

**Placer County Water Agency  
Middle Fork American River Project  
(FERC No. 2079)**

***FINAL***

**CUL 1 – CULTURAL RESOURCES  
TECHNICAL STUDY REPORT – 2008**



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## 1.0 INTRODUCTION

This report summarizes cultural resources study work completed by the Placer County Water Agency (PCWA) during 2008. Specifically, this report provides a description of the methods and results of cultural resources inventory work completed in 2008 in relation to the overall scope of work described in the CUL 1 – Cultural Resources Technical Study Plan. The work completed in 2008 builds upon work completed in 2005, 2006, and 2007. Briefly, work completed in 2008 included additional records searches and field surveys. During field surveys, two previously recorded resources were relocated and examined and two resources that were examined by PCWA field crews in 2006 and 2007 were re-evaluated. In addition, a total of 14 new cultural resources were identified. These new resources include historic objects and structures, isolated artifacts, and archaeological sites, including a prehistoric rock art site.

The Cultural Resources Inventory Study was initiated in 2005 as part of PCWA's early relicensing studies and includes two phases. Phase 1 was initiated in 2005 and focused on retrieving, compiling, and reviewing existing cultural resource information in the vicinity of the MFP. Phase 2, which began in 2006 and continued into 2008, focuses on verifying the location and condition of known cultural resources, and identifying and recording previously unrecorded cultural resources in areas associated with the MFP. Detailed information regarding the 2005, 2006, and 2007 cultural inventory studies is available in the 2005 and 2006 Cultural Resources Inventory Study Reports (PCWA 2006 and 2007a) and the CUL 1 – Cultural Resources Technical Study Report – 2007 (PCWA 2008).

An Eligibility Study will be conducted in 2008 and early 2009 after the Cultural Resources Inventory Study is complete. The results of the Eligibility Study will be documented in a draft report to be distributed for review and comment in April 2009. Ultimately, all of the cultural resources study information will be documented in the Draft Application for New License, which will be filed with the Federal Energy Regulatory Commission (FERC or Commission) and distributed to the stakeholders in October 2010.

## 2.0 STUDY OBJECTIVES

The objectives of the cultural resource studies described in the CUL 1 – TSP are:

- Develop information about the occurrence of cultural resources that could potentially be affected by Project operation and maintenance activities; and
- Determine the eligibility of cultural resources for listing in the National Register of Historic Places (NRHP).

Figure CUL 1-1 shows the CUL 1 – TSP study objectives and the study elements and activities that relate to each objective. It also shows how information developed through the cultural resources studies has been or will be documented. As indicated on Figure CUL 1-1, the study objectives will be met by completing the Cultural Resources

Inventory Study and by conducting an NRHP Eligibility Assessment. Ultimately, the information developed as part of the CUL 1 – TSP will be used to develop a plan designed to manage cultural resources that could potentially be affected by MFP operation and maintenance activities. The plan will focus on cultural resources that are eligible for or are listed on the NRHP.

### **3.0 STUDY IMPLEMENTATION**

The cultural resources studies have been conducted as outlined in the CUL 1 – TSP. Specific study elements that have been completed are summarized in the following subsection.

#### **3.1 STUDY ELEMENTS COMPLETED**

The following study elements have been completed:

- **Cultural Resources Inventory Study – Phase 1 – Summary of Existing Cultural Resources Information**

Phase 1 of the Cultural Resources Inventory Study for the majority of the Project area was completed in 2005 and is documented in the 2005 Cultural Resources Inventory Study Report (PCWA 2006).

Four snow course locations were subsequently added to the Project description in 2007. Accordingly, during 2008, a records search was performed to determine whether there are any previously known cultural resources present within a 1-mile radius of each of the snow courses. Research methods are described in Section 5.1. Research results are summarized in Section 6.1.

- **Cultural Resources Inventory Study – Phase 2 – Verification of Known Cultural Resources**

The verification of known cultural resources in the study area was initiated in 2006 and completed in 2008. Work completed in 2006 and 2007 is briefly summarized in this report for reference and is documented in detail in the 2006 Cultural Resources Inventory Study Report (PCWA 2007a) and the CUL 1 Cultural Resources Technical Study Report – 2007 (PCWA 2008), respectively. Phase 2 work completed in 2008 is documented in this report.

- **Cultural Resources Inventory Study – Phase 2 – Identification of Unknown Cultural Resources**

Field surveys to identify and document unknown cultural resources in the study area were initiated in 2006 and continued through 2008. As shown on Tables CUL 1-1, CUL 1-2, CUL 1-3, and CUL 1-4, the majority of the study area was surveyed in 2006 and 2007. The 2006 and 2007 study results are briefly summarized in this report for reference and are documented in detail in the 2006 Cultural Resources Inventory Study Report (PCWA 2007a) and the CUL 1 Cultural Resources Technical Study Report – 2007 (PCWA 2008), respectively. Areas not surveyed in 2006, including the snow courses, were surveyed in 2008. Phase 2 work completed in 2008 is documented in this report.

### 3.1.1 Variances from the CUL 1 – TSP

With two exceptions, the cultural resources study is proceeding as described in the CUL 1 – TSP. The exceptions are as follows:

- The TSP indicated that the Phase 1 inventory work was completed in 2005. Four snow course locations were added to the Project description after the initial Phase 1 inventory work was complete. The Phase 1 inventory work (e.g., records research) associated with the snow course locations was completed in 2008 and is documented in this report.
- The TSP indicated that the cultural resources inventory work would be completed in 2007. However, the inventory work continued through 2008 and associated reporting will continue into 2009.

### 3.2 OUTSTANDING STUDY ELEMENTS

The following study element is currently outstanding:

- **Conduct Eligibility Assessment**

PCWA is utilizing the results of the Cultural Resources Inventory Study to assess whether there are any cultural resources within the study area that are listed in or may be eligible to be included in the NRHP per Section 106 of the National Historic Preservation Act (NHPA). This assessment is being completed in consultation with the USDA-FS, Tribes and other stakeholders.

Based on consultation efforts to date, PCWA has identified a number of resources that should be evaluated for NRHP eligibility. Accordingly, PCWA has developed an Eligibility Evaluation Plan that identifies the specific resources to be evaluated and the evaluation process. The draft plan was distributed to the USDA-FS, Tribes, and other stakeholders on June 18, 2008 for review and comment. The final plan, which incorporates any comments received from the stakeholders, was distributed on August 28, 2008.

More detailed research designs were developed by PCWA and submitted to the TNF and the Eldorado National Forest (ENF) as part of applications for permits to perform evaluation excavations at archaeological sites as per the Archaeological Resource Protection Act (ARPA). Eligibility studies began in October 2008, after obtaining the appropriate permits.

Eligibility studies being conducted under the plan and permits described above do not include any new resources found as a result of the 2008 surveys described in this report. The resources described in this report were addressed in a Draft Supplemental Cultural Resources Evaluation Plan, which was distributed for review and comment on February 5, 2009, with comments due on April 6, 2009. The final Supplemental Cultural Resources Evaluation Plan will

address any comments provided to PCWA, as appropriate, and will be distributed in mid-April, 2009.

### **3.2.1 Proposed Modifications to CUL 1 – TSP**

PCWA does not propose any modifications to the CUL 1 – TSP.

## **4.0 EXTENT OF STUDY AREA**

The MFP is located in the Middle Fork American River Watershed (Watershed) within the boundaries of the Eldorado National Forest (ENF) and Tahoe National Forest (TNF). The locations of the primary Project facilities are shown on Map CUL 1-1, which also shows the Watershed boundary.

The study area includes all public and PCWA-owned lands within the existing FERC Project boundary and within a 200-foot area surrounding any Project facility or feature (Table CUL 1-1), Project recreation facility (Table CUL 1-2), or stakeholder-identified dispersed concentrated use area (Table CUL 1-3). In addition, the study area includes the land areas associated with potential Project betterments, including the new facilities, roads and trails, and staging and disposal sites, identified on Table CUL 1-4. The lands above subterranean features (i.e., Project tunnels) are not included in the study area. Areas around above ground features associated with the recreation facility water supply lines, for example water tanks and exposed sections of water line, were surveyed for cultural resources. In addition, areas overlying buried sections of water line were surveyed where the water line alignment is discernable based on the location of above ground features or markers.

The specific locations of the Project facilities, Project recreation facilities, dispersed concentrated use areas, and the footprints associated with potential Project betterments are shown on Maps CUL 1-2, CUL 1-3, and CUL 1-4. These maps also show the location of the FERC Project boundary for reference.

Map CUL 1-2, which consists of six sheets, shows the areas where cultural resources surveys were conducted in 2006, 2007, and 2008. Map CUL 1-3, which consists of six sheets, shows the areas that have been surveyed, methods used, and also shows jurisdictional boundaries. To-date, approximately 2,656 acres have been surveyed using either complete or general pedestrian survey methods or by visual reconnaissance.

## **5.0 STUDY APPROACH**

Phase 1 of the Cultural Resources Inventory Study was initiated in 2005 and included a records search and literature review to identify previously known cultural resources located within or near the study area. The results of Phase 1 of the study, including bibliography listings of previous studies conducted within or near the study area, are available in the 2005 Cultural Resources Inventory Study Report (PCWA 2006). As noted in Section 3.1, an additional records search was necessary in 2008 due to the

addition of four snow course locations. The results of this effort are described in Section 6.1.

Field surveys were conducted in 2006 through 2008 as part the Cultural Resources Inventory Study – Phase 2. The 2006 through 2008 field surveys focused on two activities: (1) verifying the location and condition of known cultural resources; and (2) identifying and recording previously unknown cultural resources. All areas surveyed to date are identified on Tables CUL 1-1, CUL 1-2, CUL 1-3, and CUL 1-4 and illustrated on Maps CUL 1-2, CUL 1-3, and CUL 1-4.

The following describes the 2008 Phase 1 research and Phase 2 survey methods and results.

## **5.1 2008 RESEARCH METHODS**

The MFP includes four snow courses referred to as Miranda Cabin, Diamond Crossing, Talbot Camp, and Wabena Meadows. The locations of these snow courses are shown on sheet six of each of the map sets included in this report. Existing information about any previously identified cultural resources within 1-mile of the snow courses was collected, compiled and reviewed. Cultural resources include those pertaining to prehistoric Native Americans, historic Native Americans and other cultural groups. Data collection focused on cultural resources that are more than 50 years old.

Records searches were performed at the North Central Information Center (NCIC) of the California Historical Resource Information System (CHRIS) at California State University, Sacramento, and at the offices of the TNF. None of the snow courses lie within the ENF so records maintained by the ENF were not examined. In addition, information available from the following sources was reviewed:

- Office of Historic Preservation (OHP) Historic Property Data File (2008).
- OHP Determination of Eligibility listings (2008).
- NRHP/CRHR Listings (2006).
- California Inventory of Historic Resources (1976).
- California State Historical Landmarks (1996).
- Points of Historic Interest (1992).
- Caltrans Historic Bridge Inventory (1987, 2000, 2006).
- Historic maps including the 1953 Granite Chief, Royal Gorge, and Wentworth Springs USGS 7.5' quadrangles; the 1885 T15N/R15E, Section 34 plat map; 1892 T15N/R14E, Section 25 plat map; 1879 T16N/R14E, Section 28 plat map; and the 1892 T15N/R14E, section 2 plat map.

The results of these records searches are summarized in Section 6.1.



## 5.2 2008 SURVEY METHODS

The study area was surveyed using either pedestrian surveys or visual reconnaissance, or a combination of both. The survey method used for each locality in the study area is identified on Tables CUL 1-1, CUL 1-2, CUL 1-3, and CUL 1-4 and also depicted on Map CUL 1-3 (six sheets). The type of survey method used varied depending upon a number of conditions, including type of facility, topography, and access conditions.

