisition. While GWP had also been actively buying smaller utility companies, it could not compete with PG&E in acquiring

these assets, as well as markets for their electricity. In 1930 PG&E increased its assets and earnings by 40 percent by acquiring GWP, Midland Counties Public Service Corporation and San Joaquin Light and Power Corporation and became the largest utility company in California and third largest in the nation (PG&E 1930:3-14).

By 1936, PG&E began looking at ways to improve access to the hydroelectric facilities. When the Caribou Powerhouse project began in the 1920s, there were no roads available to haul the heavy material and equipment necessary to erect the plant. PG&E wanted to connect Caribou with the newly completed Feather River Highway at Howells. To do so, they abandoned nine miles of standard gauge railroad and built a road on the grade. The Forest Service also offered to take over the right-of-way from Howells to one-half mile below Caribou and they proceeded to build a standard Forest Service road on it. A new road was then built to connect with the Butt Valley-Caribou Road above the camp at Caribou.

The 1950s Project: Butt Valley, Caribou No. 2 and Belden

During the 1950s, PG&E sought to maximize its hydro generation power capacities. Considerable water resources were being lost from Lake Almanor without first being utilized by the Caribou Powerhouse when lake levels reached a height requiring Almanor to release directly to the Feather River. In order to capture that water, PG&E began building another tunnel between Lake Almanor and Butt Lake and yet another tunnel from Butt Lake to Caribou, where a second powerhouse, Caribou No. 2, was planned 250 feet downstream from Caribou No. 1. To capture the water energy at the end of the first

tunnel, a powerhouse was planned at its outlet in Butt Lake. In addition, another dam was being built near Belden below the Caribou site to help regulate the flow being released from the two Caribou powerhouses. PG&E also envisioned another powerhouse downstream to be constructed sometime in the future (California, State of 1956).

The Federal Power Commission (predecessor of the Federal Energy Regulatory Commission) granted PG&E a license to construct Butt Valley, Caribou No. 2, and Beldon powerhouses and associated facilities in 1955. By 1956, contractors hired by the company were hard at work on the difficult and immense project, which included Caribou No. 2, the new tunnel, surge chamber and penstock.

Caribou No. 2 was designed as an outdoor facility with two 76,000 horsepower impulse turbines, each driving a 61,000 kV generator. Butt Valley Powerhouse was constructed with a single generation unit with a production capacity of 41,000 kilowatts. It was completed in 1958.

Belden Dam and Powerhouse

During 1957, concerns began to arise about the Belden Dam site. With this concern in mind, a concrete laboratory was set up at Rogers Flat to test engineering design questions (California, State of 1957). By this time, work was also underway on the Belden Powerhouse. This powerhouse included an intake structure in Caribou Afterbay, near the left abutment of Belden Dam, a massive concrete pressure conduit, a surge chamber, a penstock from the tunnel to the powerhouse and the powerhouse itself on the right bank

of the river at the mouth of Yellow Creek near Belden. Belden Powerhouse was finally completed in August 1969.

Raising Almanor Dam: 1962-1963

During 1962 and 1963, a decision was made to drain the flat between the two generations of dams at Lake Almanor, which had continued to permit leakage. The upstream dam was raised five feet to a crest elevation of 4,505 amsl and faced with a thick rock-fill buttress on the upstream slope to protect it from waves generated by wind blowing over the lake. The dam core was fortified with a grout curtain and sheet piles. The flat was also covered with a 30 to 40-foot compacted earth fill blanket (Geomatrix 1995:3). This final phase furthered the consolidation of all construction phases into one dam.

Associated Developments on the System - Public Recreation Sites

The reservoirs created by the North Fork Feather River system provide recreational fishing, boating, and camping opportunities for thousands of summer visitors, as well as year-round local residents. Lake Almanor remains one of the largest and most beautiful hydroelectric reservoirs in California. Butt Lake, while smaller, is equally beautiful and renown for its fishing.

During the early 1960s, PG&E became concerned about public behavior on company land. Visitors were beating their own paths to favored vistas and fishing spots on both lakes. As a result of the uncontrolled traffic, vegetation was being destroyed along the

shorelines. The absence of toilets and garbage cans was also leading to less than optimal sanitary conditions.

PG&E prepared a report proposing recreational development on the system. Following the report's guidelines, sites were established on both reservoirs. Facilities on Lake Almanor included Fox Farm, Mountain View and Rocky Point Campgrounds (later consolidated into one Almanor Campground) and Last Chance Campground, , Eastshore Picnic Area, Almanor Scenic Overlook, Canyondam Day Use Area and Camp Conery (a group camping facility). On Butt Lake, PG&E built Ponderosa and Cool Springs campground and the Alder Creek Day Use Site. These facilities typically included either outhouses or flush toilets with septic systems, water faucets, picnic tables, food cabinets and fire rings.

E4.2.4 Previous Cultural Resources Studies

Approximately 80 percent of the Project APE had been previously inventoried for cultural resources prior to the current relicensing. Since the late 1940's, at least 45 cultural resources studies have been conducted within or directly adjacent to the North Fork Feather River Project boundaries. These studies are identified in Table E4-4 and are summarized below. A total of 31 of these studies were formal archaeological surveys, four were National Register of Historic Places evaluations for cultural properties, one was an Historic American Building Survey, two were archaeological data recovery projects, and seven were conducted for unknown reasons.

TABLE E4-4. PREVIOUS CULTURAL RESOURCES INVESTIGATIONS WITHIN THE PROJECT VICINITY

YEAR	REPORT	AUTHOR	RESOURCES WITHIN PROJECT GENERAL VICINITY
1949/58	Unknown	Riddell, F.A.	PLU-1, 30, 32, 33,
1956	Unknown	Rich, Chester A.	PLU-87
1970	Unknown	Hill & Alverize	PLU-126
1974	Archaeological Field Reconnaissance of the Lake Almanor Shoreline	Kowta, Makoto	PLU-333, -334, -335, -336
1974	Archaeological Field Reconnaissance of the Butt Valley-Chester 60kV Pole Line	Kowta, Makoto	
1975	Unknown	"WCS"	PLU-135
?	Unknown	Plumas NF	PLU-162 (05-11-52-8)
1977	Unknown	Plumas NF	PLU-284 (05-06-51-364)
1979	Chester Wastewater Treatment Facility Proposed Additions	Buck, Paul	None
1979	Report of An Archaeological Reconnaissance of Three Parcels	Henrici, Dawn	None
1979	Archaeological Reconnaissance of Lots 6 and 7, Lake Almanor Peninsula U2	Henrici, Dawn	None
1979	Archaeological Reconnaissance of Lot Line Adjustment	Henrici, Dawn	None
1979	Archaeological Reconnaissance of Two Parcels for John Alan Plank	Henrici, Dawn	None
1979	Cultural Resources Assessment of the Lake Almanor Forest Proposed Road Easement	Peak & Assoc.	None
1980	Cultural Resources Evaluation of the Belden Forebay Powerhouse Project	Chavez, David	None
1980	Archaeological Reconnaissance of the R. Dimick Property	Henton, Gregory	None
1980	A Late Prehistoric Mortuary Complex from Lake Almanor	Kowta, Makoto	
1981	Cultural Resource Evaluation of the Proposed Yellow Creek Hydroelectric Project Facilities	Chavez, David	None
1981	Archaeological Reconnaissance of the Blake Property	Manning, James	None
1984	The Caribou Powerhouse Tramway: Report of a Cultural Resources Study	Owens, Kathleen	
1984	Bullbolt Timber Sale	Lassen NF	CA-PLU-1177-H (05-06-51-426)
1985	Archaeological Reconnaissance of the Last Chance Timber Sale	Johnson, Keith	PLU-674-H, -675-H, 676-H,
1985	Cultural Resources Reconnaissance. of Four Areas Near Belden, Caribou, and Red Hill	Knopp, Denise	None
1985	Cultural Resources Inventory and Evaluation of the Argonaut Mine Property	Maniery, M & JG	PLU-621(05-11-52-235)
1986	Archaeological Reconnaissance. of the Caribou-Belden Transmission Line	Baker & Shoup	PLU-713-H (05-11-56-300)
1986	Historic Summary, Significance Evaluation, and Impact Assessment - Caribou I Powerhouse	Shoup, Lawrence	
1986	Archaeological Reconnaissance of the Mosquito Timber Sale (PNF)	Welling, F & C	None
1987	Caribou I Powerhouse: Historic Overview and NRHP Evaluation	Shoup & Cornford	

YEAR	REPORT	AUTHOR	RESOURCES WITHIN PROJECT GENERAL VICINITY
1988	Gasner Bar Grave	Plumas NF	PLU-1126-H (05-11-56-320)
1989	Almanor Salvage Sale	Lassen NF	05-06-51-173, -179
1990	Archaeological Inventory for North Shore Campground Expansion Project	Jensen & Assoc.	None
1990	Foxy Salvage Sale	Lassen NF	05-06-51-720
1991	Belden Siphon Cultural Resources Investigation	PAR Env. Svs.	None
1991	Hamilton Branch Property Survey	Rhode, David	None
1991	Archaeological Reconnaissance for the Alder Creek Boat Ramp, Butt Valley Res.	Vaughan, Trudy	None
1992	Archaeological Inspection of THP 2-92-16-PLU	Jenkins, Richard	None
1994	Butt Valley Power Line Safety Project/ Butt Valley Timber Harvest Plan	Vaughan, Trudy	32-1185 to 32-1197, 32-1206, -1207
1995	Prattville Trail Archaeological Reconnaissance	Lassen NF	PLU-1236-H, -1237-H, -1238-H
1995	Archaeological Reconnaissance. for the Last Chance Timber Harvest Plan	Thrush, Michael	PLU-284, -674, -675 -676
1996	Cultural Resources Inventory of the Butt Valley Dam Seismic Remediation Project	Macdougall & Maniery	CA-PLU-1960-H, CA-PLU-1743-H, CA-PLU-1245-H
1996	National Register of Historic Places Evaluation of the Lake Almanor Dam	Maniery & Baker	
1997	National Register of Historic Places Evaluation of Butt Valley Dam	Maniery & Baker	
1997	Historic American Building Survey: Butt Valley Gate Tender's House	PAR Env. Svcs.	
1997	Archaeological Reconnaissance for the Canyon Dam Timber Harvest Plan (PG&E)	Vasquez, R.	32-001264, -1266, -1267, -1268, -1269, CA-PLU-1265-H
1999	Historical Archaeology at the Butt Valley Dam Site (CA-Plu-1245-H)	Maniery, Mary	

1949/1958 Francis A. Riddell recorded four cultural resource sites (CA-PLU-1, -30, -32, -33) located along the eastern shoreline of Lake Almanor. The purpose of this recordation is not known.

1956 Chester A. Rich recorded a site (CA-PLU-87) located near the mouth of the Hamilton Branch of the North Fork Feather River and Lake Almanor. The purpose of this recordation is not known.

1970 Dorothy Hill and Ophelia Alverize recorded a site located near the PG&E Canyon Dam Substation. The purpose of this recordation is not known.

1974a Dr. Makoto Kowta of the Society for California Archaeology District 2 Clearinghouse, California State University, Chico, conducted a survey of the entire Lake Almanor shoreline. This survey was undertaken for Pacific Gas and Electric Company. A general survey strategy by a two-person team was employed. Exceptions to the strategy were in a shoreline area where the terrain was too steep and rocky to examine on foot and in another area on the northwestern shore of Lake Almanor where dense vegetation, silt deposition, wet conditions and sewage outflow prevented a complete examination of the ground surface. Kowta's survey resulted in the identification of eight cultural resource sites along the shoreline. Four of these sites had been previously recorded, and four (CA-PLU-333, -334, -335, -336) were new sites recorded for the first time.

1974b Kowta conducted a cultural resources survey of the Butt Valley-Chester 60kV transmission line for Pacific Gas and Electric Company. No cultural resource sites within the Upper North Fork Feather River Project boundaries were identified during this study.

1975 An individual identified only as "WCS" recorded a site (CA-PLU-135) on the eastern shoreline of Lake Almanor. The purpose of this recordation is not known, but the site also had been previously identified by Kowta (1974) during his survey. This site was submitted for listing on the National Register of Historic Places.

1975-1977? The USDA Plumas National Forest recorded the location of the relocated Butt Valley Cemetery (CA-PLU-162). The purpose of this recordation is not known.

1977 The USDA Plumas National Forest recorded a cultural resources site (CA-PLU-284) located on the northeastern shoreline of Lake Almanor near the community of Chester. The purpose of this recordation is not known.

1979a Paul Buck of the Society for California Archaeology District 2 Clearinghouse conducted an intensive cultural resources survey of the area of proposed additions to the Chester Wastewater Treatment Facility. No cultural resource sites were identified during this study.

1979b Dawn Henrici, the Plumas County Archaeologist, conducted four archaeological reconnaissance surveys around Lake Almanor. These surveys were undertaken for the

Plumas County Planning Department and encompassed a total of eight parcels. No archaeological sites were identified during these surveys.

1979c Peak and Associates conducted a survey of the Lake Almanor Forest proposed road easement. No cultural resource sites were identified during this study.

1980a David Chavez undertook a cultural resources evaluation of the proposed Belden Forebay Powerhouse Project. This survey was conducted for Pacific Gas and Electric Company. No cultural resource sites were identified during this study.

1980b Gregory Henton conducted an archaeological survey of the R. Dimick property. This survey was undertaken for the Plumas County Planning Department. No cultural resource sites were identified during this study.

1980c Dr. Makoto Kowta undertook the salvage of prehistoric burial remains from CA-PLU-33, a site at Lake Almanor that had become exposed through erosional action. Following excavation, all recovered materials were housed in the Museum of Anthropology, California State University, Chico, under Accession Number 106.

1981a David Chavez conducted a cultural resources evaluation of project locations associated with the proposed Yellow Creek Hydroelectric Project. Two areas were surveyed, one of which lies within the current Upper North Fork Feather River Project area. This area encompassed approximately 25 acres located at the intersection of the

North Fork of the Feather River and the exit point of the Belden Tunnel. No cultural resource sites were identified in this area.

1981b James P. Manning undertook an archaeological survey of approximately five acres of land located near the west shore of Lake Almanor. No cultural resource sites were identified during this study.

1984a Kathleen Owens conducted an archaeological study of the historic Caribou Powerhouse Tramway. This study was undertaken because a landslide had severely damaged a portion of the tramway. Owens recommended that the tramway was not eligible for the National Register of Historic Places.

1984b The Lassen National Forest undertook a cultural resources survey for the Bullbolt Timber Sale that encompassed an area just west of Prattville. This survey resulted in the documentation of one cultural resource site (CA-PLU-1177-H) adjacent to the Project boundary.

1985a Keith Johnson of the Archaeological Research Program at the California State University, Chico, conducted an archaeological survey at the northwest end of Lake Almanor for PG&E's Last Chance Timber Sale. This survey resulted in the recordation of three cultural resource sites (CA-PLU-674-H, -675-H, -676-H) located within the current Project boundaries.

1985b Denise Knopp of the Archaeological Research Program at the California State University, Chico, conducted a cultural resources reconnaissance of four small areas for proposed development by the Pacific Bell Company. Two of these areas near Caribou lie within or adjacent to the current Project area. No historic or prehistoric materials were observed within either of the areas, although Knopp states that there is potential for subsurface historic-era materials at one of the locations.

1985 Maniery and Maniery of PAR Environmental Services conducted a cultural resources inventory and evaluation of the Argonaut Mine property located along the Upper North Fork Feather River just downstream of Caribou. This study resulted in the recordation of one cultural resource site (CA-PLU-621) situated just outside of the current Project boundary.

1986a Baker and Shoup conducted an archaeological reconnaissance of the Caribou Belden Transmission Line.

1986b Lawrence Shoup developed a summary of the history of the Caribou 1 Powerhouse and prepared a significance evaluation and impact assessment for this structure. This study was undertaken for proposed upgrades to the facility by PG&E. Shoup recommended that the powerhouse was eligible for listing on the National Register of Historic Places.

1986c Welling and Welling of the Plumas National Forest conducted an archaeological reconnaissance of the Mosquito Timber Sale area located just south and west of Butt Valley Reservoir. One of the cutting units within the timber sale area lies directly above the Caribou Tunnel. No cultural resource sites were identified in this area.

1988 The Plumas National Forest recorded a single historic-era grave (CA-PLU-1126-H) surrounded by a wire fence located just downstream from the Gasner Bar Campground. The identity of the individual buried here is not known.

1989a The Lassen National Forest conducted an archaeological survey for the Almanor Salvage Sale located in the vicinity of the Butt Valley Reservoir Tunnel. Two cultural resource sites were identified in this area (05-06-51-173, -179).

1989b Shoup and Cornford prepared an additional historic overview and an Historic American Engineering Record Report for the Caribou 1 Powerhouse. It appears that this work was undertaken as mitigation for proposed upgrades to this historic structure.

1990a Jensen and Associates undertook a cultural resources inventory for proposed expansions to the Northshore Campground located at the northern end of Lake Almanor. While archaeological site CA-PLU-33/H was believed to have-extended into this area, the researchers did not observe any evidence of this site or other any cultural materials during their study.

1990b The Lassen National Forest conducted an archaeological survey for the Foxy Salvage Sale located northwest of Canyon Dam on the west side of Lake Almanor. One site (05-06-51-720) was recorded in this area during their study.

1991a PAR Environmental Services undertook a cultural resources investigation of an area around the Belden Siphon. No cultural resource sites were identified.

1991b David Rhode prepared an archaeological survey report for a 40-acre parcel of land located on the Hamilton Branch of the Upper North Fork Feather River. No cultural resources sites were identified during this survey.

1991c Trudy Vaughan of Coyote and Fox conducted an archaeological survey of the proposed Alder Creek Boat Ramp located on the eastern shore of Butt Valley Reservoir. No cultural resource sites were identified during this survey.

1992 Richard Jenkins and Barry Ford of the California Department of Forestry, conducted cultural resources inspections of proposed timber harvest areas located just south of Chester and at the northern end of Butt Valley Reservoir. No cultural resource sites were identified that lie in the vicinity of the current Project area.

1994 Trudy Vaughan of Coyote and Fox conducted an archaeological survey for the Butt Valley Power Line Safety Project and the Butt Valley Timber Harvest Plan. This Project encompassed much of the east side and south end of Butt Valley Reservoir, and

extended north along the Butt Valley powerline to just above the Butt Valley Tunnel Surge Chamber. A second area above the Butt Valley Tunnel just west of Highway 89 was also surveyed. Vaughan identified fifteen previously unrecorded cultural resources sites (32-1185 to 32-1197; 32-1206, -1207) within their survey area that also lie within the current Project area.

1995a The Lassen National Forest conducted the Prattville Trail archaeological reconnaissance survey. This study identified three previously unidentified cultural resource sites (PLU-1236-H, -1237-H, -1238-H) located within or directly adjacent to the current Project boundaries.

1995b The California Department of Forestry conducted an archaeological survey for the Last Chance Timber Harvest Plan located just northwest of Lake Almanor and north of Chester. This study resulted in the recordation of four cultural resource sites (PLU-284, -674, -675 -676) located within or directly adjacent to the current Project boundary.

1996a Macdougall and Maniery conducted a cultural resources inventory for the Butt Valley Dam Seismic Remediation Project. This survey encompassed much of the southern end of Butt Valley Reservoir. Other than the Butt Valley Dam and Gate Tender's House, three additional historic resources, CA-PLU-1960-H, the Butt Valley Railroad Grade (CA-PLU-1743-H), and the Butt Valley Camp 5 site (CA-PLU-1245-H) were identified and recorded.

1996b PAR Environmental Services undertook a National Register of Historic Places evaluation of the Lake Almanor Dam as part of the Lake Almanor Dam Seismic Remediation Project. PAR recommended that the dam was eligible for listing on the National Register of Historic Places

1997a PAR Environmental Services undertook a National Register of Historic Places evaluation of the Butt Valley Dam as part of PG&E's Butt Valley Seismic Remediation Project. PAR's study recommended that the Butt Valley Dam was not eligible for listing on the National Register of Historic Places.

1997b PAR Environmental Services undertook a National Register of Historic Places evaluation of the Butt Valley Gate Tender's House for PG&E's Butt Valley Seismic Remediation Project. This structure was located in an area where construction activities were to take place and needed to be removed. PAR recommended that the house was eligible for the National Register of Historic Places. As the house and adjacent barn were located in an area that was needed for dam construction activities, they needed to be removed. For this reason, PAR completed Historic American Buildings Survey forms to document the structure prior to its removal.

1997c Vasquez conducted a cultural resources survey for PG&E's Canyon Dam Timber Harvest Plan located at the southern end of Lake Almanor. This study resulted in the recordation of six cultural resource sites (32-001264, -1266, -1267, -1268, -1269, CA-PLU-1265-H) located within the general Project vicinity.

1999b PAR Environmental Services prepared a data recovery plan and report of archaeological test excavation for historic site CA-PLU-1245-H, the Butt Valley Dam Site. PAR's report further recorded this significant site, and addresses data recovery excavation required for the Butt Valley Seismic Remediation Project.

E4.2.5 Current Project Cultural Resources Studies and Results

Traditional Cultural Properties Study

In May of 2001, the Licensee contracted with Albion Environmental (Albion) to undertake a Traditional Cultural Properties (TCP) study of the Project Area of Potential Effects. This study required that background research and interviews with Maidu individuals be conducted in order to identify areas of traditional cultural importance to the Maidu within the Project APE that are currently being used for resource gathering, ceremonies, or have other special significance to the Maidu people.

On December 14, 2001, the Licensee, Albion Environmental, and the Federally recognized Greenville Rancheria entered into a formal Memorandum of Understanding (TCP MOU; Appendix E4-B) that detailed how TCP interviews with Maidu individuals would take place and the final disposition of resulting interviews and reports. The Federally recognized Susanville Indian Rancheria (SIR) did not participate in the establishment of this MOU, as only recently has the SIR become greatly involved in the relicensing process.

During the spring and early summer of 2002, Albion Environmental conducted interviews and field research with Maidu respondents whose names were provided to Albion by the Greenville Rancheria and other groups. The data collected by Albion was used to prepare the Draft Traditional Cultural Properties Report, which was submitted to the Licensee for review on July 26, 2002, Albion Environmental Services submitted. Per the stipulations of the TCP Memorandum of Understanding, the Licensee transmitted copies of the draft report to the Greenville Rancheria for comments and per request, granted the Rancheria an additional fifteen days for review. The Greenville Rancheria in turn provided the Susanville Indian Rancheria with a copy of the draft report. On September 16, the Greenville and Susanville Indian Rancherias provided their comments to the Licensee, and Albion Environmental is currently preparing the Final TCP report. The results of the draft report, however, have been used to develop proposed management measures. Out of respect for confidentiality concerns expressed by the Maidu respondents who participated in Albion's study, only very brief summaries of the potential Traditional Cultural Properties identified within the Project APE are discussed and presented in Table E4-5 below.

TCP 1 - Big Meadows Big Meadows was the site of numerous Maidu village communities along the edge of the valley now inundated by Lake Almanor. The North Fork of the Feather River and other large creeks flowed through the meadow making it a favored habitation and resource procurement area.

TABLE E4-5. POTENTIAL TRADITIONAL CULTURAL PROPERTIES (TCPS) IDENTIFIED WITHIN THE PROJECT APE

[illegible]	[illegible]	[illegible]	[illegible]
1	Big Meadows	Habitation, sacred area, resource procurement	Numerous recorded sites.
2	Burial Location	Sacred area	CA-PLU-2090, CA-PLU-1725/H may be nearby
3	Important Natural Feature	Mythology	CA-PLU-1729
4	Resource Gathering Area	Gathering location, habitation	P-32-002093
5	Spring Area	Sacred area	CA-PLU-32
6	Fishing area	Procurement	CA-PLU-1717, P-32-002075, P-32-002080, P-32-002081, P-32-002082, P-32-002083, P-32-002085
7	Myth Location	Sacred, mythology	No
8	Willow Gathering Area	Procurement	No
9	Fishing Hole	Procurement	No
10	Roundhouse Location	Sacred	Only historic site CA-PLU-1245-H
11	Maidu Trail	Transportation	No
12	Hunting Grounds	Procurement	CA-PLU-1709, CA-PLU-1710/H, CA-PLU-1712/H, CA-PLU-1719
13	Maidu Church	Religious, spiritual, procurement	No
14	Resource Gathering Area	Procurement	CA-PLU-1715/H, historic site CA-PLU-1713-H
15	Butt Valley	Habitation, procurement	Five recorded prehistoric sites. Others historic hydro-related.

Big Meadows was also an important part of Maidu mythology and spirituality. Although Euro-American contact and the flooding of the valley in the early 20th century drastically changed Maidu lifeways in the area, the shores of Lake Almanor remain an important location for gathering plants for crafts, food and medicinal purposes to this day.

TCP 2 - Burial Location. The general location of a burial ground currently inundated by a Project reservoir was pointed out by a number of Maidu respondents (although not observed). Some of the individuals who had been buried at this location were moved to a

new location in the early 20th Century when the reservoir was flooded. Relatives of others buried here requested that the remains stay where they were and not be moved. This location may also be in the vicinity of two archaeological sites.

TCP 3 - Important Natural Feature. This natural feature at is a place that figures prominently in Maidu mythology. A few respondents were aware of the story regarding the feature and mentioned that it remains important in Maidu culture today. While much of the feature is submerged in a Project reservoir, a portion of it is currently still visible.

TCP 4 - Resource Gathering Area. An area on the west shore of a Project reservoir was described as an important plant gathering location before and after contact with Euro-Americans. One respondent also remembered, "a lot of Maidu lived here" and that the area was also the location of Maidu ceremonies during prehistoric and possibly historic times.

TCP 5 - Spring Area. Numerous respondents discussed this area as one of the most important traditional properties within the Project area. The springs here attracted both people and wildlife to this area, and it also was also an important location for spiritual reasons.

TCP 6 - Fishing Area. A fishing area that was used by one of the respondents and his uncle is located at the edge of a Project reservoir. The respondent who identified this

location used it over fifty years ago, and it is not know if it was an important fishing location prior to that time.

TCP 7 - Myth Location. This location figures prominently in Maidu creation mythology and is currently located beneath hydroelectric Project features.

TDP 8 - Willow Gathering Area: This area was identified as an area that may be the source of willow rods, an important component of Maidu basketry and it is likely that the site is still visited. The respondent also indicated that the quality of the willow decreased because the plants had not been effectively pruned during the collecting process.

TCP 9 - Fishing Hole: A Maidu respondent pointed out a fishing hole in the vicinity of a Project reservoir that was used by her family for at least three or four generations. It is also possible that the fishing spot was used prior to Euro-American contact.

TCP 10 -Roundhouse Location. A respondent pointed out the vicinity where a roundhouse once stood. The area is currently inundated and documenting the precise location was not possible. No further information is available about the roundhouse.

TCP 11 - Maidu Trail. A Maidu trail from Humbug Valley to the Project area once passed through the vicinity of a Project reservoir before the valley was inundated. The Maidu used the trail before and after contact with Euro-Americans. According to the respondent, miners also used the trail.

TCP 12 - Hunting Grounds. According to one respondent, this area was a very important Maidu hunting ground prior to the inundation of a Project reservoir. The area was rich with a variety of ducks and waterfowl. This area was also important for hunting deer and gathering willow and was used by several Maidu families.

TCP 13 -Maidu Church. A few of the respondents mentioned the presence of a "gospel" church used by the Maidu community but did not remember much about its history. The church no longer stands, but the area surrounding the Maidu church was also an important place for gathering willow and tules.

TCP 14 - Plant Gathering Area. One respondent pointed out a plant gathering area that her family has used for many years and that the area was once filled with willow bushes that were used as deer blinds. The respondent noted that the area had changed dramatically.

TCP 15 - Butt Valley. Butt Valley was one of many valleys that were occupied by the Maidu prior to contact with Euro-Americans. Prior to the creation of Butt Valley Reservoir, several villages were present here and numerous resources were present here. The valley is also mentioned in several Maidu myths.

