

## 3.5 Cultural Resources

This section of the EIR analyzes the proposed project's impacts on cultural resources. *Cultural resources* is a general term that encompasses CEQA's *historical resource* and *unique archaeological resource* (see *Regulatory Setting* below for definitions of historical resource and unique archaeological resource). Cultural resources are defined as buildings, sites, structures, or objects, each of which may have historical, architectural, archaeological, cultural, or scientific importance. According to guidance published by the Office of Historic Preservation (1995:2), any "physical evidence of human activities over 45 years old may be recorded for purposes of inclusion in the [Office of Historic Preservation's] filing system." In other words, physical evidence of human activities more than 45 years old is considered a cultural resource.

### 3.5.1 Existing Conditions

#### Environmental Setting

The existing conditions and impact assessments presented in this section are based on information gathered from the sources listed below.

- Review of existing information.
- Coordination with Native Americans.
- Field surveys of the proposed project area.

#### Review of Existing Information

The review of existing information consisted of records searches at the Northeast Center (NEC) of the California Historical Resources Information System; acquisition of historic maps; and a review of published archaeological, ethnographic, and historical literature pertinent to the proposed project area on file at Jones & Stokes' cultural resources library in Sacramento. Sources from Jones & Stokes' cultural resources library are cited in the *Cultural Context* presented below.

Records searches were conducted at the NEC, which maintains the State of California's official records of previous cultural resource studies and known cultural resources in Shasta County. In 2005, CH2MHill prepared a constraints analysis for the current project (Lilienbecker and Rochlitz 2005:19). Jones & Stokes reviewed the constraints analysis as well as the results of the records search conducted on July 19, 2005, for its preparation. The records search was conducted for records pertinent to the proposed project area and a 2-mile radius from the project area. CH2MHill also examined General Land Office survey plats of the project vicinity. In addition, the Shasta County Department of Resource Management requested a records search from the NEC in 2006, although the NEC did not provide the County with specific resource locations or copies of historic maps (Roeder 2006). To ensure that the most current cultural resource records were consulted in support of the present analysis, Jones & Stokes conducted a records search update for the proposed project area and a 2-mile radius on April 3, 2007.

Jones & Stokes acquired historic maps of the project vicinity from the California State Library in Sacramento, California, and the NEC, in order to determine if mapped historic features are

located in the project area and what types of historic-era cultural resources might exist in the project area (Board of Supervisors 1884; Carl R. Briggs & Co. 1891; General Land Office 1868, 1879, 1892; Metsker 1940; Wiegel 1912).

The records searches indicate that five cultural resource studies have been conducted in the project area, resulting in survey coverage of approximately 15% of the project area (Dore and Scarfin 2000; Gromacki 2001:68; Heipel and Johnson 1987; Price 1976; Ritter 1986). Six cultural resource studies have been conducted within a 2-mile radius of the project area (Coyote & Fox 1993:Map 2; Gromacki 1999; Jenkins 1990; Uhr 1986:82, 87; Webster et al. 1992:Maps 1–2; Wyhlidko 2003).

The records searches indicate that no previously recorded cultural resources have been identified in the project area. A historic tin can dump (P-45-2810-H, or Bunchgrass Tin Can Dump), however, is located adjacent to the project area (Dethero 1998:1–2). In addition, Bunchgrass Mountain, which may be affected by the proposed project, is a well-known locality used by Achumawi spiritual practitioners for vision quests and as a power place (Elmore pers. comm.; Olmsted and Stewart 1978:Figure 1). Olmsted and Stewart (1978:Figure 1) depict an Achumawi village in the project vicinity. Historic maps indicate that five historic features may be present in the project area: three nineteenth-century ditches, a General Land Office survey monument, and the trail to Goose Valley (Farber pers. comm.; General Land Office 1879). Lastly, four cultural resources have been recorded within a 2-mile radius of the project area: three Native American archaeological sites (CA-Sha-2016, CA-Sha-2017, and CA-Sha-3630), and one historic-era bottle fragment (Lilienbecker and Rochlitz 2005:19–20).

