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8.12 CULTURAL RESOURCES ENVIRONMENTAL EFFECTS

This section describes the potential impacts to cultural resources under the Proposed Action for the Middle Fork American River Project (MFP or Project). Cultural resources include any prehistoric or historic object, site, district, structure, or building created or modified by human activity. Potential impacts to tribal resources, including potential traditional gathering areas are addressed in Section 8.13. Section 4.0 – Proposed Action (including Tables 4-4, 4-5, and 4-6) provides a description of routine operation and maintenance activities to be implemented under the Proposed Action compared to the No-Action Alternative. Appendix A – Modified or New Facilities Construction Activities and Concept Designs includes a description of facility modification and construction activities to be implemented under the Proposed Action.

Placer County Water Agency (PCWA) delineated the Area of Potential Effects (APE) in consultation with the resource agencies, Native American Tribes, and the State Historic Preservation Officer (SHPO). During the relicensing studies, PCWA identified four properties (sites) located within the APE that are eligible for inclusion on the National Register of Historic Places (NRHP). These four sites are located within or near Project recreation facilities. In addition, one site is located within the inundation area of a Project reservoir. Information that identifies the specific location of these sites is considered privileged information (confidential) and, therefore, is not provided in this section. Privileged information, including site-specific descriptions and environmental measures for the cultural resources in the vicinity of the MFP can be found in the Final Cultural Resources Technical Study Reports (TSR) (PCWA 2011a, 2011b, and 2011c; Supporting Document [SD] D) and Draft Historic Properties Management Plan (HPMP) (PCWA 2011d; SD E). These supporting documents will not be made available to the public or posted on the internet.

This section describes how the following activities could potentially affect the NRHP-eligible sites that were identified during the relicensing studies:

- Recreation use;
- Project recreation facility maintenance;
- Project operations that effect water surface elevations (WSE); and
- Modified or new Project facility construction.

For the purposes of this discussion, effects that alter the characteristics of a site are considered to be “adverse.” “Adverse Effects” as defined in 36 Code of Federal Regulation (CFR) Part 800.5 include physical destruction or damage to an historic property; change of the character of the historic property’s use or its physical features; introduction of visual elements that diminish the integrity of a historic property’s significant features; and/or neglect of a historic property, which causes its deterioration.

Under the Proposed Action, PCWA will implement a Draft HPMP (PCWA 2011d; SD E), which provides management measures for NRHP-eligible sites within the MFP APE. The Draft HPMP included in SD E of this License Application reflects PCWA's consultation with the State Historic Preservation Officer (SHPO), Native American Tribes, United States Department of Agriculture-Forest Service (USDA-FS), and other relicensing participants throughout the relicensing process regarding the identification and resolution of impacts to cultural resources for the MFP. The goal of the Draft HPMP is to manage Project-related activities to protect NRHP-eligible resources from any effects that could alter the characteristics that make them eligible for inclusion on the NRHP. The Draft HPMP provides specific measures that will be implemented under the Proposed Action to avoid damage or disturbance to the four NRHP-eligible sites. In addition, the Draft HPMP includes measures to: (1) protect one site located near a Project road identified by the Colfax Todd Valley Consolidated Tribe (CTVCT); and (2) manage MFP maintenance activities (specifically vegetation and integrated pest management) in the vicinity of potential (currently unidentified) traditional gathering areas. These measures are discussed in Section 8.13 and are, therefore, not discussed further in this section.

8.12.1 Recreation Use

The four NRHP-eligible sites are located within or near Project recreation facilities. Recreation use of the Project recreation facilities is generally low (PCWA 2011e; SD B) and is not expected to substantially change under the Proposed Action. However, recreation use could potentially affect the NRHP-eligible sites. Typical recreation-related effects may include:

- Inadvertent trampling or damage of the resource by recreation visitors;
- Intentional vandalism of cultural site features by recreation visitors; or
- Removal of artifacts by recreation visitors.

The Proposed Action includes specific actions that will be implemented to help protect the NRHP-eligible sites from potential impacts associated with recreation use, as follows:

- One campground will be removed due to low-use levels and to protect nearby environmental and cultural resources.
- Another campground will be reduced in size due to low-use levels and to protect nearby environmental and cultural resources. Barrier fencing will be installed to limit use to an area where cultural resources are not present.

The Proposed Action also includes a public education component, which is described in PCWA's Draft HPMP (PCWA 2011d; SD E). Under the Proposed Action, PCWA will develop information posters that will be placed at existing information boards at Project-related facilities. These posters will focus on educating recreation users about the laws

and regulations pertaining to the protection of cultural resources. Therefore, implementation of the Proposed Action will reduce potential impacts associated with recreation use.