Upper North Fork Feather River Hydroelectric System Features

A historical overview of the Upper North Fork Feather River Project was prepared by PAR Environmental Services (Baker and Maniery 2001a) for the current relicensing. PAR's report presented the results of a field survey of the Upper North Fork Feather River Project System and an evaluation of the historic architectural resources that make up the System. A historical overview of the development of hydroelectric power in the Feather River region was also provided in order to provide a context for the Project and its historic-era resources.

PAR's system evaluation report focused on the Project hydroelectric facilities (Table E4-1). It included a detailed discussion and National Register of Historic Places (NRHP) evaluation of the powerhouses and their operating machinery, forebay dams, forebays, intake structures and canals and penstocks. Additionally, the Project company camps located at Canyondam and Caribou were also recorded and evaluated for their NRHP eligibility (Baker and Maniery 2001a; Baker and Maniery 2001b). At a later date, the third company camp at Prattville was evaluated by PAR (Maniery and Compas 2002).

Archaeological Survey

Intensive cultural resource surveys and inspections of the current Project Area of Potential Effects were conducted on three different occasions due to fluctuating reservoir levels at Lake Almanor. In the spring of 2000, PAR Environmental Services surveyed all accessible lands within the Project APE. In the fall of 2000, the Licensee lowered the elevation of Lake Almanor, and PAR conducted a subsequent survey of the accessible

lands that had been previously inundated. The results of these two surveys were presented in PAR's report entitled *Cultural Resources Inventory for the PG&E Upper North Fork Feather River FERC Relicensing Project, Plumas County, California (FERC #2105)* (Compas, 2001a). In the fall of 2001, the Licensee once again lowered the elevation of Lake Almanor and PAR surveyed additional previously inundated lands. The results of this final survey were presented in their report entitled *Cultural Resources Inventory for the PG&E Upper North Fork Feather River FERC Relicensing Project, Plumas County, California (FERC #2105): Additional Survey at Lake Almanor* (Compas, 2002).

Between these two PAR studies, approximately 75% of the accessible area within the Project APE was surveyed for the current Project using complete survey coverage (transects spaced no more than 20 meters apart). Due to terrain, mud, vegetation (the grass was taller than five feet in some areas) or rip-rap, approximately 15 percent of the project area was surveyed using cursory coverage (transects that varied between 25 meters and 35+ meters). The rest of the project area was inaccessible due to steep terrain. A total of approximately 7,607 acres was surveyed for the current Project. Monitors selected by the Maidu community accompanied each survey crew during the field survey and site recordation process.

A total of 93 sites were documented within the Project APE (Table E4-6). Twenty-two of these sites were previously recorded and 71 new archaeological sites were identified. The information for each previously recorded site was reviewed and supplemental site records were completed to document current impacts and other data not included on the original records. All of the newly identified sites were recorded on State of California, Department of Parks and Recreation (DPR) 523 forms. All newly identified sites recorded during the 2000 field survey season were assigned either permanent trinomials or Primary numbers. Weather and rising reservoir elevations conditions precluded the complete documentation of 13 of the new 2001 sites, but sufficient data was collected on these sites to prepare Primary Records and obtain GIS mapping data.

TABLE E4-6. RECORDED ARCHAEOLOGICAL SITES WITHIN THE PROJECT APE

SITE	TYPE	PROJECT AREA	HUMAN REMAINS	LITHICS	STONE TOOLS	GROUND STONE	OTHER PREHIST. ARTIFACTS	PREHIST. FEATURES	HISTORIC FEATURES	HISTORIC ARTIFACTS	COMMENTS
CA-PLU-30	P	Almanor		X	X						Large Lithic Scatter
CA-PLU-33/H	P/H	Almanor	?	X	X	X		X		X	Large Habitation
CA-PLU-87	P	Almanor		X	X	X		X			Large Habitation, BRMS, Scatter, Groundstone
CA-PLU-284/H	P/H	Almanor		X	X	X				X	Large Habitation/ Unknown Historic
CA-PLU-334/H	P/H	Almanor		X	X	X		X		X	BRMs, Small Habitation, Unknown Historic Function, Railroad
CA-PLU-336	P	Almanor		X							Small Lithic Scatter
CA-PLU-1028-H	H	Belden	X						X		Belden Cemetery
CA-PLU-1185	P	Butt Valley		X							Small Habitation
CA-PLU-1186/H	P/H	Butt Valley		X						X	Small Lithic Scatter, Unknown Historic Function
CA-PLU-1188-H	H	Butt Valley								X	Unknown Historic Function
CA-PLU-1190-H	H	Butt Valley								X	Unknown Historic Function
CA-PLU-1192-H	H	Butt Valley								X	Hydroelectric Camp Trash Disposal

Site	Type	Project Area	Human Remains	Lithics	Stone Tools	Ground Stone	Other Prehist. Artifacts	Prehist. Features	Historic Features	Historic Artifacts	Comments
CA-PLU-1195-H	H	Butt Valley								X	Hydroelectric Camp Trash Disposal
CA-PLU-1196-H	H	Butt Valley								X	Hydroelectric Camp Trash Disposal
CA-PLU-1211-H	H	Almanor							X		Seventeen Segments of Red River Lumber Company Railroad Grade
CA-PLU-1236-H	H	Almanor								X	Logging Camp Trash Disposal
CA-PLU-1245-H	H	Butt Valley							X	X	Hydroelectric Camp 5
CA-PLU-1265-H	H	Almanor							X	X	Hydroelectric Development
CA-PLU-1496-H	H	Almanor							X	X	Logging Camp Trash Disposal
CA-PLU-1709	P	Almanor		X	X						Large Lithic Scatter
CA-PLU-1710/H	P/H	Almanor		X	X	X				X	Small Lithic Scatter, Unknown Historic Function
CA-PLU-1711-H	H	Almanor								X	Unknown Historic Function
CA-PLU-1712/H	P/H	Almanor		X					X	X	Small Lithic Scatter, Unknown Historic Function

Site	Type	Project Area	Human Remains	Lithics	Stone Tools	Ground Stone	Other Prehist. Artifacts	Prehist. Features	Historic Features	Historic Artifacts	Comments
CA-PLU-1713-H	H	Almanor								X	Unknown Historic Function
CA-PLU-1715/H	P/H	Almanor				X				X	Small Habitation, Unknown Historic Function
CA-PLU-1717	P	Almanor		X	X						Small Lithic Scatter
CA-PLU-1718	P	Almanor		X	X	X					Small Habitation
CA-PLU-1719	P	Almanor		X	X	X					Large Habitation
CA-PLU-1720/H	P/H	Almanor		X				X		X	Large Habitation Unknown Historic Function
CA-PLU-1721	P	Almanor		X	X						Small Lithic Scatter
CA-PLU-1725/H	P/H	Almanor		X	X	X					Large Habitation, Unknown Historic Function
CA-PLU-1726-H	H	Canyon Dam							X	X	Hydroelectric Development
CA-PLU-1727-H	H	Almanor							X	X	Canyon Dam Admin. Buildings
CA-PLU-1728	P	Almanor		X	X	X					Small Lithic Scatter
CA-PLU-1729	P	Almanor		X	X	X					Large Habitation
CA-PLU-1730	P	Almanor		X							Large Habitation
CA-PLU-1731	P	Almanor		X	X						Small Lithic Scatter
CA-PLU-1732	P	Almanor		X	X						Small Lithic Scatter

Site	Type	Project Area	Human Remains	Lithics	Stone Tools	Ground Stone	Other Prehist. Artifacts	Prehist. Features	Historic Features	Historic Artifacts	Comments
CA-PLU-1733	P	Almanor		X	X	X					Large Lithic Scatter
CA-PLU-1734-H	H	Almanor								X	Unknown Historic Function
CA-PLU-1735	P	Butt Valley		X				X			Small Habitation
CA-PLU-1736-H	H	Butt Valley								X	Hydroelectric Development
CA-PLU-1737	P	Butt Valley		X	X	X		X			Large Habitation
CA-PLU-1738/H	P/H	Butt Valley		X						X	Small Lithic Scatter, Unknown Historic Function
CA-PLU-1739-H	H	Butt Valley							X	X	Mining
CA-PLU-1743-H	H	Butt Valley							X	X	Hydroelectric Construction Railroad
CA-PLU-2019	P	Almanor		X	X	X					Large Habitation
CA-PLU-2061	P	Almanor		X	X						Large Lithic Scatter
CA-PLU-2063	P	Almanor		X	X	X					Large Lithic Scatter
CA-PLU-2065	P	Almanor		X		X					Small Lithic Scatter
CA-PLU-2066	P	Almanor		X	X	X					Small Habitation

Site	Type	Project Area	Human Remains	Lithics	Stone Tools	Ground Stone	Other Prehist. Artifacts	Prehist. Features	Historic Features	Historic Artifacts	Comments
CA-PLU-2067/H	P/H	Almanor		X	X				X	X	Small Lithic Scatter, Large Historic Habitation
CA-PLU-2068/H	P/H	Almanor		X	X					X	Small Lithic Scatter, Unknown Historic Function
CA-PLU-2069	P	Almanor		X	X	X		X			Large Habitation
CA-PLU-2071	P	Almanor		X	X	X					Large Habitaiton
CA-PLU-2072	P	Almanor		X	X	X					Large Habitation
CA-PLU-2073	P	Almanor		X	X						Large Lithic Scatter
CA-PLU-2074/H	P/H	Almanor		X	X					X	Large Lithic Scatter, Unknown Historic Function
CA-PLU-2077	P	Almanor		X	X	X					Large Habitation
CA-PLU-2089	P	Almanor						X			Small Habitiaton
CA-PLU-2090	P	Almanor	?	X	X	X					Large Habitation
CA-PLU-2094	P	Almanor						X			Small Habitation (BRM)
P-32-001206-H	H	Butt Valley							X	X	Mining
P-32-001714	P	Almanor		X							Large Habitation
P-32-001716-H	H	Almanor							X	X	Ranching (Stover Ranch)
P-32-001722-H	H	Almanor							X		Unknown Historic Function
P-32-001723-H	H	Almanor							X		Ranching

Site	Type	Project Area	Human Remains	Lithics	Stone Tools	Ground Stone	Other Prehist. Artifacts	Prehist. Features	Historic Features	Historic Artifacts	Comments
P-32-001724-H	H	Almanor							X		Historic Residential
P-32-001740-H	H	Butt Valley							X		Mining
P-32-001741-H	H	Butt Valley							X		Mining
P-32-001742-H	H	Almanor							X	X	Historic Boat Launch Access Road/Railroad Grade
P-32-001744-H	H	Almanor							X		Ranching
P-32-001766-H	H	Butt Valley							X	X	Hydroelectric Construction, Camp 4 Sawmill
P-32-002062-H	H	Almanor							X		Ranching
P-32-002064	P	Almanor		X							Small Lithic Scatter
P-32-002070-H	H	Almanor							X		Ranching
P-32-002075	P	Almanor		X							Small Lithic Scatter
P-32-002076	P	Almanor		X	X						Small Lithic Scatter
P-32-002078-H	H	Almanor							X		Historic Quarry Feature
P-32-002079/H	P/H	Almanor		X			X				Small Habitation, Unknown Historic
P-32-002080	P	Almanor		X	X						Large Lithic Scatter
P-32-002081	P	Almanor		X	X						Large Lithic Scatter

Site	Type	Project Area	Human Remains	Lithics	Stone Tools	Ground Stone	Other Prehist. Artifacts	Prehist. Features	Historic Features	Historic Artifacts	Comments
P-32-002082	P	Almanor		X							Large Lithic Scatter
P-32-002083	P	Almanor		X							Large Lithic Scatter
P-32-002084	P	Almanor		X							Small Lithic Scatter
P-32-002085	P	Almanor		X	X						Small Lithic Scatter
P-32-002086	P	Almanor		X							Large Lithic Scatter
P-32-002087	P	Almanor		X	X	X					Small Habitation
P-32-002088-H	H	Almanor							X		Transportation
P-32-002091/H	P/H	Almanor		X	X					X	Small Lithic Scatter, Unknown Historic Function
P-32-002092/H	P/H	Almanor		X	X	X				X	Small Lithic Scatter, Unknown Historic Function
P-32-002093	P	Almanor		X	X			X			Large Lithic Scatter
P-32-002094	P	Almanor		X							Small Lithic Scatter

A total of 44 of the identified sites are strictly prehistoric in nature (P), 33 are strictly historic resources (H), and 16 of the identified sites contain both prehistoric and historic components (P/H). Seventy-four of these sites are located in the Lake Almanor area, 16 are in the vicinity of Butt Valley Reservoir, 2 are located along the road between the Butt Valley and Caribou, and one site is located near the Belden Powerhouse. Brief descriptions of all of the identified sites are provided below.

CA-PLU-30 (Almanor) - This previously recorded site consists of a light scatter of rhyolite, obsidian, chert and basalt debitage. Two artifacts—a basalt biface fragment and an obsidian projectile point fragment—were noted. One Early Martis/Elko Contracting Stem projectile point (2500-1500 BC) was noted during the survey.

CA-PLU-33/H (Almanor) - This previously recorded site is located in the vicinity of a nineteenth-century stage stop and a very large prehistoric/ethnographic period archaeological site. Few remains from the stage stop, other than an old road grade (P-32-001742H) and pieces of cobalt, amethyst (ca. 1880-1920) and milk glass are left. The prehistoric/ethnographic period component consists of several hopper mortars and five bedrock-milling stations as well as obsidian, chert and basalt lithics. One large Leaf-Shaped point (before 1000 BC to AD 1), three Martis series points (2500 BC to AD 500) and one Gunther variant (AD 800 to AD 1600) were noted during the initial survey. More of the site was exposed during subsequent survey and the site record was updated accordingly. Additional hopper mortars, lithics and two historic concentrations most likely related to logging activities were noted during the 2001 survey.

CA-PLU-87 (Almanor) - This previously recorded site was noted by Chester A. Rich in 1956 near one of the local resorts. According to Riddell (1974), it might be the ethnographic settlement of *Yotim*. Kowta (1974) noted that it was reported to have been badly eroded in 1958 and that he found no evidence for the site during his 1974 survey.

A maximum of five obsidian and chert flakes spread over more than a 100-meter-square area were identified below the high water line during the Fall 2000 survey. In the fall of 2001, several pieces of groundstone and one bedrock mortar cupule were recorded. Some of the groundstone consisted of bowl mortars and hopper mortars that were found lying in an upside down position. They were returned to their original positions after they were recorded.

CA-PLU-284/H (Almanor) - This previously recorded site consists of a scatter of lithics, mostly obsidian, chert and basalt, and two historic can scatters (ca. 1914-1945). One Gunther variant point (AD 800 to AD 1600) was identified. PAR determined that this site encompassed site CA-PLU-674H; therefore, the two were combined. It is important to note that only the portion of this site that is located within Licensee and Lassen National Forest lands could be recorded during the current project. The portion of the site located on Sierra Pacific Industries (SPI) lands was not recorded because of the private ownership.

CA-PLU-334/H (Almanor) - The site consists of two loci. Locus 1 contains 2 bedrock mortar features with 1 cup each, a light lithic scatter, and a historic scatter. Locus 2 consists of a mixed lithic and historic scatter and encompasses CA-PLU-1211H railroad grade, Segment J.

CA-PLU-336 (Almanor) - According to the previous site record (Furry and Mullins 1974) approximately 100 flakes were identified at this location during the mid-1970s. During the 2000 visit very few obsidian flakes (approximately five) were noted. No manufactured stone tools or projectile points were noted. The previous record (Furry and Mullins 1974) also stated that a trench had been dug beside the site. This was confirmed. It may be possible that the trench was dredged again since that initial recording and that the spoils had been placed on top of the site. No evidence of the site was noted in the meadow below the spoils pile.

CA-PLU-1028-H (Belden Area) - This previously recorded site is the Historic Belden Cemetery. The marked portion of the cemetery contains at least 14 headstones. Eight markers have names on them, including one modern one incised with "Morgan 1980-1994".

CA-PLU-1185 (Butt Valley) - This previously recorded site consists of a scatter of obsidian, basalt and quartz flakes in an open area adjacent to a spring near BVR.

CA-PLU-1186/H (Butt Valley) - This previously recorded site consists of a scatter of obsidian basalt and greenstone lithics and a light 1950s-1960s debris scatter.

CA-PLU-1188-H (Butt Valley) - This previously recorded site is a scatter of historic debris consisting of sanitary cans, solder top milk cans, pocket tobacco tins, cast iron stove parts and a roof jack. The debris dates to after construction of the dam (ca. 1935) and may represent dumping by local residents.

CA-PLU-1190-H (Butt Valley) - This previously recorded site consists of a scatter of historic debris consisting of sanitary cans including milk cans, church key-opened steel beer cans, one fragment of aqua glass, a brown gallon bottle base, fragments of china and white improved earthenware. The material dates from the 1920 to 1940s and may represent several episodes of dumping. A specific historic context could not be established.

CA-PLU-1192-H (Butt Valley) - This previously recorded site consists of a scatter of historic debris consisting of sanitary cans including milk cans, a metal match box, terracotta pipe, a steel Folgers coffee can, and fragments of white improved earthenware. The types of material are consistent with those recovered during excavations at BVR dam construction Camp 5 (CA-PLU-1245H), used between 1919 and 1925 by the GWPC. This site is near the location marked "dump site" on a 1923 map of Camp 5.

CA-PLU-1195-H (Butt Valley) - This previously recorded site consists of a scatter of historic debris with ten concentrations of artifacts from the late 1910s-early 1920s. The artifacts include mostly domestic debris such as sanitary cans, fragments of white improved earthenware, and clear and amethyst glass fragments. The debris appears to be related to GWPC's construction Camp 5 (CA-PLU-1245-H) at BVR dam. CA-PLU-1196-H and CA--PLU-1197-H were incorporated within this site during the survey as they were located less than 30 meters apart and similar types and ages of historic debris was scattered between them.

CA-PLU-1196-H (Butt Valley) - This previously recorded site consists of a scatter of historic debris with one concentration of artifacts from the late 1910s-early 1920s. The artifacts include domestic debris such as sanitary cans and a mason jar lid as well as several pocket tobacco tins. The debris appears to be related to GWP's Construction Camp 5 (CA-PLU-1245H) at BVR dam. The site is located on the southeast shore of BVR.

CA-PLU-1211-H (Almanor) - This site is composed of several segments of railroad grade associated with the Red River Lumber Company Railroad Logging System. RRLC logged in this region in the late 1910s and 1920s. Eleven segments were identified during this project. Segments A and B are part of the J2F line. Segments C and D are part of the J2 line. Segment E is part of the C line. Segment E, identified during the 2000 survey was expanded considerably in the fall of 2001, while Segments G through Q were newly identified. Segments E, G-I, M, O and Q are all portions of the C-Line.

Segments J, K, and N are part of the V10 line. It is not known what lines of the RRLC system Segment P is affiliated with.

CA-PLU-1236-H (Almanor) - This previously recorded site consists of a scatter of historic artifacts including #10 sanitary seam cans, stamped-end, vent hole milk cans, sardine cans, fragments of white improved earthenware and mason jar fragments. The site appears to be associated with the 1920s activities of the RRLC.

CA-PLU-1245-H (Butt Valley) - This previously recorded site consists of the remains of the town of Buttville and Camp 5 that served as a construction camp during the construction of Butt Valley Dam between 1919-1921 and 1923-1925. The site was excavated by PAR in 1996 as part of a seismic retrofit of the Butt Valley Dam. The data recovery and documentation efforts yielded nearly 50 concentrations of surface deposited material and 30 features that ranged from structural foundations to privy and septic systems to an historic road and a segment of the Butt Valley Railroad Grade (Feature 2). The roads served as transportation routes between Buttville and other local settlements such as Seneca. The narrow gauge railroad was built circa 1919 and carried construction materials from a sawmill to the Butt Valley Dam construction site.

CA-PLU-1265-H (Almanor) - This previously recorded site consists of a scatter of historic debris that includes #10 sanitary seam cans, stamped-end, vent hole milk cans, sardine cans, a crank shaft, a modern Kodak film clip, D cell batteries, a light bulb filament, clear machine made bottle bases, and fragments of clear, green, olive green,

aqua and cobalt glass, as well as vitrified china, fragments of white improved earthenware and mason jar fragments. A logging/equipment deck was also noted. The site contains artifacts from several depositional events and probably has been used as dumping ground for many years. Initial use likely was associated with the late 1920s to 1930s construction at Almanor Dam

CA-PLU-1496-H (Almanor) - This previously recorded site consists of a scatter of historic debris in three loci. Artifacts include 80+ #10 sanitary seam cans, sardine cans, matchstick hole-in-top coffee can, a Borden's milk can, china fragments, and brown, clear and green glass fragments. The site likely represents 1917 to 1930 railroad logging activities. The site and original site record were in good condition; however the site location map was updated.

CA-PLU-1709 (Almanor) - This site is a lithic scatter consisting of obsidian and basalt flakes. Three artifacts (a bifacially worked obsidian blade, a moderate sized obsidian projectile point fragment, and an obsidian leaf-shaped point) were also noted.

CA-PLU-1710/H (Almanor) - The site is a multi-component site consisting of eight concentrations of prehistoric artifacts and flakes, three isolated prehistoric artifacts and one concentration of historic artifacts deposited circa 1915.

CA-PLU-1711-H (Almanor) - This site consists of four scatters of historic debris, mostly sanitary seam cans, a cast iron stove, an iron bedstead, and fragments of white improved

earthenware, as well as fragments of pale green, brown and clear glass. The majority of the material dates between 1932 to ca. 1949 and appears to represent several episodes of trash deposits.

CA-PLU-1712/H (Almanor) - This is a multi-component site consisting of a light scatter of obsidian flakes, a scatter of historic debris and one earthen depression of unknown origins. The historic debris was manufactured after 1935 and consists of church-key opened-beer cans, sanitary seam cans, stovepipe, and a sheet iron wood burning stove.

CA-PLU-1713-H (Almanor) - The site is an historic can scatter with five concentrations of artifacts that date in the late 1930s to early 1940s. A portion of the site extends beyond the current project area where there are a minimum of five other concentrations. Only the portion of the site located within the project boundary was recorded.

CA-PLU-1715/H (Almanor) - The site consists of a scatter of historic debris including eight concentrations of historic artifacts that represent multiple episodes of dumping by RRLC or local residents in the late 1930s to early 1940s. One fragment of a metate was also noted; however, no other prehistoric artifacts were identified.

CA-PLU-1717 (Almanor) - This site is a large lithic scatter containing several hundred obsidian, chert and basalt flakes and tools. One Leaf-Shaped projectile point (Mesilla Complex [before 1000 BC to AD 1]) was identified.

CA-PLU-1718 (Almanor) - This site consists of a lithic scatter with obsidian and chert flakes, as well as ground stone. A Martis Corner-Notched point (ca. 2500 BC to AD 500) and a possible Martis series point was identified.

CA-PLU-1719 (Almanor) - This site is composed primarily of a lithic scatter that includes chert and obsidian flakes. One fragment of a metate and one basalt Martis Contracting Stem projectile point (ca. 2500 BC to AD 500) were also identified.

CA-PLU-1720/H (Almanor) - This is a large site composed of a scatter of historic debris as well as chert, obsidian and basalt flakes that are scattered throughout the site area. In addition, functionally different areas containing hearth features or ground stone were also noted. A Martis Corner-Notched point (ca. 2500 BC to AD 500) was also observed.

CA-PLU-1721 (Almanor) - The site is a small lithic scatter composed of basalt, chert and obsidian flakes. A Wide Stem point (Mesilla Complex [before 1000 BC to AD 1]) and basalt scraper were also identified.

CA-PLU-1725/H (Almanor) - The site is a multi-component site consisting of an obsidian, chert and basalt flake scatter and a unifacially modified tool made of metavolcanic rock. Historic-era artifacts include white improved earthenware and clear and aqua glass fragments (pre-1910).

CA-PLU-1726-H (Almanor) - The site consists of a several concentrations of historic debris spread out over a large area but primary in two loci. The site was first recorded during the 2000 survey, but was updated in the fall of 2001 and when a second locus was recorded. The first locus consists of four scatters of historic debris distributed over a large area. The second locus consists of two scatters of historic debris that are related to the construction of Almanor Dam in the 1910s to late 1920s.

CA-PLU-1727-H (Almanor) - According to the 1928 GWPC map this site is located in the vicinity of the Canyon Dam Camp administration building. The site consists of nine features including building pads and four concentrations of historic debris and appears to date to the late 1920s.

CA-PLU-1728 (Almanor) - This site was recorded during the initial 2000 survey but updated in 2001. The boundaries of the site did not change; however, subsequent to the initial recordation, a mano and metate that had been collected from the site by residents and given to a local museum were documented and returned to the site vicinity. These artifacts were placed in the water off so that they would be submerged and not visible to collectors.

CA-PLU-1729 (Almanor) - The site consists of a small lithic scatter with midden and six artifacts including two manos, a mano fragment, pestle, a metate, a basalt projectile point and basalt uniface.

CA-PLU-1730 (Almanor) - This site is prehistoric and consists of midden, obsidian flakes, an obsidian scraper and groundstone. A portion of the site extends beyond the project area boundary and could not be completely recorded.

CA-PLU-1731 (Almanor) - This site is prehistoric and consists of a lithic scatter with two concentrations of basalt, obsidian, and chert flakes. A portion of the site extends beyond the project area boundary and could not be completely recorded. It should be noted that site CA-PLU-1731 was identified in the proximity of CA-PLU-1, a site recorded by Fritz Riddell in 1949 but whose location is not currently known. However, Riddell's site record stated that wave action was destroying the site, and a direct correlation between the two could not be established. In spite of this, it should be noted that CA-PLU-1731 might be the remnants of CA-PLU-1.

CA-PLU-1732 (Almanor) - This site consists of an extensive scatter of obsidian debitage. The site was initially recorded in 2000 but the record was updated to include an obsidian Leaf-shaped projectile point (Middle Martis 1500 BC-500 BC [Johnson 1980:110-111]).

CA-PLU-1733 (Almanor) - This site consists of an extensive scatter of obsidian debitage with traces of basalt, chert and metamorphic stone debitage. Initially recorded for the current project in 2000, the boundaries of the site were updated during the 2001 survey.

CA-PLU-1734-H (Almanor) - This site is an historic scatter with three concentrations of debris. Artifacts date to the 1920s and 1930s and include hole-in-cap cans, vent hole

evaporated milk cans, sanitary seam cans, pocket tobacco tins, fragments of dark aqua glass, brown-glazed earthenware, and two fragments of white improved earthenware.

CA-PLU-1735 (Butt Valley) - Located on the shore of BVR the site consists of a BRM with two cups and a sparse (1 flake per 4 meters) lithic scatter.

CA-PLU-1736-H (Butt Valley) - This site is an historic trash scatter. Most of the debris consists of tobacco cans; however, other domestic items were found. This site is located on the northwest shore of BVR and appears to be associated with 1920s hydroelectric development.

CA-PLU-1737 (Butt Valley) - This site consists of a large sparse lithic scatter (mostly chert and basalt), ground stone and one feature.

CA-PLU-1738/H (Butt Valley) - The site consists of a sparse lithic scatter and concentrations of post-1950s artifacts.

CA-PLU-1739-H (Butt Valley) - The site consists of a large scatter of black powder blasting cans and the remains of a nineteenth-century hydraulic mining complex. It is located next to and within an old channel of Benner Creek and extends at least 200 meters beyond the area that was recorded. The portion of the site that was not recorded was outside of the current project boundary. The unrecorded portion contains check dams, channels, transverse grades and hydraulic mining cuts along the creek channel east

of the recorded portion of the site. According to an historic map of Plumas County, Redrock Mine was located in this area (Richards and Dunn n.d.).

CA-PLU-1743-H (Butt Valley) - As noted above the Butt Valley Railroad was used for the construction of Butt Valley Reservoir. A segment of the railroad was recorded as Feature 2 during the 1996 excavation; however, it extends beyond the boundaries of CA-PLU-1245H, as well as beyond the FERC boundaries. The railroad was tied into another railroad line located at the north end of the reservoir (Maniery et al. 1999:191-198). The second line extended from the reservoir to Prattville. The site was inundated during the current survey.