Existing site records were updated when field surveys yielded previously unreported information. As required, new cultural resources found during the surveys were documented on California Department of Parks and Recreation (DPR) cultural resource inventory forms (DPR 523 forms).

### 5.2.1 Pedestrian Surveys

Pedestrian surveys were conducted in all locations that were safely accessible. Pedestrian surveys were conducted in accordance with the methods outlined in the following guidance document: Framework for Archaeological Research and Management (FARM), National Forests of the North Central Sierra Nevada (Jackson et al. 1994). This document describes a variety of pedestrian survey methods, two of which have been used to conduct the MFP cultural resources surveys: “complete”, and “general.” These methods differ based on transect spacing, as follows:

- Complete: Transect spacing is less than 20 meters.
- General: Transect spacing is between 20 and 40 meters in the ENF and 20 and 50 meters in the TNF.

To date, pedestrian surveys have been performed using both “complete” or “general” methods. Complete pedestrian surveys were conducted by walking over the area to be examined in evenly-spaced transects while examining the ground surface for objects that might show evidence of archaeological or historic sites. General pedestrian surveys were conducted similarly, except transect spacing was wider than that used for complete pedestrian surveys. In 2008, all pedestrian surveys were performed as complete surveys.

Roadways and paths were frequently built on or adjacent to steep slopes. Flat ground and mild slopes surrounding roadways and paths were surveyed using complete survey methods. Steeper slopes were surveyed by either general survey (usually 25-30 meter transects) or visual reconnaissance, depending on the angle of the slope, vegetation density, and safety considerations such as accessibility of footholds and the presence of loose gravel or slippery litter.

During the surveys, ground visibility was typically poor due to a combination of thick vegetation, fallen and decaying trees, gravel from decomposing granite, and forest duff. Throughout the study area, the soils had often been disturbed by facility construction, logging, cattle grazing and herding, or recreation activities. Whenever possible, all rock

outcrops and open patches of soil were examined for evidence of cultural resources. During the 2008 surveys, where possible (approximately 25% of the time), overburden was scraped away from 50x50 cm patches at irregular 10-15 meter intervals to reveal the soil below.

### **5.2.2 Visual Reconnaissance**

Visual reconnaissance was used in some study locations that could not be safely examined by pedestrian survey. In these cases, the area was surveyed by visually scanning the landscape to search for evidence of cultural resources or to sight locations where cultural resources might occur.

This method was primarily used to examine the steep areas surrounding Project roads and paths where pedestrian surveys could not be performed or was impractical due to steep slopes or sheer rock walls. Where possible, these areas were examined by visually scanning the ground for 200-feet either side of the road. It should be noted that the probability of finding cultural resources in areas with very steep slopes is low.

The CUL 1 – Cultural Resources Technical Study Report – 2007 (PCWA 2008) indicated that certain locations near the Ralston Afterbay would be reexamined by boat. This was reconsidered in 2008, and it was determined that the use of a boat would not significantly improve survey coverage of the area.

### **5.2.3 Resource Documentation**

Information regarding new resources discovered through field surveys was recorded on standardized 523 forms produced by the DPR, Office of Historic Preservation. These forms are used throughout California to record cultural resources and are required by the Information Centers of the California Historic Resources Information System and most state and federal agencies operating within California. The DPR 523 forms for the resources described in this report are included in Confidential Appendix B.

In some cases, field investigations revealed new information about previously recorded cultural resources. In these cases, updated DPR 523 forms were produced. The updated forms are also included in Confidential Appendix B.

## **6.0 STUDY RESULTS**

### **6.1 2008 RECORDS RESEARCH**

The records search identified 15 previous studies within one mile of each of the snow course locations. These 15 studies are summarized on Table CUL 1-5. Of these, two studies were associated with areas located within 200 feet of the snow course locations. One of these studies was conducted near the Wabena Meadows Cabin Snow Course location (Chandler 1992). The other was conducted near the Diamond Crossing Snow Course location (Johnson 1977).

A total of 26 previously recorded cultural resources were identified within one mile of the snow course locations. The 26 resources are identified on Table CUL 1-6 and include historic Basque tree carving sites, prehistoric bedrock milling sites (three with associated flake scatters, one with associated rock art), a bedrock milling site with a historic trash scatter, lithic scatters, temporary prehistoric campsites, and one petroglyph site with an associated flake scatter. None of these sites is located within 200 feet of a snow course location. However, one resource, FS-05-57-106 (CA-PLA-885/H), is located just outside the 200 foot study area surrounding the Wabena Meadows Snow Course. None of the previously recorded resources identified through the records search was surveyed because they all lie outside the study area, defined as the area within 200 feet of any Project facility.

## **6.2 VERIFICATION OF LOCATION AND CONDITION OF KNOWN CULTURAL RESOURCES**

### **6.2.1 2006 Study Results**

During the 2006 field work, four previously known resources were examined. These sites are listed on Table CUL 1-7 and are briefly described below, organized by National Forest. Updated DPR 523 forms for these sites were included in the CUL 1 – Cultural Resources Technical Study Report – 2007 (PCWA 2008).

#### **Resources in the Eldorado National Forest**

FS 05-03-55-201. This resource is a bedrock milling station and flake scatter near the east end of Hell Hole Reservoir. The site was re-recorded in 2006, and an updated DPR 523 form was included in that report. The site was re-visited in 2008 but the flake scatter could not be relocated.

#### **Resources in the Tahoe National Forest**

FS-05-17-54-06. This archaeological site is recorded as comprising a flake scatter and bedrock milling feature. It is in the TNF outside of a campground near French Meadows Reservoir, but was not found in the study area during field surveys in 2006. Since it could not be located during surveys, it is not shown on the Map CUL 1-4.

FS 05-17-54-228. This site was originally recorded by the TNF as bedrock mortars on bedrock. However, in 2006 the “mortars” were determined to be a natural feature and not a cultural resource. Since it is considered a natural feature, it is not shown on the Map CUL 1-4.

FS 05-17-54-476. This resource is a historic mining ditch near French Meadows Reservoir known as the “Ralston Ditch.” In the study area, the ditch crosses the TNF and is identified as FS 05-17-54-476. Outside the study area, segments of the ditch extend into the ENF, and across private land (Anon. 1991; McLemore 1983). Where it crosses the ENF it is identified as FS 05-03-53-67.

## 6.2.2 2007 Study Results

During the 2007 field work, 14 previously recorded resources were found and examined. These resources are listed on Table CUL 1-7 and the locations of these resources are shown on Map CUL 1-4 in Confidential Appendix A. In addition, archaeologists searched for three isolated finds that were not formally recorded but were documented as being in the study area (1218, 1219, and 1120). These three isolated finds could not be relocated and are therefore not shown on the map. The 14 previously known resources present in the study area and examined in 2007 are described below. Updated DPR 523 forms for these sites were included in the CUL 1 – Cultural Resources Technical Study Report – 2007 (PCWA 2008).

### Resources in the Eldorado National Forest

FS-05-03-53-04. This archaeological site lies near Eleven Pines Road, near the Long Canyon Crossing Sediment Disposal Area. The site has a prehistoric habitation component with three bedrock mortar features, and a historic mining component. As of March 2007 this site was determined eligible for the NRHP.

FS-05-03-53-64. This archaeological site is a bedrock mortar feature and associated flake scatter northwest of Hell Hole Reservoir. A number of campfires have been built on the site and have damaged the bedrock. Three of the mortar cups originally recorded on the bedrock surface are no longer present due to erosion. The reported flake scatter could not be found.

FS-05-03-53-65. This resource is near Hell Hole reservoir. It consists of bedrock mortars, petroglyphs and a dense flake scatter. New information about this site has been developed as part of a separate study being conducted for the USDA-FS.

### Resources in the Tahoe National Forest

FS-05-17-54-116. This archaeological site is comprised of a large but sparse flake scatter and bedrock mortars in a campground near French Meadows Reservoir. Much of the archaeological material reported from the surface is no longer present. A bedrock mortar feature previously recorded could not be relocated, and field observations indicate that it may have been a natural feature mistaken for a bedrock mortar. The site boundaries were expanded as a result of information gathered during current field work. The new site boundaries for FS-05-17-54-116 now engulf previously recorded site FS-05-17-54-370.

FS-05-17-54-214. This historic archaeological site is the remains of Gates Cabin and associated domestic debris. It appears this location was a base for ranch workers tending animals sent to pasture in the French Meadows area. Discarded food cans, beer cans, motor oil cans, and metal from construction materials are all present on the site surface, as are the degrading remains of a framed cabin constructed of corrugated metal.

FS-05-17-54-370. This is a sparse basalt flake scatter. During field surveys for the MFP it was clear that there is no break in the distribution of cultural material between this site and FS-05-17-54-116 described above. Accordingly, this site is now considered part of FS-05-17-54-116.

FS-05-17-54-400. This archaeological site is west of French Meadows Dam and is recorded as a site with two mortars on one boulder and an associated midden and lithic flake scatter. As of July 2007, only one mortar remains on the boulder and neither the flake scatter nor midden could be found at the reported location.

FS-05-17-54-445. This resource was previously recorded as the “Lambert Ditch,” a mining ditch running roughly parallel to and downslope of the Ralston Ditch (FS-05-17-54-476). These two ditches were constructed in the 1870’s to transport water from the Middle Fork American River east of French Meadows either to the Ralston Ridge, 16 miles to the southwest (PAR Environmental Services 2003:9), or to Pennsylvania Flat, 21 miles to the southeast (Starn 2004). This ditch is named the “Ralston Ditch” and the “Red Star Ditch” on different records.

In the study area, the ditch crosses private land and land managed by the TNF, where it is identified as FS 05-17-54-445. Outside the study area, segments of the ditch extend into the ENF, where it is referred to as FS 05-03-53-237.

FS-05-14-54-466. This is a historic mining site located north of the Middle Fork Interbay. It includes a mining ditch, two adits, a foot trail, two metal tanks, and rock and soil piles.

FS-05-17-54-467. This archaeological site is recorded as a house pit and is located north of the Middle Fork Interbay. The feature described as a house pit at FS-05-17-54-467 is ambiguous and may not be a cultural feature based on observations made in 2007. No cultural materials (i.e., flaked stone, ground stone, midden soil, etc.) were found in this location.

FS-05-17-54-468. This site is recorded as a bedrock mortar north of the Middle Fork Interbay. In 2007 the site was believed to be a natural feature. However, it was reevaluated in 2008 and is considered a possible bedrock mortar. Additional information is provided in Section 6.2.3.

FS-05-17-54-476. This resource is located near French Meadows Reservoir and is the remains of the Ralston Ditch. The “sister” of the Lambert Ditch, the Ralston Ditch was constructed by a combination of earth excavation and stone wall construction in the 1870’s to serve as a water conduit from the Middle Fork American River and possibly Coyote Springs to Ralston Ridge, 16 miles to the southwest. The ditch was used until 1911 and still survives in segments ranging in length from tens of feet to several miles (PAR Environmental Services 2003:9).

P-31-1252. The resource recorded as P-31-1252 falls within the study area near the Oxbow Powerhouse, but it is a bedrock milling feature on a boulder that has clearly

been moved well out of context by the river, and therefore does not represent an intact archaeological site. This resource could not be found again in 2008.

