

3. Cultural Resources

3.1 Overview

This section describes the cultural resources found in the New Melones Lake Area. This section has been organized into the following subsections:

- **Prehistoric Resources.** Any material remains, structures, and items used or modified by people before Europeans established a presence in the region.
- **Historic Resources.** Any material remains and the landscape alterations that have occurred since the arrival of Europeans in the region.
- **Traditional Cultural Properties/Sacred Sites.** Traditional cultural properties and sacred sites are places associated with the cultural practices or beliefs of a living community.

3.1.1 Introduction

Cultural resources are locations of human activity, occupation, or use. They include expressions of human culture and history in the physical environment, such as prehistoric or historic archaeological sites, buildings, structures, objects, districts, or other places. Cultural resources can also include natural features that are considered to be important to a culture, subculture, or community or that allow the group to continue traditional lifeways and spiritual practices. Extensive archaeological resource studies were conducted prior to constructing New Melones Dam and filling the lake.

Although cultural resources have been organized into prehistoric resources, historic resources, and traditional cultural properties, these types are not exclusive, and a single cultural resource may have multiple components. Native American use of the lands and resources in the New Melones Lake planning area continued into the historic period. Traditional cultural properties are places associated with the cultural practices or beliefs of a living community. These sites are rooted in the community's history and are important in maintaining cultural identity. Examples of traditional cultural properties for Native Americans can include natural landscape features, places used for ceremonies and worship, places where plants are gathered to be used in traditional medicines and ceremonies, and places where artisan materials are found.

The New Melones Lake Area contains at least 627 historic and prehistoric archaeological sites referred to collectively as the New Melones Archaeological District. An archaeological district is a grouping of sites that are linked by common components or location and are collectively eligible for listing on the National Register of Historic Places (NRHP). Reclamation, in consultation with the California Office of Historic Preservation, applies the National Register criteria to assess the eligibility of identified properties. A district can include sites that would meet the NRHP eligibility criteria as individual properties as well components that are not

individually significant. As a type of historic property, an archaeological district is subject to the Section 106 process that requires Federal agencies to take into account the effects of their actions or actions that they permit, license, or approve on any district, site, object, building, or structure included in, or eligible for inclusion in, the NRHP (36 CFR 800). This process does not require that all historic properties be preserved, but does ensure that Federal agency decisions concerning the treatment of these resources result from meaningful consideration of cultural and historic values, and identification of options available to protect the resources.

Although none of these sites have been designated as traditional cultural properties, some of these sites hold cultural significance to local tribes and there are likely other locations that are not identified in the archaeological records that may be important to Native American communities. Documented site types include prehistoric habitation sites, bedrock mortars, petroglyphs, lithic quarries, and caves, and historic mines, rail and wagon roads, homesteads, mills, and townsites. These properties and other types of cultural resources range from ancient hunting camps to nineteenth-century gold mining boomtowns together representing approximately 10,000 years of human activity (Moratto et al. 1988). The planning area also includes an onsite artifact curation facility that holds material from studies conducted at New Melones and other Reclamation projects.

The cultural resource studies that led to identifying, recording, and limited excavating of archaeological sites were completed as part of NHPA compliance in anticipation of the filling of New Melones Lake. This included excavation and further study that was part of mitigation for adverse effects to historic properties associated with the project. Thus the most important factor affecting the current condition, preservation, access, and availability of these resources for study and interpretation is lake levels. Table R-9 outlines the distribution of recorded sites with reference to lake levels [Note: this is information from the 1988 NRHP nomination form and may not be the most current data]. Sites that have been totally inundated in the permanent pool are generally considered unavailable for further interpretation or study due to their lack of accessibility. Reclamation and the Corps of Engineers have effectively mitigated for the potential loss of integrity and setting for these sites as part of the New Melones cultural resource studies. Sites entirely or partially within the fluctuating pool have been subject to wave action, erosion from cyclical inundation, and exposure. Sites in this zone are also most susceptible to damage from lakeside recreational use and vandalism. Sites above the flood zone, including caves, are generally more accessible due to boat access than they were prior to filling the lake but have not been subject to the level of impacts of those in the other zones. Impacts have been caused by erosion, construction, recreational use and vandalism.