## Coordination with Native Americans

Coordination with Native Americans was conducted by Jones & Stokes and Pacific Legacy along two tracks: Pacific Legacy ethnographer Shelly Tiley coordinated with the Pit River Tribe, and Jones & Stokes coordinated with other Native American organizations and individuals in the area. The purpose of these interactions was to identify cultural resource concerns of the Achumawi, the aboriginal inhabitants of the project vicinity (Olmsted and Stewart 1978:Figure 1). Jones & Stokes contacted the Native American Heritage Commission (NAHC) by fax on April 9, 2007, to request a search of the Sacred Lands File and a list of contacts among local Native Americans. The NAHC responded by fax on April 12, 2007, indicating that the Sacred Lands File does not contain records of cultural resources in the project area. The NAHC also provided a list of contacts, to whom Jones & Stokes sent coordination letters and project maps on April 16, 2007. No response to these letters has been received to date, probably because of the Pit River Tribe's internal coordination directly with Ms. Tiley.

Ms. Tiley met with seven Pit River Tribe members on May 24 and June 27, 2007 to discuss cultural resource concerns. The tribal members are all associated with the Itsatawi and Madesi bands of Achumawi. Consultation with the Pit River Tribe and the results of consultation are described below in *Identified Cultural Resources* and *Impacts and Mitigation Measures* and in Appendix D of this Draft EIR.

## Field Survey

Two Jones & Stokes archaeologists conducted a cultural resource inventory of portions of the project area on May 3, 4, and 24, 2007. Previously surveyed portions of the project area were not reexamined. Snow to a depth of 4 inches covered the portion of the project area where the proposed wind turbine string splits, completely obscuring the ground surface. The archaeologists commenced the survey on May 3 at the Bunchgrass radio facility, following the

proposed wind turbine corridor by taking compass bearings. A 300-foot-wide, 2-mile-long corridor was surveyed by walking four transects spaced 100 feet apart and making observations of the ground surface<sup>1</sup>. Ground surface visibility varied across the survey corridor due to the presence of boulders, trees, duff, and low-lying vegetation. Visibility ranged from zero to 60% and averaged 30%. Slopes ranged from moderate to steep. No cultural resources were identified in this survey corridor.

The survey was completed on May 24, 2007, by which time no snow was present in the project area. The remainder of the project area was surveyed as described above. Survey conditions in the northern portion of the project area were generally excellent, with gentle slopes and 60–80% ground surface visibility. A 1-mile segment of the project area was not surveyed because the steepness of the slope and abundance of large boulders would have all but precluded human habitation of this portion of the project area. Three isolated artifacts (designated HR-ISO-1–3) were identified during the survey. Survey coverage is depicted in Figure 3.5-1.

## Cultural Context

### Native American Context

The *Native American Context* presents the cultural developments among prehistoric Native Americans of the project vicinity through to the modern-day Achumawi and their nearest neighbors in the project vicinity, the Northern Yana.

### Prehistoric Context

Evidence of Native American occupation of present-day Shasta County dates to as early as 12,000 years before present (B.P.) (or 12,000 years before A.D. 1950). This conclusion is based on the discovery of two isolated fluted projectile points—which typically date to ca. 12,000–10,000 B.P.<sup>2</sup>—at archaeological sites on Hat Creek and at Samwell Cave (Dillon 2002:Figure 5, Table 1). Little is known about Paleoindian lifeways in Shasta County due to the small quantity of known artifacts dating to the Paleoindian Period.

The earliest well-defined Native American occupation of the project vicinity was identified on the basis of excavations at sites CA-Sha-475 and CA-Sha-499 on Squaw Creek, approximately 20 miles west of the project area (Tyree and Sundahl 2002:5). The earliest occupation at CA-Sha-475 was dated by radiocarbon methods to 8500 B.P.; use of CA-Sha-475 continued to the historic period (Clewett and Sundahl 1983:Table 18). Archaeological surveys and excavations at other localities near the project area—namely Sugar Pine Canyon, Lake Britton, and Pit River reaches 3–5—indicate prehistoric occupation of the Cascade Range ranging from 4940 B.P. to the historic period, although these investigations did not examine archaeological sites situated on

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<sup>1</sup> In archaeological surveys, the field of observation, or actual width, of individual transects varies with topography, weather conditions, and vegetative ground cover. Conservative estimates of the field of observation along a single transect is 6–15 feet (Ebert 1992:50). The transect interval employed was selected on the basis of the dimensions of known cultural resources in the project vicinity. For example, archaeological sites CA-Sha-2016, CA-Sha-2017, and CA-Sha-3630 extend 100 feet or more in their minimum length–width dimensions (McGann 1992a:1, 1992b:1; Wyhlidko 2003:124). Employing transect intervals that are less than or equal to the smallest dimension of known archaeological sites grants the archaeological survey a high probability of site discovery.