“Sites” 1218, 1219, 1120. These three isolates were documented by True et al. (1978) but were never formally recorded on DPR 523 forms. Site 1218 is an isolated piece of blue bottle glass and Site 1219 is described as a concrete pad, apparently for mounting equipment. True et al.’s report does not include a description of Site 1120. None of these isolates could be relocated during the field surveys. As none of these had been formally recorded, and none were encountered during surveys, DPR 523 forms were not generated.

### **6.2.3 2008 Study Results**

During the 2008 field work, two previously recorded resources were relocated and examined. These resources are listed on Table CUL 1-7 and the locations of these resources are shown on Map CUL 1-4 in Confidential Appendix B. The two previously known resources present in the study area and examined in 2008 are described in the following. The discussion is organized by National Forest.

#### **Resources in the Eldorado National Forest**

FS-05-03-55-201. This site is located at the southeast end of Hell Hole Reservoir. It was originally recorded as a bedrock milling station and flake scatter. It was visited in 2006 and at that time the bedrock milling station was found but the flake scatter could not be found. The site was revisited in 2008 at which time conditions were found to be the same as observed during 2006. That is, the flake scatter that was originally recorded could not be relocated during the 2008 survey. A DPR 523 form for this site was included in the CUL 1 – Cultural Resources Technical Study Report – 2007 (PCWA 2008). As such, it is not included in this report.

#### **Resources in the Tahoe National Forest**

FS-05-17-54-468. This site is located north of the Middle Fork Interbay Road. It had been previously recorded as a single bedrock mortar. During 2007 fieldwork, it was identified as a natural feature. However, re-examination in 2008 suggests that it may be a shallow bedrock mortar placed in a natural depression on the rock. The field crew cleared forest duff from randomly-placed patches of ground within a 20-foot radius of the mortar rock, and found no evidence of cultural deposits. The DPR 523 was updated to reflect the condition of the site based on the 2008 surveys and is included in Confidential Appendix B for reference.

### **6.3 IDENTIFICATION AND RECORDATION OF PREVIOUSLY UNKNOWN CULTURAL RESOURCES**

#### **6.3.1 2006 Study Results**

During the 2006 field surveys, one new archaeological resource (originally identified as PL-01, now identified as FS-05-03-55-681) and two isolated cultural resources (ISO-01

and ISO-02) were found. These three resources are identified on Table CUL 1-8 and their locations are shown on confidential Map CUL 1-4. These sites are near the east end of Hell Hole Reservoir. Updated DPR 523 forms for these sites were included in the CUL 1 – Cultural Resources Technical Study Report – 2007 (PCWA 2008). Each of these sites is briefly described in the following, organized by land jurisdiction.

### **Resources in the Eldorado National Forest**

FS-05-03-55-681. This site was described in the 2006 report as PL-01. The site is comprised of a sparse basalt lithic scatter and a historic tobacco tin. The site is on the south side of Hell Hole Reservoir, near the eastern end of the reservoir.

### **Resources Located on Other Public or Private Land**

ISO-01. This is a basalt core discovered during the 2006 surveys. It was found on a bench of land overlooking Hell Hole Reservoir's northeastern shore, on land owned by PCWA.

ISO-02. This isolated artifact is a rough basalt uniface discovered during the 2006 surveys, east of Hell Hole Reservoir, within the FERC Project boundary, on land owned by PCWA.

### **6.3.2 2007 Study Results**

During the 2007 field surveys, 14 previously unidentified resources were found and documented. These resources are listed in Table CUL 1-8 and their locations are shown on Map CUL 1-4 in Confidential Appendix A. Note that some of the resources described below have been previously reported but not formally recorded and as such are reported here as “new” resources. DPR 523 forms were prepared for all of the “new” resources identified in 2007 and were included in the CUL 1 – Cultural Resources Technical Study Report – 2007 (PCWA 2008).

Resources identified in 2007 include prehistoric archaeological sites and isolates, and historic mining resources such as mining ditches and the remains of structures, as described in the following. The discussion is organized by land jurisdiction.

### **Resources in the Eldorado National Forest**

FS-05-03-53-371. This resource is a dirt road and the southwest footings of two bridges on the south shore of the Rubicon River near Ralston Afterbay. The northeast footings for these bridges have been destroyed. The south side of the river could not be reached, and therefore the full length and extent of the road could not be determined.

FS-05-03-53-372. This site is the remains of a mining camp or small town on the west bank of the Middle Fork American River near the Oxbow Powerhouse. It was previously reported by Rackerby as site H-25 but was never formally recorded. This site was reexamined in 2008. Additional information about this site is included in Section 6.3.3.

FS-05-03-53-373. This resource is a section of road along the south side of the Ralston Afterbay. The southeast terminus of the road is at the water's edge, indicating that the road had probably been built at some point prior to the construction of the hydroelectric facilities, although its exact age is currently unknown.

FS-05-03-53-374. This site is a section of a placer mining ditch near a campground. The ditch was constructed entirely by excavation, and no stone walls or other similar structures are found along its length. It runs roughly parallel to a road, terminating where it turns to the west and intersects with the road. The southern end of the ditch is badly eroded and vanishes after approximately 240 feet.

FS-05-03-53-375. This site is a shallow bedrock mortar on a granite outcrop near road 14N09A. No associated artifacts were found nearby, but forest duff and snow on the ground precluded close inspection of the ground surface.

ISO-03. This isolated artifact is a basalt flake, apparently a third-stage reduction flake. It was found northwest of Hell Hole Reservoir near the Hell Hole OHV trail.

### **Resources in the Tahoe National Forest**

FS-05-17-54-478. This resource is a mining ditch near the Ralston Picnic Area. The recorded segment of the ditch runs for approximately 500 feet through the study area, and was constructed through a combination of excavation and stone wall construction. The ditch is eroded, but still clearly visible and identifiable. This ditch may be Site H-1 reported by Rackerby (1965:21) but never formally recorded.

FS-05-17-54-479. This resource is a road along the slope beneath the Middle Fork Interbay Access Road. The northern portion of the road appears to have been recently logged and used for access to cattle grazing areas. The southern portion of the road has been badly eroded, and several trees, some over six meters in height, have grown in the roadway. It is likely, though not certain, that the road is over 50 years old.

FS-05-17-54-480. FS-05-17-54-480 is a section of a mining ditch near one of the campgrounds near French Meadows. It extends for approximately 100 feet roughly parallel to the Middle Fork American River and was constructed entirely by excavating soil from the center of the ditch and piling it into berms on either side of the ditch.

FS-05-17-54-481. FS-05-17-54-481 is a berm constructed to divert a stream running near one of the campgrounds near French Meadows. The berm runs roughly north-south for approximately 500 feet with the southern terminus at the bank of the Middle Fork American River. At its southern terminus the berm is approximately 11 feet wide, ten feet tall on the eastern side (facing the diverted stream), and four feet tall on the western side.

PL-02. This resource was surveyed in 2007 and previously recorded as a mining ditch. It was reexamined in 2008 and determined to be a recent feature.



ISO-04. This isolated artifact is a dark grey basalt decortication flake. It was found near one of the campgrounds near French Meadows, among rocks that appear to have been deposited by the river.

ISO-05. This isolate is a mining adit located on the east side of the Middle Fork Interbay Access Road, approximately ½ mile south of the intersection with FR 96. The adit is within the road cut, and the portal of the adit has collapsed.

### **Resources on Other Public or Private Land**

PL-03. This site is the remains of a historic mining settlement on private land along the northeast side of the Middle Fork American River near the Middle Fork American River Gage below Oxbow Powerhouse. The site includes several mine tailings piles, several discrete historic trash dumps, and a complex of stone walls that includes a two-chamber structure (possibly a stamp mill). Chronologically diagnostic trash at this site (including cone-top beer cans, amethyst glass, and a car fender) are all consistent with use during the late 19th through mid-20th centuries.

### **6.3.3 2008 Study Results**

During the 2008 field surveys, 14 new cultural resources were identified. In addition, two resources that were surveyed in 2006 or 2007 were re-evaluated in 2008. These resources include historic objects/structures, archaeological sites, and isolated artifacts. These resources are identified on Table CUL 1-8 and their locations are shown on confidential Map CUL 1-4. New DPR 523 forms were prepared for these resources and are included in Confidential Appendix B of this report for reference. Each of these sites is briefly described in the following, organized by land jurisdiction.

### **Resources on the Eldorado National Forest**

FS-05-03-53-372. This site is the remains of a mining camp or small town on the west bank of the Middle Fork American River near the Oxbow Powerhouse. It was previously described by Rackerby (1965:21) as Site H-25, but never formally recorded and no trinomial or Forest Service number has been assigned to this site. The site is on a sand bar at a relatively low elevation, and has been damaged along its river-facing sides by water erosion. Originally recorded in 2007, further survey of the surrounding area in 2008 revealed additional features. As re-recorded, the site consists of historic debris (including apparent wreckage from machinery), the remains of what appears to be a metal fence, three excavated pits, six tailings piles, a large excavated area, a ditch (the purpose of which is unclear, but it does not appear to have been for water transportation), and two stone structure foundations. Historic garbage is spread thinly across the surface of the site, and is commingled with recent trash. Much of the historic debris on the site's surface appears to have been deposited by the river during high-water episodes, and includes the remains of corrugated metal pipes, pumps and derricks, and a large portion of an automobile. None of the historic trash discovered during field work is time diagnostic.

PL-16. This resource is the remains of a mining ditch excavated into a gentle slope overlooking Long Canyon Creek. This segment is 40 feet long, and appears to have eroded away on both the northern and southern ends.

PL-19. This resource is located near Middle Meadows Campground and consists of the remains of a rock-ring hearth or fire ring. Rings such as this one may be found at campgrounds ranging in age from ancient prehistory to contemporary campground use.

PL-20. This resource is a possible mining ditch that runs for approximately 720 feet on a slope east of Big Meadows Campground. The location and general shape are consistent with a badly-eroded mining ditch, but the state of degradation was so extreme that it was not possible to determine with certainty whether or not this was a ditch, or some other man-made structure. The presence of erosion control ditches on the same slope further complicated identification of this feature.

PL-22. This resource is a rock art site located on a rock outcropping on the eastern end of Hell Hole Reservoir. The site consists of four panels of rock art, including both petroglyphs and ground cupules. No other cultural materials were found in the vicinity. The rock art site is located at an elevation of 4,616 feet mean sea level (msl) and the maximum water surface elevation of Hell Hole Reservoir is 4,630 msl. Accordingly, the rock art site would be submerged when the water surface elevation is at its highest level.

ISO-06. This isolate is a set of three chert flakes found on the slopes overlooking the south shore of the eastern end of Hell Hole Reservoir. The isolate was located approximately 110 meters away from FS-05-03-55-201.

### Incidental Observations

There is a drainage near the Middle Meadows Campground that, for approximately 1/3 of its total length, has unusually regular sides, suggesting that it might have begun as a mining ditch. The eastern terminus of the “ditch” is in a shallow depression in a meadow. The “ditch” then proceeds roughly E-W to a paved campground road. Approximately 200 feet to the east of the campground road, the “ditch” degrades into an eroded drainage, which is then channeled underneath the road via a culvert, and drains into Long Canyon Creek. The “ditch” has regular sides consistent with a man-made ditch for approximately 200 feet, but lacks a clear berm on either side, runs perpendicular to another known mining ditch in the vicinity, and lacks clear man-made features at both the eastern and western ends. As a result, this is treated here as an ambiguous, possibly man-made feature. Accordingly, this feature is not shown on the maps nor is it recorded on a DPR form.

In addition, field crews found the remains of what appears to have been machinery buried underneath sediments at the Long Canyon Sediment Disposal Area. The age of the machinery is uncertain, though plastic insulation on wiring found in association with

the debris indicates that at least some of the material may be from relatively recent activities.