CA-PLU-2019 (Almanor) - This site consists of four loci. All four loci consist of lithic scatters of obsidian, basalt, and chert, as well as a variety of portable ground stone. The loci are located on slight gravel rises surrounded and separated by flat marshy ground. One Elko Corner-notched projectile point (1500 BC-500 BC), one contracting stem projectile point (2500 BC-1500 BC), and one Triangular-shaped projectile point (1500 BC- 500 BC) were noted during the survey.

CA-PLU-2061 (Almanor) - The site consists of a lithic scatter of obsidian, basalt, and chert, and 7 flaked stone artifacts of obsidian and chert. It is located on a very slight gravel rise that tapers off into surrounding marshy areas.

CA-PLU-2063 (Almanor) - The site consists of a lithic scatter spread out over a great distance. The denser areas of the site are located on slight gravel rises; however, artifacts are also found on the flatter ground between these rises. The majority of the lithic material on this site is obsidian, but basalt and chert were also noted. The flake density of the site is variable, ranging from one flake per m^2 to ten flakes per m^2.

CA-PLU-2065 (Almanor) - The site is composed of a lithic scatter including obsidian and chert flakes and an igneous metate fragment. The flake density ranges between two flakes per m^2 and less than one flake per m^2. The site is located on a gravel rise surrounded by vegetated flat lands.

CA-PLU-2066 (Almanor) - This site consists of two loci located on slight rises surrounded by springs, creeks and grassland. Both loci consist of lithic scatters including obsidian and basalt flakes and shatter. Locus 2 also contains an andacite mano fragment.

CA-PLU-2067/H (Almanor) - The site consists of an historical concentration and a generalized historic scatter of glass, metal and ceramic. A rock feature, a concentration of slag and a light lithic scatter containing obsidian and basalt flakes and an obsidian projectile point base fragment were also identified. There are many cut stumps in and around the site, indicating it was historically a forested area.

CA-PLU-2068/H (Almanor) - The site consists of an historical concentration, a mixed scatter of lithics and historic debris including basalt, obsidian and chert flakes, flaked

stone artifacts and historic metal, glass, ceramics, and a stone quarry. One Bucks Lake Wide-stem point (2500 BC–AD 1500) was noted during the survey (Johnson 1980:116-117). There are several cut stumps in the site area indicating that this was historically a forested area. A Red River Lumber Company railroad grade (CA-PLU-1211H, Segment E) is located to the north–northwest at the edge of the site.

CA-PLU-2069 (Almanor) - This site consists of two loci. Both loci are located below the high water line of Lake Almanor, on slight gravel rises surrounded by dense low growing vegetation. Both loci consist of lithic scatters of obsidian, basalt and chert flakes and flaked stone artifacts, as well as ground stone. Locus 1 also contains a hearth feature.

CA-PLU-2071 (Almanor) - The site consists of a lithic scatter of obsidian, basalt and chert, four flaked stone artifacts and five ground stone artifacts. The flake density of the site ranges between one and four flakes per m^2. The site is located on a slight rise with small gravel patches. A marshy drainage forms the north-northeast boundary. Annual grasses bound the site on the west.

CA-PLU-2072 (Almanor) - The site consists of a lithic scatter including obsidian, basalt, chert, and other igneous stone. The artifacts noted include several core tools, cores, bifaces, manos, two awls, a drill and one hopper mortar. One Gunther variant (AD 800-AD 1600), one Rose Spring Corner-notched (AD 500 – AD 1100), and one Rose Spring Contracting Stem (AD 500-AD 1100) point were noted during the current survey. Cut

stumps indicate that the site is located in a historically forested area. It is currently characterized by mud and cut stumps.

CA-PLU-2073 (Almanor) - The site consists of a lithic scatter including obsidian, basalt and chert. The flake density is approximately one flake per m^2. Two flaked stone artifacts and one Sierra Contracting Stem (Dougherty 2002) were also noted. The site is located on a slight rise beside the current edge of Lake Almanor.

CA-PLU-2074/H (Almanor) - The site consists of a sparse lithic scatter, mainly of basalt, but also including obsidian, quartzite and chert. The flake density is approximately one flake per m^2. Seven flaked stone artifacts were noted. Clear, aqua and cobalt glass were also noted across the site. The site is located on a slight rise beside the current edge of Lake Almanor.

CA-PLU-2077 (Almanor) - This site consists of a large lithic scatter containing flakes, flaked stone artifacts, and ground stone and consisting of five loci. This site has variable density ranging from less than one flake per m^2 to more than 50 flakes per m^2. The vast majority of the lithic material in this site is Kelly Mountain obsidian, both mahogany and black. Other varieties of obsidian as well as basalt and chert were also noted on this site. Two Northern Side-notched points (Dougherty 2002) were recorded at Locus 3 and Locus 2. Two separate rows of fence posts (LA- 07H and LA-21H) are contained within this site.

CA-PLU-2089 (Almanor) - The site consists of one basalt outcrop with one bedrock mortar cup. This site may be related to CA-PLU-333, but does not match the location assigned to CA-PLU-333 by the California State University, Chico, Information Center.

CA-PLU-2090 (Almanor) - The site consists of a lithic scatter of obsidian, basalt and chert. Eleven flaked stone artifacts and seven ground stone artifacts were noted. It is located on two small spits of land that jut into Lake Almanor. One Eastgate Corner-notched point (AD 500-AD 1200) was noted during the survey. There are numerous cut stumps scattered across the site. The ground is mostly basalt and other igneous rock, with some exposed clay. The site is bounded on the west by Lake Almanor while the northern, eastern and southern boundaries are delineated by the visible extent of the artifacts. Seventeen ground stone artifacts that had been removed by visitors and given to a local museum were returned to the water just west of the site.

CA-PLU-2094 (Almanor) - The site consists of one boulder outcrop with a single hopper-style mortar cupule.

P-32-001206-H (Butt Valley) - This previously recorded site is a scatter of historic debris and a concrete-capped adit/shaft located on a steep talus slope. The artifacts are related to mining and consist of a file, white ceramic insulators, milled board fragments, wire, and an iron cylinder. The age of the site is unknown.

P-32-001714 (Almanor) - The area consists of possible midden soil and two areas where flakes are scattered out over a 20-meter diameter area and a 30-meter diameter area in a meadow. The flake density for both areas was less than one flake per square meter. The flakes were visually identified as Kelly Mountain obsidian and one possible piece of Warner Mountain obsidian. Phosperous testing was conducted on site soils. The phosperous count was high, indicating that midden soils exist in this locale. Both areas appear as low mounds compared with the rest of the topography of the meadow.

According to Riddell (1974), a late nineteenth century Mountain Maidu settlement, *Chambukunuim*, was located in this vicinity. It was reported to be a summer camp with no permanent residents.

P-32-001716-H (Almanor) - This site consists of the vacated Stover ranch complex and consists of 10 buildings within an area that is connected by wood post fencing that creates large grazing and smaller corral areas. The buildings located in the northwest corner of the property consist of a wood-framed garage (blacksmith shop) and a modern mobile home site. The garage, which probably dates to around the 1860s (Fariss and Smith 1882:lithograph of Stover Ranch), is of wood framed construction with vertical wood board siding, a corrugated metal-surfaced gable roof, and a bay opening on the eastern side. To the northern side of this garage is a metal fuel tank (circa 1940) that is set on an approximately six-foot-high wooden stand with ladder. The circa 1970s mobile home site includes a modern metal-sided mobile home set beneath an open-sided, wood-framed, gable-roofed shelter. East of the mobile home site are three circa 1900 ancillary

structures -- a small wood-framed poultry shed, an icebox, and a wood-framed well house.

East of the above described ancillary structures is a bunkhouse. The single-story bunkhouse, built circa 1860s (Lawson n.d.), is of wood framed construction, appears to have a mudsill and possibly wood post foundation, and has wood clapboard siding and a gable roof with original wood shingles at the north end and a metal batten-style surface at the south end. The interior is divided into two rooms and includes wood plank flooring and vertical board wall and ceiling finishes.

A post-1950 ancillary structure is adjacent to the west side of the bunkhouse, in the area where the above-mentioned west extension to the bunkhouse would have been. It is of wood frame construction with a concrete footing foundation, grooved plywood siding, and an extremely low-pitched plywood-surfaced roof. A rectangular arch made of heavy timbers and metal is set into this concrete pad; its use is unknown.

East of the bunkhouse is a structure that was used as a slaughterhouse. It was built circa 1880s/1890s (Lawson n.d.) and is of heavy timber frame construction on a mudsill foundation and has vertical wood board siding and a corrugated metal-surfaced gable roof. Fenestration consists of a window opening on the north side and a wooden door on the south side.

South of the slaughterhouse is a scale house, which has a circa 1900 construction date (Lawson n.d.). This structure is of heavy timber construction, set on a concrete foundation, vertical wood board siding and a corrugated metal-surfaced gable roof. According to the Plumas County Museum (Lawson, personal communication), the scale house had a floating floor. Cattle would go into the house and their weight would displace water under the floor into glass tubes. As water rose into the tubes it would record the weight. Unfortunately the brass weights, which were an important part of this weighing system were broken off and stolen by vandals, and the walls, upon which weights had been calculated, had also been removed without authorization.

Surrounding the north, east and south sides of the scale house are fencing in corral areas. Associated with an adjacent corral area to the north is a cattle loading/unloading chute. The chute's ramp and loading platform are constructed of poured concrete and the closed railings for the ramp are constructed of concrete blocks. A branding station is present near this ramp. The loading platform has metal railings and a metal gate. A flat area north of the corral served as rodeo grounds.

West of the scale house is the site of a former large horse barn, constructed circa 1860s (Lawson n.d.). A fire demolished this barn on November 16, 2000. The following description of the barn uses information recorded on a June 13, 2000 visit to the property. It consisted of one story of interior space at its east end and two stories of interior space at its west end (the second story was a hay/feed loft). The barn appeared to be set on a heavy timber (one foot by one foot) sill foundation. The exterior was sided with vertical

boards and the gable roof was surfaced with corrugated metal. The floor of the east end's interior consisted of evenly spaced heavy timber wood joists with dirt beneath. The floors of the west end were wood plank. The west end's interior north side also included six stalls, wood troughs, and five hay drops with wooden chutes.

Immediately north of the large barn is the wagon shed. The south end of this shed was destroyed in the November 2000 fire mentioned in the paragraph above. The following description was formulated in June 2000, five month before the fire. This rectangular wood-framed shed appears to be set on a mudsill foundation, has vertical wood board siding, a wood shingle-surfaced gable roof, and four bay openings on the west side. The floor of the structure is earthen.

The extant fencing throughout the property is constructed of wood posts with barbed wire and/or wood rails. Gates are metal or wood. The timbers used in many of the structures and a majority of the posts used in the fencing throughout the property are hand-hewn and may date to the late nineteenth century.

P-32-001722-H (Almanor) - This site consists of a segment of road grade that was under water by the early 1930s. Its use predates the final filling of the reservoir. It may be a segment of Red Bluff Road in use between 1860 and 1930 (Fariss and Smith 1882:Map 1).

P-32-001723-H (Almanor) - This site is a pole fence constructed of logs placed in a chevron pattern at least three rungs high. It was inundated by circa 1930. It is partially buried in mud.

P-32-001724-H (Almanor) - This site consists of a road grade, inundated by 1930. The road was not shown on any historic maps. Two to three railroad spikes were found in the vicinity of the road indicating that it likely was used by Red River Lumber Company (RRLC) during timber operations in the late 1910s to early 1920s before conversion to a roadway. It was inundated by Lake Almanor circa 1930.

P-32-001740-H (Butt Valley/Caribou Road Area) - The site consists of a large mining adit that is 8 feet wide by 7 feet high. The tunnel strikes 270° into the mountainside and appears to run nearly level for at least 50 feet. The stone around the entrance is schist and slate and contains drill borings. The age of the site is unknown.

P-32-001741-H (Butt Valley/Caribou Road Area) - The site consists of a large mining adit with a partially collapsed entrance. The remaining opening is 2 feet 8 inches high x 3 feet 8 inches wide. The tunnel strikes 265° into the mountainside and appears to run nearly level for at least 20 feet. The age of the site is unknown.

P-32-001742-H (Almanor) - This site is a paved road that crosses CA-PLU-33/H. Several railroad spikes were found in the vicinity of the road indicating that it likely was used by Red River Lumber Company (RRLC) during timber operations in the late 1910s

to early 1920s before conversion to a roadway, or it may be a segment of the Red Bluff Road (Fariss and Smith 1882).

P-32-001744-H (Almanor) - This site is a row of wooden fence posts usually submerged by Lake Almanor. It was inundated by Lake Almanor circa 1930.

P-32-001766-H (Camp 4 Sawmill; Butt Valley) - This site consists of the remains of a sawmill associated with Hydroelectric development at BVR. Foundation remains, piles of sawdust, segments of the BVR, a dinkey engine, and historic trash were identified. This site was observed during a recent drawdown of the Butt Valley Reservoir to accommodate dam repair work. The site was not recorded at that time and is currently inundated.

P-32-002062-H (Almanor) - This site consists of a single row of square cut fence posts running northeast to southwest and two larger round gateposts. The visible extent of the site is approximately 1,126 feet (341 meters) long. Two gateposts, spaced approximately 14 feet apart are also present.

P-32-002064 (Almanor) - This site consists of a lithic scatter containing more than 50 flakes of obsidian, basalt and chert. The distribution of the flakes is patchy and spread widely over a 100 m^2 area. This distribution pattern is most likely the result of wave action churning and redepositing artifacts. Located near the center of the site is a circular depression, which was determined to be a natural feature rather than man made

P-32-002070-H (Almanor) - This site consists of an historic fence line that is 440 feet (134 meters) long. The barbed wire was removed and the fence posts were cut off to facilitate boat traffic on the lake.

P-32-002075 (Almanor) - The site consists of a lithic scatter. A minimum of ten obsidian flakes, six basalt flakes and one quartzite flake were noted during the survey. Snow and the rising level of Lake Almanor prevented further recordation of this site.

P-32-002076 (Almanor) - The site consists of a large dense lithic scatter. At least two projectile points, including an obsidian side-notched point were noted during the survey. Snow and the rising level of Lake Almanor prevented further recordation of this site.

P-32-002078-H (Almanor) - The site consists of a large gravel quarry feature located at the northern end of Lake Almanor. There are approximately 10 gravel pits in the area. Local residents speculate that the quarry was associated with the construction of the causeway or P-32-001742-H, the access road to the old boat ramp at the end of "the spit".

P-32-002079/H (Almanor) - The site consists of a sparse lithic scatter including obsidian, basalt, and chert. A minimum of 10 flakes was observed in a 10-meter-diameter area. A steatite pipe bowl was also noted. One amethyst glass patent finish toiletries bottle with 12 facets was found in the area. Definition of site boundaries and identification of

possible additional components were not possible due to the water and mud that surrounded the area, most likely obscuring further deposits.

P-32-002080 (Almanor) - The site consists of a large but light lithic scatter. It appears ephemeral on the surface. One biface tip was noted during the survey. Snow and the rising level of Lake Almanor prevented further recordation of this site.

P-32-002081 (Almanor) - The site consists of a lithic scatter of obsidian and basalt. One basalt cobble chopper was noted during the survey. The density of the site increases at a bearing of 30°. This site may join with P-32-002083. Snow and the rising level of Lake Almanor prevented further recordation of this site.

P-32-002082 (Almanor) - The site consists of a lithic scatter of obsidian and basalt. The ground visibility is patchy due to vegetation. The site is located approximately 100 meters east of CA-PLU-1717. It is possible that this site extends far enough west to be associated with CA-PLU-1717. Snow and the rising level of Lake Almanor prevented confirmation of this association and further recordation of this site.

P-32-002083 (Almanor) - The site consists of a light scatter of obsidian and basalt lithics. It is possible that this site is continuous with P-32-002081. Snow and the rising level of Lake Almanor prevented confirmation of this association and further recordation of this site.

P-32-002084 (Almanor) - The site consists of a scatter of obsidian lithics. Snow and the rising level of Lake Almanor prevented further recordation of this site.

P-32-002085 (Almanor) - The site consists of a moderately dense scatter of obsidian and basalt lithics. Three projectile points and one retouched flake tool were noted during the survey. Snow and the rising level of Lake Almanor prevented further recordation of this site.

P-32-002086 (Almanor) - The site consists of a sparse scatter of obsidian lithics. It is possible that this site is continuous with P-32-002087. Snow and the rising level of Lake Almanor prevented further recordation of this site.

P-32-002087 (Almanor) - The site consists of a large scatter of ground stone, a hearth feature and a very ephemeral lithic scatter in a 50-meter-diameter area. Ten ground stone artifacts were noted. The rising water table may have obscured the ephemeral lithic scatter that was noted during the survey. Rain and a rising water table prevented definition of site boundaries and mapping of this site.

P-32-002088-H (Almanor) - This site consists of a segment of the old state Highway 36 (GWPC 1927:Map). The highway was abandoned upon the construction of Highway 36 across the Lake Almanor Causeway after 1927.

P-32-002091/H (Almanor) - This site is a historic scatter that includes white earthenware ceramic, solarized, clear, aqua, olive and amber glass, wire nails, stove parts, a cast iron equipment frame, and miscellaneous metal fragments. One obsidian point fragment and one flake of obsidian were also noted within the site boundaries.

P-32-002092/H (Almanor) - (Was CA-PLU-135) - This site is located on a point bracketed by sandy coves with gently sloping surfaces. A house occupies the point crest. The site consists of a very light lithic scatter of obsidian, chert and basalt flakes, three flaked stone artifacts, five ground stone artifacts, and an equally light scatter of historic debris including olive, solarized, green, aqua and clear glass, white improved earthenware, and one wire nail. The site is spread over two sandy beaches on both sides of a point, and along the steep slope at the tip of the point. All of the historic debris except for the wire nails are located on the beach to the south of the point. The prehistoric scatter is distributed relatively equally on both sides of the point.

P-32-002093 (Almanor) - The site consists of a lithic scatter and a possible bedrock mortar. A minimum of two obsidian flakes, two basalt flakes, one cryptocrystalline biface fragment and one obsidian corner-notched projectile point were noted during the survey. These artifacts were hidden under a rock near the bedrock mortar. The site extends a minimum of 20 meters north of the bedrock mortar where the survey crew noted obsidian flakes and a basalt tool. Snow and the rising level of Lake Almanor prevented further recordation of this site.

P-32-002094 (Almanor) - The site consists of a lithic scatter located on lands administered by the Lassen National Forest. A minimum of six obsidian flakes, four basalt flakes and three chert flakes were noted during the survey. Snow and the rising level of Lake Almanor prevented further recordation of this site.

E4.2.6 National Register of Historic Places Eligibility and Cultural Values

Individual site significance can be defined in a number of ways. The legal definition of significance of a site for the NRHP is codified at 36 CFR 60.4:

> *National Register Criteria for Evaluation.* The quality of significance in American history, architecture, archaeology, engineering, and culture is present in districts, sites, buildings, structures, and objects that possess integrity of location, design, setting, materials, workmanship, feeling, and association and
>
> a) **that are associated with events** that have made a significant contribution to the broad pattern of our history;
>
> b) **that are associated with the lives of persons** significant in our past;
>
> c) **that embody the distinctive characteristics** of a type, period, or method of construction or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction;
>
> d) **that have yielded, or may be likely to yield, information** important to prehistory or history.

In addition to the criteria set forth at 36 CFR § 60.4, properties can have other cultural values that should be considered. Amendments to the National Historic Preservation Act in 1992 (§101(d)(6)(A)) specify that properties of traditional religious and cultural importance (Traditional Cultural Properties or TCPs) to an Indian tribe may be determined eligible for inclusion in the NRHP. Therefore, a property may be important because it:

- has traditional or ethnographic significance because of its ties to the cultural past of Native Americans;
- has the potential to add to our knowledge of prehistory or history;
- is associated with important events and/or people; or
- has architectural significance.

Archaeological sites, architectural features, and TCPs may also be eligible for inclusion in the NRHP together as a district. A district is defined as a geographically definable area that "possesses a significant concentration, linkage, or continuity of sites, buildings, structures, or objects united historically or aesthetically by plan or physical development" (USDI NPS Bulletin 15, 1990, revised 1991:5). From a research perspective, a single site may not be eligible for inclusion in the NRHP on its own merit. However, when considered as part of an inter-related district, a site's significance and importance could be enhanced depending on the contribution that the site makes to the district. The Caribou Historic District within the Project area has been recommended as an historic district eligible for listing in the NRHP. Treatment of a specific site within a district is dependant upon whether or not the site contributes to the character of the district as a whole.

Upper North Fork Feather River Hydroelectric System and Associated Company Camps

PAR Environmental Services was retained to evaluate the Upper North Fork Feather River Hydroelectric system structures (the System) for its National Register of Historic Places eligibility (Baker and Maniery 2001a). The individual structures and features of the System are depicted in Table E4-7. The following discussion evaluates the system as whole, the individual generation units, and individual resources where appropriate.

TABLE E4-7. UPPER NORTH FORK FEATHER RIVER SYSTEM:

ELIGIBILITY BY FEATURE

Unit	Feature	State No.	Date	Eligible	Ineligible
Almanor	Almanor Dam	P32-001638-H	1913-1924	X	
Almanor	Almanor Intake Tower	P32-001639-H	1913-1924	X	
Almanor	Lake Almanor	--	1913-1924	X	
Almanor	Prattville Intake Towers	P32-001640-H	1919-1924		X
Almanor	Butt Valley Tunnel	--	1958		X
Butt Valley	Butt Valley Powerhouse	--	1958		X
Butt Valley	Butt Valley Dam	--	1919-1924		X
Butt Valley	Butt Lake	--	1919-1924		X
Butt Valley	Butt Dam Intake Tower	--	1924		X
Caribou	Caribou No. 1 Powerhouse	--	1921-1924	X	
Caribou	Caribou No. 2 Powerhouse	--	1958		X
Caribou	Caribou 1 Penstock	--	1984		X
Caribou	Caribou 2 Penstock	--	1984		X
Belden	Belden Dam	--	1958		X
Belden	Belden Reservoir	--	1958		X
Belden	Belden Powerhouse	--	1969		X

The Upper North Fork Feather River Hydroelectric System - The Upper North Fork Feather River hydroelectric system consists of separate, yet connected components. Each contains numerous resources that are integral parts of the whole. Give its interactive nature, it was appropriate to examine and evaluate the individual resources as elements of the whole, taking a district approach. Forebays, penstocks, and reservoirs, creating a long and linear alignment of resources, physically connect the district. canals, penstocks, and reservoirs, creating a long and linear alignment of resources, physically connect the

district. Many features on the system however, including the recreational sites, the meteorological station, and other features are less than fifty years old and exhibit no extraordinary local, regional, or national significance nor do they represent unique or innovative engineering methods. As a result, the System as a whole appears ineligible for the National Register of Historic Places.

Almanor Hydroelectric Generation Unit - The Almanor Dam was previously determined eligible for the NRHP on a statewide level under Criteria A, B, and C in 1996 (Maniery and Baker 1996:14). Seismic remediation performed by PG&E on the dam that year consisted primarily of sinking and filling shafts through the dam's hydraulic fill zones to improve its overall stability. These modifications did not significantly alter the appearance or integrity of the dam and did not change its overall eligibility. Therefore, Almanor Dam appears to remain eligible for the NRHP under Criterion A, B, and C with a period of significance corresponding to the development of Lake Almanor as the world's largest man-made reservoir, 1913 through 1927.

When Almanor Dam was first constructed in 1913, the reservoir it created was hailed as the largest man-made lake in the world. After GWP completed raising the dam in 1927, Lake Almanor again received international attention. The size of the lake, as well as the dam, was an engineering feat for the time and generated comment from hydroelectric specialists, engineers, and the media. It is the foundation of the Upper North Fork Feather River System and has also become important regionally for its recreational and irrigation potential.

Lake Almanor, the reservoir that Almanor Dam creates, appears eligible for the NRHP under Criterion A on a state level for its association with the development of California's hydroelectric infrastructure and as the world's largest man-made reservoir for its time. It's period of significance extends from 1913, when it was first established, until 1927, when construction to raise the storage level of the reservoir ended.

The intake tower at Almanor Dam clearly exhibits the Gothic Revival style preferred by hydroelectric facility architects throughout the United States in the 1920s. At that time, industrial structures were seen as symbols of progress. Imagery based on European castles and fortresses began to be reflected in the structures exterior architectural design. The eight-sided steep-pitched turret shape of the Almanor Dam intake tower is a clear expression of this style (Dames and Moore 1992:26).

The intake tower at Almanor Dam appears eligible at a statewide level under Criterion A for its association with the dam and under Criterion C as the only remaining example of the original intake tower style in the system. Although several water-release gates have been concreted shut, effectively ending their functionality, the tower remains intact and largely unmodified. It still retains integrity of location, setting, design, materials, feeling and association. The period of significance mirrors that of the dam, 1913 through 1927.

Butt Valley Hydroelectric Generation Unit - Butt Valley Dam was previously evaluated and determined ineligible for listing in the NRHP in 1996. Other features include the

original Butt Valley Tunnel (or Prattville) Intake tower, which were dismantled and abandoned in 1957. The original tunnel was also sealed and abandoned the same year. The other features, including the new Butt Valley tunnel, intake, penstock, surge chamber and powerhouse, are less than fifty years old and exhibit no extra ordinary local regional, or national significance nor do they represent unique or innovative engineering methods. No components of Butt Valley appear to qualify for inclusion in the NRHP.

Caribou Hydroelectric Generation Unit - The Caribou No. 1 Powerhouse was previously determined eligible in 1987 at a statewide level under Criteria A and C with a period of significance from 1919 to 1924. According to Shoup and Cornford (1987), Caribou No. 1 is eligible under Criterion A for its association with, "the planning and construction of a large, complex, and interrelated power system which serves and made possible the development of a huge urban area, the San Francisco Bay Area." Under Criterion C, the powerhouse, "illustrates and enhances our understanding of hydroelectric systems as well as the kind of construction characteristics of such systems" (Shoup and Cornford 1987:35). Other than upgrading and replacing old equipment, there have been no major modifications to Caribou No. 1 since that evaluation in 1987. As a result, it appears to remain eligible for the NRHP under Criteria A and C with a period of significance extending from its construction in 1919 to 1924 when the third of its three generators went on line, increasing its energy production.

Other features of the unit include the Caribou No. 2 Powerhouse, penstocks, tunnel and surge chamber. They are less than fifty years old and exhibit no extraordinary local,

regional, or national significance nor do they represent unique or innovative engineering methods. As such, they do not meet NRHP criteria.

Belden Hydroelectric Generation Unit - The Belden hydroelectric generation features, including Belden Dam, Belden Powerhouse, Oak Flat Powerhouse, and their associated structures, were all constructed after 1950. This unit is less than 50 years old and exhibits no extraordinary local, regional, or national significance nor does any feature in the unit represent unique or innovative engineering methods. As a result, they appear ineligible for the National Register of Historic Places.

Company Camps

Company camps began disappearing after World War II when improved transportation systems allowed employees to commute. The considerable expensive of maintaining unnecessary structures in remote locations has led to the destruction or removal of most camps. While GWP originally built numerous temporary construction camps on the system, they only retained a few for more permanent use. Of these, PG&E has focused its maintenance efforts on Caribou Camp. Other dwellings, such as many found at Canyondam and those at Butt Valley, were gradually abandoned for lack of use and increasing maintenance costs. Today, Caribou Camp, the Company camp at Prattville, and two structures at Canyondam Camp are all that remain of the Upper North Fork Feather River system company camps features.

Two of the company camps present within the Upper North Fork Feather River Project were evaluated for inclusion in the NRHP as historic districts (Caribou Camp, Prattville Camp). In addition, the individual components of each of these camps were evaluated to determine if they contribute to the NRHP eligibility of the district in which they are found. The third company camp at Canyondam only contains two of the original camp structures and therefore was not evaluated as a historic district. However, the two remaining structures were evaluated individually for their NRHP-eligibility.