Preliminary inventories in compliance with the Native American Graves Protection and Repatriation Act (NAGPRA) of collections curated at New Melones were conducted, although more detailed inventories are needed and the facility itself would require upgrades to meet Federal curation standards as set forth in 36 CFR Part 79, Curation of Federally-Owned and Administered Archeological Collections.

Table R-9: Distribution of Archaeological Sites by Lake Elevation Zones

Number of Recorded Sites	Lake Level Zone	Elevation Range (feet)
122	Sites located in the permanent pool only	Less than 808 amsl ¹
33	Sites located partly in the permanent pool and partly within the fluctuating pool	Less than 808 amsl to 1,088 amsl
232	Sites located within the fluctuating pool only	From 808 amsl to 1,088 amsl
24	Sites located partly in the fluctuating pool and partly above the flood pool	From 808 amsl to Greater than 1,088 amsl
203	Sites located above the flood pool only	Greater than 1,088 amsl
5	Sites that include portions in all zones	From less than 808 amsl to greater than 1,088 amsl
8	Elevation uncertain	

¹Above Mean Sea Level.
Source: Moratto et al. 1988

(**Note:** The number of cultural resource sites recorded for New Melones Lake varies depending on the reference consulted (bibliography reference). The number of sites described here are the best available statistics at this time. Source documents will be reviewed as part of the ongoing RMP/EIS analysis to resolve these discrepancies.)

3.1.2 Current Management of Cultural Resources

Cultural resources are managed in accordance with the regulations and agreements described below in Section 3.1.3. To accomplish this, Reclamation has implemented management strategies derived from decision documents including the 1976 Master Plan and various Reclamation internal directives, and from non-decision internal guidance sources such as the 1995 Draft RMP and the 2006 Fire Management Plan. Those management strategies are described in tables for each subsection, below.

Current management strategies for all cultural resources are listed in Table R-10 below. Management strategies for specific cultural resource categories appear in the respective sections.

Table R-10: Summary of Current Decisions and Guidance for Cultural Resources

Decision	Source
<p>Reclamation will manage cultural resources in the New Melones Project Area as called for in the Memorandum of Agreement (MOA) for the New Melones Project, Reclamation Policy and Directives and Standards for Cultural Resources Management and the Inadvertent Discovery of Human Remains on Reclamation Lands, Department of the Interior Departmental Manual 411, the National Historic Preservation Act, the Archaeological Resources Protection Act, the Native American Graves Protection and Repatriation Act, 36 CFR Part 800, 36 CFR Part 60, 36 CFR Part 79, and 43 CFR Part 10.</p>	<p>Reclamation Manual LND P01 Reclamation Manual LND 02-01 Reclamation Manual 07-01 DOI 411 DM 1-3 National Historic Preservation Act Archaeological Resources Protection Act Native American Graves Protection and Repatriation Act</p>
<p>Whenever possible, protect historic properties by avoidance through Reclamation's planning process.</p>	<p>Reclamation Manual LND P01</p>
<p>For site-specific projects, consider the effects to cultural resources through implementation of the Section 106 process of the National Historic Preservation Act (NHPA), Archeological Resources Protection Act (ARPA), and the Native American Graves Protection and Repatriation Act (NAGPRA).</p>	<p>National Historic Preservation Act 36 CFR Part 800 Archaeological Resources Protection Act Native American Graves Protection and Repatriation Act</p>
Internal Guidance	Source
<p>Complete electronic data base and GIS mapping of known cultural resources.</p>	<p>DRMP 1995</p>
<p>Promote protection of cultural resources through visitor education and public outreach.</p>	<p>DRMP 1995</p>
<p>Provide protective signs, educational printed handouts, interpretative programs, and ranger interface with the public to explain the values of cultural resources.</p>	<p>DRMP 1995</p>
<p>Protect historic properties through the use of protective fencing, coverings, and exclusion, as applicable.</p>	<p>DRMP 1995</p>
<p>Protect historic properties through ranger patrol.</p>	<p>DRMP 1995</p>
<p>Permitting for cultural resources survey and excavation will be processed by Reclamation's Regional Office.</p>	<p>DRMP 1995</p>
<p>Interpret selected sites for the education and enjoyment of the general public; give priority to sites within public use areas in proximity to special geologic, cultural, or natural features; and give special attention to public use areas being degraded through natural or human impacts.</p>	<p>DRMP 1995</p>
<p>Produce scientifically accurate and culturally sensitive cultural resources displays and brochures.</p>	<p>DRMP 1995</p>