### **Resources Located on the Tahoe National Forest**

PL-02. This site is located near French Meadows dam and was originally recorded as a mining ditch adjacent to a dirt road. Further investigation in 2008 indicates that, although the feature has the appropriate morphology and location for a mining ditch, it is of relatively recent construction.

PL-14. This resource is a segment of a mining ditch that runs roughly parallel to Duncan Creek for a distance of approximately 1000 feet. The original extent of the ditch is unknown.

PL-15. This resource consists of a historic debris scatter and fire pit on the bank of the Middle Fork American River, upstream of French Meadows Reservoir. The cans present include “church-key” beer cans (pre-1960’s) and numerous sanitary cans of types likely to have contained meats and vegetables. The fire pit may be a recent addition to the site location. This appears to represent the remains of a mid-20<sup>th</sup> century campsite.

PL-23. This resource sits on the north bank of the Middle Fork American River near the Ralston Powerhouse. Because of its location near rapid waters and along a sheer cliff face, it could not be approached for close examination. The resource consists of a pile of rocks that look as if they may be mine tailings. The top of the pile contains a few trees, and what appears to be an earthen platform. A non-rusted metal pipe was also visible near the top of the pile.

ISO-07. This isolate is a single black basalt flake located near Duncan Creek. The flake was found in a gravel and soil matrix near a seasonal drainage, indicating that it may have been deposited with the gravel.

ISO-09. This isolate is scraps of metal from a pipe and what may be a portion of an old, iron stove top. Although there are enough fragments of historic or possibly historic metal at this location to qualify as a site, they are on the riverbank of the Middle Fork American River, do not appear to represent an intact archaeological site, and appear to have been deposited by the river.

ISO-11. This isolate is a piece of reddish chert that was found adjacent to the Middle Fork American River, near the Wabena Meadows snow course. Although the piece does not appear to have been worked, this type of stone does not occur naturally in the area, and is an ideal material for the production of stone tools. It is likely, therefore, that it was transported to the area by humans.

## Resources Located on Other Public or Private Property

PL-17. This resource is the remains of a road, probably a logging road, located on the north side of North Fork Long Canyon Creek. It intersects a Project road but lies on private property outside of the FERC Project boundary. The road joins a maintained dirt road at its western terminus, and forks to form short northern and southern road segments at the eastern end. The resource has been badly eroded, and numerous trees are now growing in the middle of the road.

PL-21. This resource is located near the South Fork of Long Canyon Creek, downstream of Middle Meadows Campground, on private property. It is the remains of a dirt road that runs for approximately 500 feet near Forest Road 2, and probably previously intersected Forest Road 2. The eastern, upslope end of the road terminates near Forest Road 2, and the western down slope side terminates at a maintained dirt road at the bottom of South Fork Long Canyon Creek. The road is badly eroded, having become basin-shaped near its western terminus, and numerous trees have grown on the road. However, the age of the road could not be determined from information gathered in the field.

ISO-10. This isolate is a single dark grey basalt flake located east of Hell Hole Reservoir, outside of the FERC Project boundary. The flake is in a bed of gravel and cobbles, and appears to have been deposited there by the creek. There were no indications of archaeological deposits elsewhere near the creek.

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**TABLES**

**Table CUL 1-1. Project Facilities Surveyed in 2006, 2007, and 2008.**

<b>Project Facility</b>	<b>Year Surveyed</b>	<b>Survey Method</b>
<b>Dams, Reservoirs, and Diversion Pools</b>		
<b>Large Dams</b>		
French Meadows Dam and Outlet Works	2007	Mixed Complete Pedestrian Survey and Visual Reconnaissance
Hell Hole Dam and Outlet Works	2006	Mixed General Pedestrian Survey and Visual Reconnaissance
<b>Medium Dams</b>		
Middle Fork Interbay Dam	2007	Visual Reconnaissance
Ralston Afterbay Dam	2007	Visual Reconnaissance
<b>Small Dams</b>		
Duncan Creek Diversion Dam	2007	Complete Pedestrian Survey
North Fork Long Canyon Diversion Dam	2007	Complete Pedestrian Survey
South Fork Long Canyon Diversion Dam	2007	Complete Pedestrian Survey
<b>Large Reservoirs</b>		
French Meadows Reservoir	2006/2008	Mixed Complete and General Pedestrian Survey
Hell Hole Reservoir	2006	Mixed Complete and General Pedestrian Survey and Visual Reconnaissance
<b>Medium Reservoirs</b>		
Middle Fork Interbay	2007	Visual Reconnaissance
Ralston Afterbay	2007	Visual Reconnaissance
<b>Small Diversion Pools</b>		
Duncan Creek Diversion Pool	2007	Complete Pedestrian Survey
North Fork Long Canyon Diversion Pool	2007	Complete Pedestrian Survey
South Fork Long Canyon Diversion Pool	2007	Complete Pedestrian Survey
<b>Water Conveyance Systems</b>		
<b>Tunnels</b>		
Duncan Creek - Middle Fork Tunnel		Not Surveyed - Subsurface Feature
French Meadows - Hell Hole Tunnel		Not Surveyed - Subsurface Feature
Hell Hole - Middle Fork Tunnel		Not Surveyed - Subsurface Feature
Middle Fork - Ralston Tunnel		Not Surveyed - Subsurface Feature
Ralston - Oxbow Tunnel		Not Surveyed - Subsurface Feature

**Table CUL 1-1. Project Facilities Surveyed in 2006, 2007, and 2008 (continued).**

<b>Project Facility</b>	<b>Year Surveyed</b>	<b>Survey Method</b>
<b>Water Conveyance Systems (continued)</b>		
<b>Diversion Pipes and Drop Inlets</b>		
North Fork Long Canyon Diversion Pipe and Drop Inlet	2008	Complete Pedestrian Survey
South Fork Long Canyon Diversion Pipe and Drop Inlet	2007	Complete Pedestrian Survey
<b>Surge Shafts and Adits</b>		
Brushy Canyon Adit	2007	Complete Pedestrian Survey
Hell Hole - Middle Fork Tunnel Surge Shaft and Tank	2007	Complete Pedestrian Survey
Middle Fork - Ralston Tunnel Surge Shaft and Tank	2007	Visual Reconnaissance
<b>Removable Sections and Portals</b>		
Duncan Creek - Middle Fork Tunnel Portal	2006	General Pedestrian Survey
French Meadows - Hell Hole Tunnel Removable Section	2007	Complete Pedestrian Survey
Hell Hole - Middle Fork Tunnel Removable Section	2007	Complete Pedestrian Survey
Middle Fork - Ralston Tunnel Removable Section	2007	Visual Reconnaissance
North Fork Long Canyon Crossing Removable Section	2007	Complete Pedestrian Survey
<b>Intakes and Gatehouses</b>		
Duncan Creek - Middle Fork Tunnel Intake	2007	Complete Pedestrian Survey
French Meadows - Hell Hole Tunnel Gatehouse	2006	General Pedestrian Survey
French Meadows - Hell Hole Tunnel Intake		Not Surveyed - Submerged
Hell Hole - Middle Fork Tunnel Gatehouse	2006	Visual Reconnaissance
Hell Hole - Middle Fork Tunnel Intake		Not Surveyed - Submerged
Middle Fork - Ralston Tunnel Intake and Gatehouse	2007	Visual Reconnaissance
Ralston - Oxbow Tunnel Intake	2007	Visual Reconnaissance
<b>Penstocks and Valve Houses</b>		
French Meadows Powerhouse Penstock and Butterfly Valve House	2007	Complete Pedestrian Survey
Middle Fork Powerhouse Penstock and Butterfly Valve House	2007	Complete Pedestrian Survey
Ralston Powerhouse Penstock and Butterfly Valve House	2007	Visual Reconnaissance
<b>Powerhouses, Switchyards, and Substations</b>		
French Meadows Powerhouse and Switchyard	2007	Visual Reconnaissance
Hell Hole Powerhouse	2006	General Pedestrian Survey
Middle Fork Powerhouse and Upper and Lower Switchyards	2007	Visual Reconnaissance
Ralston Powerhouse and Switchyard	2007	Complete Pedestrian Survey
Oxbow Powerhouse and Switchyard	2007	Visual Reconnaissance
Hell Hole Substation	2006	Visual Reconnaissance



**Table CUL 1-1. Project Facilities Surveyed in 2006, 2007, and 2008 (continued).**

<b>Project Facility</b>	<b>Year Surveyed</b>	<b>Survey Method</b>
<b>Gaging Stations and Weirs</b>		
<b>Stream Gages and Weirs</b>		
Duncan Creek Gage and Weir above Diversion Dam (USGS Gage and Weir No. 11427700)	2007	Complete Pedestrian Survey
Duncan Creek Gage and Weir below Diversion Dam (USGS Gage and Weir No. 11427750)	2007	Complete Pedestrian Survey
Middle Fork American River Gage and Weir below French Meadows Dam (USGS Gage and Weir No. 11427500)	2007	Complete Pedestrian Survey
Middle Fork American River Gage at Interbay Dam (USGS Gage No. 11427770)	2007	Visual Reconnaissance
Middle Fork American River Gage above Middle Fork Powerhouse (USGS Gage No. 11427760)	2007	Visual Reconnaissance
Middle Fork American River Gage below Oxbow Powerhouse (USGS Gage No. 11433300)	2007	Complete Pedestrian Survey
North Fork Long Canyon Gage and Weir at Diversion Dam (USGS Gage and Weir No. 11433085)	2007	Complete Pedestrian Survey
South Fork Long Canyon Gage and Weir at Diversion Dam (USGS Gage and Weir No. 11433065)	2007	Complete Pedestrian Survey
Rubicon River Gage and Weir below Hell Hole Dam (USGS Gage and Weir No. 11428800)	2006	General Pedestrian Survey
<b>Diversion Gages</b>		
North Fork Long Canyon Gage at Diversion Dam (USGS Gage No. 11433080)	2007	Complete Pedestrian Survey
South Fork Long Canyon Gage at Diversion Dam (USGS Gage No. 11433060)	2007	Complete Pedestrian Survey
<b>Reservoir Gages</b>		
French Meadows Reservoir Gage (USGS Gage No. 11427400)		Not Surveyed - Submerged
French Meadows Reservoir Staff Gage	2006	General Pedestrian Survey
Hell Hole Reservoir Gage (USGS Gage No. 11428700)		Not Surveyed - Submerged
Hell Hole Reservoir Staff Gage	2006	Visual Reconnaissance
Middle Fork Interbay Reservoir Gage	2007	Visual Reconnaissance
Ralston Afterbay Reservoir Gage	2007	Visual Reconnaissance