8.12.2 Project Recreation Facility Maintenance

Two NRHP-eligible sites are located within the boundaries of developed Project recreation facilities. Cultural resources located within the boundaries of developed Project recreation facilities could potentially be affected by activities related to operation and maintenance of those facilities. Maintenance of the Project campgrounds is the responsibility of PCWA, but is currently carried out by the USDA-FS or their concessionaires, with funds provided by PCWA.

Operation and maintenance activities include “annual” maintenance and “heavy maintenance.” Annual maintenance typically includes activities such as patrol, clean up, signing, toilet pumping, and water testing. These activities do not involve ground-disturbing activities, will not affect cultural resources and are, therefore, not discussed further.

Heavy maintenance includes anything beyond normal, annual maintenance, and may include: reconstruction, replacement and/or repair of facilities and infrastructure including roads, water systems, sanitation systems, buildings, and boat ramps. These activities sometimes involve ground disturbance. Potential effects related to heavy maintenance of developed Project recreation facilities may include:

- Inadvertent trampling of cultural site features or artifacts by construction workers and equipment;
- Removal of artifacts by construction personnel; or
- Inadvertent damage or removal of cultural site features or artifacts during construction activity.

The Proposed Action includes the following specific measures to help protect cultural resources from potential impacts associated with Project recreation facility maintenance. These measures are specified in the Draft HPMP (PCWA 2011d; SD E).

- An Employee Resource Awareness Training Program including: (1) annual training; (2) informational materials; and (3) field meetings.
- Avoidance measures including:
 - **Design.** Any heavy maintenance activities or campground rehabilitation efforts will be designed in consultation with the USDA-FS to avoid eligible cultural resources.
 - **Buffers.** Prior to any construction and/or ground-disturbing activities, a buffer of at least 30 feet (approximately 10 meters) will be established around the

features associated with eligible sites. The buffer will protect the site from direct or indirect Project-related activities, such as rehabilitation of campground facilities, reconfiguration of campground facilities, maintenance of campground facilities, and vegetation management.

- Monitoring during heavy maintenance activities at Project recreation sites including notification to tribes prior to conducting any construction or ground-distributing activities at or near one of the four NRHP-eligible sites.

Therefore, with these measures, the NRHP-eligible sites that are located within or adjacent to recreation facilities will not be impacted by implementation of the Proposed Action.

8.12.3 Project Operations (Water Surface Elevations)

One NRHP-eligible site is located within the inundation zone of a Project reservoir. The site could be affected by:

- Wave action (erosion);
- Deterioration as the site is exposed and submerged; or
- Vandalism or damage by recreational boaters when exposed, particularly when water levels are near or just below the elevation of the site.

This reservoir will be operated similar under the Proposed Action and the No-Action Alternative, with minor changes in WSE occurring on a seasonal basis depending upon water year type. Therefore, implementation of the Proposed Action will have no effect on this resource compared to the No-Action Alternative. However, the Proposed Action includes the following measures that will be implemented at this reservoir:

- An additional survey (once over the term of the next license) will be conducted within the inundation area of the Project reservoir when WSE reaches a specified level to determine whether additional cultural resources are present. Native Americans will be invited to participate in the survey.
- In the unlikely event that the reservoir is drawn down below the minimum pool elevation, PCWA will survey the areas of the bottom of the reservoir that have not been previously surveyed for cultural resources.

The purpose of these surveys is to determine whether additional cultural resources are present in areas of the reservoir that are usually submerged. The survey will provide data related to the prehistoric and historic use of the area around the reservoir, and may provide additional insight regarding the NRHP-eligible site.

8.12.4 Existing Facility Modification and Construction of New Facilities

As discussed in Section 4.0, the Proposed Action includes modifications to existing Project facilities and construction of new Project facilities, including:

- Hell Hole Reservoir Seasonal Storage Increase Improvements;
- Small Diversion Modifications; and
- Outlet Works Modifications.

These facilities and the area within 200 feet of these facilities, and the construction and staging areas associated with the Hell Hole Reservoir Storage Increase Improvement, are located within the APE and were surveyed for cultural resources as part of the MFP relicensing studies. There are no NRHP-eligible sites located in areas where construction activity is proposed (modified/new Project facilities). Therefore, the modification of existing Project facilities and the construction of new Project facilities will have no effect on NRHP-eligible sites.