<sup>2</sup> Archaeologists working in California typically ascribe fluted projectile points to the Paleoindian Period (ca. 13,500–10,500 B.P.) (White et al. 2005:Table 1).

high-elevation ridges such as Hatchet Ridge<sup>3</sup> (Kelly et al. 1987:Table 8-1; Sundahl and Clewett 1985:75–79).

The three previously recorded archaeological sites within a 2-mile radius of the project area consist of CA-Sha-3630 (Goose Mountain Site), a short-term prehistoric campsite between Hatchet Ridge and Goose Mountain; and sites CA-Sha-2016 and CA-Sha-2017, both lithic scatters with two projectile points each. These three sites are located at the foot of Hatchet Ridge adjacent to Goose and Carberry Creeks, respectively, and all have ready access to Hatchet Ridge via secondary ridges. (McGann 1992a, 1992b; Wyhlidko 2003:109, 123.) The sites have not been excavated or dated through radiocarbon methods or obsidian hydration.

Prehistoric use of Hatchet Ridge, as far as can be determined from the sites discussed in the previous paragraph, was probably limited to game-hunting forays and travel due to a lack of natural features conducive to human habitation. No water sources are presently evident on the ridge, and the closest springs are 200–500 feet below the ridgeline, typically with steep intervening terrain (U.S. Geological Survey 1990). Hatchet Ridge is also very exposed to the elements, although forest that existed prior to the Fountain Fire likely provided cover.

Given the expectation for game hunting in the project area, the archaeological materials most likely to occur would be isolated projectile points and fragments thereof lost after being fired at game, as well as small retooling areas where hunting equipment was made or repaired while waiting for game. Archaeological manifestations of retooling areas would be evidenced by small quantities of stone flakes or chips from resharpening projectile points and perhaps broken point fragments. Finally, rock hunting blinds may be present overlooking saddles and other areas suitable for tracking game. Hunting blinds are also liable to have retooling sites associated with them.

#### **Ethnographic Context: Pit River Tribe (Achumawi)**

The Pit River Indians have traditionally inhabited a vast area of northeastern California that encompasses the mountainous Pit River drainage from southern Goose Lake to Big Bend, in Shasta County. Pit River tribes are comprised of two groups<sup>4</sup>: the Achumawi, consisting of nine bands, and the Atsugewi, with two bands (Garth 1978:Figure 1; Kniffen 1928:303; Olmsted and Stewart 1978:Figure 1). The Achumawi language and its distant relative, Atsugewi, together form the Palaihnihan family, a member of the Hokan stock; each language contains dialects that correspond to the band divisions (Shipley 1978:89). The project area is situated in portions of Atsuge, Itsatawi, and Madesiwi territories (Olmsted and Stewart 1978:Figure 1).

The natural environment of the Pit River Tribe is varied and includes a wide range of food resources, in part because of the diverse habitats presented by the rugged, vertically stratified nature of the area. Staple foods included acorns, fish, and deer; various seeds, berries, insects, waterfowl, eggs, and bulbs were also consumed. Many plants were also used as tools and medicines. The Pit River Tribe used the upland areas primarily for hunting deer, gathering basketry material, and spiritual purposes. (Olmsted and Stewart 1978:226–230, Figure 1.)

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<sup>3</sup> The terms *Hatchet Ridge* and *Hatchet Ridge–Bunchgrass Mountain* are used in this section because they are the terms used in relevant literature and preferred by the Tribe. The same geographic feature is referred to as Hatchet Mountain in the remainder of this document.

<sup>4</sup> As a modern political entity, the Pit River Tribe consists of all 11 bands that fall under the ethnographers' appellations of Achumawi and Atsugewi. The constituent bands of the Pit River Tribe are the Ajumawi, Aporige, Astariwi, Atsugewi, Atwamsini, Hammawi, Hewisedawi, Illmawi, Itsatawi, Kosealekte, and Madesi. (Tiley 2007:3.)