Caribou Camp Historic District (P32-001643-H)

Caribou Camp was established by GWP in 1919 as a construction camp for the Caribou No. 1 Powerhouse project. In 1926, GWP began converting the camp to a more permanent housing and recreational area for its employees during a second phase of construction involving raising the Almanor and Butt Valley dams and reservoirs. Today the district conveys a strong feeling of time and place as a California company camp and is representative of the type of settlement established by hydroelectric companies in the 1920s for their employees working in remote locations.

The original clubhouse, dormitory, cottages, schoolhouse, and landscaping within the Carigu Historic District remain (Table E4-8). The architectural style present is indicative of the California 1920s Arts and Crafts company camps, which mirrored the bungalow and rustic lodge style used by the National Park Service.

TABLE E4-8. CARIBOU CAMP HISTORIC DISTRICT ELEMENTS

DESCRIPTION	STATE NO	CONSTRUCTION DATE	BUILDING NO.	CONTRIBUTING
Clubhouse	32-001644-H	1926	--	X
Dormitory	32-001645-H	1926	--	X
Garage 1/Shed	32-001646-H	1937	--	X
Garage 2/Shed	32-001647-H	1952	--	X
Schoolhouse	32-001648-H	1939	--	X
Type 1 Houses	32-001649-H	1951	4297, 4860	X
Type 2 Houses	32-001650-H	1920	3902	X
Type 3 Houses	32-001651-H	1919-1920	3895, 3896, 3898, 3899, 3900, 3901	X
Type 4 Houses	32-001652-H	1922	3894	X
Rockwalls/Landscaping	--	1920s	--	X
Vehicle Fueling Station	--	--	--	--
Sheds (4)	--	1970s	--	--

While PG&E has maintained the buildings, including replacing original roofing and flooring, and in some cases constructing additions, most of these changes were made before 1950 and would have been considered essential and integral to the operation of a company camp. Other PG&E company camps, such as at Pit No. 1, Hat Creek 1 and 2, and Tiger Creek, only retain a portion of their of their original or early housing. Caribou, however, retains the essential elements, including housing, recreational facilities, schoolhouse and unifying landscaping. As such, the Caribou Camp Historic District was recommended as eligible under Criterion A for its association with the important hydroelectric generation construction of the system and on going operations of Caribou and under Criterion C as an excellent example of a California company camp. The camp's period of significance appears to extend from 1919, when it was established, to 1951, when the last cottages were constructed. In their letter to the Licensee dated July

29, 2002, the California State Historic Preservation Officer concurred with these recommendations.

Prattville Camp

The Prattville Camp was originally Camp 1 of the GWP series of camps built during construction of Almanor and Butt Valley dams. The camp at Prattville was located at the construction site of the Prattville Intake Tower, which delivered water to a tunnel that then transported the water to Butt Valley to create a reservoir there. This first camp location was established in 1920 and used again in 1924 when additional work was needed near the tunnel. Channeling in Lake Almanor was necessary to increase head pressure at Caribou 1 so construction camps were set up for workers building the massive bulkheads around the intake tower and a channel 14,200 feet long (Maniery et al. 1996:12; Shoup and Cornford 1987:22). The camp was then moved a short distance in 1926 when GWP raised the level of Almanor Dam, thereby raising the level of the lake. The majority of the buildings at the current camp location were built in 1926 and platted in their current positions on a map of the same date (Table E4-9). One structure at the present camp, now a PSEA cabin, may date to the earlier operations. This cabin was formerly a boathouse that was initially set somewhere on Lake Almanor; it was moved onto the present camp property and modified into a dwelling sometime before 1957 (PG&E 1957). Alterations to this structure have also occurred within the past 30 years (Dick Davis, personal communication 2001).

The Prattville Camp is not now, nor was it ever, as extensive a camp as Caribou. There is no evidence that the camp ever included a clubhouse, dormitory, or schoolhouse. Instead, it appears to have always consisted of a tender's facility, a collection of bunkhouses, warehouses, and a mess hall. Furthermore, the majority of the circa 1926 Camp Prattville construction camp buildings have had all or most of their original windows removed and replaced with modern aluminum slider or aluminum double hung windows. Newer doors and entry porches were added to the bunkhouses when the interiors were altered to become multi-unit facilities. The cookhouse structure has been converted for modern use as equipment storage.

TABLE E4-9. PRATTVILLE CAMP ELEMENTS

DESCRIPTION	STATE NO.	CONSTRUCTION DATE	BUILDING NO.	NRHP-ELIGIBLE?
Gate Tender's House	(pending)	1926	4057	X
Camp Director's House (original mess hall)	--	1926	--	--
Bunkhouse 1	--	1926	3859	--
Bunkhouse 2	--	1926	3858	--
Bunkhouse 3	--	1926	3857	--
Bunkhouse 4 (original office)	--	1926	3856	--
Garage 1 (Gate Tender's Garage)	--	1926	4057b	-
Garage 2	--	1926	--	-
Shed 1 (Gate Tender's wood shed)	--	1926	4057a	--
Shed 2	--	Post-1957	--	--
Boathouse (cabin)	--	Ca. 1920s	--	--
Warehouse	--	1926	--	--
Meathouse	--	1926	--	--

One of the original bunkhouses (between the caretaker's house and the easternmost extant bunkhouse) was removed from the property at an unknown date. As previously mentioned, the former boathouse building was moved onto the property by 1927 and has

been completely renovated (Dick Davis, personal communication 2001). The shed, located north of the meat house, and the gate tender's garage also appear to have been added to the property after 1956.

Although the Prattville Camp has its noteworthy place in northern California's hydroelectric system history (Criterion A), it is not associated with an individual or individuals or outstanding significance (Criterion B), nor is it the oldest or most architecturally elaborate or intact of PG&E's hydro-related camps (Criterion C). It does not contain archaeological deposits that could meet Criterion D. In comparison with similarly sized and designed Camp Shasta and Camp Pit, Camp Prattville lacks integrity, especially in the areas of design, materials, workmanship, and feeling. Due to lack of integrity and historical and architectural significance, the Camp Prattville Historic District was recommended as ineligible for listing in the National Register. In their letter to the Licensee dated July 29, 2002, the California State Historic Preservation Officer concurred with this recommendation.

According to the current resident, the interior of the gate tender's house at the Prattville Camp contains original elements such as finishes and built-in elements. Today, this structure is one of few remaining well-preserved GWP tender's houses in the PG&E system. Although another almost identical GWP-built house, also built in 1926, exists at the PG&E system's Canyondam site (located approximately five miles to the southeast), the two buildings represent a hydro-related building type that is disappearing. The Prattville Camp tender's house retains a high degree of integrity of location, setting,

design, materials, feeling and association (continued use as a tender's house by PG&E). As such the Prattville Camp Tender's House appears individually eligible to the National Register under Criterion C as a representative example of a California company camp architectural type. Its period of significance extends from 1926, when the level of Lake Almanor was raised and the Prattville Camp was fully established by GWP at its present location, until 1930, when PG&E acquired all of GWP's assets, including the tender's house at Prattville. In their letter to the Licensee dated July 29, 2002, the California State Historic Preservation Officer concurred with this recommendation. All other buildings on the property do not retain adequate integrity to qualify as individually eligible for inclusion in the National Register.

Canyondam Camp

Canyondam Camp is the oldest of the existing hydroelectric camp locations on the North Fork Feather River project area. GWP originally constructed the camp in 1911, during the Eastwood Multiple Arch Dam construction phase. The camp consisted of a series of small bunkhouses, a cookhouse, administration building, blacksmith shop, warehouse, and a number of cottages. Residences for a gate tender and a patrolman were also added. Latrines for the bunkhouses and water tanks were situated a short distance behind the dwellings.

GWP relocated the camp between 1925 and 1926 as they began raising Almanor Dam to increase reservoir capacity from 300,000 to 1,308,000-acre feet. This construction project lasted 21 months. New camp construction included warehouses and living

quarters at the anticipated higher lake level. The camp then included a cookhouse, 20 ten-man bunkhouses, a commissary, an oil storage house, an eight-unit garage, an emergency hospital and a cottage for the superintendent. Two plastered houses were built for the plant-operating department. When the work was completed, a more permanent camp remained that included an office, barn, the best of the four cottages, a warehouse, cook house, eight bunk houses, a garage, a new unplastered cottage and two plastered houses. The camp area was fenced with wire mesh and barbed wire, with a separate area for the barn and corral (Krafft 1926:13, 59).

What remains of the camp is known today as Canyondam. Only two of the 1926 camp buildings still exist and are in good condition. They appear to be the former Patrolman's Residence and one of the cottages originally intended for use by married personnel. The substation and transformer structures from the old camp also remain, however they have been greatly modified. During the 1960s through 1970s, PG&E made several improvements to the service, removing old equipment each time (PG&E 1960c, 1972a, 1980). The two remaining structures (Canyondam House and Cabin) were both recommended as eligible for the National Register under Criterion C, as good examples of the California Company Camp architectural style. No other structures at Canyondam were recommended as eligible. In their letter to the Licensee dated July 29, 2002, the California State Historic Preservation Officer concurred with these recommendations.

Historic-era Sites

As mentioned above, a total of 33 strictly historic sites are present within the Upper North Fork Feather River Project APE. As part of current Upper North Fork Feather River Relicensing Project, PAR Environmental Services evaluated all but three of these sites for their historic significance in accordance with 36 CFR § 60.4 (Maniery and Compas 2002; Table E4-10). The three sites that were not evaluated were CA-PLU-1743-H (the Butt Valley Railroad), P-32-001766-H (the Camp 4 Sawmill), and CA-PLU-1245-H (the Camp 5 site). These three are all located at Butt Valley Reservoir and were completely inundated under approximately 20 feet of water during studies for the current Project. These sites were exposed in 1996 when the lake was drawn down during a dam seismic retrofit project. CA-PLU-1245-H was previously determined eligible for inclusion for the National Register under criteria A and D during the retrofit project and was partially destroyed by that project following data recovery excavations. The portion of the site that remained inundated in 1996 however, still contains the archaeological remains of Buttville, as well as early hydroelectric campsites. Until CA-PLU-1743-H, P-32-001766-H, and the intact portion of CA-PLU-1245-H are formally evaluated, these three resources can be assumed to be eligible for listing in the NRHP.

The ranch structures present at a fourth strictly historic site, P-32-001716-H (the historic Stover Ranch complex) were also recommended as ineligible for listing in the National Register under Criteria A, B, or C (Compas 2001) due to their compromised integrity. However, tall grass obscured a clear examination of the ground at this location, and there is a potential that this site could contain significant subsurface historic archaeological deposits (e.g. privies) associated with the early (1860s) years of ranch development. Deposits pre-dating 1880 are rare. Any archaeological remains from this time period within the Stover property could lend important data regarding early settlement of Big Meadows, boarding house facilities and ranch development and could potentially meet Criterion C (Maniery and Compas 2002).

TABLE E4-10. FORMALLY EVALUATED AND UNEVALUATED HISTORIC SITES

SITE NUMBER	LOCATION	THEME	TYPE	NRHP EVALUATION (RECOMMENDATIONS)		
				Eligible	Ineligible	Potentially Eligible
CA-PLU-334/H	Almanor	Logging	Trash		√[1]	√[1]
CA-PLU-1028-H	Belden	Settlement	Cemetery		√[2]	
CA-PLU-1188-H	BVR	Unknown	Trash		√	
CA-PLU-1190-H	BVR	Hydro	Trash		√	
CA-PLU-1192-H	BVR	Hydro	Dam Tender Trash		√	
CA-PLU-1195-H	BVR	Hydro	Camp 5, Trash		√	
CA-PLU-1196-H	BVR	Hydro	Camp 5, Trash		√	
CA-PLU-1211-H	Almanor	Logging	RR Grades		√	
CA-PLU-1236-H	Almanor	Logging	Camp, Trash		√	
CA-PLU-1245-H	BVR	Hydro	Camp 5	√		
CA-PLU-1265-H	Almanor	Logging	Trash, Landing		√	
CA-PLU-1496-H	Almanor	Logging	Camp,Trash		√	
CA-PLU-1711-H	Almanor	Logging/ Landfill	Trash		√	
CA-PLU-1713-H	Almanor	Landfill	Trash		√	
CA-PLU-1715/H	Almanor	Landfill	Trash		√	
CA-PLU-1726-H	Almanor	Hydro	GWP Camp, Trash		√	
CA-PLU-1727-H	Almanor	Hydro	GWP Camp, Trash		√	
CA-PLU-1734-H	Almanor	Hydro	GWP Camp, Trash		√	
CA-PLU-1736-H	BVR	Logging	Camp 34, Trash, Spur		√	
CA-PLU-1739-H	BVR	Mining/Hydro	Ground Sluice/Trash		√	
CA-PLU-1743-H	BVR	Hydro	Butt Valley Railroad	√		
CA-PLU-2067/H	Almanor	Logging	Camp 28, Trash		√	
P-32-001206-H	BVR	Hydro	Air Shaft, Trash		√	
P 32-001716-H	Almanor	Ranch/ Settlement	Homesite		√[3]	√[3]
P-32-001722-H	Almanor	Transportation	Road		√	
P-32-001723-H	Almanor	Ranch/ Settlement	Fence		√	

Site Number	Location	Theme	Type	NRHP Evaluation (Recommendations)		
				Eligible	Ineligible	Potentially Eligible
P-32-001724-H	Almanor	Transportation	Road		√	
P-32-001740-H	BVR	Mining	Adit		√	
P-32-001741-H	BVR	Mining	Adit		√	
P-32-001742-H	Almanor	Transportation	Road		√	
P-32-001744-H	Almanor	Ranch/ Settlement	Fence		√	
P-32-001766-H	BVR	Hydro	Camp 4, Sawmill	√		
P-32-002062-H	Almanor	Ranch/ Settlement	Fence		√	
P-32-002070-H	Almanor	Ranch/ Settlement	Fence		√	
P-32-002078-H	Almanor	Logging	Gravel Quarry		√	
P-32-002088-H	Almanor	Transportation	Road		√	
P-32-002091/H	Almanor	Unknown	Trash		√	

1. Evaluation only applies to historic component of site. Prehistoric component remains potentially NRHP-eligible.
2. Belden Cemetery does not appear to meet NRHP criteria but has local community and Native American values
3. Buildings at Stover Ranch appear ineligible for the NRHP; subsurface archaeological deposits are assumed present on site and are considered potentially eligible for the NRHP.

All of the remaining 29 strictly historic-era sites have been impacted to some degree from logging activities, vandalism, off road vehicles, wave action, or inundation and none contain subsurface deposits. These sites do not appear to meet National Register of Historic Places criteria or do not contain adequate integrity to qualify for inclusion in the National Register. These resources have therefore been recommended as ineligible for listing (Maniery and Compas 2002). In their letter to the Licensee dated July 29, 2002, the California State Historic Preservation Officer concurred with these recommendations

In addition to the 33 strictly historic-era sites that were evaluated, the historic components of four sites that also contained prehistoric components were also evaluated (CA-PLU-334/H, CA-PLU-1715/H, CA-PLU-2067/H and P-32-002091/H). These four

evaluations were undertaken because a) the prehistoric components were minimal and were likely transported to the site from elsewhere (e.g. "isolates"), or b) evaluation could be accomplished without impacting the prehistoric component of the site. The prehistoric component of site CA-PLU-1715/H consists of a single metate. The prehistoric component of site P-32-002091/H consists of a single obsidian projectile point fragment and a flake. Finally, the prehistoric component of CA-PLU-2067/H consists of a total of obsidian three flakes and one obsidian projectile point. According to PAR Environmental, the prehistoric artifacts observed at these three sites were likely transported to the area from elsewhere (Compas 2002; Maniery and Compas 2002) and can therefore be considered to be "isolates". Following evaluation of the historic components of these three sites, PAR Environmental recommended that they were not eligible for inclusion in the NRHP according to the criteria for evaluation and due lack of integrity. Site CA-PLU-334/H however, consists of a two loci containing sparse scatters of lithic material as well as historic materials. The majority of the historic material found at the site is associated with a RRLC railroad grade. Because of its RRLC context, and the fact that the material is confined to the ridge top near the railroad, this historic component was evaluated. PAR recommended that this component of the site was not eligible for inclusion in the NRHP. The NRHP-evaluation of the site however, only applies to the historic artifact concentrations and not to the prehistoric component of the site. The prehistoric component remains potentially NRHP-eligible.

In accordance with Section 106 of the National Historic Preservation Act (as amended), the Licensee is not required to address impacts to cultural resource sites that have been

formally determined to be ineligible for inclusion in the National Register of Historic Places. As mentioned above, 29 strictly historic-era sites and three historic sites containing prehistoric isolates have been recommended as ineligible for the NRHP (Maniery and Compas 2002) and the California SHPO has concurred. All 32 of these sites can therefore be eliminated from further consideration in this CRMP.

Prehistoric Archaeological Sites

According to Federal regulations, the National Register criteria for evaluation (Section E4.2.6 above) must be applied to *each individual archaeological site* (36CFR 800.4(c)) in order to determine if the site is eligible for listing in the NRHP. Existing evaluation and/or data gathered from adjacent or non-adjacent sites cannot be applied to other separately recorded resources. It can only be used for further study of that particular site.

In order to determine the NRHP-eligibility of each of the prehistoric sites found within the Project APE, formal evaluations of each site would be necessary. Prehistoric sites are typically eligible for listing on the NRHP under Criterion D for the information potential that they contain. According to *National Register Bulletin 15: How to Apply the National Register Criteria for Evaluation* (National Park Service 1997), to be eligible under Criterion D, a property must have characteristics:

> "...suggesting the likelihood that it possesses configurations of artifacts, soil strata, structural remains, or other natural and cultural features that make it possible to a) test a hypothesis or hypothesis...that bear on important research questions..."; b) corroborate or amplify currently available information suggesting that a hypothesis is either true or false, and c) reconstruct the sequence of archaeological cultures for the purpose of identifying and explaining...the archaeological record for a particular area" (National Register 1997:21).

For many sites, especially those described as sparse lithic scatters, sub-surface archaeological test investigations would therefore need to be conducted in order to determine if a particular prehistoric resource does or does not contain these characteristics. Furthermore, if it can be demonstrated that a particular site does *not* contain these characteristics, the site can be removed from any further planning consideration, as Federal regulations only require that *eligible* resources be addressed. Formal evaluation of any unevaluated prehistoric sites within the Project APE could very well eliminate many of them from any future management.

In meetings with the Maidu Consultation Group (Appendix E4-C) regarding the Project, concerns were expressed regarding the potential impacts of archaeological test excavation and data recovery upon prehistoric sites. This preference was formally voiced in letters from the federally recognized Susanville and Greenville Indian Rancherias (letters dated September 9 and September 30, 2002 respectively). Wherever possible, preservation, education, and monitoring/patrolling of all prehistoric cultural resource sites regardless of NRHP eligibility was the Maidu management preference. For the purposes of this document and proposed CRMP, it has is therefore been established that the Maidu generally oppose test excavation and/or data recovery unless a particular site cannot be protected or managed in any other way.

Most of the 60 prehistoric sites or sites containing prehistoric components within the Project APE have not been formally evaluated for NRHP eligibility in the past. As mentioned above, however, four of the sites containing both historic and prehistoric

components were evaluated for the current Project. The prehistoric materials found at three of these sites could be considered to be "isolates" transported from elsewhere. These three sites were recommended as ineligible for listing in the NRHP (CA-PLU-1715/H, CA-PLU-2067/H and P-32-002091/H). The historic component of the fourth site (CA-PLU-334/H) was evaluated without impacting the prehistoric materials present. While the historic materials were found to be ineligible, the prehistoric component of this site remains potentially NRHP-eligible.

Given Maidu concern and preference discussed above, the Licensee has not undertaken National Register of Historic Places evaluations of the remaining 57 prehistoric sites or sites containing prehistoric components. However, in their letter to the Licensee dated July 26, 2002, the USDA Lassen National Forest has commented that NRHP evaluation of the four prehistoric sites under their jurisdiction (CA-PLU-284/H, CA-PLU-1718, P-32-002094) may be warranted. The Licensee will consult with the Forest Service, the FERC, the SHPO, and the appropriate Maidu groups discuss to develop appropriate treatment of these sites. However, until formal NRHP-evaluations are undertaken that indicate otherwise, these 57 sites within the Project APE that contain prehistoric components can be considered potentially eligible for inclusion in the National Register of Historic Places.

Traditional Cultural Properties (TCPs)

As mentioned in Section E4.2.5, above, fifteen potential Traditional Cultural Properties have been identified within the current Project APE. Due to the confidential and often

sacred nature of these resources, the Licensee has not formally evaluated the NRHP-eligibility of the individual TCPs. However, based on interviews with Maidu respondents, Albion Environmental has made informal NRHP-eligibility recommendations of the resources to be used for management purposes. These recommendations are provided below.

TCP 1 -Big Meadows. Prior to the creation of Lake Almanor, Big Meadows was an important location to the Maidu for numerous reasons. Even though it is now inundated by Lake Almanor, Big Meadows still retains integrity of relationship as the present day community recognizes a strong connection between the area and their traditional beliefs and practices and identity as Maidu. However, Big Meadows as a whole no longer possess integrity of condition as Lake Almanor has covered most of the important plant gathering areas and village sites associated with Maidu culture. It has been recommended that Big Meadows therefore does not possess the qualities of a potential NRHP-eligible Traditional Cultural Property, even though many *individual* locales within Big Meadows that have not been inundated may meet these criteria.

TCP 2 - Burial Location. This burial area may meet the criteria of a potential NRHP-eligible Traditional Cultural Property. The location is known even if it is currently located under Lake Almanor and still figures prominently in the identity of present day Maidu. However, the integrity of condition is at this time unknown, as the location could not be observed.

TCP 3 – Important Natural Feature. This feature still figures prominently in the current Maidu belief system and therefore possesses integrity of relationship. While the feature is sometimes submerged by a Project reservoir, portions of it remain visible virtually year round. The site therefore may also possess integrity of condition. As a result, it has been recommended that the feature therefore meets the criteria of relationship and condition as a potential NRHP-eligible Traditional Cultural Property.

TCP 4 – Resource Gathering Area. This area, like Big Meadows, was a region of general traditional use by the Maidu. However, the area currently lacks the quality of a tangible property and there does not appear to be any evidence that the Maidu have continued to gather plant materials here. It has been therefore recommended that this area lacks the integrity of relationship necessary to qualify as a potential NRHP-eligible Traditional Cultural Property.

TCP 5 - Spring Area. This area is revered as a spiritual place, and a symbol Maidu identity. The location of springs is known, and are currently under a Project reservoir. The site clearly possesses integrity of relationship, and although the site has lost integrity of condition, it has been recommended that this may outweigh its continued significance to the Maidu. Therefore, it has been recommended that this location may possess the qualities of a potential NRHP-eligible Traditional Cultural Property.

TCP 6 -Fishing Area. The fishing area is a part of a respondent's family history. Its use has been discontinued and its condition is unknown. It has therefore been recommended that the area does not meet the criteria of a potential NRHP-eligible TCP.

TCP 7 - Myth Location: Creation stories are an important part of Maidu identity and sense of place. Though hydroelectric facilities currently cover this location, it is still remembered and valued by Maidu respondents. The site has the necessary integrity of relationship although it lacks integrity of condition due to the construction of the hydroelectric system. However, it has been recommended that this location may still possess qualities of a potential NRHP-eligible TCP because the Maidu continue to ascribe traditional significance to the location despite the presence of the hydroelectric features.

TCP 8 - Willow Gathering Area. Basketry continues to be an important expression of Maidu traditional identity and the Maidu community as a whole points to past and present basketmakers as a symbol of their culture. Therefore gathering places for basket materials such as the willow site are ascribed traditional significance by the community and possess the necessary integrity of relationship to qualify as a Traditional Cultural Property. This willow location, by virtue of the presence of the willow, possesses integrity of condition and therefore has been recommended as meeting the criteria of a potential NRHP-eligible Traditional Cultural Property.

TCP 9 - Fishing Hole. This fishing hole is a tangible property that does not appear to have changed through time, thus satisfying integrity of condition. While a traditional Maidu fishing technique was used at the site at one time, the practice has not survived to the present. It has therefore been recommended that the location does not possess integrity of relationship and is not a potential NRHP-eligible Traditional Cultural Property.

TCP 10 - Roundhouse Location. This particular roundhouse may once have been an important part of traditional Maidu religious beliefs, and part of a larger village before Euro-American contact, but details about the roundhouse are unknown, indicating that the integrity of relationship is weak. The roundhouse was covered in water with the inundation of a Project reservoir and the exact location is unknown, and the physical structure has been destroyed, suggesting that its integrity of condition is also weak. It has been recommended that this roundhouse site therefore does not possess the necessary qualities of a potential NRHP-eligible Traditional Cultural Property.

TCP 11 - Maidu Trail: Researchers found no evidence that the Maidu respondent who described the trail ascribed any special significance to it. Integrity of relationship is therefore weak, and the condition of the property has been compromised by the creation of a Project reservoir. It has therefore been recommended that the site does not possess the qualities of a potential NRHP-eligible Traditional Cultural Property.

TCP 12 - Hunting Ground. Researchers found no evidence that the Maidu respondent who described the hunting area ascribed any current importance to it. Integrity of relationship is therefore weak, and the creation of a Project reservoir has compromised the condition of the property. As such, it has been recommended that the site does not possess the qualities of a potential NRHP-eligible Traditional Cultural Property.

TCP 13 - Maidu Church. The Maidu respondents did not ascribe particular traditional significance to this church. The church itself is gone and the site does not appear to have strong current associations for the Maidu respondents. It has therefore been recommended that this property is not significant and does not possess the qualities of a NRHP-eligible Traditional Cultural Property.

TCP 14 – Resource Gathering Area. The Maidu respondent ascribed no special significance to the hunting and gathering site, and respondents did not indicate any interest in using the site in the future. The integrity of relationship to traditional beliefs and practices is therefore weak and the site has also apparently changed significantly, thus weakening integrity of condition. As such, it has been recommended that the property does not possess the qualities of a potential NRHP-eligible Traditional Cultural Property.

TCP 15 - Butt Valley. Much like Big Meadows, Butt Valley was the location of settlements, gathering and hunting areas, and other places that figured into the daily life and beliefs of the Maidu. While still important area to some Maidu, most respondents

attached a greater level of significance to Big Meadows. Butt Valley is difficult to define as a tangible property since only generalized information about it is known. Furthermore, the integrity of condition was highly compromised by the construction of Butt Valley Reservoir. While this was an important settlement area in pre-contact and pre-Project times, it has been recommended that it does not currently possess the qualities and integrity necessary to be considered a potential NRHP-eligible Traditional Cultural Property.

E4.3 EFFECTS ON HISTORIC PROPERTIES/CULTURAL RESOURCES

E4.3.1. Introduction

An "historic property" is any "prehistoric or historic district, site, building, structure, or object included in or eligible for inclusion in the National Register of Historic Places" (36 CFR 800.16(l)(1)). This term also applies to NRHP-eligible Traditional Cultural Properties. An undertaking, or project, has an effect on a historic property when it may alter any of the characteristics of the property that qualify the property for inclusion in the NRHP (36 CFR 800.16(i)). *Effect* refers specifically to the alteration of *characteristics that contribute* to the NRHP-eligibility of a historic property. For the purposes of this management plan, the term "cultural resource" refers to both formally evaluated historic properties and those resources that have not been evaluated and are therefore potentially NRHP-eligible. The term *impact* is inclusive and refers to all past and current damage or alterations to cultural resources, regardless of NRHP-eligibility.

Archaeological properties are usually important for the data they contain, and land uses that do not result in the alteration of those data potentials generally do not affect archaeological properties. A specific type of impact may have dissimilar effects on various archaeological sites, depending on the nature of the sites and their data potentials. For example, the data potentials at some sites may be buried or extremely durable and less susceptible to damage than at other sites where primary deposits are situated closer to the surface of the ground.