**Table CUL 1-1. Project Facilities Surveyed in 2006, 2007, and 2008 (continued).**

<b>Project Facility</b>	<b>Year Surveyed</b>	<b>Survey Method</b>
<b>Gaging Stations and Weirs (continued)</b>		
<b>Powerhouse Gages</b>		
French Meadows Powerhouse Gage (USGS Gage No. 11427200)	2006	Visual Reconnaissance
Middle Fork Powerhouse Gage (USGS Gage No. 11428600)	2007	Visual Reconnaissance
Oxbow Powerhouse Gage (USGS Gage No. 11433212)	2007	Visual Reconnaissance
Ralston Powerhouse Gage (USGS Gage No. 11427765)	2007	Complete Pedestrian Survey
<b>Leakage Weirs</b>		
French Meadows Dam Leakage Weirs Nos. 1 -- 6	2007	Complete Pedestrian Survey
Hell Hole Dam Leakage Weir	2006	Mixed General Pedestrian Survey and Visual Reconnaissance
<b>Project Communication Lines and Powerlines</b>		
<b>French Meadows Area</b>		
French Meadows Dam Generator Building to French Meadows Dam Outlet Works Powerline	2006/2007	Mixed Complete and General Pedestrian Survey and Visual Reconnaissance
French Meadows Dam Generator Building to French Meadows Dam Spillway Gates Powerline	2006/2007	Mixed General Pedestrian Survey and Visual Reconnaissance
<b>Hell Hole Area</b>		
French Meadows Powerhouse to French Meadows Powerhouse Penstock and Butterfly Valve House Communication Line/Powerline	2006/2007	Mixed Complete Pedestrian Survey and Visual Reconnaissance
French Meadows Powerhouse and Switchyard to Hell Hole - Middle Fork Tunnel Gatehouse, Dormitory Facility, Operator's Cottages, and Hell Hole Powerhouse Communication Line/Powerline	2006	Mixed General Pedestrian Survey and Visual Reconnaissance
Dormitory and Cottages Water Supply Tank Powerline	2006	Mixed General Pedestrian Survey and Visual Reconnaissance
Hell Hole Powerhouse to Rubicon River Gage and Weir below Hell Hole Dam Communication Line/Powerline	2006	Mixed General Pedestrian Survey
<b>Middle Fork Interbay Area</b>		
Middle Fork Powerhouse to Middle Fork Powerhouse Butterfly Valve House Communication Line/Powerline	2007	Visual Reconnaissance
Middle Fork Powerhouse Butterfly Valve House to Radio Repeater near Hell Hole - Middle Fork Tunnel Surge Tank (underground) Communication Line/Powerline	2007	Visual Reconnaissance
Middle Fork Powerhouse to Middle Fork - Ralston Tunnel Intake and Gatehouse Communication Line/Powerline	2007	Visual Reconnaissance

**Table CUL 1-1. Project Facilities Surveyed in 2006, 2007, and 2008 (continued).**

<b>Project Facility</b>	<b>Year Surveyed</b>	<b>Survey Method</b>
<b>Project Communication Lines and Powerlines (continued)</b>		
<b>Middle Fork Interbay Area (continued)</b>		
Middle Fork Powerhouse to Middle Fork American River Gage above Middle Fork Powerhouse Communication Line/Powerline	2007	Visual Reconnaissance
<b>Ralston - Oxbow Area</b>		
Ralston - Oxbow Tunnel Intake to Ralston Powerhouse Communication Line	2007	Visual Reconnaissance
Ralston Powerhouse to Ralston Powerhouse Butterfly Valve House Communication Line/Powerline	2007	Visual Reconnaissance
Ralston Afterbay Dam Generator Building to Ralston - Oxbow Tunnel Intake Communication Line/Powerline	2007	Visual Reconnaissance
Oxbow Powerhouse to Ralston Afterbay Dam Generator Building Communication Line/Powerline	2007	Mixed Complete Pedestrian Survey and Visual Reconnaissance
<b>Photovoltaic Poles and Powerlines</b>		
Photovoltaic Poles and Powerline to Duncan Creek Gage above Diversion Dam	2007	Complete Pedestrian Survey
Photovoltaic Pole and Powerline at Duncan Creek Gage below Diversion Dam	2007	Complete Pedestrian Survey
Photovoltaic Pole and Powerline at Middle Fork American River Gage below French Meadows Dam	2007	Complete Pedestrian Survey
Photovoltaic Pole and Powerline at Middle Fork American River Gage above Middle Fork Powerhouse	2007	Visual Reconnaissance
Photovoltaic Pole and Powerline at North Fork Long Canyon Gage at Diversion Dam	2007	Complete Pedestrian Survey
Photovoltaic Pole and Powerline at South Fork Long Canyon Gage at Diversion Dam	2007	Complete Pedestrian Survey
Photovoltaic Pole at Middle Fork American River Gage below Oxbow Powerhouse	2007	Complete Pedestrian Survey
<b>Microwave Reflectors and Radio Towers</b>		
Passive Microwave Reflector Station above Middle Fork Interbay	2007	Complete Pedestrian Survey
Radio Communications Tower near French Meadows - Hell Hole Tunnel Gatehouse	2007	General Pedestrian Survey
Radio Communications Tower and Repeater near Hell Hole - Middle Fork Tunnel Surge Shaft and Tank	2007	Complete Pedestrian Survey

**Table CUL 1-1. Project Facilities Surveyed in 2006, 2007, and 2008 (continued).**

Project Facility	Year Surveyed	Survey Method
<b>Microwave Reflectors and Radio Towers (continued)</b>		
Passive Microwave Reflector Station above Ralston Afterbay	2007	Complete Pedestrian Survey
<b>Disposal Sites</b>		
Duncan Diversion Dam Sediment Disposal Area	2007	Complete Pedestrian Survey
North Fork Long Canyon Crossing Sediment Disposal Area	2008	Complete Pedestrian Survey
Middle Fork Interbay Sediment Disposal Area	2007	Complete Pedestrian Survey
Ralston Ridge Sediment Disposal Area	2007	Complete Pedestrian Survey
Indian Bar Sediment Disposal Area	2007	Complete Pedestrian Survey
<b>Ancillary Facilities</b>		
French Meadows Dam Generator Building	2007	General Pedestrian Survey
French Meadows Dam Staging Area	2007	Complete Pedestrian Survey
Dormitory Facility	2006	General Pedestrian Survey
Dormitory and Cottages Water Supply Tank	2006	General Pedestrian Survey
Hell Hole Staging Areas	2006	General Pedestrian Survey
Operator Cottages and Shop	2006	General Pedestrian Survey
Ralston Afterbay Dam Generator Building	2007	Visual Reconnaissance
Storage Building at Middle Fork - Ralston Tunnel Surge Shaft and Tank	2007	Visual Reconnaissance
Wabena Meadows Snow Course	2008	Complete Pedestrian Survey
Miranda Cabin Snow Course	2008	Complete Pedestrian Survey, except when inaccessible
Diamond Crossing Snow Course	2008	Complete Pedestrian Survey, except when inaccessible
Talbot Camp Snow Course	2008	Complete Pedestrian Survey
<b>Project Fences</b>		
<b>Slope Fences</b>		
French Meadows Powerhouse Penstock Rock Fence	2006	Visual Reconnaissance
French Meadows Powerhouse Slope Fence	2006	Visual Reconnaissance
Long Canyon Crossing Slope Fence	2007	Visual Reconnaissance
Middle Fork Powerhouse Upper Switchyard Slope Fence	2007	Visual Reconnaissance
Middle Fork Interbay Dam Slope Fence	2007	Visual Reconnaissance
Oxbow Powerhouse Slope Fence	2007	Visual Reconnaissance
Ralston Powerhouse Penstock and Butterfly Valve House Slope Fences	2007	Visual Reconnaissance
Ralston Powerhouse Slope Fence	2007	Visual Reconnaissance

**Table CUL 1-1. Project Facilities Surveyed in 2006, 2007, and 2008 (continued).**

<b>Project Facility</b>	<b>Year Surveyed</b>	<b>Survey Method</b>
<b>Project Fences (continued)</b>		
<b>Public Safety Fences</b>		
Dormitory Facility Barrier Fence	2006	General Pedestrian Survey
Hell Hole Dam General Parking Area Barrier Fence	2006	General Pedestrian Survey
North Fork Long Canyon Crossing Removable Section Barrier Fence	2007	Complete Pedestrian Survey
<b>Project Roads and Access Points</b>		
<b>Duncan Creek Area</b>		
Duncan Creek Diversion Intake Road and Diversion Pool Access Point	2007/2008	Complete Pedestrian Survey
Duncan Creek Diversion Dam Road	2007	Complete Pedestrian Survey
Duncan Creek Diversion Pool Road and Access Point	2007	Complete Pedestrian Survey
<b>French Meadows Area</b>		
Duncan Creek - Middle Fork Tunnel Portal Road and Spillway Access Point	2006	General and Complete Pedestrian Survey and Visual Reconnaissance
French Meadows - Hell Hole Tunnel Gatehouse Road	2006	General Pedestrian Survey
French Meadows Dam Outlet Works and Leakage Weirs Road	2007	Complete Pedestrian Survey
French Meadows Dam Staging Area Road	2007	Complete Pedestrian Survey
Middle Fork American River Gage and Weir below French Meadows Dam Road	2007	Complete Pedestrian Survey
<b>Hell Hole Area</b>		
Hell Hole Dam and Powerhouse Road and Spillway Southern Access Point	2006	Visual Reconnaissance.
Rubicon River Gage and Weir below Hell Hole Dam Road	2006	General Pedestrian Survey
Hell Hole Dam Leakage Weir Road	2006	General Pedestrian Survey
Hell Hole Dam Spillway Northern Access Point	2006	Mixed General Pedestrian Survey and Visual Reconnaissance
French Meadows - Hell Hole Tunnel Portal Road	2006	Mixed General and Complete Pedestrian Survey and Visual Reconnaissance
French Meadows Powerhouse Road	2006	Mixed Complete Pedestrian Survey and Visual Reconnaissance
Hell Hole - Middle Fork Tunnel Gatehouse Road	2006	Visual Reconnaissance

**Table CUL 1-1. Project Facilities Surveyed in 2006, 2007, and 2008 (continued).**

<b>Project Facility</b>	<b>Year Surveyed</b>	<b>Survey Method</b>
<b>Project Roads and Access Points (continued)</b>		
<b>Hell Hole Area(continued)</b>		
Dormitory Facility Road	2006	General Pedestrian Survey
Hell Hole Dam Spillway Discharge Channel Road	2008	Mixed Pedestrian Survey and Visual Reconnaissance
<b>Long Canyon Area</b>		
North Fork Long Canyon Diversion North Road	2007	Complete Pedestrian Survey
North Fork Long Canyon Diversion South Road	2008	Complete Pedestrian Survey
North Fork Long Canyon Diversion Drop Inlet Road	2008	Complete Pedestrian Survey
South Fork Long Canyon Diversion and Drop Inlet Road	2007	Complete Pedestrian Survey
North Fork Long Canyon Crossing Removable Section North Road and Parking Area	2007	Complete Pedestrian Survey
North Fork Long Canyon Crossing Removable Section South Road	2007	Complete Pedestrian Survey
<b>Middle Fork Interbay Area</b>		
Middle Fork Powerhouse Butterfly Valve House Road	2007	Complete Pedestrian Survey and Visual Reconnaissance
Middle Fork Powerhouse Penstock and Butterfly Valve House Road	2007	Visual Reconnaissance
Middle Fork Interbay Dam and Powerhouse Road and Interbay Access Points	2007	Mixed Complete Pedestrian Survey and Visual Reconnaissance
Middle Fork Powerhouse Upper Switchyard Road	2007	Visual Reconnaissance
<b>Ralston-Oxbow Area</b>		
Brushy Canyon Adit Road	2007	Complete Pedestrian Survey
Oxbow Powerhouse Road	2007	Complete Pedestrian Survey
Ralston Powerhouse Butterfly Valve House Road	2007	Visual Reconnaissance
Ralston - Oxbow Tunnel Intake Road	2007	Visual Reconnaissance
Ralston Afterbay Road and Boat Ramp	2007	Visual Reconnaissance
Ralston Afterbay Dam Road and Afterbay Access Point	2007	Complete Pedestrian Survey
Ralston Afterbay Sediment Removal Access Point	2007	Complete Pedestrian Survey
<b>Duncan Creek Area</b>		
Duncan Creek Diversion Dam North Trail	2007	Complete Pedestrian Survey
Duncan Creek Diversion Dam South Trail	2007	Complete Pedestrian Survey
Photovoltaic Poles and Powerline to Duncan Creek Gage above Diversion Dam Trail	2007	Complete Pedestrian Survey
Duncan Creek Gage and Weir above Diversion Trail	2007	Complete Pedestrian Survey
Duncan Creek Gage and Weir below Diversion Trail	2007	Complete Pedestrian Survey