## Historical Context

European and Euroamerican exploration of the project vicinity occurred relatively late in history, receiving its impetus from the Hudson's Bay Company explorations of the 1820s, in which the British fur company sought a purported all-water route from the Snake River country (located between Oregon's portion of the Cascade Range and the Great Salt Lake) to the Pacific Ocean. Hudson's Bay Company trappers explored the Modoc Plateau, Sacramento Valley, and Pit River drainage from 1826 to 1830, establishing no outposts but contributing substantially to British and (through American trapper Jedediah Strong Smith) American geographical knowledge of the region. (Owens with Peak 1984:81–85.) Fur trappers, although consisting of small parties, wreaked devastation among the Achumawi through transmission of diseases such as malaria (Cook 1955:312). The project vicinity witnessed infrequent travel by trappers and overland emigrants en route to the Sacramento Valley through the 1840s (Owens with Peak 1984:88), but no permanent Euroamerican settlements were established near the project area.

The earliest recorded Euroamerican settlement of the project vicinity dates to 1857–1858, likely in response to the measure of protection afforded to Euroamericans by the presence of Fort Crook at Fall River Valley. Samuel Burney, a Scottish trapper and emigrant guide, settled north of the present town of Burney in early 1857 or November 1858. He was killed by Indians on March 11, 1859. (Giles 1949:232; Gudde 1969:43; Hoover et al. 1990:441.)

Lasting Euroamerican settlement in the project vicinity commenced in Burney Valley, 1869, with the arrival of the Julias and Mary Cornaz family. The Cornaz's established a farm and operated a combined saloon, hotel, and general store. (Giles 1949:232; Owens with Peak 1984:106.) A post office was established in 1872 (named Burney Valley), and by 1879 further development of the project vicinity was evident at Carberry Flat to the west and in the operation of Cummings and Geissner toll roads (Colby 1982:64; Gudde 1969:43; General Land Office 1879). By 1895, Burney Valley had 74 residents, two general stores, a hotel, a blacksmith shop, the post office, an express office, and a school (Giles 1949:232).

Historic maps and documents provide no evidence of Euroamerican occupation of the project area itself. Historic and modern land uses are confined to forestry (U.S. Forest Service, Lassen National Forest), private timber management enterprises (Sierra Pacific), and the operation of radio facilities. Consequently, historic archaeological materials are probably thinly distributed in the project area.

## Identified Cultural Resources

A total of four cultural resources have been identified in the project area to date, based on literature reviews, coordination with Native Americans, and cultural resource surveys. The identified cultural resources consist of Hatchet Ridge–Bunchgrass Mountain and three isolated artifacts (two projectile points and a historic beer can). Each of these resources is described below. Three historic ditches were identified by map research as in or adjacent to the project area, but were not identified during the cultural resources survey, suggesting that they are no longer extant; they are not discussed further in this analysis.

## Hatchet Ridge–Bunchgrass Mountain

Coordination with the Pit River Tribe identified Hatchet Ridge–Bunchgrass Mountain as a culturally significant site<sup>5</sup>, particularly to the Itsatawi and Madesi bands, and possibly the Atsuge, whose traditional territories are separated by Hatchet Ridge. Hatchet Ridge–Bunchgrass Mountain figures importantly in the lives of the Pit River Tribe for the reasons listed below. (Tiley 2007:8, Appendix C.)

- Hatchet Ridge served as a major transportation corridor for the Pit River Tribe.
- Bunchgrass Mountain is used as basketry collection locality.
- Wildlife that are traditionally important to the Pit River Tribe cross Hatchet Ridge or use it as a migration corridor.
- Hatchet Ridge and Bunchgrass Mountain contain power places. Power places are important locations to the Pit River Tribe because it is at power places that people can obtain power for healing, doctoring, and other purposes (Lake 1991:45; Olmsted and Stewart 1978:234, Figure 1; Tiley and Pierce 2004:19, 22; Woods and Raven 1985:61).
- The Pit River Tribe used the Hatchet Ridge–Bunchgrass Mountain route to travel between portions of the Pit River drainage and Goose Valley, east of the project area (Tiley 2007:8, Appendix C). A feature labeled “Indian Trail” is mapped on a historic survey plat as extending from the eastern edge of Hatchet Ridge into Goose Valley (General Land Office 1879). Because it was a major foot route out of the Pit River Canyon, people were sometimes carried along this way for burial, and may have been buried trailside in the case of inclement weather. This ridge was also traveled to reach the little lake just to the east, where traditional doctors made vision quests. Hatchet Ridge is presently used by Pit River Tribe members to travel to Bunchgrass Mountain to gather basketry materials (redbud, bear grass, willow) and huckleberries. (Tiley 2007:8–9, Appendix C.)