Internal Guidance	Source
Continue to operate the visitor center and maintain cultural resources interpretive displays.	DRMP 1995
Minimize publicity and access to sensitive cave locations; avoid constructing trails to caves and install gates where necessary for conservation purposes.	New Melones Lake Revised Cave Management Plan. 1996
Require permits and review for all research projects within and around cave resources.	New Melones Lake Revised Cave Management Plan. 1996
Avoid all known historic properties. Avoidance means that no activities associated with the Proposed Action that may adversely affect historic properties will occur within site boundaries. Portions of the Proposed Action may need to be modified, redesigned, or eliminated to properly avoid historic properties. When changes in proposed activities (e.g., project modifications) are necessary to avoid historic properties, these changes would be completed before initiating any activities.	Draft Peoria EA 2006
For all actions proposed under the draft Peoria Wildlife Management Area Plan alternatives: If buried cultural resources, such as chipped or ground stone, historic debris, building foundations, or bone, are discovered during ground-disturbing activities, all work in that area and within 100 feet of the find would be stopped immediately until a Reclamation archaeologist can assess the significance of the find and, if necessary, develop appropriate treatment and avoidance measures in consultation with SHPO. Complete Section 106 prior to initiating any ground-disturbing actions under the Peoria Wildlife Management Area Plan. No construction related to the Peoria Wildlife Management Area Plan can be implemented until a Section 106 consultation is completed.	Draft Peoria EA 2006
Protect sensitive cultural resources by using Minimum Impact Suppression Tactics (MIST) and by coordinating with a Cultural Resource Advisor during fire suppression activities. Such activities must be coordinated with Reclamation cultural resources staff.	DFMP 2006
In emergency circumstances, where heavy equipment was employed without prior on-site coordination, Reclamation will conduct post-fire archaeological evaluations to assess and document equipment damage to cultural resources. Damage assessments and possible mitigation work may be required.	DFMP 2006
Reduce hazardous fuel loadings in order to reduce fire intensity levels, which will minimize negative fire effects on natural and cultural resources in the unit and will mitigate the potential for catastrophic fires. Fuel reduction projects will be subject to Section 106 compliance prior to implementation.	DFMP 2006

3.1.3 Management Authority and Relevant Regulations

General Regulations

- **An Act for the Preservation of American Antiquities [Antiquities Act of 1906] (PL 59-209; 34 Stat. 225; 16 USC 432, 433)** made it unlawful for any person to appropriate, excavate, injure, or destroy any historic or prehistoric ruin or monument, or any object of antiquity, situated on lands owned or controlled by the Government of the United States.
- **Historic Sites Act of 1935 (PL 74-292; 49 Stat. 666; 16 USC 461)**. This act declares a national policy to identify and preserve nationally significant “historic sites, buildings, objects and antiquities.” It authorizes the National Historic Landmarks program and provides the foundation for the National Register of Historic Places authorized in the National Historic Preservation Act of 1966. Regulations implementing the National Historic Landmarks Program are at 36 CFR Part 65.
- **National Historic Preservation Act of 1966 and amendments (PL 89-665; 80 Stat. 915; 16 USC 470)**. The NHPA creates the National Register of Historic Places and extends protection to historic places of state and local as well as national significance. It establishes the Advisory Council on Historic Preservation, State Historic Preservation Officers, Tribal Preservation Officers, and a preservation grants-in-aid program. Section 106 directs Federal agencies to take into account effects of their actions (“undertakings”) on properties in or eligible for the National Register.
- **National Environmental Policy Act of 1969 (PL 91-190; 83 Stat. 852; 42 USC 4321)**. NEPA states that it is the Federal government’s continuing responsibility to use all practicable means to preserve important historic, cultural, and natural aspects of our national heritage. It instructs Federal agencies to prepare environmental impact statements for each major Federal action having an effect on the environment.
- **American Indian Religious Freedom Act of 1978 (PL 95-341; 92 Stat. 469; 42 USC 1996)**. AIRFA states that “it shall be the policy of the United States to protect and preserve for American Indians their inherent right of freedom to believe, express, and exercise the traditional religions of the American Indian, Eskimo, Aleut, and Native Hawaiians, including but not limited to access to sites, use and possession of sacred objects, and the freedom to worship through ceremonials and traditional rites”.
- **Archaeological Resources Protection Act (ARPA) of 1979 (PL 96-95; 93 Stat. 721; 16 USC 470aa-470mm), as amended (PL 100-555; PL 100-588)**. ARPA expands the protections provided by the Antiquities Act of 1906 in protecting archaeological resources and sites located on public and Indian lands. ARPA has felony-level penalties for excavating, removing, damaging, altering, or defacing any archaeological resource more than 100 years of age, on public or Indian lands, unless authorized by a permit.
- **Native American Graves Protection and Repatriation Act of 1990 (PL 101-601; 25 USC 3000-3013; 104 Stat. 3048-3058)**. NAGPRA provides for disposition of cultural items from Federal or tribal lands. The ownership or control of Native American cultural items that are excavated or discovered on Federal or tribal lands after 1990 is determined by a custody hierarchy set out in the statute.