**Table CUL 1-1. Project Facilities Surveyed in 2006, 2007, and 2008 (continued).**

Project Facility	Year Surveyed	Survey Method
<b>Project Roads and Access Points (continued)</b>		
<b>French Meadows Area</b>		
Middle Fork American River Gage and Weir below French Meadows Dam Trail	2007	Complete Pedestrian Survey
<b>Middle Fork Interbay Area</b>		
Middle Fork American River Gage above Middle Fork Powerhouse Trail	2007	Visual Reconnaissance
Passive Microwave Reflector Station above Middle Fork Interbay Trail	2007	Complete Pedestrian Survey
<b>Ralston Afterbay Area</b>		
Passive Microwave Reflector Station above Ralston Afterbay Trail	2007	Visual Reconnaissance
Middle Fork American River Gage below Oxbow Powerhouse Trail	2007	Complete Pedestrian Survey

**Table CUL 1-2. Project Recreation Facilities and Associated Features Surveyed in 2006, 2007, and 2008.**

<b>Project Recreation Facility or Feature</b>	<b>Date Surveyed</b>	<b>Survey Method</b>
<b>French Meadows Area</b>		
Ahart Campground	2007	Complete Pedestrian Survey
Coyote Group Campground	2006	Complete Pedestrian Survey
Poppy Campground	2006	General Pedestrian Survey
French Meadows Campground	2006	General Pedestrian Survey
Gates Group Campground	2007	Complete Pedestrian Survey
Lewis Campground	2006	General Pedestrian Survey
French Meadows Picnic Area	2006	General Pedestrian Survey
McGuire Picnic Area	2006	General Pedestrian Survey
French Meadows Boat Ramp	2006	General Pedestrian Survey
McGuire Boat Ramp	2006	General Pedestrian Survey
<b>Hell Hole Area</b>		
Big Meadows Campground	2007	Complete pedestrian survey and archaeological testing performed as part of campground rehabilitation project
Hell Hole Campground	2007	Complete Pedestrian Survey
Upper Hell Hole Campground	2006	General Pedestrian Survey
Hell Hole Vista	2007	Complete Pedestrian Survey
Hell Hole General Parking Area	2006	Mixed General and Complete Pedestrian Survey
Hell Hole Boat Ramp Parking Area	2006	General Pedestrian Survey
Hell Hole Boat Ramp	2006	Visual Reconnaissance
<b>Ralston Afterbay Area</b>		
Ralston Picnic Area	2007	Complete Pedestrian Survey
Ralston Picnic Area Cartop Boat Ramp	2007	Complete Pedestrian Survey
Indian Bar Rafting Access and General Parking	2007	Complete Pedestrian Survey
<b>Long Canyon Area</b>		
Middle Meadows Group Campground	2007	Complete Pedestrian Survey
<b>Project Recreation Facility Water Supplies and Associated Maintenance Trails</b>		
Dolly Creek Water Supply	2007	Complete Pedestrian Survey
French Meadows Campground Water Supply and Trail	2006, 2007, 2008	Mixed Complete Pedestrian Survey and Visual Reconnaissance
Big Meadows Campground Water Supply and Trail	2007, 2008	Complete Pedestrian Survey
Middle Meadows Group Campground Water Supply and Trail	2008	Complete Pedestrian Survey



**Table CUL 1-3. Dispersed Concentrated Use Areas Surveyed in 2006, 2007, and 2008.**

<b>Dispersed Concentrated Use Area</b>	<b>Year Surveyed</b>	<b>Survey Method</b>
<b>French Meadows Reservoir Area</b>		
Area near French Meadows-Hell Hole Tunnel Gatehouse	2006	General Pedestrian Survey
Area immediately downstream of French Meadows Dam (both sides of river)	2007	Mixed Complete Pedestrian Survey and Visual Reconnaissance
Area located immediately northwest of French Meadows Dam	2007	Mixed Visual Reconnaissance and Complete Pedestrian Survey
Area near bridge over the Middle Fork American River, upstream French Meadows Reservoir	2008	Complete Pedestrian Survey
<b>Duncan Creek Diversion Dam Area</b>		
Area on north side of Duncan Creek Diversion Dam	2007	Complete Pedestrian Survey
Area near Duncan Creek Gage and Weir, upstream of Duncan Creek Diversion Dam	2007	Complete Pedestrian Survey
Area near new bridge crossing Duncan Canyon on the road to the Grizzly, etc.	2008	Complete Pedestrian Survey
<b>Hell Hole Reservoir Area</b>		
Area on west side of Hell Hole Reservoir, between dam and Hell Hole Boat Ramp	2006	Mixed Visual Reconnaissance and General Pedestrian Survey
Grey Horse Area	2006	General Pedestrian Survey
<b>Long Canyon Area</b>		
Area surrounding South Fork Long Canyon Diversion Dam	2007	Complete Pedestrian Survey
Areas along South Fork Long Canyon Creek, downstream of South Fork Long Canyon Diversion Dam	2008	Complete Pedestrian Survey
<b>Middle Fork Interbay Area</b>		
Shoreline area surrounding Middle Fork Interbay	2007	Visual Reconnaissance
<b>Ralston Afterbay Area</b>		
Ralston Afterbay Sediment Disposal Area	2007	Complete Pedestrian Survey
Shoreline area surrounding Ralston Afterbay	2007	Visual Reconnaissance
Area along Middle Fork American River, between Ralston Picnic Area and the new gage	2007	Complete Pedestrian Survey
Area at confluence of North Fork of the Middle Fork American River and Middle Fork American River	2008	Visual Reconnaissance
Indian Bar, Willow Bar, and Junction Bar Areas	2007/2008	Complete Pedestrian Survey

**Table CUL 1-4. Project Facilities and Temporary Construction Areas Associated with MFP Proposed Betterments Surveyed during 2006, 2007, and 2008.**

Proposed Facility	Year Surveyed	Survey Method
<b>Hell Hole Reservoir Seasonal Storage Increase</b>		
<b>Hell Hole Dam</b>		
<b>Modified Facilities</b>		
Hell Hole Dam Spillway Crest Gates	2006	Visual Reconnaissance
Hell Hole Dam Parapet Walls	2006	Visual Reconnaissance
<b>New Facilities</b>		
Hell Hole Dam Spillway Crest Gates Control Building	2006	Visual Reconnaissance
Hell Hole Dam Spillway Crest Gates Control Building Powerline	2006	General Pedestrian Survey and Visual Reconnaissance
<b>Temporary Construction and Staging Areas</b>		
Hell Hole Dam Spillway Crest Gates Construction Road	2006	Visual Reconnaissance
Hell Hole Dam Spillway Crest Gates Construction Work Area	2006	Visual Reconnaissance
Hell Hole Dam Spillway Crest Gates and Control Building Construction Staging Area	2006	Visual Reconnaissance
Hell Hole Dam Parapet Wall Construction Staging and Work Area	2006	Visual Reconnaissance
Hell Hole Dam Spillway Crest Gates Control Building Construction Work Area	2006	Visual Reconnaissance
Hell Hole Dam Spillway Crest Gates Control Building Powerline Construction Work Area	2006	Mixed General Pedestrian Survey and Visual Reconnaissance
Hell Hole Dam Spillway Crest Gates Control Building Powerline Construction Staging Area	2006	Mixed General Pedestrian Survey and Visual Reconnaissance
<b>Hell Hole-Middle Fork Tunnel Gatehouse</b>		
<b>Modified Facilities</b>		
Hell Hole - Middle Fork Tunnel Gatehouse Parapet Wall	2006	Visual Reconnaissance
<b>Temporary Construction and Staging Areas</b>		
Hell Hole-Middle Fork Tunnel Gatehouse Parapet Wall Construction Staging and Work Area	2006	Visual Reconnaissance
<b>French Meadows Powerhouse</b>		
<b>Modified Facilities</b>		
French Meadows Powerhouse Parapet Wall	2006	Visual Reconnaissance.
<b>Temporary Construction and Staging Areas</b>		
French Meadows Powerhouse Parapet Wall Construction Staging and Work Area	2006	Visual Reconnaissance.

**Table CUL 1-4. Project Facilities and Temporary Construction Areas Associated with MFP Proposed Betterments Surveyed during 2006, 2007, and 2008 (continued).**

Proposed Facility	Year Surveyed	Survey Method
<b>Hell Hole Reservoir Seasonal Storage Increase (continued)</b>		
<b>South Fork Long Canyon Diversion</b>		
<b>Modified Facilities</b>		
South Fork Long Canyon Diversion Dam Crest Gates	2007	Complete Pedestrian Survey
<b>New Facilities</b>		
South Fork Long Canyon Diversion Dam Crest Gates Generator Building	2007	Complete Pedestrian Survey
<b>Temporary Construction and Staging Areas</b>		
South Fork Long Canyon Diversion Dam Crest Gates and Generator Building Construction Staging and Work Area	2007	Complete Pedestrian Survey
<b>French Meadows Powerhouse Capacity Upgrade</b>		
<b>French Meadows Reservoir</b>		
<b>Modified Facilities</b>		
French Meadows - Hell Hole Tunnel Intake Trash Rack		Not surveyed - area submerged
<b>Temporary Construction and Staging Areas</b>		
French Meadows - Hell Hole Tunnel Intake Trash Rack Construction Staging Area	2006	General Pedestrian Survey where not submerged
French Meadows - Hell Hole Tunnel Intake Trash Rack Construction Work Area	2006	General Pedestrian Survey where not submerged
French Meadows - Hell Hole Tunnel Intake Trash Rack Construction Road	2006	General Pedestrian Survey where not submerged
<b>French Meadows Powerhouse</b>		
<b>Modified Facilities</b>		
French Meadows Powerhouse Switchyard	2007	Visual Reconnaissance
<b>New Facilities</b>		
French Meadows Powerhouse	2007	Visual Reconnaissance
French Meadows Powerhouse Penstock	2007	Visual Reconnaissance
French Meadows - Hell Hole Tunnel Surge Shaft/Tank	2007/2008	Visual Reconnaissance
French Meadows - Hell Hole Tunnel Surge Pipeline	2007/2008	Visual Reconnaissance
French Meadows - Hell Hole Tunnel Surge Shaft or Pipeline Road	2007/2008	Complete Pedestrian Survey

**Table CUL 1-4. Project Facilities and Temporary Construction Areas Associated with MFP Proposed Betterments Surveyed during 2006, 2007, and 2008 (continued).**