Hatchet Ridge and Bunchgrass Mountain contain power places along the ridge, where men sought power in the past, and a few continue to do so today (Tiley 2007:8–9, Appendix C; Uhr 1986:1; Woods and Raven 1985:40; Wyhlidko 2003a:1). Those seeking power and visions frequently made rock cairns during their time on Hatchet Ridge and Bunchgrass Mountain. Reportedly, one of the cairns set up for these purposes was damaged by the installation of the microwave towers. (Tiley 2007:Appendix C.) A number of stories were recalled regarding events culturally important to the Pit River Tribe on the ridge, involving the vision people experienced there (Ritter 1986:1; Tiley 2007:Appendix C; Woods and Raven 1985:40). A recently deceased tribal elder has urged men of the tribe to “get back on track,” and at least one of them plans to seek spirit helpers in the vicinity in the near future (Tiley 2007:Appendix C).

Past and continued traditional use of Hatchet Ridge–Bunchgrass Mountain by the Pit River Tribe hinged on accessibility and the serene but remote, inhospitable qualities of the ridge. A man seeking spiritual power would travel alone to an isolated, rugged portion of the mountains and remain for periods typically lasting 2–4 days (Olmsted and Stewart 1978:232, 234; Woods and Raven 1985:14). Isolation, physical exertion, and peril are critical characteristics of Achumawi spiritual quests. There would be few archaeological indications of traditional use of Hatchet Ridge, except for the trail itself and cairns (Tiley 2007:10).

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<sup>5</sup> The Office of Historic Preservation (1995:3) defines a site as “the location of a significant event, a prehistoric or historic occupation or activity, or a building or structure, whether standing, ruined, or vanished, where the location itself possesses historic, cultural, or archaeological value regardless of any existing structure.”

A number of recent disturbances are evident on Hatchet Ridge–Bunchgrass Mountain: radio and microwave towers on Hatchet Ridge and Bunchgrass Mountain, a system of dirt roads, Sierra Pacific Industries timber operations, and the partial vegetative denuding of the area caused by the Fountain Fire. Despite these recent disturbances, for the purposes of traditional cultural practices, the Pit River Tribe considers Hatchet Ridge–Bunchgrass Mountain “visually pristine” (Tiley 2007:Appendix C). Although Bunchgrass Lookout Road and other elements of the road system are doubtless larger travel corridors than historic-era Achumawi foot trails, the presence of unpaved roads along the ridge is not inconsistent with traditional use of the ridge as a travel corridor. The damage inflicted on the ridge’s vegetative communities, while severe, is at worst a temporary impact on the character-defining features of Hatchet Ridge–Bunchgrass Mountain. Forest fires are not exclusively modern phenomena; they doubtless occurred on the ridge in former times. Additionally, though not documented specifically in the project area, the deliberate burning of vegetation was a common California Indian forest management practice (Woods and Raven 1985:6–7). Finally, the radio and microwave towers, while clearly visible on most of the ridge, do not impede views from the ridge of important natural features such as Mt. Lassen and Mt. Shasta. The towers are sufficiently dispersed relative to the length of the ridge that they do not dominate the viewshed on or fully compromise the character-defining features of Hatchet Ridge–Bunchgrass Mountain for traditional cultural practices.

### Isolated Artifacts

Three isolated artifacts (two projectile points and one historic beer can) were identified during the 2007 cultural resources survey; all were found on the ridgeline in the northwestern portion of the project area. The first isolate, designated HR-ISO-1, is a complete, obsidian dart-sized<sup>6</sup> projectile point. The shape and dimensions of HR-ISO-1 bear some similarity to Clewett and Sundahl’s (1983:Figure 11) Type 7 projectile points recovered west of the project area, but secure dating of the artifact is not possible in the absence of other time-diagnostic artifacts or direct dating of the projectile point itself. HR-ISO-1’s use as a dart point, however, suggests a date earlier than 1500 B.P. This date is the inferred timing of the inception of bow-and-arrow technology and the concomitant near-replacement of darts in the Southern Cascade Range (Sundahl 2004:66).

The second isolate, designated HR-ISO-2, is an Olympia beer can dating to the 1950s.