- **Reservoir Salvage Act of 1960, as amended (16 USC 469-469c)** extended the Historic Sites Act of 1935. It gave the Department of the Interior, through the National Park Service, major responsibility for preserving archaeological data that might be lost specifically through dam construction.
- **Curation of Federally-Owned and Administered Archeological Collections (36 CFR Part 79).** The regulations in this part establish definitions, standards, procedures, and guidelines to be followed by Federal agencies to preserve collections of prehistoric and historic material remains and associated records.
- **Determinations of Eligibility for Inclusion in the National Register (36 CFR Part 63).** These regulations were developed to assist Federal agencies in identifying and evaluating the eligibility of properties for inclusion in the National Register.
- **National Register of Historic Places (36 CFR Part 60).** These regulations describe the criteria for eligibility for inclusion of properties in the NRHP.
- **Protection of Historic Properties (36 CFR Part 800).** These regulations describe the Section 106 Process.
- **Public Conduct on Bureau of Reclamation Facilities, Lands, and Waterbodies (43 CFR Part 423).** These regulations intend to maintain law and order and protect persons and property within Reclamation projects and on Reclamation facilities, lands, and waterbodies by specifying areas open and closed to public use.

Executive Orders

- **Executive Order 13751, Consultation and Coordination with Indian Tribal Governments, 63 FR 96.** Executive Order 13175 was issued to establish regular and meaningful consultation and collaboration with tribal officials in the development of Federal policies that have tribal implications. When implementing such policies, agencies shall consult with tribal officials as to the need for Federal standards and any alternatives that limit their scope or otherwise preserve the prerogatives and authority of Indian tribes.
- **Government-to-Government Relations with Native American Tribal Governments (Memorandum signed by President Clinton; April 29, 1994) (Federal Register, Vol. 59, No. 85).** The memorandum directs Federal agencies to consult, to the greatest extent practicable and to the extent permitted by law, with tribal governments prior to taking actions that affect Federally recognized tribal governments. Federal agencies must assess the impact of Federal government plans, projects, programs, and activities on tribal trust resources and assure that tribal government rights and concerns are considered during such development.
- **Executive Order 11593, Protection and Enhancement of the Cultural Environment, 36 FR 8921,** directs Federal agencies to inventory cultural properties under their jurisdiction, to nominate to the National Register all Federally owned properties that meet the criteria, to use due caution until the inventory and nomination processes are completed, and to assure that Federal plans and programs contribute to preservation and enhancement of non-Federal properties.

- **Executive Order 13007, Indian Sacred Sites, 61 FR 104, directs Federal agencies in managing Federal lands to** 1) accommodate access to and ceremonial use of Indian sacred sites by Indian religious practitioners; and 2) avoid adversely affecting the physical integrity of such sacred sites.
- **Executive Order 13287, Preserve America 2003,** directs Federal agencies to improve their management of historic properties and to foster heritage tourism in partnership with local communities.