However, a land use that does not have an effect an NRHP-eligible archaeological site may have an effect upon a NRHP-eligible Traditional Cultural Property (TCP) if the property evokes a sense of time, place, and identity for Native Americans, and if environmental alterations intrude on that association. A TCP may be valued for a variety of reasons, including its use for sacred ceremonies, resource gathering purposes, a view of particular natural and culturally important features, or a historical association with events and individuals. In such circumstances, the setting of the property can be critical. Similarly, historic architectural properties were often designed for a particular environmental setting and can only be appreciated in that unaltered setting.

Currently, there are a number of impacts to cultural resources within the Project APE, including recreation activities, shoreline erosion, and roadway use. However, it is not always easy to discern past events from *ongoing* impacts to these properties. Some specific impacts may also be a result of naturally occurring phenomena or they may be a result of Project activities and it may not always be easy to tell which is the case.

Additionally, certain kinds of Project-related activities or features may not have a direct impact to cultural resources, but may establish the conditions by which damage occurs. For example, a road may not traverse a site and damage it directly, but it may provide ready access to an archaeological site that would otherwise be inaccessible.

Finally, new impacts may be observed during the term of a License that were not readily apparent or occurring when the cultural studies were undertaken or when the License was approved. For example, while erosion may not be currently present at a particular site, Project-related activities could result in new erosion of the resource in the future. If not curtailed, this erosion could damage the data potential and potential NRHP-eligibility of the site.

In summary, the nature of various types of land use can be described in general terms, but the impacts of those activities must be examined on a site-specific basis. Therefore, values of cultural resources (including formally evaluated historic properties) and site-specific circumstances provide the context for a consideration of the impacts of the Project upon historic properties.

The Project area is currently used for a variety of purposes including the maintenance and operation of the hydroelectric facilities and recreational use. The type and level of impacts to cultural resources properties within the Project APE are determined by the setting, size, visibility, and public knowledge of cultural resource locations. The

following section of the report first describes general types of land use and their associated impacts, and concludes with a discussion of identified site-specific impacts.

E4.3.2 Project Facilities, Operation, and Maintenance

The Project diverts water from Upper North Fork Feather River, channels it into penstocks and uses it to generate power at the Butt Valley, Caribou, and Belden Powerhouses. Following its entrance into each of the powerhouses, the water is then discharged into the North Fork of the Feather River. The facilities themselves generally require only routine maintenance, which has little effect on the lands surrounding the Project. Maintenance and operation of the Project generally focus on the existing facilities and access roads. The area beyond these facilities receives little attention from maintenance crews, with the exception of road upkeep and the disposal of road materials.

Currently, many of the Project access roads are paved. However, several important Project roads are dirt or gravel and several are designated as County roads. Under an agreement with Plumas County, the Licensee maintains these dirt roads as it is necessary for facility access. Seasonal sediment slides from adjacent slopes must often be cleared from the roadway in order to allow passage.

Dirt access roads within the Project are also maintained by-grading which can affect historic properties that may lie buried beneath them. In addition, ditches excavated for roadway drainage may cause further impacts to archeological sites. Vehicular traffic on these dirt roadways can also damage historic properties, depending on the condition of

the road, the season of use, and the types of vehicles that travel the roads. The presence of roads makes historic properties more accessible to the public, in some cases increasing their vulnerability.

Fluctuating reservoir levels, particularly along shorelines, can result in Project related erosion if not kept in check. The regular fluctuation of reservoir levels by the Licensee can result in the erosion of archaeological sediments into the reservoir and the creation of cutbanks. Figure E4-Z of Appendix E4 depicts the four primary lake elevation "bands" at Lake Almanor. These bands are also described in Table E4-11 below:

TABLE E4-11. LAKE ALMANOR ELEVATIONS

ELEVATION	DESCRIPTION
4500 ft.	UNFFR FERC License boundary/general PG&E property boundary.
4494 ft.	Maximum permitted high water elevation
4474 ft.	Typical low-level elevation (late fall)
Below 4474 ft.	Atypical low elevation levels (e.g. Fall 2001).

Typically, Lake Almanor fluctuates between 4,474 and 4,494 feet in elevation. In general, Project reservoirs are lowest in the winter so that they can be refilled by spring flows. This reservoir fluctuation is necessary for Project operations.

Finally, the dredging of sediment from Project reservoirs can also impact cultural resources. Dredged material is usually disposed of on PG&E-owned lands as close as

possible to the reservoir from which it came. Activities associated with dredging and the disposal of dredge material can impact sensitive cultural resource sites.

E4.3.3 Recreational Use

Recreational activities, including boating, fishing, hunting, and camping, are found throughout the Project area. The use of Licensee operated or permitted recreational facilities can greatly impact cultural resource sites should any be present within or adjacent to the facility. While the Licensee does not specifically promote recreational use of the Project area below Butt Valley Reservoir, Project access roads to the hydroelectric facilities make the area more accessible for recreational purposes. As a result, sensitive archaeological areas may become more susceptible to public use.

In general, it appears that most recreational users of the Project area do not knowingly impact cultural resource sites. They cross over them in order to access preferred fishing locations, or they may stop to picnic or camp, but the goal of *most* visitors is not to impact sites but to enjoy the area for the recreational opportunities that it provides. Nonetheless, impacts as a result of recreational use do indeed occur and need to be addressed.

E4.3.4 Vandalism

Vandalism can be defined as the obvious intent to knowingly disturb, destroy, or collect archaeological remains from a site that can be clearly observed (e.g. "pothunter's pits"), or where local residents have reported such actions. Vandalism can also take two forms depending on intent. While the casual collection of surficial artifacts can be considered to be vandalism according to the above definition, casual collectors often do not know that these activities are unauthorized and can greatly jeopardize archaeological site integrity and data potential. In some cases, however, vandals intentionally and maliciously damage archaeological sites or partake in other activities that impact sites with full knowledge that what they are doing is wrong and unauthorized.

Vandalism can be attributed to Project activities if such Project activities or facilities provide the only access to cultural resource sites and that access is resulting in the illicit collection of artifacts or the intentional disturbance of cultural materials and features. Archeological sites that may contain human remains and burials are particularly susceptible to vandalism and looting. The Maidu community has been very concerned about these activities. Fortunately, throughout the Project area, intentional and malicious vandalism does not appear to be widespread. However, any such activity poses potential threats to all historic properties within the Project APE.

E4.3.5 Specific Effects on Cultural Resources

Each cultural resource or historic property has its own unique history and blend of impacts. As mentioned above, it is often difficult to identify impacts that have occurred in the past from those that are ongoing. Unless past impacts are addressed however, many are likely to continue because patterns of activity have been established. Table E4-12 summarizes past, current, and potential impacts on each of the 61 eligible or unevaluated archaeological sites and 15 Traditional Cultural Properties within the Project APE.

Within the Project APE, nine categories of potential impacts have been identified. These are shown in Table E4-13 in order of their frequency of occurrence.

TABLE E4-12 POTENTIAL IMPACTS TO ELIGIBLE OR UNEVALUATED ARCHAEOLOGICAL RESOURCES / TCPS

STATE/TCP NO.	SITE TYPE	CASUAL VISIT	INUNDATION	WAVE ACTION	HISTORIC USE	MODERN LOGGING	VANDALS	CONSTRUCTION/ DEMOLITION	MODERN GRAZING	SUV/ATV TRAFFIC
CA-PLU-30	Large Lithic Scatter	X	X	X			X			
CA-PLU-33/H	Large Habitation, Unknown	X	X	X	X		X	X		X
CA-PLU-87	Large Habitation, BRMS, Lithics, Ground Stone	X	X	X				X		
CA-PLU-284/H	Large Habitation, Unknown Historic	X			X	X		X		
CAPLU-334/H (Prehistoric component only)	BRMs, Small Habitation, Unknown Historic, Railroad	X	X	X						X
CA-PLU-336	Small Lithic Scatter	X			X			X	X	
CA-PLU-1185	Small Habitation							X		
CA-PLU-1186/H	Small Lithic Scatter, Unknown Historic	X				X		X		
CA-PLU-1245-H	Hydroelectric Camp		X							
CA-PLU-1709	Large Lithic Scatter	X								
CA-PLU-1710/H	Small Lithic Scatter, Unknown Historic	X								
CA-PLU-1712/H	Small Lithic Scatter, Unknown Historic	X								
CA-PLU-1717	Large Lithic Scatter			X						
CA-PLU-1718	Small Habitation			X						
CA-PLU-1719	Large Habitation				X				X	
CA-PLU-1720/H	Large Habitation Unknown Historic	X	X	X	X					
CA-PLU-1721	Small Lithic Scatter			X						
CA-PLU-1725/H	Large Habitation	X	X	X						

State/TCP No.	Site Type	Casual Visit	Inundation	Wave Action	Historic Use	Modern Logging	Vandals	Construction/ Demolition	Modern Grazing	SUV/ATV Traffic
CA-PLU-1728	Small Lithic Scatter		X	X						
CA-PLU-1729	Large Habitation			X						
CA-PLU-1730	Large Habitation	X		X				X		
CA-PLU-1731	Small Lithic Scatter	X		X				X		
CA-PLU-1732	Small Lithic Scatter		X	X						
CA-PLU-1733	Large Lithic Scatter		X	X						
CA-PLU-1735	Small Habitation			X						
CA-PLU-1737	Large Habitation	X		X	X		X	X		
CA-PLU-1738/H	Small Lithic Scatter, Unknown Historic					X				
CA-PLU-1743-H	Butt Valley Railroad	X	X					X		
CA-PLU-2019	Large Habitation		X	X						
CA-PLU-2061	Large Lithic		X	X						
CA-PLU-2063	Large Lithic Scatter		X	X						
CA-PLU-2065	Small Lithic Scatter		X	X						
CA-PLU-2066	Small Habitation		X	X						
CA-PLU-2068/H	Small Lithic Scatter, Unknown Historic	X	X	X	X			X		X
CA-PLU-2069	Large Habitation	X	X	X						X
CA-PLU-2071	Large Habitation		X	X						
CA-PLU-2072	Large Habitation		X	X						
CA-PLU-2073	Large Lithic Scatter	X	X	X						
CA-PLU-2074/H	Large Lithic Scatter	X	X	X						X
CA-PLU-2077	Large Habitation	X	X	X	X					X
CA-PLU-2089	Small Habitation, BRM		X							
CA-PLU-2090	Large Habitation	X	X	X	X			X		
CA-PLU-2094	Small Habitation, BRM	X	X							

State/TCP No.	Site Type	Casual Visit	Inundation	Wave Action	Historic Use	Modern Logging	Vandals	Construction/ Demolition	Modern Grazing	SUV/ATV Traffic
P-32-001714	Large Habitation	X	X	X	X			X	X	
P-32-001716-H (Possible buried deposits only)	Ranching	X			X		X	X		
P-32-001766-H	Hydroelectric Development, Camp 4 Sawmill		X	X						
P-32-002064	Small Lithic Scatter		X	X						
P-32-002075	Small Lithic Scatter	X	X	X						
P-32-002076	Small Lithic Scatter, Unknown Historic	X	X	X						
P-32-002079/H	Small Habitation Unknown Historic	X	X	X	X					X
P-32-002080	Large Lithic Scatter	X	X	X						
P-32-002081	Large Lithic Scatter	X	X	X						
P-32-002082	Large Lithic Scatter	X	X	X						
P-32-002083	Large Lithic Scatter	X	X	X						
P-32-002084	Small Lithic Scatter	X	X	X						
P-32-002085	Small Lithic Scatter	X	X	X						
P-32-002086	Large Lithic Scatter	X	X	X						
P-32-002087	Small Habitation	X	X	X						
P-32-002092/H	Small Lithic Scatter, Unknown Historic	X	X	X	X			X		
P-32-002093	Large Lithic	X	X	X						
P-32-002094	Small Lithic Scatter	X	X	X						
TCP 1	Big Meadows		X		X					
TCP 2	Burial location		X							
TCP 3	Important Natural Feature	X	X	?						
TCP 4	Gathering Area		X					X		
TCP 5	Spring Area		X					X		
TCP 6	Fishing Area									

State/TCP No.	Site Type	Casual Visit	Inundation	Wave Action	Historic Use	Modern Logging	Vandals	Construction/ Demolition	Modern Grazing	SUV/ATV Traffic
TCP 7	Myth Location		X		X			X		
TCP 8	Willow Gathering Area		X							
TCP 9	Fishing Hole									
TCP 10	Roundhouse Location		X							
TCP 11	Maidu Trail		X							
TCP 12	Hunting Grounds		X							
TCP 13	Maidu Church							X		
TCP 14	Gathering Area									
TCP 15	Butt Valley		X		X					

TABLE E4-13. FREQUENCY OF IDENTIFIED IMPACTS

Wave Action	47	62%
Inundation	54	71%
Casual Visitation	40	53%
Construction/Demolition	19	25%
Historic Use	16	21%
SUV/ATV Traffic	7	9%
Vandalism	4	5%
Modern Logging	3	4%
Modern Grazing	3	4%

Wave Action - Lake Almanor and Butt Valley Reservoir are alternately churning and deflating many of the sites along the shorelines. This sort of wave action at sites can be damaging than inundation and can cause greater disturbances to archaeological resources. In some cases, this has resulted in much of a site being washed away, leaving only permanent features such as bedrock mortars. A total of 47 eligible or potentially eligible archaeological sites (and possible one potential TCP) show some degree of wave action damage. Thirty-nine of these resources are also typically inundated. Figure E4-1 depicts a typically inundated area at Lake Almanor that has also been subject to wave action.

FIGURE E4-1 EXAMPLE OF WAVE ACTION

This figure shows how wave action has churned the sediments resulting in their redeposition as a "hummock" feature on the terrain.

Wave action can also result in severe cutbank erosion along shorelines. This is evident at other Licensee reservoirs that are subject to frequent and radical fluctuation for hydro generation purposes. At the current Project reservoirs however, major reservoir drawdowns generally only occur once a year. The degree of drawdown depends on the amount of rainfall received that particular year and the amount of spring runoff received

in the reservoir basins. Fortunately, cutbank erosion was only observed at one potentially eligible site within the Project APE. However, the erosion occurring at this site, a prehistoric site that is typically inundated by Lake Almanor is a result of a natural stream channel that bisects the site. This channel creates a moderate, but natural cutbank on either side.

Inundation - Inundation refers to the partial or complete coverage of a site by a Project reservoir. The effects of inundation upon archaeological resources can vary in terms of severity. When a site has been completely inundated for years and water circulation patterns in the area are fairly gentle, then one should find a greater amount of preservation. As previously evidenced at Butt Valley Reservoir during recent dam repair work, complete inundation can aid in the preservation of artifacts and can obscure and protect the site from the view of artifact collectors (Maniery and Baker 1999; Compas 2001:47). However, inundation can also be damaging to artifacts manufactured from organic materials.

Inundation can also result in the deposition of imported or redistributed sediments upon submerged sites. In some areas, such as north of the Lake Almanor causeway, water drains from the small tributaries surrounding the north end of the meadow into the lake and through two small openings in the causeway into the lake south of the project area. Many sediments are deposited on the north side of the causeway and could potentially cover sites that might be located there. This deposition protects sites present here from

deflation and possibly artifact collection by visitors to the sites when the lake level is lowered because sediments obscure the site.

A total of 43 eligible or potentially eligible archaeological sites and 11 potential Traditional Cultural Properties are currently being subject to inundation. All but three of these resources are located beneath Lake Almanor. The others are located at Butt Valley Reservoir.

Casual Visitation Casual visitation was observed at 39 eligible or potentially eligible archaeological sites and one potential TCP. Since Lake Almanor and Butt Valley Reservoir are recreational areas, many of the sites show signs of minor to major impacts from people that unknowingly disturb them. The types of impacts identified include trails, picnic debris (some dating to the 1950s at Butt Valley Reservoir), fire hearth construction, and the construction of duck blinds by hunters. Several varieties of blinds were observed, from poles stuck into the ground and the stacking of rocks to the excavation of square and circular pits.

Construction/Demolition - This impact was documented when a road or building had been constructed within a site or where formal landscaping or other development has occurred. This impact also refers to the intentional demolition or removal of a resource. Impacts to sites ranged from minor to moderate depending on the amount of construction carried out within a site. Impacts from construction were noted at fifteen archaeological sites and in the vicinity of 4 potential TCPs.

Historic Use - This category includes actions related to historic period activities such as mining, logging, the construction of historic hydroelectric facilities or transmission lines, or the construction of railroad grades to facilitate the transportation of lumber. These activities impacted earlier prehistoric deposits and historic period sites. This type of activity was noted at 13 archaeological sites and three potential TCPs within the project area.

SUV/ATV Traffic While current Licensee policy prohibits vehicular access below the high water line at Licensee reservoirs, during periods of reservoir drawdown or low lake elevation, dry lakebeds are susceptible to unauthorized vehicular traffic. Recreational vehicular use for hunting, fishing, and other purposes is common at these times, and has been observed at four sites below the high water line at Lake Almanor.

Vandalism - Vandalism was noted only where obvious intent to disturb, destroy, or collect archaeological remains from a site could be clearly observed, or where local residents have reported such actions. While casual artifact collection is a common occurrence within the Project area, intentional vandalism was only observed at four sites. This includes the unauthorized collection of materials, structural elements and artifacts from the Stover Ranch complex and three other historic and prehistoric sites throughout the Project area.

Modern Logging - Logging activities were evident in the form of recent bulldozer pushes, grading, skid trails, stumps, and grading. Three sites in the project area show evidence of impacts from recent logging activities.

Modern Grazing - Modern cattle grazing was observed at three sites within the project area. Ground cover is thick in these areas protecting the sites from too much damage; however, cattle are allowed to graze in these areas when the ground is wet causing deep hoof marks and pits that disturb the surface of the site. All of the sites where this phenomenon occurred are located at the northern end of Lake Almanor.

E4.4 MANAGEMENT OF HISTORIC PROPERTIES AND CULTURAL RESOURCES (CULTURAL RESOURCES MANAGEMENT PLAN)

E4.4.1 Introduction

In the past, the Project license has emphasized responsible stewardship of the lands in the Project area. The most effective way for the Licensee to strengthen and maintain its cultural resources stewardship is to implement a plan that will integrate reasonable treatment measures with the Licensee's requirements for operation of the Project. This CRMP is designed to provide a responsible level of consideration of the known and potential impacts of Project-related activities upon cultural and historic properties located throughout the Project Area of Potential Effects as defined in Section E4.2.2 above. The management approach outlined in the CRMP proposes general and site-specific treatment options in a tiered and staged strategy. The management measures and strategies outlined in the CRMP constitute the implementing mechanism for compliance with Section 106 of the National Historic Preservation Act through "*Draft Programmatic Agreement Among the Federal Energy Regulatory Commission, the Advisory Council on Historic Preservation, and the California State Historic Preservation Officer for Managing Historic Properties that may be Affected by a License Issuing to Pacific Gas and Electric Company for the Continued Operation of the Upper North Fork Feather River Project (FERC 2105) in Plumas County, California*" (Appendix E4-A). The executed PA, developed pursuant to 36 CFR § 800.14(b), establishes a process for the consideration of historic properties by the FERC and constitutes the comments of the Advisory Council.

The PA and CRMP are tailored to the specific needs and circumstances of the undertaking. As mentioned in Section E4.2.6 above, Maidu values and concerns regarding ground disturbance associated with archaeological test excavation discouraged the examination of almost all of the prehistoric properties sufficient to define their data potentials and NRHP eligibility. In the interest of addressing those concerns, the Licensee will instead treat of the prehistoric archaeological sites or sites with prehistoric components within the Project APE as though they are NRHP eligible historic properties unless they have been previously determined not to be eligible (see the three sites it Table E4-10 above) or unless impacts to these sites are unavoidable and cannot be managed in other ways. For most sites, the Licensee will apply both short- and long-term treatment measures in a phased effort order to give these sites continued management consideration by the Licensee and the SHPO, in consultation with Lassen and Plumas National Forests, and the Greenville and Susanville Indian Rancherias. Traditional Cultural Properties (TCPs) will be managed in the same way, but will also consider the informal recommendations provided by Albion Environmental in the TCP report. The four historic-era properties that have been recommended as eligible for inclusion in the NRHP will also be managed in accordance with the CRMP and the PA.

The following sections discuss both general and site-specific treatment measures and the strategy for applying those measures to historic properties within the Project APE. These treatment measures are based on the premise that preservation of historic properties in place and the avoidance of damage to those properties is the most desirable objective of management. Additionally, treatment measures have been selected in a manner that

addresses both the short- and long-term adverse effects that are currently impacting each site. Treatment also reflects the type of value placed on the historic property. Finally, the cost of treatment also plays a role in the decision-making process. If the selected treatment measures identified in this CRMP prove to be impractical or ineffective, historic properties may ultimately be removed from management consideration through appropriate research, documentation, and consultation. The short-term costs of this option however, are substantial.

The needs and circumstances of each historic property will be integrated in an overall implementation strategy that will be efficient, effective, and realistic. In addition, this CRMP addresses potential dilemmas that may occur as a result of unanticipated discoveries, natural or manmade disasters, and the strategy to be taken during any emergency undertakings to protect or preserve the historic properties.

E4.4.2 General Treatment Measures

The management of historic properties in the Project primarily involves the control of human activity to either *direct activity away from sensitive locations* and focus it on specific areas, and to *deter inappropriate activity and behavior*. Focusing or restricting recreation and vehicle access and parking, and controlling grazing are examples of redirected activity. Deterrents involve the use of information, barriers, and monitoring and prosecution.

Directing and Redirecting Activity

Travel Routes and Road Closures. The Licensee will take measures to post and enforce Licensee policy restricting vehicular access below the 4,494'elevation (PG&E datum). Vehicles will be permitted in designated areas only. Boulder barricades and other restrictive devices will be used in areas where vehicles are accessing Project lands below the high water line. A plan for specific placement of these barricades will be developed in consultation with the appropriate agencies. Restricting and enforcing vehicular access will eliminate the effects that vehicular access has upon cultural resource sites.

Developed Recreation Areas. The Licensee currently operates or leases land to eleven developed recreational facilities within the Upper North Fork Feather River Project APE. These facilities are: Lake Almanor Campground, Camp Conery Group Camp, Canyon Dam Day Use Area, Almanor Scenic Overlook, Eastshore Picnic Area, Last Chance Family and Group Campground, Ponderosa Flat Campground, Alder Creek Day Use Area, Cool Springs Campground, North Shore Campground, and the Plumas Pines Resort. Within these recreational areas, vehicle access will be limited to designated areas only and facility hosts (or operators of recreational facilities who lease property from the Licensee) will be instructed to enforce vehicle access restrictions. Hosts will also be informed of all appropriate laws and restrictions regarding artifact collection on Licensee lands and will be expected to pass this information on to the campers that use the facilities. Impacts to cultural resource sites located within or adjacent to formal recreation areas are addressed on a site-specific basis below.

Road Maintenance Restrictions. Routine road maintenance will be regulated to avoid adversely affecting cultural resource sites and historic properties. If road improvement is necessary for continued use, then alternative treatment options such as fill or rerouting will be considered.

Deterrents

Information Deterrents. Information deterrents are designed to inform and alert land users (both Licensee employees and the public) that certain kinds of activities are prohibited, or that the conduct of certain activities is inappropriate at specific locations. Information deterrents assume that land users, when provided appropriate information, will act responsibly and conform to proscriptions conveyed by the information, resulting in the protection and avoidance of damage to historic properties.

Information deterrents are the least expensive in the short-term, although the long-term, cumulative costs of ongoing information dissemination may be substantial. Information deterrents do not provide insurmountable physical barriers. They primarily include signing and education, although the placement of obstructions could also be construed as a type of information deterrent. Physical obstructions generally are not sufficient to prevent proscribed activities if a potential violator is so inclined and determined. Rather, they provide a clear message that specific locations or routes should not be used. Information deterrents are prerequisite for other treatment options, such as law

enforcement. By informing land users of the legal prohibitions and restrictions, the Licensee will establish a context for effective prosecution.

Three types of information deterrents will be employed as part of the Project CRMP. These deterrents are:

Signage. Signs will be posted clearly warning the public that certain areas are protected and that violators will be vigorously prosecuted. These signs will be highly visible and placed in areas that provide access to potentially vulnerable historic properties. Signs are effective in warning the public that they are in a protected area and provide enforceable notice. Careful placement of signs is crucial, otherwise, signs may increase public knowledge of where sites are located, making the properties more vulnerable to vandalism. Appropriate wording on the signs and their placement will be developed in consultation with Licensee Corporate Security and legal advisors, local, state and federal law enforcement agencies, the Maidu community and resource management specialists.

Public Education. Following license issuance and prior to the implementation of any new License requirements, the Licensee will work with the public media to develop newspaper articles and/or television news reports to inform the public of any changes that will be occurring within the Project area and any restrictions that will be implemented, the reasons for these changes and restrictions and to inform the public of the penalties for violation. Prior to the onset of a period of reservoir drawdown, the Licensee will again

work through the media to remind the public of appropriate and inappropriate activities within the drawdown areas.

The Licensee will install new informational kiosks or will improve existing kiosks at all Licensee recreation facilities and will use them and other reasonable measures to inform the recreating public of both the cultural importance of the Project area and of the laws and Licensee policies regarding protection of resources. The Licensee will work with the Greenville and Susanville Indian Rancherias (and other Maidu groups as appropriate) to develop appropriate public information to be disseminated in this manner. Information regarding any upcoming changes in reservoir levels will also be posted.

Just prior to the recreation season every year, the Licensee will ensure that all private property owners bordering Licensee lands and all Licensee campground hosts or operators of recreational facilities who lease property from the Licensee are informed of all appropriate laws and restrictions regarding the use of vehicles below the high water line, ground disturbance and illicit artifact collection on Licensee lands and the penalties for violation.

Employee Education. The Licensee currently implements an employee environmental training and sensitivity program and has proposed to continue this practice. If Licensee employees are informed about the importance of the historic properties, they are more likely to help protect the sites. Additionally, employees will be instructed to confine their Project activities to areas that do not contain of cultural resource sites.

Barriers. The installation of barriers is a form of deterrent that involves attempts to physically prohibit or remove access to a historic property. This type of deterrent is designed to make it extremely difficult to harm historic properties or to access unauthorized areas. The short-term costs of barrier deterrents are high, but have proven to be effective. Once in place, however, they will need periodic maintenance.

For the current Project, public vehicular access will be limited to designated areas and roads only. New barriers will be placed in appropriate locations in order to direct traffic away from identified sites. Boulders comprising these barriers will be large enough and heavy enough to discourage vandalism and removal and will be spaced close enough together to effectively prevent vehicles from driving around them. While off-road vehicle access may be difficult to eliminate, the barriers, combined with the strategic placement of informational signs identified above, should convey the message that these areas are off-limits to vehicular traffic.

Monitoring/Patrolling. Monitoring, patrolling, and prosecution of violators are deterrents that work in conjunction with other options, such as information deterrents, to alert potential violators of the illegality of their actions. A schedule of long-term monitoring of the historic properties within the Project APE will be implemented. Monitoring will also check for any new impacts and any natural damage that may be occurring on cultural resource sites. While monitoring is costly, it is an efficient way of ensuring the integrity of historic properties.

As part of the monitoring program, the Licensee's Cultural Resources Specialist or his/her designee will act as a monitor for regular visits to accessible sites within the Project Area of Potential Effects, particularly those sites that are easily accessible to the recreating public Any designee will be a professional archaeologist. A representative appointed by the Maidu community will also be invited to accompany the Specialist on monitoring visits. Additionally, Licensee hydroelectric employees will check for damage to barriers and gates as part of their routine maintenance rounds. Any barriers or other devices requiring repair will immediately be brought to the attention of the Hydroelectric Supervisor on duty and repairs made within two weeks time.