The third isolate, designated HR-ISO-3, is a corner-notched obsidian dart point fragment. The artifact has a nearly complete base and is missing the tip and small portion of the point’s midsection. HR-ISO-3’s edges are lightly serrated, and its barbs extend nearly to the base of the point. Because it is a dart-sized projectile point HR-ISO-3, like HR-ISO-1, probably predates 1500 B.P.

## Regulatory Setting

### California Environmental Quality Act

CEQA requires that public agencies (in this case, the County) that finance or approve public or private projects must assess the effects of the project on cultural resources. CEQA requires that alternative plans or mitigation measures be considered if a project would result in significant effects on important cultural resources. However, only impacts on significant cultural resources need to be addressed. Therefore, prior to the development of mitigation measures, the

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<sup>6</sup> Dart-sized projectile points were hafted to a spear launched by hand or with the aid of a spear-thrower.

importance of cultural resources must be determined. The steps that normally are taken in a cultural resources investigation for CEQA compliance are listed below.

- Identify cultural resources.
- Evaluate the significance of resources.
- Evaluate the effects of a project on all resources.
- Develop and implement measures to mitigate the effects of the project only on significant resources, namely historical resources and unique archaeological resources.

The State CEQA Guidelines define three ways that a cultural resource may qualify as a historical resource for the purposes of CEQA review.

1. The resource is listed in or determined eligible for listing in the California Register of Historical Resources.
2. The resource is included in a local register of historical resources, as defined in Public Resources Code (PRC) 5020.1(k), or is identified as significant in a historical resource survey meeting the requirements of PRC 5024.1(g) unless the preponderance of evidence demonstrates that it is not historically or culturally significant.
3. The lead agency determines the resource to be significant as supported by substantial evidence in light of the whole record (14 California Code of Regulations [CCR] 15064.5[a]).

A cultural resource may be eligible for inclusion in the California Register of Historical Resources if it meets any one of the criteria listed below.

- Is associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage.
- Is associated with the lives of persons important in our past.
- Embodies the distinctive characteristics of a type, period, region, or method of construction; represents the work of an important creative individual; or possesses high artistic values.
- Has yielded, or may be likely to yield, information important in prehistory or history.

In addition, CEQA distinguishes between two classes of archaeological resources: archaeological resources that meet the definition of a historical resource as above, and unique archaeological resources. An archaeological resource is considered unique if it meets any of the following criteria.

- Is associated with an event or person of recognized significance in California or American history or of recognized scientific importance in prehistory.
- Can provide information that is of demonstrable public interest and is useful in addressing scientifically consequential and reasonable research questions.
- Has a special or particular quality such as oldest, best example, largest, or last surviving example of its kind. (PRC 21083.2.)



## Shasta County General Plan: Heritage Resources Element

The Shasta County General Plan includes a Heritage Resources Element, the purpose of which is to “identify and protect sites and structures of architectural, historical, archaeological, or cultural significance.” The Heritage Resources Element establishes Objective HER-1, *Protection of significant prehistoric and historic cultural resources*, and the related Policy HER-a, *Development projects in areas of known heritage value shall be designed to minimize degradation of these resources*. Where conflicts are unavoidable, mitigation measures that reduce such impacts shall be implemented. Possible mitigation measures may include clustering, buffer or nondisturbance zones, and building siting requirements.” (Shasta County 2004:6.10.01, 6.10.04.)

### 3.5.2 Impact Analysis

This analysis comprises a determination of whether the proposed project would affect heritage resources and provides recommendations to minimize the degradation of these resources, pursuant to the policy outlined above.

#### Methodology

Analysis of impacts on cultural resources focuses on properties eligible for listing in the California Register of Historical Resources or those properties considered significant resources or unique archaeological resources under CEQA.

#### Thresholds of Significance

Impact assessments for cultural resources are based on the type of resource, a determination of whether a resource is considered eligible for inclusion in the California Register of Historical Resources, the type of impact, and the extent of the impact. Impacts on cultural resources are considered significant under CEQA if the impacts would result in a substantial adverse change to the significance of a historical resource or unique archaeological resource.

Physical damage to or destruction of significant cultural resources, particularly archaeological sites, may affect the physical integrity of those resources and thus reduce their information or research potential (California Register of Historical Resources Criterion 4). Physical damage or alteration may also have deleterious effects on the characteristics of a cultural resource that convey its significant association with an important historical event, person, or architectural/design quality (California Register of Historical Resources Criteria 1–3). Other examples of adverse changes are listed below.