Proposed Facility	Year Surveyed	Survey Method
<b>French Meadows Powerhouse Capacity Upgrade (continued)</b>		
<b>Temporary Construction and Staging Areas</b>		
French Meadows Powerhouse/Switchyard Construction Work Area	2006	Visual Reconnaissance.
French Meadows Powerhouse/Switchyard Construction Staging Area	2006	Visual Reconnaissance.
French Meadows Powerhouse Penstock Construction Work Area	2007	Visual Reconnaissance
French Meadows Powerhouse Penstock Construction Staging Areas	2007	Visual Reconnaissance
French Meadows - Hell Hole Tunnel Surge Shaft/Tank or Pipeline Construction Staging Areas	2008	Complete Pedestrian Survey
French Meadows - Hell Hole Tunnel Surge Shaft/Tank Construction Work Area	2008	Complete Pedestrian Survey
French Meadows - Hell Hole Tunnel Surge Pipeline Construction Work Area	2008	Complete Pedestrian Survey
French Meadows - Hell Hole Tunnel Surge Shaft or Pipeline Road Construction Staging and Work Area	2008	Complete Pedestrian Survey
<b>Non-Project Facilities Modified During Construction</b>		
Forest Road 14N09A	2007	Complete Pedestrian Survey
Forest Road 14N09A Construction Staging and Work Area	2007	Complete Pedestrian Survey
<b>Middle Fork Powerhouse</b>		
<b>Modified Facilities</b>		
Middle Fork Powerhouse Upper and Lower Switchyard	2007	Visual Reconnaissance
<b>Ralston Powerhouse Capacity Upgrade</b>		
<b>Ralston Powerhouse</b>		
<b>Modified Facilities</b>		
Ralston Powerhouse	2007	Complete Pedestrian Survey
<b>Temporary Construction and Staging Areas</b>		
Ralston Powerhouse Construction Staging Area	2007	Complete Pedestrian Survey

**Table CUL 1-5. Previous Studies Conducted within one mile of Snow Course Locations.**

Study	Citation	Year	Snow Course Location	Location	Within MFP Survey Area
NCIC 2057	Bell 1977	1977	Talbot Campground	Royal Gorge, T15N, R14E, S 3, 2	No
NCIC 2127	Gillett and Calvert 1999	1999	Talbot Campground	Royal Gorge, T15N, R14E, S 2	No
NCIC 2321	Smith 1997	1997	Talbot Campground	Royal Gorge, T15N, R14E, S 2	No
NCIC 2315	Gary 1993	1993	Talbot Campground	Royal Gorge, T15N, R14E, S 2	No
NCIC 1588	Ferrier 1994	1994	Talbot Campground	Royal Gorge, T16N, R14E, S 36	No
NA	Smith & Ruth 1993	1993	Talbot Campground	Royal Gorge, T15N, R14E, S 2	No
NA	Rogers 1996	1996	Talbot Campground	Royal Gorge, T15N, R14E, S 3, 2	No
NCIC 2322	Bystry 1997	1997	Wabena Meadows	Royal Gorge, T16N, R14E, S 21, 22	No
NCIC 8878	Smith 1989	1989	Wabena Meadows	Royal Gorge, T16N, R14E, S 28	No
NCIC 8879	Gillett and Levy 1994	1994	Wabena Meadows	Royal Gorge, T16N, R14E, S 28, 29	No
NA	Chandler 1992	1992	Wabena Meadows	Royal Gorge, T16N, R14E, S 28, 32, 33	Yes - located within 200 ft of snow course
NCIC 2311	Johnson 1977	1977	Diamond Crossing	Wentworth Springs, T15N, R15E, S 27, 28, 33	Yes - located within 200 ft of snow course
NA	Wohlgemuth, Tokutomi, Foote 1982	1982	Miranda Cabin	Wentworth Springs, T15N, R14E, S 23, 24, 25, 26, 35, 36	No
NCIC 2055	Levy 1992	1992	Miranda Cabin	Wentworth Springs, T15N, R14E, S 23	No
NCIC 793	Garcia 1998	1998	Miranda Cabin	Wentworth Springs, T15N, R14E, S 35	No

**Table CUL 1-6. Previously Recorded Resources Located within one mile of Snow Course Locations.**

Identifier	Type	Description	Snow Course Location	Location	Notes
CA-PLA-2033 (P-31-2956)	Prehistoric	Petroglyphs and Lithic Scatter	Miranda Cabin	Wentworth Springs, T15N, R14E, S 34	None
FS-05-17-54-257 (CA-PLA-2043, P-31-2970)	Prehistoric	BRM and Flake Scatter	Miranda Cabin	Wentworth Springs, T15N, R14E, S 36	None
FS-05-17-54-254 (CA-PLA-2044, P-31-2971)	Prehistoric	Flake Scatter	Miranda Cabin	Wentworth Springs, T15N, R14E, S 36	None
FS-05-17-57-254 (CA-PLA-2039H, P-31-2966)	Historic	Basque Tree Carvings	Diamond Crossing	Wentworth Springs, T15N, R15E, S 27	None
FS-05-17-54-496 (CA-PLA-2040H, P-31-2697)	Historic	Basque Tree Carvings	Diamond Crossing	Wentworth Springs, T15N, R15E, S 34	None
FS-05-17-57-498 (CA-PLA-2041, P-31-2968)	Prehistoric	Flake Scatter	Diamond Crossing	Wentworth Springs, T15N, R15E, S 27	None
FS-05-17-57-189 (CA-PLA-35, P-31-161)	Prehistoric	BRM and Occupation Site	Diamond Crossing	Wentworth Springs, T15N, R15E, S 33	None
FS-05-17-57-190 (CA-PLA-892, P-31-1068)	Prehistoric	BRM Site	Diamond Crossing	Wentworth Springs, T15N, R15E, S 34	None
FS-05-17-57-191 (CA-PLA-893H, P-31-1069)	Historic	Basque Tree Carvings	Diamond Crossing	Wentworth Springs, T15N, R15E, S 33	None
FS-05-17-57-106 (CA-PLA-885/H, P-31-1018)	Historic and Prehistoric	BRM and Occupation Site, Historic Trash Scatter	Wabena Meadows	Royal Gorge, T16N, R14E, S 28	Adjacent to but outside of Snow Course survey area.
FS-05-17-239 (CA-PLA-2118, P-31-3079)	Prehistoric	BRM and Flake Scatter	Talbot Campground	Royal Gorge, T15N, R14E, S 2	None

**Table CUL 1-6. Previously Recorded Resources Located within one mile of Snow Course Locations (continued).**

Identifier	Type	Description	Snow Course Location	Location	Notes
FS-05-17-54-240 (CA-PLA-2119, P-31-3080)	Prehistoric	Flake Scatter	Talbot Campground	Royal Gorge, T15N, R14E, S 2	None
FS-05-17-54-244 (CA-PLA-2121, P-31-3082)	Prehistoric	Flake Scatter and Temporary Campsite	Talbot Campground	Royal Gorge, T15N, R14E, S 2	None
FS-05-17-54-245 (CA-PLA-2122, P-31-3083)	Prehistoric	BRM Site and Flake Scatter	Talbot Campground	Royal Gorge, T15N, R14E, S 2	None
FS-05-17-54-246 (CA-PLA-2123, P-31-3084)	Prehistoric	BRM Site	Talbot Campground	Royal Gorge, T15N, R14E, S 3	None
FS-05-17-54-242 (CA-PLA-894, P-31-1070)	Prehistoric	Flake Scatter	Talbot Campground	Royal Gorge, T15N, R14E, S 2	None
FS-05-17-54-243 (CA-PLA-895, P-31-1071)	Prehistoric	Flake Scatter and Temporary Campsite	Talbot Campground	Royal Gorge, T15N, R14E, S 2	None
CA-PLA-920 (P-31-1096)	Prehistoric	Flake Scatter and Temporary Campsite	Talbot Campground	Royal Gorge, T15N, R14E, S 2	None
CA-PLA-921 (P-31-1097)	Prehistoric	BRM Site with Petroglyphs	Talbot Campground	Royal Gorge, T15N, R14E, S 2	None
CA-PLA-922 (P-31-1098)	Prehistoric	BRM Site	Talbot Campground	Royal Gorge, T15N, R14E, S 2	None
CA-PLA-922 (P-31-1098)	Prehistoric	BRM Site	Talbot Campground	Royal Gorge, T15N, R14E, S 2	None
CA-PLA-923 (P-31-1099)	Prehistoric	BRM Site	Talbot Campground	Royal Gorge, T15N, R14E, S 2	None
CA-PLA-924 (P-31-1100)	Prehistoric	BRM Site	Talbot Campground	Royal Gorge, T15N, R14E, S 2	None
CA-PLA-925 (P-31-1101)	Prehistoric	BRM Site	Talbot Campground	Royal Gorge, T15N, R14E, S 2	None
FS-05-17-54-399 (CA-PLA-929, P-31-1107)	Prehistoric	Flake Scatter	Talbot Campground	Royal Gorge, T15N, R14E, S 2	Not Eligible for the NRHP
P-31-1104	Prehistoric	BRM Site	Talbot Campground	Royal Gorge, T15N, R14E, S 2	None

**Table CUL 1-7. Summary of Previously Known Cultural Resources Examined in 2006, 2007, and 2008.**

Identifier	Type	Description	Year Surveyed	DPR 523 Form or other Record in Appendix B
<b>Eldorado National Forest</b>				
FS-05-03-53-04	Historic and Prehistoric	Bedrock Mortars, Mining Ditch, and historic trash scatter	2007	No - updated DPR 523 Form included in CUL 1 – Cultural Resources Technical Study Report - 2007
FS-05-03-53-64	Prehistoric	Bedrock Mortars, Flake Scatter	2007	No - updated DPR 523 Form included in CUL 1 – Cultural Resources Technical Study Report - 2007
FS-05-03-53-65	Prehistoric	13 BRMs 39 cups, 3 slicks, petroglyphs, dense lithic scatter. Also referred to as CA PLA 1863	2007, as part of a separate study	No - updated DPR 523 Form included in CUL 1 – Cultural Resources Technical Study Report - 2007
FS-05-03-55-201	Prehistoric	Bedrock milling features with pestles. Flake scatter originally recorded could not be relocated during 2008 surveys.	2006/2008	No - updated DPR 523 Form No - updated DPR 523 Form included in CUL 1 – Cultural Resources Technical Study Report - 2007
<b>Tahoe National Forest</b>				
FS-05-17-54-06	Prehistoric	Bedrock milling station and flake scatter. Not relocated during 2006 field work.	2006	No - original archaeological record included in CUL 1 – Cultural Resources Technical Study Report - 2007
FS-05-17-54-116	Prehistoric	Bedrock Mortars and Flake Scatter. Site boundaries expanded to include FS-05-17-54-370.	2007	No - updated DPR 523 Form included in CUL 1 – Cultural Resources Technical Study Report - 2007
FS-05-17-54-214	Historic	Remains of a structure and domestic debris	2007	No - updated DPR 523 Form included in CUL 1 – Cultural Resources Technical Study Report - 2007
FS-05-17-54-228	N/A	Natural depressions in rock originally mistaken for bedrock mortars	2006	No - DPR 523 Form included in CUL 1 – Cultural Resources Technical Study Report - 2007



**Table CUL 1-7. Summary of Previously Known Cultural Resources Examined in 2006, 2007, and 2008 (continued).**

Identifier	Type	Description	Year Surveyed	DPR 523 Form or other Record in Appendix B
<b>Tahoe National Forest (continued)</b>				
FS-05-17-54-370	Prehistoric	Flake scatter, subsumed into FS-05-17-54-116	2007	No - updated DPR 523 Form included in CUL 1 – Cultural Resources Technical Study Report - 2007
FS-05-17-54-400	Prehistoric	Bedrock mortar	2007	No - updated DPR 523 Form included in CUL 1 – Cultural Resources Technical Study Report - 2007
FS-05-17-54-445	Historic	Mining ditch. (Lambert Ditch). Also crosses land managed by the ENF where it is identified as FS-05-03-53-237.	2007	No - updated DPR 523 Form included in CUL 1 – Cultural Resources Technical Study Report - 2007
FS-05-17-54-466	Historic	Mining site	2007	No- USDA Primary Record included in CUL 1 – Cultural Resources Technical Study Report - 2007
FS-05-17-54-467	Prehistoric	Possible house pit. Ambiguous and may not be an archaeological feature.	2007	No - updated DPR 523 Form included in CUL 1 – Cultural Resources Technical Study Report - 2007
FS-05-17-54-468	Prehistoric	Previously identified as a natural feature, re-evaluated as a possible mortar in 2008.	2007/2008	Yes - updated DPR 523 Form included in this report based on 2008 survey
FS-05-17-54-476	Historic	Mining ditch. (Ralston Ditch). Also crosses land managed by the ENF where it is identified as FS-05-03-53-67.	2006/2007	No - DPR 523 Form included in CUL 1 – Cultural Resources Technical Study Report - 2007
P-31-1252	Prehistoric	Bedrock mortar in boulder. Not considered an archaeological site because it is out of context.	2007	No- USDA Primary Record included in CUL 1 – Cultural Resources Technical Study Report - 2007
True Sites 1218, 1219, 1120	Historic	Previously reported by True et al (1978) but not formerly recorded. Could not be relocated during field surveys.	2007	No - no record available