As intentional vandalism of cultural resource sites within the Project area has been minimal (four sites), the formal monitoring visits by the Cultural Resources Specialist or designee will occur once per month throughout the recreation season (April through September) for the first two years following the implementation of site-specific treatment measures identified in the CRMP. This monitoring will increase to twice monthly during periods of reservoir drawdown (October and November) when previously inundated sites become exposed and this increased monitoring will continue until the resources are covered by snow. In the future, the frequency of monitoring visits may decrease should fewer incidents of vandalism or other problems occur. Any change in monitoring frequency will be undertaken in consultation with the FERC and the SHPO.

The monitor(s) will be responsible for collecting information on ongoing cultural resource property damage in order to examine the effectiveness of implemented treatment measures. Their role will not be to "cite" or otherwise approach potential violators. Should the monitors observe an unauthorized activity, they will immediately contact Licensee Security and if necessary, the Plumas County Sheriff's Department, who will take appropriate action. In addition, the Licensee will work with the Plumas County Sheriff's Department to arrange for a part time patrol of Licensee lands.

E4.4.3 Site Specific Treatment Measures

After the current and future impacts affecting each historic property were identified (Section E4.3.5), general treatment measures that would eliminate or minimize the effects were discussed (Section E4.4.2). However, the circumstances of each historic property are unique, and therefore different combinations of measures are considered for individual properties. The selected site-specific options are placed into an overall management program and strategy (Section E4.4.4).

Archaeological Sites

Table E4-14 identifies the same impacts to each eligible or unevaluated archaeological resource recorded within the Project APE that are shown in Table E4-1. However, Table E4-14 also states whether or not the identified impacts are a result of Project-related activities. If identified impacts to cultural resource sites are Project-related, Table E4-14 provides a brief description of proposed treatment. A more detailed description of treatment to address Project-related impacts follows. The Licensee is proposing specific

treatment of 59 archaeological sites within the Project APE. These sites are those that are eligible or potentially eligible for inclusion for listing in the NRHP and also exhibit Project-related impacts that could affect any potential NRHP-eligibility. While potential impacts to the remaining three archaeological sites may have been identified, these impacts either cannot be attributed to Project-related activities or they do not appear to be harming the resources in any way. Table E4-14 also depicts proposed measures for the 15 potential Traditional Cultural Properties identified in the APE.

Should the Licensee propose to change operational or maintenance activities over the course of the License in such a way that impacts to any cultural resource sites as a result of new Project-related activities may occur, an assessment of the effects of such activity upon identified cultural resources will be undertaken in accordance with 36 CFR 800.5. This assessment will be accomplished in consultation with the FERC, the SHPO, the Rancheria and the Lassen and Plumas National Forests as appropriate.

TABLE E4-14. POTENTIAL IMPACTS TO ELIGIBLE OR UNEVALUATED ARCHAEOLOGICAL RESOURCES AND PROPOSED TREATMENT

STATE/TCP NO.	SITE TYPE	AREA	IDENTIFIED IMPACTS	PROJECT-RELATED?	PROPOSED TREATMENT
CA-PLU-30	Large Lithic Scatter	Almanor	Casual visitation, inundation, wave action	Yes	Signage; see Management of Inundated Archaeological Sites / Sites Subject to Wave Action
CA-PLU-33/H	Large Habitation, Unknown Historic	Almanor	Casual visitation, inundation, wave action, historic use, logging, vandalism, construction, SUV/ATV traffic	Yes	Proceed with Stage 3 Treatment Measures to be developed n consultation with SHPO, FERC, ACHP and Greenville Rancheria.
CA-PLU-87	BRMS, Small Lithic Scatter	Almanor	Casual visitation, inundation, wave action, construction	Yes	Signage see Management of Inundated Archaeological Sites / Sites Subject to Wave Action; consideration prior to issuance of construction permits
CA-PLU-284/H	Large Habitation, Unknown Historic	Almanor	Casual visitation, historic use, logging, construction	Yes	Consult with USDA Lassen National Forest and others regarding appropriate treatment.
CAPLU-334/H	BRMs, Small Lithic Scatter, Unknown Historic, Railroad	Almanor	Casual visitation, inundation, wave action, SUV/ATV traffic	Yes	Signage; block vehicular access; see Management of Inundated Archaeological Sites / Sites Subject to Wave Action
CA-PLU-336	Small Lithic Scatter	Almanor	Casual visitation, historic use, construction, grazing	Yes	Eliminate grazing
CA-PLU-1185	Small Habitation	Butt Valley	Construction	Yes	Restrict road grading; signage, monitoring
CA-PLU-1186/H	Small Lithic Scatter, Unknown Historic	Butt Valley	Casual visitation, logging, construction	Construction, logging not Project-related. Visitation Project-related.	Signage; monitoring

State/TCP No.	Site Type	Area	Identified Impacts	Project-Related?	Proposed Treatment
CA-PLU-1245-H	Hydroelectric Camp	Butt Valley	Inundation	Yes	Signage; should drawdown occur, fully record and evaluate previously unevaluated portion for NRHP-eligibility, and proceed with any appropriate treatment
CA-PLU-1709	Large Lithic Scatter	Almanor	Casual visitation	Yes	Signage; monitoring
CA-PLU-1710/H	Small Lithic Scatter, Unknown Historic	Almanor	Casual visitation	Yes	Signage; monitoring
CA-PLU-1712/H	Small Lithic Scatter, Unknown Historic	Almanor	Casual visitation	Yes	Signage; monitoring
CA-PLU-1717	Large Lithic Scatter	Almanor	Inundation, wave action	Yes	Signage; see Management of Inundated Archaeological Sites / Sites Subject to Wave Action
CA-PLU-1718	Small Habitation	Almanor	Inundation, wave action	Yes	Consult with USDA Lassen National Forest and others regarding appropriate treatment.
CA-PLU-1719	Large Habitation	Almanor	Historic use, grazing, inundation, wave action	Yes	Signage; see Management of Inundated Archaeological Sites / Sites Subject to Wave Action
CA-PLU-1720/H	Large Habitation Unknown Historic	Almanor	Casual visitation, inundation, wave action, historic use	Yes	Signage; see Management of Inundated Archaeological Sites / Sites Subject to Wave Action
CA-PLU-1721	Small Lithic Scatter	Almanor	Wave action	Yes	Signage; see Management of Inundated Archaeological Sites / Sites Subject to Wave Action
CA-PLU-1725/H	Small Lithic Scatter, Unknown Historic	Almanor	Casual use, inundation, wave action	Yes	See Management of Inundated Archaeological Sites / Sites Subject to Wave Action
CA-PLU-1728	Small Lithic Scatter	Almanor	Inundation, wave action	Yes	Signage; see Management of Inundated Archaeological Sites / Sites Subject to Wave Action

State/TCP No.	Site Type	Area	Identified Impacts	Project-Related?	Proposed Treatment
CA-PLU-1729	Large Habitation	Almanor	Wave action	Yes	Signage; see Management of Inundated Archaeological Sites / Sites Subject to Wave Action
CA-PLU-1730	Large Habitation	Almanor	Casual visitation, wave action, construction	Yes	Signage; see Management of Inundated Archaeological Sites / Sites Subject to Wave Action; consideration prior to issuance of construction permits
CA-PLU-1731	Small Lithic Scatter	Almanor	Casual visitation, wave action, construction	Yes	Signage; see Management of Inundated Archaeological Sites / Sites Subject to Wave Action; consideration prior to issuance of construction permits
CA-PLU-1732	Small Lithic Scatter	Almanor	Inundation, wave action	Yes	Signage; see Management of Inundated Archaeological Sites / Sites Subject to Wave Action
CA-PLU-1733	Large Lithic Scatter	Almanor	Inundation, wave action	Yes	Signage; see Management of Inundated Archaeological Sites / Sites Subject to Wave Action
CA-PLU-1735	Small Habitation	Butt Valley	Wave action	Unknown	None proposed at this time
CA-PLU-1737	Large Habitation	Butt Valley	Casual visitation, wave action, historic use, vandalism, construction	Yes	Signage, campground host and public education; signage; see Management of Inundated Archaeological Sites / Sites Subject to Wave Action
CA-PLU-1738/H	Small Lithic Scatter, Unknown Historic	Butt Valley	Logging	No	None - Logging not Project-related
CA-PLU-1743-H	Butt Valley Railroad	Butt Valley	Casual visitation, inundation, construction	Yes	Signage; should drawdown occur, fully record and evaluate site for NRHP-eligibility, and proceed with any appropriate treatment

State/TCP No.	Site Type	Area	Identified Impacts	Project-Related?	Proposed Treatment
CA-PLU-2019	Small Lithic Scatter	Almanor	Inundation, wave action	Yes	See Management of Inundated Archaeological Sites / Sites Subject to Wave Action
CA-PLU-2061	Small Lithic Scatter	Almanor	Inundation, wave action	Yes	See Management of Inundated Archaeological Sites / Sites Subject to Wave Action
CA-PLU-2063	Small Lithic Scatter	Almanor	Inundation, wave action	Yes	See Management of Inundated Archaeological Sites / Sites Subject to Wave Action
CA-PLU-2065	Small Lithic Scatter	Almanor	Inundation, wave action	Yes	See Management of Inundated Archaeological Sites / Sites Subject to Wave Action
CA-PLU-2066	Large Lithic Scatter	Almanor	Inundation, wave action	Yes	See Management of Inundated Archaeological Sites / Sites Subject to Wave Action
CA-PLU-2068/H	Small Lithic Scatter, Unknown Historic	Almanor	Casual visitation, inundation, wave action, historic use, construction, SUV/ATV traffic	Yes	See Management of Inundated Archaeological Sites / Sites Subject to Wave Action
CA-PLU-2069	Small Lithic Scatter	Almanor	Casual visitation, inundation, wave action, SUV/ATV traffic	Yes	See Management of Inundated Archaeological Sites / Sites Subject to Wave Action
CA-PLU-2071	Small Lithic Scatter	Almanor	Inundation, wave action	Yes	See Management of Inundated Archaeological Sites / Sites Subject to Wave Action
CA-PLU-2072	Small Lithic Scatter	Almanor	Inundation, wave action	Yes	See Management of Inundated Archaeological Sites / Sites Subject to Wave Action
CA-PLU-2073	Possible Small Habitation	Almanor	Casual visitation, inundation, wave action	Yes	See Management of Inundated Archaeological Sites / Sites Subject to Wave Action

State/TCP No.	Site Type	Area	Identified Impacts	Project-Related?	Proposed Treatment
CA-PLU-2074/H	Large Lithic Scatter	Almanor	Casual visitation, inundation, wave action, SUV/ATV Traffic	Yes	See Management of Inundated Archaeological Sites / Sites Subject to Wave Action
CA-PLU-2077	Large Habitation	Almanor	Casual visitation, inundation, wave action, historic use, SUV/ATV traffic	Yes	See Management of Inundated Archaeological Sites / Sites Subject to Wave Action
CA-PLU-2089	BRM	Almanor	Inundation	Yes	None proposed at this time.
CA-PLU-2090	Small Lithic Scatter	Almanor	Causal visitation, inundation, wave action, historic use, construction	Yes	See Management of Inundated Archaeological Sites / Sites Subject to Wave Action
CA-PLU-2094	BRM	Almanor	Casual visitation, inundation	Yes	None proposed at this time.
P-32-001714	Large Habitation	Almanor	Causal visitation, wave action, historic use, vandalism, construction, grazing	Wave action, inundation, grazing	Signage; eliminate grazing; see Management of Inundated Archaeological Sites / Sites Subject to Wave Action
P-32-001716-H (Possible buried features only)	Ranching (Stover Ranch)	Almanor	Casual visitation, historic use, vandalism, construction	Yes	Signage; monitoring; NRHP evaluation of any potential sub-surface deposits should ground disturbance be proposed in the future
P-32-001766-H	Camp 4 Sawmill	Butt Valley	Inundation, wave action, casual visitation during drawdown periods	Yes	Signage; should drawdown occur, fully record and evaluate site for NRHP-eligibility, and proceed with any appropriate treatment
P-32-002064	Small Lithic Scatter	Almanor	Inundation, wave action	Yes	See Management of Inundated Archaeological Sites / Sites Subject to Wave Action
P-32-002075	Mod. Lithic Scatter	Almanor	Casual visitation, inundation, wave action	Yes	See Management of Inundated Archaeological Sites / Sites Subject to Wave Action

STATE/TCP NO.	SITE TYPE	AREA	IDENTIFIED IMPACTS	PROJECT-RELATED?	PROPOSED TREATMENT
P-32-002076	Small Lithic Scatter, Unknown Historic	Almanor	Casual visitation, inundation, wave action	Yes	See Management of Inundated Archaeological Sites / Sites Subject to Wave Action
P-32-002079/H	Large Lithic Scatter Unknown Historic	Almanor	Casual visitation, inundation, wave action, historic use, SUV/ATV traffic	Yes	See Management of Inundated Archaeological Sites / Sites Subject to Wave Action
P-32-002080	Small Lithic Scatter	Almanor	Casual visitation, inundation, wave action	Yes	See Management of Inundated Archaeological Sites / Sites Subject to Wave Action
P-32-002081	Small Lithic Scatter	Almanor	Casual visitation, inundation, wave action	Yes	See Management of Inundated Archaeological Sites / Sites Subject to Wave Action
P-32-002082	Small Lithic Scatter	Almanor	Casual visitation, inundation, wave action	Yes	See Management of Inundated Archaeological Sites / Sites Subject to Wave Action
P-32-002083	Small Lithic Scatter	Almanor	Casual visitation, inundation, wave action	Yes	See Management of Inundated Archaeological Sites / Sites Subject to Wave Action
P-32-002084	Large Lithic Scatter	Almanor	Casual visitation, inundation, wave action	Yes	See Management of Inundated Archaeological Sites / Sites Subject to Wave Action
P-32-002085	Small Lithic Scatter	Almanor	Casual visitation, inundation, wave action	Yes	See Management of Inundated Archaeological Sites / Sites Subject to Wave Action
P-32-002086	Small Lithic Scatter	Almanor	Casual visitation, inundation, wave action	Yes	See Management of Inundated Archaeological Sites / Sites Subject to Wave Action
P-32-002087	Mod. Lithic Scatter	Almanor	Casual visitation, inundation, wave action	Yes	See Management of Inundated Archaeological Sites / Sites Subject to Wave Action
P-32-002092/H	Small Lithic Scatter, Unknown Historic	Almanor	Casual visitation, inundation, wave action, historic use, construction	Yes	See Management of Inundated Archaeological Sites / Sites Subject to Wave Action

State/TCP No.	Site Type	Area	Identified Impacts	Project-Related?	Proposed Treatment
P-32-002093	Large Lithic Scatter	Almanor	Casual visitation, inundation, wave action	Yes	See Management of Inundated Archaeological Sites / Sites Subject to Wave Action
P-32-002094	Mod. Lithic Scatter	Almanor	Casual visitation, inundation, wave action	Yes	Consult with USDA Lassen National Forest and others regarding appropriate treatment.
TCP 1	Big Meadows	Almanor	Inundation, historic use	Yes	Public education
TCP 2	Burial location	Confid.	Inundation	Yes	Monitoring during drawdowns
TCP 3	Important Natural Feature	Confid.	Casual visitation, inundation	Yes	"Flag" permit database and monitor
TCP 4	Gathering Area	Confid.	Inundation, construction	Yes	Work with Maidu community to develop plant-gathering agreement.
TCP 5	Spring Area	Confid.	Inundation, construction	Yes	Public education
TCP 6	Fishing Area	Confid.	None	n/a	None
TCP 7	Myth Location	Confid.	Inundation, construction	Yes	None
TCP 8	Willow Gathering Area	Confid.	Inundation	Yes	Work with Maidu community to develop plant-gathering agreement.
TCP 9	Fishing Hole	Confid.	None	n/a	None
TCP 10	Roundhouse Location	Confid.	Inundation	Yes	None
TCP 11	Maidu Trail	Confid.	Inundation	Yes	None
TCP 12	Hunting Grounds	Confid.	Inundation,	Yes	None
TCP 13	Maidu Church	Confid.	Demolition	No	None
TCP 14	Gathering Area	Confid.	None	n/a	Work with Maidu community to develop plant-gathering agreement.
TCP 15	Butt Valley	Butt Valley	Inundation, historic use	Yes	Public education

Management of Inundated Archaeological Sites / Sites Subject to Wave Action - A total of 45 eligible or potentially eligible archaeological sites within the Project APE are located beneath the 4494' elevation at Lake Almanor and are either typically inundated, subject to varying degrees of wave action, or both. These sites, and the lake elevations at which they are exposed are depicted in Table E4-15 below:

As mentioned above, the Greenville and Susanville Indian Rancheria and other Maidu groups and individuals have stressed preservation and protection of cultural resources over archaeological test excavation and/or subsequent data recovery. The primary concern has been to protect these sites from illicit artifact collection, vandalism, and ATV/SUV use during drawdown periods when the sites are exposed. For this reason, the Licensee is not proposing any archaeological test excavation of this kind upon these resources at this time. Instead, the Licensee will implement increased monitoring and/or patrolling during periods of reservoir drawdown as mentioned in Section E4.4.2 (General Treatment Measures) above. During these periods monitoring will increase from once every month to twice per month. As drawdowns generally occur during the fall and winter seasons, this increased monitoring will occur a) until the reservoir level increases again or b) until snow cover protects the sites, whichever occurs first. Should snow cover melt before the reservoir level rises again, monitoring will again commence.

TABLE E4-15. LAKE ALMANOR ELEVATION BANDS AND EXPOSED POTENTIALLY NRHP-ELIGIBLE SITES

[illegible]	SITES EXPOSED
4494-4485 ft.	CA-PLU-33/H
	CA-PLU-87
	CA-PLU-284/H
	CA-PLU-334/H
	CA-PLU-1718
	CA-PLU-1719
	CA-PLU-1720/H
	CA-PLU-1725/H
	CA-PLU-1732
	CA-PLU-1733
	CA-PLU-2063
	P-32-002092/H
	P-32-002094
4485-4474 ft.	CA-PLU-33/H (more of site exposed)
	CA-PLU-1717
	CA-PLU-1720/H (more of site exposed)
	CA-PLU-1729
	CA-PLU-1733 (more of site exposed)
	CA-PLU-2019, Loci 1-4
	CA-PLU-2061
	CA-PLU-2065
	CA-PLU-2066
	CA-PLU-2067/H
	CA-PLU-2068/H
	CA-PLU-2069, Loci a, b
	CA-PLU-2071
	CA-PLU-2072
	CA-PLU-2073
	CA-PLU-2074/H
	CA-PLU-2077, Loci a, b, c, d
	CA-PLU-2090
	CA-PLU-2094
	P-32-002064
	P-32-002075
	P-32-002076
	P-32-002079/H
	P-32-002080
	P-32-002081, Loci a, b, c

[illegible]	[illegible]
4485-4474 ft. (cont.)	P-32-002082
	P-32-002083
	P-32-002084
	P-32-002085
	P-32-002086
	P-32-002087
	P-32-002093
4474-4467 ft.	CA-PLU-0030
	CA-PLU-33/H (more of site exposed)
	CA-PLU-2077, Loci a, c, d, e (more of site exposed)
	CA-PLU-2089
	P-32-002091/H
Below 4467 ft.	CA-PLU-33/H (more of site exposed)

During drawdown periods, attempts will be made to fully record the thirteen sites that could not be fully recorded during current Project studies due to inclement weather.

Prior to reservoir drawdown periods and during the period when typically inundated sites are exposed, the Licensee will also use the media to remind the recreating public of vehicular access restrictions, Federal laws regarding the protection of cultural resources, and potential penalties for violation. These reminders will also be posted at all Licensee kiosks at formal recreation areas.

The Licensee is not opposed to archaeological test excavation associated with NRHP evaluation of prehistoric sites or sites with prehistoric components. Should Maidu concern and opinion regarding potential impacts of test excavation change, or should the SHPO, FERC, ACHP or Forest Service object to the proposed management approach, the Licensee will proceed with the development of an appropriate evaluation program for

these sites in consultation with these agencies. Evaluation of some sites may be possible without test excavation if data necessary to make an informed evaluation using NRHP criteria is readily apparent on the surface. Furthermore, as most of the inundated sites are very similar in nature, a testing program that examines a representative sample of these resources could be an appropriate course to take should text excavation of sites ultimately be necessary.

Management of Future Construction-Related Activities - The Licensee currently permits various construction activities within FERC Project boundaries. These activities include the construction of boat ramps and docks at Lake Almanor and other activities. The Licensee utilizes a database that shows all of the property owners at Lake Almanor, the various permits that have been granted to each property owner, the permit status, and other information. Prior to the current relicensing, much of the Project area had not previously been surveyed for cultural resources and the location of resources was not known. The Licensee therefore may have granted various construction permits in the past that may have unintentionally impacted cultural resource sites. In order to ensure that potential impacts to cultural resources are considered prior to issuing permits in the future, the Licensee will "flag" particular locations in the permit database. These "flags" will not contain confidential site information. However, should a property owner request a permit for construction, the Licensee will see the "flag" and know to consult with the Company Cultural Resources Specialist to determine if granting such a permit could result in impacts to cultural resources.

In the future, the Licensee may also undertake various Project-related construction activities that must have FERC or other agency approval (i.e. construction of new, or modification of existing Project facilities, recreational developments, etc.). Such activities that require this approval may constitute "undertakings" that call for compliance with Section 106 of the National Historic Preservation Act (as amended). Prior to undertaking these activities, the Licensee will determine if the activities will take place within or outside of the current APE as defined.

1. If the activities will take place *within* the current APE, the Licensee's Cultural Resources Specialist will be consulted to determine if the activity could affect a known cultural resource site and will consult with all appropriate agencies and Greenville and Susanville Indian Rancherias to determine appropriate treatment in compliance with Section 106.

2. If the activities will take place *outside* of the current APE, the Licensee's Cultural Resources Specialist will ensure that the location is surveyed according to current standards for cultural resources and all appropriate agency and Tribal consultation is undertaken in compliance with Section 106.

Management of Other Archaeological Site-Specific Impacts - A total of 61 NRHP-eligible or potentially eligible archaeological sites are present within the Project Area of Potential Effects that are being subject to potential Project-related impacts (including wave action, inundation, and construction discussed above). These resources and their

proposed treatment measures are discussed below. The additional 15 potential Traditional Cultural Properties are also addressed.

CA-PLU-30 – This large lithic scatter is located along the shoreline of Lake Almanor, and may be effected by casual visitation and vandalism. During the 2001 survey, the crew observed more than 30 obsidian, basalt, chert, metavolcanic and possible petrified wood flakes, as well as a basalt biface fragment at CA-PLU-30. One of the Maidu monitors participating the recordation of the site piled some of the flakes on larger rocks to make the site easier to relocate for recordation. Three days later after heavy rains, the crew returned to record the site and noted that none of the flakes could be relocated. Only one obsidian, one chert, one metavolcanic and two basalt flakes were noted at this time. Consequently, it was concluded that either rain and/or a visitor(s) had disturbed the site between the survey and recording phases. For this reason, the Licensee will post "Sensitive Resource Area" signage in the vicinity of the site and will monitor in accordance with the monitoring plan identified in Section E4.4.2 above. This site is also subject to inundation and wave action. Potential impacts to the site as a result of inundation and wave action are addressed above (see Management of Inundated Archaeological Sites / Sites Subject to Wave Action).

CA-PLU-33/H - This extensive prehistoric habitation site is located at a widely used and popular recreation facility. This facility is currently leased by and operated by a private party. Impacts as a result of recreational use of this area are extensive and ongoing and include illicit artifact collection, site vandalism, and unauthorized vehicle entry. The

survey crew witnessed duck hunters driving off road and below the high water line in SUV's and ATV's within site boundaries. A prehistoric rock hearth had been previously noted in the vicinity of Features 10 and 11 of the site during the 2001 initial survey. When the survey crew returned to record the site later on, the rocks of this feature had been removed and assembled nearby for use as a duck blind. Consequently the locational and descriptive information about the hearth were lost and could not be documented. While the duck hunters may not have intentionally and knowingly vandalized an archaeological feature, they had been told by the survey crew that SUV/ATV access below the high water line was not authorized by the Licensee. The hunters nonetheless continued their activities despite this knowledge, and thus the damage that they caused to the hearth feature was a result of an activity that the perpetrators knew was wrong. The survey crew reported the ATV and SUV traffic to the Licensee as it was happening and the Licensee immediately contacted the local Sheriff's office; however, the perpetrators left the area before officials had time to respond.

Closure of the recreational facility at CA-PLU-33/H would result in a large void in the Lake Almanor recreation experience that would need to be filled elsewhere. This option also does not have the support of the 2105 Committee, the non-Tribal group of interested parties who have participated in relicensing consultation. For this reason, the Licensee is not proposing to close the facility, but instead is proposing to convert much a portion of it to day-use only in order to better manage better public use and resources. As recreational impacts to this site cannot be feasibly avoided, the Licensee will proceed with Stage 3 Management of the site as discussed in Section E4.4.4 below. Suitable and agreed-upon

treatment measures will be developed in consultation with the FERC, the SHPO, the Advisory Council on Historic Preservation, the Greenville and Susanville Indian Rancherias, and other Maidu groups as appropriate. This site is also subject to inundation and wave action. Potential impacts to the site as a result of inundation and wave action are addressed above (see Management of Inundated Archaeological Sites / Sites Subject to Wave Action).

CA-PLU-87 - This large prehistoric habitation site is primarily a bedrock mortar site located along the shoreline of Lake Almanor, and may be effected by casual visitation. For this reason, the Licensee will post "Sensitive Resource Area" signage in the vicinity of the site and will monitor in accordance with Section E4.4.2 above. This site is also subject to inundation and wave action. Potential impacts to the site as a result of inundation and wave action are addressed above (see Management of Inundated Archaeological Sites / Sites Subject to Wave Action). This site also contains the remains of an old boat ramp. No improvements to this ramp or other construction activities will be permitted without appropriate consultation with FERC, the SHPO, the Advisory Council on Historic Preservations, the Greenville Rancheria, and other Maidu groups as appropriate

CA-PLU-284/H - This site is located on both Licensee lands and lands administered by the USDA Lassen National Forest (FS 05-06-51-364). Additionally, an unrecorded portion of the sites is situated on private lands (Sierra Pacific Industries [SPI]). CA-PLU-284/H is currently being impacted by inundation and wave action during drawdown

periods, and by casual visitation and the use of SUV/ATVs by the recreating public. Relicensing studies have also identified biological concerns in this area. Appropriate management of this site will be developed in consultation with the USDA Lassen National Forest, the SHPO, the FERC, and the Greenville and Susanville Indian Rancherias (and other Maidu groups as appropriate).

CA-PLU-334/H – This site is currently subject to inundation and wave action. Only the prehistoric component of this site is potentially eligible for listing in the NRHP. As discussed above, the historic component has been recommended as ineligible. Potential impacts to the site as a result of inundation and wave action are addressed above (see Management of Inundated Archaeological Sites / Sites Subject to Wave Action). During periods of reservoir drawdown, the site is also impacted by vehicular use in the form of SUV/ATV traffic and casual visitation. The Licensee will determine where vehicular access to the site is originating, and will permanently block access. Furthermore, the Licensee will post "Sensitive Resource Area" signage in the vicinity of the site and will monitor in accordance with Section E4.4.2 above.

CA-PLU-336 - As mentioned in Section E4-2.5 above, very few artifacts were observed at this site during the current study (five obsidian flakes, no formed tools). Additionally, the site has been severely compromised by the previous construction of a large trench through the site boundaries and by grazing activity. As very little of the site remains, it is unlikely that the site is eligible for the National Register of Historic Places. Nonetheless, the Licensee will eliminate grazing in this area.

CA-PLU-1185 - This site is located adjacent to Butt Valley Reservoir. Only the past construction of County Road along the east shore of the reservoir and possible road maintenance-related activity appears to have impacted this site. The majority of the site is located on the west side of the road, although some materials were observed on the east side as well. Routine maintenance of this road will continue to be necessary over the term of the license. This maintenance however, will be restricted to the existing road and no graded material will be deposited within the site's boundaries. Furthermore, the Licensee will post "Sensitive Resource Area" signage in the vicinity of the site and will monitor in accordance with the monitoring plan specified in Section E4.4.2 above.