- Alteration of the resource, including restoration, rehabilitation, repair, maintenance, stabilization, hazardous material remediation, and provision of handicapped access, that is not consistent with the Secretary of the Interior’s Standards for the Treatment of Historic Properties (36 Code of Federal Regulations [CFR] 68) and applicable guidelines.
- Removal of the resource from its historic location.
- Change in the character of the resource’s use or of physical features within the resource’s setting that contribute to its historic significance.
- Introduction of visual, atmospheric, or audible elements that diminish the integrity of the resource’s significant historic features.

- Neglect of the resource that causes its deterioration, except where such neglect and deterioration are recognized qualities of a property of religious and cultural significance to an Indian tribe or Native Hawaiian organization.

## Impacts and Mitigation Measures

Construction traffic, staging, and ground disturbance would likely result in damage to or destruction of three isolated artifacts, designated HR-ISO-1, HR-ISO-2 and HR-ISO-3. None of these isolated artifacts are eligible for listing in the California Register of Historical Resources and do not otherwise meet CEQA's definitions for historical resources and unique archaeological resources. These artifacts cannot be tied to historically significant events or persons, do not exhibit unique design characteristics, do not appear to be the works of a master craftsman, and do not have the potential to yield information important to the study of prehistory or history; in fact, the information potential of all three artifacts was exhausted in the process of documenting the finds on California Department of Parks and Recreation Primary Record forms and mapping their locations. For these reasons, the isolated artifacts are not considered historical resources or unique archaeological resources for the purposes of CEQA, and damage to or destruction of the artifacts would have no impact. No mitigation is required.

The Pit River Tribe notes that birds traditionally important to the Tribe may be killed by wind turbine blades. Important species include eagles, ospreys, ducks, and geese (Tiley 2007:8). Bird mortality is a concern to the Pit River Tribe as stewards of the environment encompassed by the Achumawi's traditional territory (Tiley and Pierce 2004:34). The operational impact of bird mortality is analyzed in Section 3.4, *Biological Resources*. The Tribe also notes that the migration patterns and other behavior of animals may be disrupted by the presence of wind turbines and the noise they generate. These project impacts are analyzed in Chapter 3.4, *Biological Resources*.

### **Impact CUL-1: Visual and auditory disruption of Pit River Tribe religious practices conducted on Hatchet Ridge caused by construction and operation of wind turbines (significant and unavoidable)**

Hatchet Ridge–Bunchgrass Mountain appears to be a historical resource for the purposes of CEQA. The ridge has a documented history of use as a travel corridor and setting for Achumawi spiritual practices from at least as early as 1879 to the present day. As noted above in *Identified Cultural Resources*, numerous sources identify Hatchet Ridge and Bunchgrass Mountain as places of cultural significance and practice to the Pit River Tribe. Particularly in connection with the Pit River Tribe's traditional spiritual practices, Hatchet Ridge and Bunchgrass Mountain retain their character-defining qualities: isolation, harshness, and serenity. Because of this long history of traditional use of Hatchet Ridge and Bunchgrass Mountain, these features appear to be eligible for listing in the California Register of Historical Resources under its first significance criterion as being associated with events that have made a significant contribution to broad patterns of California's cultural heritage—in this case regionally, among the Pit River Tribe.

The construction and operation of the proposed wind turbines would result in visual and auditory disruptions of Pit River Tribe spiritual practices on Hatchet Ridge and Bunchgrass Mountain. The presence, sight, and sound of the wind turbines would impede the serenity of Hatchet Ridge and Achumawi spiritual practitioners' sense of isolation from society, both of which outcomes are detrimental to traditional spiritual practices on Hatchet Ridge. This impact would be considered significant under CEQA because isolation and serenity are considered character-defining qualities of Hatchet Ridge–Bunchgrass Mountain. Implementation of Mitigation Measures CUL-1 through CUL-4 would reduce the severity of this impact, but not to a less-than-significant level.