**Table CUL 1-8. Summary of Previously Unknown Cultural Resources Identified in 2006, 2007 and 2008.**

Forest Service Number	Field Identifier	Type	Description	Year Surveyed	DPR 523 Form in Appendix B
<b>Eldorado National Forest</b>					
FS-05-03-53-371	PL-04	Historic	Dirt road and bridge footings. Previously reported by PAR Environmental as site MFAR-ISO-1 but not formerly recorded.	2007	No - DPR 523 Form included in CUL 1 – Cultural Resources Technical Study Report - 2007
FS-05-03-53-372	PL-06	Historic	Mining settlement - Rackerby's site H-25 but never formerly recorded.	2007, 2008	Yes – updated based on 2008 survey
FS-05-03-53-373	PL-08	Historic	Road	2007	No - DPR 523 Form included in CUL 1 – Cultural Resources Technical Study Report - 2007
FS-05-03-53-374	PL-10	Historic	Mining ditch	2007	No - DPR 523 Form included in CUL 1 – Cultural Resources Technical Study Report - 2007
FS-05-03-53-375	PL-11	Prehistoric	Bedrock Mortar	2007	No - DPR 523 Form included in CUL 1 – Cultural Resources Technical Study Report - 2007
FS-05-03-55-681	PL-01	Prehistoric and Historic	Sparse lithic scatter and a tobacco tin	2006	No - updated DPR 523 Form included in CUL 1 – Cultural Resources Technical Study Report - 2007
None	PL-16	Historic	Mining Ditch Segment	2008	Yes
None	PL-19	Unknown	Old Fire Ring. Age is unclear.	2008	Yes
None	PL-20	Unknown	Possible Mining Ditch	2008	Yes
None	PL-22	Prehistoric	Petroglyph Site	2008	Yes

**Table CUL 1-8. Summary of Previously Unknown Cultural Resources Identified in 2006, 2007 and 2008 (continued).**

Forest Service Number	Field Identifier	Type	Description	Year Surveyed	DPR 523 Form in Appendix B
<b>Eldorado National Forest</b>					
None	ISO-03	Prehistoric	Basalt Flake	2007	No - DPR 523 Form included in CUL 1 – Cultural Resources Technical Study Report - 2007
None	ISO-06	Prehistoric	Three Chert Flakes	2008	Yes

<b>Tahoe National Forest</b>					
FS-05-17-54-478	PL-05	Historic	Mining ditch - Possibly Rackerby's site H-1 but never formerly recorded.	2007	No - DPR 523 Form included in CUL 1 – Cultural Resources Technical Study Report - 2007
FS-05-17-54-479	PL-07	Historic	Road	2007	No - DPR 523 Form included in CUL 1 – Cultural Resources Technical Study Report - 2007
FS-05-17-54-480	PL-12	Historic	Mining ditch	2007	No - DPR 523 Form included in CUL 1 – Cultural Resources Technical Study Report - 2007
FS-05-17-54-481	PL-13	Historic	Stream diversion berm	2007	No - DPR 523 Form included in CUL 1 – Cultural Resources Technical Study Report - 2007
None	PL-02	N/A	Previously recorded as a ditch segment, re-evaluated and determined to be a recent feature.	2007, 2008	No - DPR 523 Form included in CUL 1 – Cultural Resources Technical Study Report - 2007

**Table CUL 1-8. Summary of Previously Unknown Cultural Resources Identified in 2006, 2007 and 2008 (continued).**

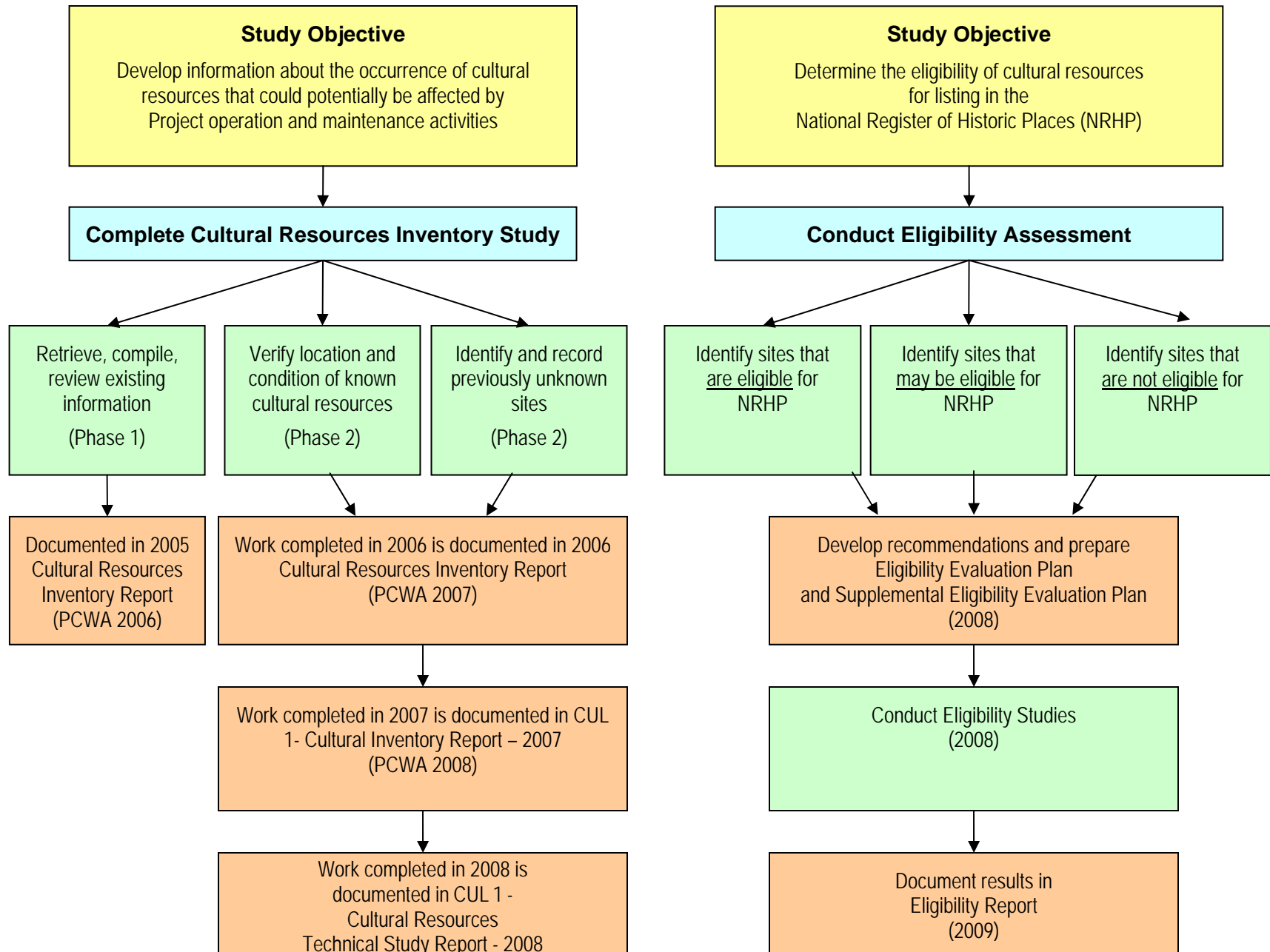
Forest Service Number	Field Identifier	Type	Description	Year Surveyed	DPR 523 Form in Appendix B
<b>Tahoe National Forest (continued)</b>					
None	PL-14	Historic	Mining Ditch Segment.	2008	Yes
None	PL-15	Historic	Historic Can and Debris Scatter.	2008	Yes
None	PL-23	Unknown	Possible mine tailings on north side of American River.	2008	Yes.
None	ISO-04	Prehistoric	Basalt Flake	2007	No - DPR 523 Form included in CUL 1 – Cultural Resources Technical Study Report - 2007
None	ISO-05	Historic	Mining Adit	2007	No - DPR 523 Form included in CUL 1 – Cultural Resources Technical Study Report - 2007
None	ISO-07	Prehistoric	Basalt Flake	2008	Yes
None	ISO-09	Historic	Metal debris	2008	Yes
None	ISO-11	Prehistoric	Chert Chunk	2008	Yes
<b>Other Public or Private</b>					
N/A Private property	PL-03	Historic	Mining site - consists of tailings piles, several trash scatters, and building foundations.	2007	No - DPR 523 Form included in CUL 1 – Cultural Resources Technical Study Report - 2007
N/A Lone Star Timber property	PL-17	Unknown	Old Dirt Road. Age is unclear.	2008	Yes

**Table CUL 1-8. Summary of Previously Unknown Cultural Resources Identified in 2006, 2007 and 2008 (continued).**

Forest Service Number	Field Identifier	Type	Description	Year Surveyed	DPR 523 Form in Appendix B
<b>Other Public or Private (continued)</b>					
N/A PCWA property	PL-21	Unknown	Abandoned Dirt Road. Age is unclear.	2008	Yes
N/A PCWA property	ISO-01	Prehistoric	Basalt core	2006	No - DPR 523 Form included in CUL 1 – Cultural Resources Technical Study Report - 2007
N/A PCWA property	ISO-02	Prehistoric	Isolated artifact - basalt uniface	2006	No - DPR 523 Form included in CUL 1 – Cultural Resources Technical Study Report - 2007
N/A Sierra Pacific Industries property	ISO-10	Prehistoric	Basalt Flake	2008	Yes

**FIGURE**

**Figure 1. CUL 1 – Cultural Resources Study Objectives and Related Study Elements and Reports.**



**MAPS**



**Privileged Information**

**APPENDIX A**

**Resource Location Maps – Map CUL 1-4 (includes 6 sheets)**

**Cultural Resources Identified in 2006, 2007, and 2008**

The Resource Location Maps have been removed from this document because they contain the location(s) of sensitive cultural resources and are considered "privileged" information. Privileged cultural resources information is located in Volume 5 which may not be made available to the public pursuant to the Federal Energy Regulatory Commission's (FERC's) regulations contained in 36 CFR 800.11(c)(1). This information is not maintained in FERC's Public Reference Room or on the Commission's electronic library except as an indexed item.

**Privileged Information**

**APPENDIX B**

**Department of Parks and Recreation (DPR) Forms and other Records**

The Department of Parks and Recreation (DPR) Forms and other Records have been removed from this document because they contain the location(s) of sensitive cultural resources and are considered "privileged" information. Privileged cultural resources information is located in Volume 5 which may not be made available to the public pursuant to the Federal Energy Regulatory Commission's (FERC's) regulations contained in 36 CFR 800.11(c)(1). This information is not maintained in FERC's Public Reference Room or on the Commission's electronic library except as an indexed item.