8.12.5 Additional Measures to Protect Cultural Resources

In addition to the measures described above, the Proposed Action includes the following measures that will be implemented to help protect the four NRHP-eligible resources identified in the Draft HPMP (PCWA 2011d; SD E).

- **Site Condition Monitoring.** Cultural resource site condition monitoring including conducting surveys of the four NRHP-eligible sites will be conducted once every five years to monitor the condition of the four NRHP-eligible sites over time. Native American Tribes will be notified and invited to participate in site monitoring activities. If adverse impacts are identified through these monitoring efforts, PCWA will consult with the USDA-FS, SHPO, and Native American Tribes, as appropriate, to identify and design measures that address the specific nature of the effect.
- **Identification of Site Damage.** The USDA-FS will be immediately notified if damage to a site is identified during site-condition monitoring or during routine Project operation and maintenance activities. Site damage will be assessed using Archeological Resources Protection Act of 1979 (ARPA) guidelines. Appropriate management measures will be identified in consultation with the USDA-FS and Native American Tribes.

The Draft HPMP also includes management measures that are designed to identify and protect currently unknown cultural resources that may be present in the vicinity of the MFP. Management measures include:

- Implementation of procedures for addressing new projects that were not part of the MFP as described under the Section 4.0 – Proposed Action.

- Treatment of human remains uncovered during Project-related activities will be addressed following the Native American Graves Protection and Repatriation Act (NAGPRA) guidelines, Eldorado National Forest (ENF) and Tahoe National Forest (TNF) NAGPRA plans, and California Health and Safety Code (CHSC) Section 7050.5(b).
- Procedures for inadvertent discoveries include notifying cultural resources staff of the ENF or TNF, implementation of management measures that all parties deem feasible and appropriate such as, avoidance, preservation in place, excavation, documentation, curation, data recovery, or other appropriate measures.
- Requirements that future project activity, not included in Section 4.0 – Proposed Action and evaluated in Federal Energy Regulatory Commission's (FERC) National Environmental Policy Act (NEPA) document for the MFP, will require separate environmental review.

8.12.6 Conclusions—Cultural Resources

Four NRHP-eligible properties are located within the APE of the MFP. These properties have high cultural and research values and could be affected by recreation use, Project recreation facility maintenance, and Project operations. However, the Proposed Action includes a Draft HPMP that contains management measures that will be implemented to protect NRHP-eligible resources from any effects that could alter the characteristics that make them eligible for inclusion on the NRHP. These measures include:

- Implementation of an Employee Resource Awareness Training Program;
- Implementation of a public education program;
- Avoidance measures, including design measures and the establishment of buffers during ground-disturbing activities;
- Resource condition monitoring and specific provisions that will be implemented if damage to an NRHP-eligible site is identified;
- Additional surveys;
- Increased involvement by Native American Tribes; and
- Contingency measures and procedures that will be implemented in the event a currently unknown cultural resource is identified.

Implementation of these measures will enhance management of cultural resources in the MFP APE.

8.12.7 Unavoidable Adverse Effects

The Draft HPMP includes specific measures that are designed to avoid adverse impacts to the four NRHP-eligible sites located within the MFP APE. Therefore, implementation of the Proposed Action will not result in unavoidable adverse impacts.

Regardless, the Draft HPMP includes specific measures that will be implemented in the event that adverse impacts to an NRHP-eligible site are identified through: (1) site monitoring activities during ground disturbing activities; or (2) periodic site condition monitoring. As specified in the Draft HPMP, the USDA-FS will immediately be notified if damage to a site is identified during routine Project operation and maintenance activities or during site condition monitoring. Site damage will be assessed using ARPA guidelines and site documentation will be provided to the USDA-FS and SHPO. Appropriate management measures will be identified in consultation with the USDA-FS and Native American Tribes.

LITERATURE CITED

- Placer County Water Agency (PCWA). 2011a. CUL 1 – Cultural Resources Technical Study Report (2007). Available in PCWA’s Application for New License – Supporting Document D.
- _____. 2011b. CUL 1 – Cultural Resources Technical Study Report (2008). Available in PCWA’s Application for New License – Supporting Document D.
- _____. 2011c. CUL 1 – Cultural Resources National Register of Historic Places Eligibility Report. Available in PCWA’s Application for New License – Supporting Document D.
- _____. 2011d. Draft Historic Properties Management Plan. Available in PCWA’s Application for New License – Supporting Document E.
- _____. 2011e. REC 1 – Recreation Use and Facilities Technical Study Report. Available in PCWA’s Application for New License – Supporting Document B.