CA-PLU-1186/H - This site is located adjacent to Butt Valley Reservoir and is comprised primarily of a light to moderate quantity of historic materials, although a small concentration of prehistoric lithic artifacts is also present. A steel transmission tower is located within the site boundaries and a transmission access road has been cut though a portion of the site. This road, however, does not cross though the prehistoric component of the site. This site may be impacted by casual visitation by the recreating public, but construction of the transmission line and subsequent logging activities appear to be the primary site disturbances. These activities are not Project-related. However, as the recreating public may pass through the site in order to access Butt Valley Reservoir, the Licensee will post appropriate "Sensitive Resource Area" signage in the vicinity of the site and will monitor in accordance with the monitoring plan specified in Section E4.4.2 above.

CA-PLU-1245-H - This site was previously determined eligible for inclusion in the National Register under criteria A and D during the Butt Valley Dam Seismic Retrofit Project and was partially destroyed by that project following data recovery excavations. The portion of the site that remained inundated in 1996 however, still may contain the archaeological remains of Buttville, as well as early hydroelectric campsites. For this reason, should another reservoir drawdown occur that exposes this area, the Licensee will fully record and evaluate this unevaluated portion for NRHP-eligibility, and proceed with any appropriate treatment in consultation with the SHPO and the FERC.

CA-PLU-1709 - This large lithic scatter was recorded in the vicinity of Lake Almanor. Only casual visitation may be impacting this resource. No other disturbances were noted. For this reason, the Licensee will post "Sensitive Resource Area" signage in the vicinity of the site and will monitor in accordance with the monitoring plan specified in Section E4.4.2 above.

CA-PLU-1710/H - This multi-component site, consisting of numerous concentrations of lithic material and one small concentration of historic debris, was recorded in the vicinity of Lake Almanor. Only casual visitation may be impacting this resource. No other disturbances were noted. For this reason, the Licensee will post "Sensitive Resource Area" signage in the vicinity of the site and will monitor in accordance with the monitoring plan specified in Section E4.4.2 above.

CA-PLU-1712/H - This small site, consisting of a light scatter of flakes and a scatter of historic debris is located in the vicinity of Lake Almanor. Only casual visitation may be impacting this resource. No other disturbances were noted. For this reason, the Licensee will post "Sensitive Resource Area" signage in the vicinity of the site and will monitor in accordance with the monitoring plan specified in Section E4.4.2 above.

CA-PLU-1717 – This large lithic scatter is located in the vicinity of Lake Almanor, is marshy much of the year, and is being potentially impacted by action. Potential impacts to the site as a result of wave action are addressed above (see Management of Inundated Archaeological Sites / Sites Subject to Wave Action). The Licensee will also post "Sensitive Resource Area" signage in the vicinity of the site and will monitor in accordance with Section E4.4.2 above.

CA-PLU-1718 - This small habitation site is located on lands administered by the USDA Lassen National Forest in the vicinity of Lake Almanor and is marshy much of the year and is being potentially impacted by wave action. Appropriate management of this site will be developed in consultation with the USDA Lassen National Forest, the SHPO, the FERC, and the Greenville and Susanville Indian Rancherias (and other Maidu groups as appropriate).

CA-PLU-1719 - This large prehistoric site is located near the western shore of Lake Almanor. Potential impacts identified at the site include historic use and grazing. The licensee will eliminate grazing in this area. Additionally, the site is marshy much of the

year and may be subject to wave action. Potential impacts to the site as a result of wave action are addressed above (see Management of Inundated Archaeological Sites / Sites Subject to Wave Action). The Licensee will also post "Sensitive Resource Area" signage in the vicinity of the site and will monitor in accordance with Section E4.4.2 above.

CA-PLU-1720/H - This very extensive site is located at the northern end of Lake Almanor has been impacted by historic use of the area and by casual visitation. For this reason, the Licensee will post "Sensitive Resource Area" signage in the vicinity of the site and will monitor the site in accordance with Section E4.4.2 above. This site is also subject to inundation and wave action. Potential impacts to the site as a result of inundation and wave action are addressed above (see Management of Inundated Archaeological Sites / Sites Subject to Wave Action).

CA-PLU-1721 – This small lithic scatter is located near the northern end of Lake Almanor is marshy much of the year and is being potentially impacted by wave action. Potential impacts to the site as a result of wave action are addressed above (see Management of Inundated Archaeological Sites / Sites Subject to Wave Action). The Licensee will also post "Sensitive Resource Area" signage in the vicinity of the site and will monitor in accordance with Section E4.4.2 above

CA-PLU-1725/H – This site is located on the eastern shore of Lake Almanor, and extends on to privately owned property. The area sees casual use. The Licensee will therefore ensure that the resident homeowner is aware of appropriate laws and restrictions

regarding artifact collection on Licensee lands and will consider any permit for construction in accordance with Management of Future Construction-Related Activities above. The Licensee will also post "Sensitive Resource Area" signage in the vicinity of the site and will monitor in accordance with Section E4.4.2 above. The portion of the site on Licensee lands is being potentially impacted by wave action. Potential impacts to the site as a result of inundation and wave action are addressed above (see Management of Inundated Archaeological Sites / Sites Subject to Wave Action).

CA-PLU-1728 – This small lithic scatter is located along the eastern shore of Lake Almanor and is inundated and subject to wave action for much of the year. Potential impacts to the site as a result of inundation and `wave action are addressed above (see Management of Inundated Archaeological Sites / Sites Subject to Wave Action). The Licensee will also post "Sensitive Resource Area" signage in the vicinity of the site and will monitor in accordance with Section E4.4.2 above

CA-PLU-1729 – This large habitation site is located along the eastern shore of Lake Almanor and is potentially being impacted by wave action. Potential impacts to the site as a result of wave action are addressed above (see Management of Inundated Archaeological Sites / Sites Subject to Wave Action). The Licensee will also post "Sensitive Resource Area" signage in the vicinity of the site and will monitor in accordance with Section E4.4.2 above

CA-PLU-1730 - This large prehistoric site is located along the eastern shoreline of Lake Almanor, and may be effected by casual visitation. The site extends onto private lands to the east where it has also been subject to private landscaping activities. The Licensee will ensure that the resident homeowner is aware of appropriate laws and restrictions regarding artifact collection on Licensee lands and will consider any permit for additional construction in accordance with Management of Future Construction-Related Activities above. The Licensee will also post "Sensitive Resource Area" signage in the vicinity of the site and will monitor in accordance with Section E4.4.2 above. The portion of the site on Licensee lands is being potentially impacted by wave action. Potential impacts to the site as a result of wave action are addressed above (see Management of Inundated Archaeological Sites / Sites Subject to Wave Action).

CA-PLU-1731 - This prehistoric site is located along the shoreline of Lake Almanor and extends onto private property. Private home construction, landscaping, and boat ramp excavation have affected this site. Additionally, it has been reported that this area is a popular location for illicit artifact collection. For this reason, the Licensee will ensure that the resident homeowner is aware of appropriate laws and restrictions regarding artifact collection on Licensee lands and will ensure that a Licensee permit has been previously issued for the boat launch. If no permit has been issued, the resident will be asked to abandon the boat launch. Additionally, the Licensee will post "Sensitive Resource Area" signage in the vicinity of the site and will monitor in accordance with Section E4.4.2 above. This site is also subject to inundation and wave action. Potential impacts to the

site as a result of inundation and wave action are addressed above (see Management of Inundated Archaeological Sites / Sites Subject to Wave Action).

CA-PLU-1732 – This small lithic scatter is located along the western shore of Lake Almanor. The site is typically inundated and may be subject to wave action. Potential impacts to the site as a result of wave action are addressed above (see Management of Inundated Archaeological Sites / Sites Subject to Wave Action). The Licensee will also post "Sensitive Resource Area" signage in the vicinity of the site and will monitor in accordance with Section E4.4.2 above.

CA-PLU-1733 – This small habitation site is located along the western shore of Lake Almanor. The site is typically inundated and may be subject to wave action. Potential impacts to the site as a result of wave action are addressed above (see Management of Inundated Archaeological Sites / Sites Subject to Wave Action). The Licensee will also post "Sensitive Resource Area" signage in the vicinity of the site and will monitor in accordance with Section E4.4.2 above.

CA-PLU-1735 – This small habitation site is located along the western shore of Butt Valley Reservoir immediately adjacent to a natural drainage outlet into the reservoir. The site may be subject to wave action when the reservoir level is high, although it is likely that any depletion that is occurring at the site is a result of high spring flows into the reservoir from the adjacent drainage. Unlike the populated Lake Almanor, there is little threat of site vandalism or illicit artifact collection here as the site is difficult to access.

Posting of "Sensitive Resource" signs in this remote area would only result in directing attention to the site. For these reasons, no further treatment is recommended.

CA-PLU-1737 - This extensive prehistoric site is located along the shoreline of Butt Valley Reservoir. The proximity of this site to a Licensee Campground has resulted in a high degree of casual visitation, historic use, and vandalism of the site area. Additionally, a dirt bank or berm, and the remains of a concrete pillar indicated past construction activity here. The Licensee will ensure that during the recreation season, the hosts of all Licensee campgrounds are aware of all appropriate laws and restrictions regarding artifact collection on Licensee lands and the penalties for violation. Additionally, the Licensee will post "Sensitive Resource Area" signage in the vicinity of the site and will monitor in accordance with Section E4.4.2 above. This site is also subject to inundation and wave action. Potential impacts to the site as a result of inundation and wave action are addressed above (see Management of Inundated Archaeological Sites / Sites Subject to Wave Action).

CA-PLU-1738/H - This site is primarily historic in nature, although a very sparse prehistoric component is also present. The site is situation in the vicinity of Butt Valley Reservoir. Past logging activities appear to be the only site impact. As logging activities are not Project related, no treatment is proposed.

CA-PLU-1743-H – This historic site, the remains of the Butt Valley Railroad, are typically inundated by the Butt Valley Reservoir and portions have been impacted in the

past by construction activities. During drawdown periods, the site also sees casual visitation by the recreating public. Should the site become exposed again in the future, the Licensee will initiate formal NRHP evaluation will be undertaken and appropriate management measures implemented. In the mean time, the Licensee will post "Sensitive Resource Area" signage along the shoreline in the vicinity of the site.

CA-PLU-2019 - This small lithic scatter containing four loci is located near the western shore of Lake Almanor and is typically inundated by Lake Almanor and may be subject to wave action. Potential impacts to the site as a result of inundation and wave action are addressed above (see Management of Inundated Archaeological Sites / Sites Subject to Wave Action).

CA-PLU-2061 - This small lithic scatter is located near the western shore of Lake Almanor and is typically inundated by Lake Almanor and may be subject to wave action. Potential impacts to the site as a result of inundation and wave action are addressed above (see Management of Inundated Archaeological Sites / Sites Subject to Wave Action).

CA-PLU-2063 - This small lithic scatter is located near the western shore of Lake Almanor and is typically inundated by Lake Almanor and may be subject to wave action. Potential impacts to the site as a result of inundation and wave action are addressed above (see Management of Inundated Archaeological Sites / Sites Subject to Wave Action).

CA-PLU-2065 - This small lithic scatter is located near the northern end of Lake Almanor and is typically inundated by Lake Almanor and may be subject to wave action. Potential impacts to the site as a result of inundation and wave action are addressed above (see Management of Inundated Archaeological Sites / Sites Subject to Wave Action).

CA-PLU-2066 - This large lithic scatter containing two loci is located near the northern end of Lake Almanor and is typically inundated by Lake Almanor and may be subject to wave action. As the site is location in an area where signage can be easily posted, the Licensee will also post "Sensitive Resource Area" signage in the vicinity of the site. Potential impacts to the site as a result of inundation and wave action are addressed above (see Management of Inundated Archaeological Sites / Sites Subject to Wave Action).

CA-PLU-2068/H – This small lithic scatter that also contains a scatter of historic material is located at the northern end of Lake Almanor. During drawdown periods, the site sees casual visitation by the recreating public and ATV/SUV traffic. Vehicular access to the site appears to via the adjacent railroad grade from the vicinity of Catfish Beach. The Licensee has blocked vehicular access at Catfish Beach and Northshore Campground, and will enforce these restrictions. Furthermore, the Licensee will post "Sensitive Resource Area" signage at Northshore Campground and Catfish Beach. The site is also typically inundated and may be subject to wave action. Potential impacts to the site as a result of inundation and wave action are addressed above (see Management of Inundated Archaeological Sites / Sites Subject to Wave Action).

CA-PLU-2069 - This small lithic scatter that contains two primary loci is located near the northern end of Lake Almanor and is typically inundated by the lake. Additionally, the site sees casual visitation by the recreating public and ATV/SUV traffic during drawdown periods. Vehicular access to the site appears to via a formal campground. The Licensee has blocked vehicular access to the shoreline at this campground and will work with the campground host to enforce the Company's vehicle restriction policy. Furthermore, the Licensee will post "Sensitive Resource Area" signage at the campground. Potential impacts to the site as a result of inundation and wave action are addressed above (see Management of Inundated Archaeological Sites / Sites Subject to Wave Action).

CA-PLU-2071 - This small lithic scatter is located near the western shoreline of Lake Almanor and is typically inundated by the lake. Potential impacts to the site as a result of inundation and wave action are addressed above (see Management of Inundated Archaeological Sites / Sites Subject to Wave Action).

CA-PLU-2072 - This small lithic scatter is located near the western shoreline of Lake Almanor and is typically inundated by the lake. Potential impacts to the site as a result of inundation and wave action are addressed above (see Management of Inundated Archaeological Sites / Sites Subject to Wave Action).

CA-PLU-2073 – This small possible habitation site is located at the northern end of Lake Almanor, is typically inundated by the lake and may be subject to wave action. The site

also sees casual visitation during drawdown periods. Access to the site appears to via a formal campground. The Licensee will therefore post "Sensitive Resource Area" signage at the campground. Potential impacts to the site as a result of inundation and wave action are addressed above (see Management of Inundated Archaeological Sites / Sites Subject to Wave Action).

CA-PLU-2074/H - This large lithic scatter containing a small number of historic glass fragments is located at the northern end of Lake Almanor, is typically inundated by the lake and may be subject to wave action. The site also sees casual visitation and vehicular traffic during drawdown periods. Access to the site appears to via a formal campground. The Licensee has blocked access at this campground, but will work with the campground host to enforce the Company's vehicle restriction policy. The Licensee will also post "Sensitive Resource Area" signage at the campground. Potential impacts to the site as a result of inundation and wave action are addressed above (see Management of Inundated Archaeological Sites / Sites Subject to Wave Action).

CA-PLU-2077 – This large habitation site consists of five loci of prehistoric material distributed across a wide area. The site is typically inundated by Lake Almanor and may be subject to wave action. Furthermore, the site is subject to casual visitation and SUV/ATV traffic during drawdown periods. It is not known where vehicular access is originating, but it is likely from a formal campground. The Licensee has blocked access at this campground, but will work with the campground host to enforce the Company's vehicle restriction policy. The Licensee will also post "Sensitive Resource Area"

signage at the campground. Potential impacts to the site as a result of inundation and wave action are addressed above (see Management of Inundated Archaeological Sites / Sites Subject to Wave Action).

CA-PLU-2089 – This bedrock milling station (BRM) containing a single mortar cupule is located on a rock outcrop on the eastern shoreline of Lake Almanor. This feature is typically located below the high water line of the reservoir. However, this does not appear to be impacting the site. No further treatment is therefore proposed at this time.

CA-PLU-2090 – This small lithic scatter is located near the eastern shoreline of Lake Almanor and is typically inundated by the lake. This site is located very near lands under private ownership. Artifacts have been collected at the site by residents and provided to a local museum. These artifacts were returned to the site by PAR Environmental and a representative of the Greenville Rancheria at the Licensee's request. For these reasons, the Licensee will therefore ensure that the resident homeowners are aware of appropriate laws and restrictions regarding artifact collection on Licensee lands and will consider any future permit for construction in accordance with Management of Future Construction-Related Activities above. The Licensee will also post "Sensitive Resource Area" signage in the vicinity of the site and will monitor in accordance with Section E4.4.2 above. Potential impacts to the site as a result of inundation and wave action are addressed above (see Management of Inundated Archaeological Sites / Sites Subject to Wave Action).

CA-PLU-2094 - This bedrock milling station (BRM) containing a single mortar cupule is located on a rock outcrop on the eastern shoreline of Lake Almanor. This feature is typically located below the high water line of the reservoir. However, this does not appear to be impacting the site. No further treatment is therefore proposed at this time.

P-32-001714 - This prehistoric site is located in the vicinity of Lake Almanor, and has been impacted in the past by historic ranching activity and associated construction. Current impacts may be occurring as a result of casual visitation and artifact collection. The Licensee will therefore install The Licensee will install "Sensitive Resource Area" signage in the vicinity of the site and will monitor in accordance with Section E4.4.2 above. Ranching activity and construction are no longer occurring here, but the Licensee will ensure that any grazing activity is eliminated. A portion of this site is also subject to seasonal wave action as a result of Lake Almanor. Potential impacts to the site as a result of wave action are addressed above (see Management of Inundated Archaeological Sites / Sites Subject to Wave Action).

P-32-001716-H - This site consists of the remains of an historic ranching complex near Lake Almanor. The structures present at the site were evaluated for listing in the National Register of Historic places and were recommended as ineligible due to the lack of integrity of the ranch's individual features and as a complex. Buried historic materials and features such as sheet scatters and privies, however, likely exist within the site. These areas may be as eligible for listing in the National Register of Historic Places

under criterion D for their potential to contribute information on early ranch life in the area.

Impacts to the site have included construction-related activity, casual visitation, and the vandalism and unauthorized removal of historic structural materials and artifacts. During site recordation, vandals had removed boards from the walls of buildings at the ranch and moved them up the driveway to property adjacent to the complex where they built a "club house". Other structural materials and artifacts have also been removed from the site in the past without Licensee permission. Finally, subsequent to site recordation, one of the structural features of the complex was also burned to the ground as a result of unauthorized public use. Should any ground disturbance or development be proposed within the site boundaries in the future, the presence or absence of subsurface deposits that could be eligible for the National Register of Historic Places under Criteria D should be established, and appropriate treatment be undertaken in consultation with the SHPO and the FERC.

P-32-001766-H – Butt Valley Reservoir typically inundates this large historic-era site and was only observed when the reservoir was drawn down to facilitate recent dam repair work. At that time, casual visitation of the site was common. Should the reservoir be subject to another drawdown, the Licensee will fully record and evaluate the NRHP-eligibility of the site and proceed with any appropriate treatment in consultation with the FERC and the SHPO.

P-32-002064 - This small lithic scatter is located near the western shore of Lake Almanor and is typically inundated by Lake Almanor and may be subject to wave action. Potential impacts to the site as a result of inundation and wave action are addressed above (see Management of Inundated Archaeological Sites / Sites Subject to Wave Action).

P-32-002075, P-32-002076, P-32-002079/H, P-32-002093, P-32-002080 through P-32-002087 - These sites are all typically inundated by Lake Almanor and full recordation of them was not possible during the three field surveys due to rising reservoir levels and the onset of snow. Should the sites become exposed again in the future, if feasible, full recordation will take place as soon as possible. Potential impacts to these sites as a result of inundation and wave action will be addressed as discussed above (see Management of Inundated Archaeological Sites / Sites Subject to Wave Action).

P-32-002092/H - This small lithic scatter that also contains an historic component is located very near the eastern shore of Lake Almanor, and is typically inundated and may be subject to wave action. In addition, the site is subject to casual visitation during drawdown periods. For this reason, the Licensee will ensure that the resident homeowner is aware of appropriate laws and restrictions regarding artifact collection on Licensee lands. Additionally, the Licensee will post "Sensitive Resource Area" signage in the vicinity of the site. Potential impacts to the site as a result of inundation and wave action are addressed above (see Management of Inundated Archaeological Sites / Sites Subject to Wave Action).

P-32-002094 - This site is typically inundated by Lake Almanor and full recordation was not possible during the three field surveys due to rising reservoir levels and the onset of snow.

As this site is located on lands administered by the USDA Forest Service, appropriate management of this site will be developed in consultation with the USDA Lassen National Forest, the SHPO, the FERC, and the Greenville and Susanville Indian Rancherias (and other Maidu groups as appropriate).

Upper North Fork Feather River Project Facilities and Camps.

As mentioned above, the Project system has been recommended as ineligible for the National Register of Historic Places as a Historic District (Baker and Maniery 2001). However, several elements of the system have been recommended as eligible on their own merit. The eligible elements are the Almanor Dam, the Almanor Intake Tower, Lake Almanor, and the Caribou 1 Powerhouse. Additionally, the gate tender's house at the Prattville PSEA Camp, the Caribou Camp Historic District, and the two structures that remain of the Canyondam Camp have also been recommended as eligible for listing in the NRHP. Due to safety concerns, the Licensee plans to remove the tennis court and empty swimming pool at Caribou Camp as part of the current relicensing. Appropriate steps will be taken prior to the removal of these features in consultation with the SHPO, the FERC, the ACHP, and the Plumas National Forest.. Throughout the term of the License, however, activities such as maintenance, repair, alteration, replacement, and new construction may be necessary. Any major repairs or modifications to NRHP-eligible

components of the System or Caribou Camp Historic District contributing elements shall be performed in accordance with *the Secretary of the Interior's Standards for Rehabilitation* (48 FR 44738-44739) in consultation with the SHPO. Ideally, all repairs or modifications shall be done utilizing the existing materials and in the same style and technique as the original. If repairs, modifications, or replacement are necessary for any of the NRHP contributing electrical or mechanical elements, they shall be replaced in kind by functionally equivalent parts whenever possible.

Table E4-16 depicts repair and maintenance activities that may be undertaken on NRHP-eligible or contributing structures that do not require consultation with the SHPO: The Licensee will ensure that all Project foremen and supervisors responsible for repairs, maintenance or construction on Project facilities are provided with this Table and are aware of the requirements. If repairs, modifications, or replacement of individually eligible components of the system (including any original mechanical or electrical hardware) becomes necessary and cannot be accomplished in a manner that conserves the historic character and value of the affected component(s), the Licensee shall consult with the SHPO regarding alternatives to such action.

Table E4-16. Repair and Maintenance Activities to NRHP-eligible Properties That Do Not Require SHPO Consultation

Element	Activity
Structural Elements	Repair or replacement of trim, or hardware when done in kind to match existing material and design;
	Replacement of glass when done in kind to match existing material and design.
	Windowpanes may be double or triple glazed as long as the glazing is clear and replacement does not alter existing window material and form. This excludes the use of tinted glass, which will require consultation;
	Maintenance of features such as frames, paneled or decorated jambs and molding through appropriate surface treatments such as cleaning, rust removal, paint removal, and re-application of protective coating systems;
	Repair or replacement of doors, when done in kind to match existing material and form;
	Repair or replacement of roofs or parts of a roof that are deteriorated, when done in kind to match existing material and design. Adequate anchorage for roofing material to guard against wind damage and moisture penetration shall be provided;
	Repair or replacement of gutters and drain pipes, when done in kind to match existing material and design;
	Repair or replacement of porches and stairs when done in kind to match existing material and design;
	Repair of window and doorframes by patching, splicing, consolidating, or otherwise reinforcing or replacing in kind those parts that are either extensively deteriorated or are missing. The same configuration of panes will be retained;
	Repair or replacement of window and door screens when done in kind to match existing material and design;
	Alteration, repair, and/or modification of the interior of buildings/structures, not impacting on exterior appearance; and
	Demolition of buildings/structures within the Caribou Historic District boundaries that have been evaluated and found to be non-contributing elements of the District or demolition of any structures within the Upper North Fork Feather River System that have been evaluated and found to be ineligible for listing in the NRHP
Surfaces	Painting or patching exterior surfaces when the new paint or patch material matches the existing or original color/material;
	Replacement or installation of caulking and weather-stripping around windows, doors, walls, and roofs; and
	Removal of non-original intrusive surface applied elements such as exterior wall mounted conduit, pipes, wiring, junction boxes, etc.
Utility Systems	Installation of mechanical equipment that does not effect the exterior of the buildings/structures; and
	Replacement, removal, or upgrading of electrical wiring.
	Ongoing maintenance of immediately surrounding landscaping, including such modifications as removing diseased or safety-threatening vegetation;

Element	Activity
Utility Systems (cont.)	Repair or replacement of street or road surfaces, curbs, driveways and walkways done in kind to match existing materials and design; and
	Repair or replacement of fencing done in kind to match existing material and design.
New Materials	Installation of dry insulation;
	Installation of securing devices, including dead bolts, door locks, window latches, and door peepholes. Damage to historic doors and windows should be minimized during installation;
	Installation of fire or smoke detectors;
	Installation of securing systems; and
	Installations of screening or other like materials in order to protect the building/structure from rodents and other intrusive wildlife (e.g. bat screening.
Ground Disturbing Activities (When no prehistoric materials are present)	Excavations for repair or replacement of building footings or foundation work within two (2) feet of existing footings and foundations;
	Excavations for repair or replacement of building footings or foundation work within two (2) feet of existing footings and foundations;
	Tree or shrub planting or removal in areas that have been previously disturbed by these activities; and
	Installation of landscape sprinkler systems.
	Removal of non-native weeds.

Under extraordinary circumstances (i.e., unusual system outages caused by severe weather, fire, flood, landslide, earthquake or other natural cataclysm) where prompt restoration of electrical service is a vital necessity, reasonable effort shall be make to minimize effects on historic properties during emergency repair work and the Licensee will proceed in accordance with Emergency Undertaking provisions identified in Section 4.4 of this CRMP below.

Traditional Cultural Properties (TCPs)

As shown in Table E4-5 above, a total of 15 Traditional Cultural Properties that are potentially NRHP-eligible have been documented within the Project APE. These resources, potential Project-related effects, and proposed treatment/mitigation are discussed below.

TCP 1 -Big Meadows. The initial and most profound effect of the Project was the prior flooding of Big Meadows by Licensee predecessors undertaken at a time when no laws or regulations required protection of cultural resources. The creation of Lake Almanor changed Big Meadows so dramatically that the integrity of this property has been greatly compromised. As part of this relicensing, however, the Licensee must only address potential impacts to cultural resources as a result of the current or future operation and maintenance of the Upper North Fork Feather Hydroelectric Project. These current Project-related activities generally affect what remains of Big Meadows at the shoreline of Lake Almanor. It has been recommended that due to Big Meadows lack of integrity, these Project-related effects are therefore better described, evaluated and addressed in the context of *specific* cultural resource sites and other individual TCPs around the Lake. However, the past significance of Big Meadows to the Maidu Community warrants a public recognition of the area as a once-thriving center of Maidu culture. For this reason, the Licensee will work with the Maidu Community, the Lassen and Plumas National Forests (as appropriate) the FERC, and the State Historic Preservation Officer to develop an appropriate education program designed to provide the local public with a greater understanding and appreciation of the importance of what is now Lake Almanor (see

E4.4.2, General Treatment Measures, Public Education above). It is hoped that this knowledge will result in greater public respect for the area and the sensitive resources that it holds, as well as a greater willingness to preserve and protect these resources as intact vestiges of Big Meadows Maidu culture.

TCP 2 - Burial Location. The burial site is currently submerged under a Project reservoir and was not observed during cultural resources studies for the current relicensing. Some Maidu respondents felt that the burials are protected by the lake, but most expressed concerns about the possibility that the burials may be exposed and/or disturbed during drawdown periods. This location, however, lies well below the normal low level of the reservoir, so it is unlikely that it would be exposed during typical Project operations. However, should the reservoir need to be drawn down to below this level in the future, all attempts will immediately be made to relocate this cemetery and respectfully assess its condition in consultation with the Maidu community and other agencies as appropriate. Based on this assessment, appropriate decisions regarding treatment of the remains will be made in consultation with the Maidu, as long as such treatment complies with the provisions set forth in Section 7050.5 of the California Health and Safety Code and Section 5097.98 of the California Public Resources Code.