**Mitigation Measure CUL-1: Coordinate with the Pit River Tribe during project development, and prepare a detailed recordation of Hatchet Ridge–Bunchgrass Mountain**

The County and the applicant will coordinate with the Pit River Tribe through the Tribe's chairperson and the Pit River Environmental Office to retain a professional ethnographic consultant to undertake a detailed recordation of Hatchet Ridge–Bunchgrass Mountain as a traditional cultural property. The recordation will commence prior to construction and will include photographic documentation of pre- and postconstruction conditions on Hatchet Ridge–Bunchgrass Mountain. Additional research, particularly into ethnographer Omer C. Stewart's notes filed at the University of California, Berkeley, and interviews with Itsatawi and Madesi individuals, will also be required to complete the recordation. The information gathered as a result of field, interview, and research tasks will be compiled into a report, which the ethnographer will transmit to the Pit River Tribe. The Tribe will have the right to determine the dissemination of the report. Detailed recordation of Hatchet Ridge–Bunchgrass Mountain in this manner will create a photographic and documentary record of the traditional cultural property prior to construction of the proposed project, resulting in partial compensation for the loss of the property's character-defining features of isolation, harshness, and serenity.

**Mitigation Measure CUL-2: Implement a cultural resources monitoring program with the Pit River Tribe during construction**

Cultural resource monitors from the Pit River Tribe will monitor ground-disturbing construction activities associated with the proposed project to ensure that more discrete sacred localities in the project area are avoided or that impacts on such localities are mitigated to the extent feasible. The Pit River Environmental Office will coordinate with the appropriate Achumawi bands (Itsatawi and Madesi) to assign monitors.

**Impact CUL-2: Inadvertent damage to or destruction of buried or otherwise obscured archaeological resources and human remains resulting from ground-disturbing construction activities (less than significant with mitigation)**

Construction and staging activities associated with the proposed project have the potential to disturb buried or otherwise obscured, as-yet-undiscovered archaeological resources and human remains. Damage to or destruction of significant or potentially significant buried archaeological remains during construction would be a significant impact. Implementation of Mitigation Measure CUL-3a would reduce the level of this impact; however, the level to which it would be reduced would be variable depending upon the nature of the resource.

Similarly, damage to or destruction of human remains during construction would be a significant impact under CEQA. Implementation of Mitigation Measure CUL-3b would reduce this impact to a less-than-significant level.

**Mitigation Measure CUL-3a: Stop work if archaeological materials are discovered during construction**

If archaeological materials (such as chipped or ground stone, historic debris, building foundations, or non-human bone) are inadvertently discovered during ground-disturbing activities, the construction contractor will stop work in that area and within 100 feet of the find until a qualified archaeologist can assess the significance of the find and develop appropriate treatment measures. Treatment measures will be made in coordination with the Tribe and other parties as appropriate. Treatment measures typically include development

of avoidance strategies or mitigation of impacts through data recovery programs such as excavation or detailed documentation.

If cultural resources are discovered during construction activities, the construction contractor and lead contractor compliance inspector will verify that work is halted until appropriate treatment measures are implemented. Implementation of this mitigation measure may be sufficient to reduce impacts on archaeological sites to a less-than-significant level.

### **Mitigation Measure CUL-3b: Stop work if human remains are discovered during construction**

If human remains of Native American origin are discovered during ground-disturbing activities, the County must comply with state laws relating to the disposition of Native American burials, which fall within the jurisdiction of the NAHC (PRC 5097). If human remains are discovered or recognized in any location other than a dedicated cemetery, the County will not allow further excavation or disturbance of the site or any nearby area reasonably suspected to overlie adjacent human remains until:

- the Shasta County coroner has been informed and has determined that no investigation of the cause of death is required; and
- if the remains are of Native American origin,
  - the descendants from the deceased Native Americans have made a recommendation to the landowner or the person responsible for the excavation work for means of treating or disposing of, with appropriate dignity, the human remains and any associated grave goods as provided in PRC 5097.98; or
  - the NAHC was unable to identify a descendant or the descendant failed to make a recommendation within 48 hours after being notified by the NAHC.

### **Impact CUL-3: Restriction of traditional Pit River Tribe basketry material collection and religious practices during construction and operation (less than significant)**

Hatchet Ridge–Bunchgrass Mountain contains several basketry material collection localities, which would remain inaccessible to the Pit River Tribe during construction and operation of the proposed project. Similarly, use of the project area and Bunchgrass Mountain itself for traditional religious practices would be impeded during and after construction, although to no greater extent than they are under existing land uses. Therefore, although access restrictions adversely affect the use of a historical resource (Hatchet Ridge–Bunchgrass Mountain), the inaccessibility of the project area would be no greater as a result of the proposed project than under existing conditions. Accordingly, this impact is considered less than significant. No mitigation is required.