TCP 3 - Important Natural Feature. Most of this feature is currently submerged by a Project reservoir and its location is surrounded by residential development, which makes access to the shoreline difficult. It is not known whether the reservoir is physically affecting this resource, but from the perspective of the Maidu respondents, this resource

does not appear to be threatened at this time. In order to ensure that this remains the case, the Licensee will enter the location of this resource into the Company permit database. In this way, should a nearby property owner request a permit for construction that could disturb this important resource, the Licensee will can proceed appropriately to ensure that the feature remains protected.

TCP 4 - Resource Gathering Area. Much of the land that was traditionally used by the Maidu to obtain plant resources in this area is currently partially submerged by a Project reservoir. Other parts are covered by residential, commercial, and recreation development. As a result, Maidu respondents were unsure about precisely where plant resources used to grow in this area. A recurring theme among Maidu TCP respondents, however, is that traditional plant gathering areas within the Project area are scarce, and those that remain are difficult to access due to development and private property ownership. In order to ensure that the Maidu retain the ability to gather plant materials within the Project area for traditional uses, the Licensee will work with the Maidu and Licensee biological specialists to develop an agreement upon how and where such gathering can take place. The Licensee must, however, be ensured that sensitive and/or threatened plant species are protected and that plant areas are not subject to overuse. The Licensee will therefore work with the Maidu to formulate guidelines regarding access for collecting purposes and communicate those guidelines to the Maidu community. These same guidelines will be shared with Licensee operations staff so that misunderstandings will be avoided.

TCP 5 - Spring Area. This resource is currently inundated below the edge of a Project reservoir and is surrounded by housing and commercial development. As a result, the resource was not visible during cultural resource studies for the current relicensing. However, this area remains important to the Maidu Community as a significant location in their past and current culture. For this reason, the Licensee proposes to include this area in the public education program discussed under TCP 1 above.

TCP 6 - Fishing Area. No effects to this area were identified during the TCP study, and therefore no management is proposed at this time.

TCP 7 -Myth Location. The principal effect on the property occurred with the construction of the Upper North Fork Feather River Project facilities upon it. Continued operation of the Project, however does not seem to have altered the significance of the site, and therefore no treatment is proposed.

TCP 8 - Willow Gathering Area. The flooding of a Project reservoir submerged the majority of the willow in the area, although it is still used by the Maidu to collect plant materials. The respondent who identified the site expressed some uneasiness about gathering because of the surrounding development. See TCP 4 for proposed management measures to ensure Maidu access to traditional plant resources.

TCP 9 - Fishing Hole. The effect of the Project upon this location is not known. However, the site is on a creek upstream from a Project reservoir, and no aspect of the

Project altered the hydrology of the creek at this point. For this reason, no management is currently proposed.

TCP 10 - Roundhouse Location. This location is currently inundated by a Project reservoir and the resource could neither be seen nor formally recorded. Should the reservoir be drawdown by the Licensee in the future, attempts will be made to relocate and record this feature. However, no specific management is proposed at this time.

TCP 11 - Maidu Trail. The flooding of a Project reservoir covered a portion of the trail. As the Maidu respondents who described the trail did not attach any particular import to it, no specific management is therefore proposed.

TCP 12 - Hunting Grounds. A portion of this area is flooded by a Project reservoir for much of the year. As the Maidu respondents who described the area did not attach any particular significance to it, no specific management is therefore proposed.

TCP 13 - Maidu Church. This structure was removed by the property owners (not Licensee), and all that remains is the trace of a driveway. As this structure did not hold any particularly strong significance to the Maidu respondents, no specific management is proposed.

TCP 14 - Resource Gathering Area: While this area was used in the past, respondents did not indicate any interest in future use of this area. However, see TCP 4 for proposed management measures to ensure Maidu access to other traditional plant resources.

TCP 15 - Butt Valley . As with Big Meadows (TCP 1 above), the most profound effect of the Project was the prior by Licensee predecessors. As part of this relicensing, however, the Licensee must only address potential effects as a result of the current or future operation and maintenance of the Upper North Fork Feather Hydroelectric Project. Furthermore, most respondents attributed greater significance to Big Meadows. Nonetheless, the past significance of this area to Maidu Community warrants a public recognition of the area. For this reason, the Licensee will work with the Maidu Community, the Lassen and Plumas National Forests (as appropriate) the FERC, and the State Historic Preservation Officer to develop an appropriate education program designed to provide the local public with a greater understanding and appreciation of the importance of what is now Butt Valley Reservoir (see E4.4.2, General Treatment Measures, Public Education above).

E4.4.4 Treatment Measure Management Strategy

Treatment options for historic properties generally have been site-specific, but certain measures apply to all properties. The effectiveness of non-destructive treatment options (e.g., road closure, signing, monitoring) has seen great success in the nearby Lake Britton area in Shasta County. The short-term cost of these options is relatively low, but their use requires a commitment to long-term management attention. The selection of

treatment options involves professional judgment that balances historic property values and best estimates of the likely effectiveness of selected options against long- and short-term treatment costs.

The management strategy developed for Project historic properties calls for staged implementation. These stages are discussed below. Each stage carries with it treatment measures applied at both the site-specific and general level. Each stage carries progressively greater short-term cost, and subsequent stages are implemented according to an assessment of the effectiveness of the treatment measures applied during the preceding stage. Therefore, monitoring and consultation may be heavier during earlier stages, as there is less assurance that treatment measures will be effective. However, there are fewer direct impacts on historic properties resulting from the treatment measures applied during earlier stages.

The first stage of recommended options addresses the immediate deleterious effects on identified historic properties, requires the least amount of landscape alteration or impacts to historic properties themselves, and is the most economical alternative. Treatment measures applied in Stage 1 are those discussed in sections E4.4.2 and E4.4.3 above. These measures emphasize the redirection of land use activities and deterrence through information.

If Stage 1 treatment measures are not effective in reducing harmful effects, then Stage 2 alternatives will be implemented. Stage 2 alternatives emphasize more extreme forms of

earlier treatment, and landscape-altering measures. Greater emphasis is also given to monitoring and patrolling for the purposes of apprehension and prosecution. In the unlikely event that Stages 1 and 2 are not effective, the Licensee will initiate Stage 3, developing additional treatment measures in consultation with the Commission, the SHPO, the Greenville Rancheria (and other Maidu organizations as appropriate), and the Lassen and Plumas National Forests (as appropriate).

The implementation of the staged approach to management carries with it substantial consultation responsibilities. In addition, the management strategy includes means by which to assess the effectiveness of treatment measures, ensure their enforcement, identify the need for new treatment alternatives, and implement those alternatives. A process for assessing the effectiveness of the each management strategy and treatment measures is discussed in Paragraph E4.4.3.

Stage 1 Management Strategy.

All plans for general and site-specific treatment measures specified in Section E4.4.2 and E4.4.3 will be completed within one year of new License issuing. Additionally, the following measures will also be taken:

1. Small Project-employee alert signs will be placed in select locations near archaeological sites to the following effect:

Warning
Alert Hydroelectric Superintendent
Prior to Working in This Area

Careful placement of signs is crucial, otherwise, signs may increase public knowledge of where sites are located, making the properties more vulnerable to vandalism. Consultation regarding the precise wording of these signs will be undertaken with the USDA Plumas or Lassen National Forests (when appropriate).

2. Public information and interpretive signage will be placed in a prominent location at all Project recreational facilities, kiosks, and at the Project dams and powerhouses. These signs will provide an historic background of the Project and that particular area and will be developed in consultation with the USDA Plumas and Lassen National Forests (when appropriate) and the Greenville and Susanville Rancherias (and other Maidu groups as appropriate). Other public education programs developed with agencies will also be implemented.

3. "Sensitive Resource Signs" will be installed in the proximity of select archaeological sites. Signs will not be placed directly on archaeological sites, but in the general vicinity. Careful placement of signs is crucial, otherwise, signs may increase public knowledge of where sites are located, making the properties more vulnerable to vandalism. Appropriate placement and wording on the signs will be developed in consultation with Licensee Corporate Security and attorneys, local, state and federal law enforcement agencies, the Maidu community and resource management specialists. The signs will clearly state that vehicles must

not cross into unauthorized areas, that ground disturbance is strictly prohibited, and will also provide the penalties for violation

4. Any landscape changes (additional gates, obstructions, road closures) proposed as part of this CRMP will be coordinated with specialists such as biologists, recreation specialists, and hydroelectric engineers. All such efforts will be combined with the interests of other specialists to avoid conflicts.

5. The Licensee will continue to provide Hydroelectric employees in the Upper North Fork Feather River Project area with training/interpretive programs about the prehistory and history of the region. These employees will also be made aware of any agreements made with the Maidu regarding access for plant collecting purposes so that Licensee operations staff will not question agree-upon activities should they be observed (see item 10 below).

6. To ensure the historical integrity of the Project facilities, any improvements to NRHP-eligible facilities requiring FERC approval will also be reviewed by the SHPO as detailed in Section 4.3 above.

7. A regular schedule for historic properties monitoring will implemented. Initially, historic property inspections will occur once per month throughout the prime recreation season (April through September) for the first two years following the implementation of site-specific treatment measures identified in the CRMP.

During the months of October and November at Lake Almanor when reservoir elevations are low, monitoring will be increased to twice monthly until snow covers the ground and sites are no longer visible. In the future, the frequency of monitoring visits may decrease should fewer incidents of vandalism or other problems occur. Any change in monitoring frequency will be undertaken in consultation with the FERC, the SHPO, and the Greenville and Susanville Indian Rancherias (and other Maidu organizations as appropriate). Monitoring will also check for any new impacts and any natural damage that may be occurring on cultural resource sites. While monitoring is costly, it is an efficient way of ensuring the integrity of historic properties.

As part of the monitoring program, the Licensee's Cultural Resources Specialist or his/her designee will act as a monitor for regular visits to accessible sites within the Project APE, particularly those sites that are easily accessible to the recreating public. Any designee will be a professional archaeologist. A representative of the Maidu community appointed by the Greenville and Susanville Indian Rancherias will also be invited to accompany the Specialist on monitoring visits. These individuals will be responsible for collecting information on ongoing historic property damage in order to examine the effectiveness of implemented treatment measures. Any vandalism to restrictive barriers will-also be noted at this time. The role of the monitors will not be to "cite" or otherwise approach potential violators. Should the monitors observe an unauthorized activity taking place, they will immediately contact Licensee Security and if necessary, the Plumas County

Sheriff's Department, who will take appropriate action. Additionally, Licensee hydroelectric employees will check for damage to barriers and gates as part of their routine maintenance rounds. Any barriers or other devices requiring repair will immediately be brought to the attention of the Hydroelectric Supervisor on duty and repairs made within two weeks time. Should new site vandalism or any other ground disturbance affecting historic properties be observed, the Licensee will proceed discuss the appropriateness of Stage 2 management in consultation with the SHPO, the Greenville Rancheria (and other Maidu organizations as appropriate), and Lassen and Plumas National Forests (as appropriate).

8. The Licensee will work with the Plumas County Sheriff's Department to arrange for a part time patrol of Licensee lands during the recreation season. The purpose of this patrol will be to ensure that visitors to the Project area abide by all laws and Licensee policies.

9. The Licensee will work with the Susanville and Greenville Rancherias (and other Maidu groups as appropriate) to establish a Memorandum of Agreement (MOU) regarding the use of Licensee lands for the collection of plant materials for traditional uses. This agreement will specify how and where such gathering can take place and will ensure that any sensitive and/or threatened plant species are protected and that plant areas are not subject to overuse. The Licensee will work with the Maidu to formulate guidelines regarding access for collecting purposes and communicate those guidelines to the Maidu community. These same

guidelines will be shared with Licensee operations staff so that misunderstandings will be avoided.

The estimated cost of Stage 1 treatment measures is $828,718. Additional monitoring is estimated to cost approximately $12,000 per year. These costs will be the responsibility of the Licensee.

Stage 2 Management Strategy

The following will be undertaken if agencies agree that Stage 1 Management is ineffective:

1. If public use continues to disturb cultural resource sites or vehicle restrictive barriers are not sufficient or are being continually vandalized:
    a. Additional measures will be undertaken to further curtail access; or
    b. Other appropriate site treatment will be developed in consultation with the FERC, the Plumas and Lassen National Forests (as appropriate), the Susanville and Greenville Indian Rancherias (and other Maidu organizations as appropriate) and the State Historic Preservation Officer.

2. Monitoring by the Licensee will be increased to twice per month between April and September.

3. Additional patrolling of the area by local law enforcement officers will be requested.

The estimated cost of additional monitoring and patrolling as part of Stage 2 treatment measures is $210,000 per year. These costs will be the responsibility of the Licensee. Other costs associated with Stage 2 Costs are difficult to determine, as they are dependant upon the number of sites where these measures are to take place and the exact nature of the agreed-upon treatment. However, should Stage 2 treatment measures become necessary for any site within the Project APE, detailed cost estimates will be developed and presented to the parties of the Programmatic Agreement.

Stage 3 Management Strategy

The Licensee is confident that Stages 1 and 2 Management Strategies will prove effective in protecting archeological resources fro Project-related activities in the Project APE. In the unlikely event that all Stage 1 and Stage 2 measures are not effective and it does not appear possible to protect cultural resources from impacts, the implementation of more extreme management or mitigation measures may be necessary. In such cases, the Licensee will consult with the FERC, the SHPO, the Advisory Council on Historic Preservation, the USDA Lassen and Plumas National Forests (as appropriate) and the Greenville and Susanville Indian Rancherias (and other Maidu organizations as appropriate) to discuss appropriate treatment.

Costs associated with the implementation of Stage 3 Management measures are difficult to determine, as they are dependant upon the number of sites where these measures are to take place and the exact nature of the agreed upon treatment. However, should Stage 3 Management measures become necessary for any site within the Project APE, detailed cost estimates will be developed and presented to the parties of the Programmatic Agreement.

Implementing the Management Strategy.

This CRMP outlines a strategy and property-specific treatment measures for managing historic properties within the Project APE. However, property-specific designs to implement some of these plans are needed. Such designs will involve consultation with the parties to the Programmatic Agreement, the Greenville and Susanville Rancherias, on-site visits with the Licensee's Cultural Resources Specialist, and appropriate Licensee planners and construction personnel to plan the locations and details of implementation. The SHPO will be afforded an opportunity to review final design plans for all specific mitigation measures discussed in Section 4.4.3 above.

Completed property-specific designs will be submitted to the parties to the Programmatic Agreement, the Greenville and Susanville Indian Rancherias (and other Maidu organizations as appropriate), and the Lassen and Plumas National Forests (as appropriate) within one year of License acceptance. Implementation of Stage 1 treatment measures will be completed within three years following FERC, SHPO, Greenville and Susanville Indian Rancheria (and other Maidu organizations as appropriate) and Forest

Service approval. Should cultural resources monitoring of the Project indicate a need for additional site protection and/or treatment, consultation with the parties to the Programmatic Agreement, the Lassen and Plumas National Forests (as appropriate) and the Greenville and Susanville Indian Rancherias will be initiated. This consultation will be undertaken in order to identify and implement appropriate Stage 2 or Stage 3 treatment measures in a timely manner. If disagreement regarding Management strategies or treatment occurs between the consulting parties, resolution of the disagreement will take place in accordance with Stipulation II of the Programmatic Agreement ("Dispute Resolution").

Measuring Effectiveness.

This CRMP is designed to substantially reduce effects to historic properties, although some impacts may continue. The staged management strategy outlined in this CRMP will require the periodic assessment of information regarding program effectiveness. If the parties to the Programmatic Agreement concur that implemented treatment measures are ineffective and implementation of the next phase of management may be necessary, consultation with the parties to the Programmatic Agreement, the Lassen and Plumas National Forests (when appropriate) and the Greenville and Susanville Indian Rancherias regarding additional treatment measures or will be initiated.

The Licensee's Cultural Resources Specialist(s) or their designee(s) will play a pivotal role in collecting information by which to initiate planning, consultation, and implementation of additional treatment measures. Should a designee be appointed by the

Licensee to undertake this task, such designee will be a professional archaeologist. Annual reporting of monitoring activities is a mechanism for such assessment and decision-making. An annual report that compiles and summarizes information gathered during monitoring conducted during the year will be and submitted by the Licensee to the SHPO, the Greenville and Susanville Indian Rancherias, the Lassen and Plumas National Forests and to the FERC by March 15 of every year. If impacts are identified during monitoring activities, the annual report will disclose those impacts, assess whether those impacts may have affected cultural resources, detail steps that were taken to remedy the situation and recommend further action if necessary.

If impacts are identified between annual reports that pose immediate threats to cultural resources, the Licensee's Cultural Resources Specialist(s) shall immediately contact the SHPO and follow the measures outlined for unexpected discoveries. Should the SHPO so request, or at the Licensee's discretion, previously unevaluated archeological properties that are being threatened will be evaluated for their NRHP eligibility in consultation with the Greenville and Susanville Indian Rancherias (and other Maidu organizations as appropriate) and the Lassen and Plumas National Forests (if appropriate). If the Licensee and the SHPO agree that a property does not meet the NRHP criteria, no further management consideration of the property is required.

The Licensee will submit all design plans for all stages of management plan implementation concurrently to the SHPO, the Greenville and Susanville Indian Rancherias (and other Maidu organizations as appropriate), and the Lassen and Plumas

National Forests (if appropriate) for review. These parties will have 30 days to review the plans and provide comments. Any disputes regarding the design plans will be resolved in accordance with Stipulation II of the Programmatic Agreement ("Dispute Resolution").

Native American Relations.

The following strategies are proposed to facilitate Native American relations:

1. Tribal consultation will be expanded should unavoidable impacts on cultural and historic properties occur and no preservation measures are feasible. The Susanville and Greenville Indian Rancherias (and other Maidu organizations) have emphasized preservation over archaeological test excavation and/or data recovery. Preservation measures advocated by the Maidu include the use of restrictive barriers, monitoring, and education. Should the Licensee or other agency propose archaeological test excavation and/or data recovery in the future, and if/when the Greenville and Susanville Indian Rancherias object or disagree with the necessity or appropriateness of these measures, then dispute resolution procedures identified in Stipulation II of the Programmatic Agreement will be followed.

2. Prior to undertaking any archaeological work that could disturb a recorded cultural resource, the Licensee will develop and negotiate an agreement with the Greenville and Susanville Indian Rancherias (and other Maidu organizations as

appropriate) regarding this work. A Memorandum of Agreement (MOA) is one common form of agreement. Other types of agreement documents include Memoranda of Understanding (MOU) and contracts. The form of the agreement will be determined by project type and need, in consultation with the Greenville and Susanville Indian Rancherias. The agreement will outline the method of consultation, the intent and method of any necessary excavation, the hiring of Maidu representatives as monitors and crewmembers, and the curation of any recovered materials.

3. In any future archeological work requiring ground disturbance, each crew will include an archaeologist trained in the identification of human remains. Human burials will be avoided unless they are in direct danger of exposure or are seriously threatened by vandalism. Should human remains be identified during the course of any other Project-related activity, the Licensee will immediate stop work in vicinity of the remains and contact the Plumas County Coroner, the Licensee's Cultural Resources Specialist, and the Greenville and Susanville Indian Rancherias (and other Maidu organizations as appropriate). All human remains and associated burial artifacts encountered will be taken care of in a respectful and dignified manner. If removal is necessary, this will be undertaken with an appropriate Maidu representative present, and the remains will be treated according to the provisions set forth in Section 7050.5 of the California Health and Safety Code and Section 5097.98 of the California Public Resources Code. If objections are raised regarding the treatment of human remains, the FERC shall

consult with the objecting party(s) to resolve the objections in the manner prescribed in Stipulation II of the Programmatic Agreement.

4. A policy will be established which ensures that the Greenville and Susanville Indian Rancherias have access to copies of site maps, site forms, catalogs, reports, and other material produced during cultural resource studies. The Licensee will establish a protocol with the Rancheria regarding the distribution of confidential site locational information and materials.

5. Only Licensee representatives will negotiate agreements and discussions that involve commitments by the Licensee. A Licensee representative will be selected that has sufficient authority to negotiate, as well as demonstrated abilities and sensitivity to work with the Tribe and understand their concerns.

6. In order to ensure that the Maidu retain the ability to gather plant materials located within the Project area for traditional uses, the Licensee will work with the Greenville and Susanville Indian Rancherias (and other Maidu groups as appropriate) and Licensee biological specialists to develop an agreement upon how and where such gathering can take place and under what conditions. The Licensee must, however, be ensured that sensitive and/or threatened plant species are protected and that plant areas are not subject to overuse. The Licensee will therefore work with the Maidu to formulate guidelines regarding access for collecting purposes and communicate those guidelines to the Maidu community.

These same guidelines will be shared with Licensee operations staff so that misunderstandings will be avoided.

Unanticipated Discoveries.

The exposure of and damage to previously undisclosed cultural resources may occur from causes such as maintenance and erosion. In addition, known cultural resources may reveal characteristics that were previously unknown. If such unanticipated discoveries are made, the Licensee's Cultural Resources Specialist and Hydroelectric Superintendent will be notified immediately. The discovered property will first be examined by a qualified professional archaeologist to determine if it is indeed a cultural resource, recorded according to accepted contemporary standards and impacts to the resource, if any, will be identified. If impacts are identified, the Licensee will consult with the SHPO, the USDA Lassen and Plumas National Forests (as appropriate), and the Greenville and Susanville Indian Rancherias to determine the appropriate course of action. The CRMP will be used to provide the decision-making framework for management. The SHPO may request, or the Licensee may decide, to evaluate the property for NRHP eligibility, in consultation with the Susanville and Greenville Indian Rancherias.

If the discovery occurs during the implementation of the undertaking and the Licensee has followed the terms of the PA and implementing CRMP, the Licensee will notify the SHPO and the Advisory Council about the nature and extent of the historic property, following the provisions set forth at 36 CFR § 800.13(b). Until agency and Tribal

consultation has been completed, the Licensee shall assume NRHP-eligibility of the property and shall attempt to prevent any harm from being done to the property.

Emergency Undertakings.

Natural and non-natural disasters that pose serious threats to life and property may require emergency actions that will affect historic properties. For example, the forebay banks may need emergency stabilization, or a channel may need to be diverted to avoid flooding. If an emergency undertaking occurs for the Project that may affect cultural resources, Licensee will immediately notify the FERC, the SHPO, the Greenville and Susanville Indian Rancherias, and the Lassen and Plumas National Forests (as appropriate) and provide an opportunity to comment regarding the undertaking within seven days of notification. If the FERC determines that circumstances do not permit seven days for comment, the Licensee shall notify the SHPO the Greenville and Susanville Indian Rancherias and the Lassen and Plumas National Forests (as appropriate) and invite any comments within the time available. This procedure will only apply to emergency undertakings implemented within 30 days after the disaster or emergency. If more than 30 days have passed since the emergency or disaster, the Licensee will review the undertaking in accordance with review the undertaking in accordance with 36 CFR § 800.4 through 800.6

Data Recovery Plans.

The Susanville and Greenville Indian Rancherias and other Maidu organizations and individuals have requested that no data recovery excavations be conducted within their

traditional territories unless absolutely necessary. However, in the event that data recovery is determined by the Licensee, in consultation with the SHPO, the USDA Forest Service (if appropriate) and the Greenville and Susanville Indian Rancherias to be the most appropriate course of action in order to mitigate any unavoidable impacts, such data recovery shall take into account the principles, standards, and guidance contained in Archaeology and Historic Preservation: Secretary of the Interior's Standards and Guidelines (48 FR 44716-44742), the Council's Recommended Approach for Consultation on Recovery of Significant Information from Archaeological Sites (64 FR 95:27085-27087, and guidance offered by the SHPO. A detailed data recovery plan will be prepared and will incorporate, at a minimum, the following criteria:

1. Each historic property where data recovery is to occur shall be specifically defined and its exact location detailed.

2. The plan shall include a set of detailed research questions to be addressed through the data recovery and an explanation of their relevance, importance, and data requirements

3. Methods proposed for data recovery shall be thoroughly outlined, with an explanation of their relevance and relationship to the research questions. Methods for data analysis, management and dissemination of information gleaned from data recovery shall also be addressed.

4. Any data recovery plan shall include procedures for consultation with the Native American community. (Specific recommendations appear above in the section on Native American relations).

5. The plan shall include detailed and reasonable proposals for the costs of data recovery, data analyses, and report preparation. A well-organized and feasible time schedule for the proposed implementation and completion of fieldwork, data analyses and report preparation shall also be provided.

6. A procedure that describes how the final report will be made available to the professional archaeological community, the Susanville and Greenville Indian Rancherias (and other Maidu organizations as appropriate), and appropriate agencies shall be included.

7. The plan shall include a discussion of the final disposition and curation of any cultural materials recovered during excavation. Materials shall be curated according to the guidelines discussed below.

Curation of Recovered Materials.

Curation of any prehistoric materials recovered from archaeological sites within the Project will aspire to the standards outlined in 36 CFR § 79. If necessary, the details of any future curation will be stipulated in a Memorandum of Agreement (MOU) between

the Licensee and the Greenville and Susanville Indian Rancherias. This MOU will be negotiated prior to the implementation of any data recovery measures.

E4-5 AGENCY RECOMMENDATIONS

As part of the consultation process, the USDA Lassen National Forest (letter dated July 26, 2002), the California State Historic Preservation Officer (letter dated July 29, 2002) and Plumas County (letter dated July 25, 2002) have made comments and recommendations regarding Project cultural resource issues and this CRMP. These comments and recommendations, and Licensee responses can be found in Report E9, Agency Consultation, of this License Application.

E4.6 AGENCY AND TRIBAL CONSULTATION

Primary responsibility for compliance with federal law pertaining to undertakings licensed by the FERC rests with the FERC in consultation with the SHPO. The Licensee's role is characterized as assisting the FERC in fulfilling its obligations under Section 106 of the National Historic Preservation Act of 1966. Correspondingly, the Licensee's federal agency consultation requirement is directed to the FERC. The FERC consults with the SHPO and Advisory Council on Historic Preservation in the application of Section 106 procedure; however, the Licensee, with the written approval of the FERC (letter dated June 20, 2000), has directly participated in these consultations. A brief summary of Agency consultation is provided in Table 1 of Appendix E4-C, although other informal consultation (phone calls, etc.) also took place.

The Licensee has also consulted from the beginning of the relicensing process with various Maidu groups and individuals whose traditional lands lie within the Project APE, including the Greenville and Susanville Indian Rancherias, the two Federally-recognized Tribes closest to the Project area. Other Maidu groups who have participated in the consultation process were the Maidu Cultural and Development Group, the Honey Lake Maidu, the Roundhouse Council, and representatives of the Mountain Maidu, the United Maidu Nation, and the Mooretown Rancheria. Together, these groups have been very instrumental in identifying problem areas and developing appropriate treatment measures.

As part of the consultation process, the Licensee met numerous times with the Maidu Consultation Group in order to address relicensing issues. This group is comprised of all of the federally recognized and non-recognized organizations identified above as well as unaffiliated Maidu individuals with an interest in Project cultural resources. Documentation of all Maidu consultation or consultation that was important to note regarding the Project cultural resources is provided in Table 2 of Appendix E4-C, although other informal consultation (phone calls, etc.) also took place.

During consultation meetings, the concerns of the Maidu were elicited, study proposals were discussed, and information about the Project was distributed In particular, copies of all cultural resources reports prepared for the current Project were provided to the Greenville and Susanville Indian Rancherias. Following completion of cultural resource studies, meetings centered upon the results of these studies and the discussion of various management measures. Comments on the Draft License Application and proposed

CRMP were submitted by the Greenville Rancheria (letters dated July 26, September 13, and September 30, 2002), the Susanville Indian Rancheria (letter dated September 9, 2002, email dated September 30, 2002), the Honey Lake Maidu (letter dated July 26, 2002), and the Mountain Maidu (memo received August 16, 2002). Licensee responses to these comments are provided in Report E4-9, Agency Consultation, of this License Application Recently, the Greenville Rancheria has requested that a formal agreement regarding the protocols involved with Tribal consultation be reached. The Licensee is currently considering this request.

E4.7 HISTORICAL AND ARCHEOLOGICAL REFERENCES

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