Department of Interior Directives

- **Departmental Manual 411, “Managing Museum Property,”** sets the policy for the collection, management, and care of museum property for all DOI bureaus. Museum property is a subset of the larger personal property category within DOI, thus property law and regulations apply.

Reclamation

- **Cultural Resources Management Policy LND-P01.** Cultural resources are recognized as fragile, irreplaceable resources with potential public and scientific uses, and represent an important and integral part of our Nation’s heritage. It is Reclamation’s practice to:
 1. Manage cultural resources under Reclamation jurisdiction or control according to their relative importance, to protect against impairment, destruction, and inadvertent loss, and to encourage and accommodate the uses determined appropriate through planning and public participation.
 2. Manage cultural resources under cultural resource statutes and the planning and decision making processes as are followed in managing other public land resources.
 3. Ensure that tribal issues and concerns are given consideration during planning and decision making, including fire management planning and decision making for specific fire management projects.

This policy is not limited to Reclamation’s activities that affect Federal lands. It is the responsibility of Reclamation to assure that its actions and authorizations are considered in terms of effects on cultural resources located on non-Federal lands. Fire management planning and activities on site-specific projects that involve non-Federal land shall consider this responsibility.

Directives and Standards

- **Cultural Resources Management LND 02-01** ensures that Reclamation manages its cultural resources according to Federal legislative mandates and in a spirit of stewardship; clarifies Reclamation’s roles and responsibilities related to cultural resources; and provides direction for consistent implementation of Reclamation’s cultural resources management responsibilities.

- **Inadvertent Discovery of Human Remains on Reclamation Lands LND 07-01** establishes procedures for compliance with Federal statutes when inadvertent (i.e., unplanned) discoveries of human remains occur on Reclamation lands.
- **Inadvertent Discovery of Native American Graves Protection and Repatriation Act (NAGPRA) Cultural Items on Tribal Lands LND 10-01** establishes procedures for addressing inadvertent (i.e., unplanned) discoveries of NAGPRA cultural items on tribal lands due to Reclamation projects and activities.

3.1.4 Other Plans That May Be Considered

Cultural resources, particularly those that are found in the New Melones Archaeological District, may overlap planning jurisdictions. For this reason, Reclamation will coordinate cultural resource management with agencies that manage lands adjacent to New Melones. At a minimum, these include:

Bureau of Land Management. BLM is in the process of revising their Sierra Nevada RMP. Reclamation will coordinate with BLM for management strategies and to ensure adequate management of jointly managed resources.

USFS Stanislaus National Forest. The Stanislaus National Forest Plan contains measures for management of cultural resources. To any reasonable degree, Reclamation will coordinate with USFS for management of cultural resources.

3.1.5 Trends

Over time, the identified cultural resources have continued to be subject to some loss of integrity, impacting the values that make the sites or features important for scientific, interpretive, or cultural use. Monitoring has been limited, and the extent of these impacts is unknown.

Ongoing trends include the loss or modification of features, the loss or modification of site components and physical relationships within sites and intrusions into the setting of resources. Many of these trends are the result of natural processes such as weathering and erosion that can be exacerbated by increased recreational use. Vandalism and inadvertent damage by visitors is likely to increase as recreational use increases in the planning area, which is likely to necessitate additional management, education, and enforcement actions. There is also a continuing interest among Native American communities in traditional and religious uses of the environment and participation in public land management practices. Developing new facilities and new access locations may lead to impacts to prehistoric resources. The removal of historic structures such as the Camp Nine Bridge will be necessary for safety reasons in the near future.

There is revival of interest among native groups in continuing cultural traditions and asserting the right to use public lands for cultural purposes. Future trends include more tribal interest in the protection of locations, plants, and landscape features and participation in land use decisions in order to sustain identity and exercise traditional cultural practices. Tribal groups in the Sierra Nevada Region are particularly concerned with herbicide use on materials used in basketry,

medicines, and ceremonies. Public lands are increasingly being used for larger traditional gatherings and ceremonies.

Data being compiled by Reclamation will assist in the preparation of a cultural resources research design. The research design will assist Reclamation in managing the cultural resources of New Melones. The New Melones Archaeological District currently includes all of the archaeological sites and features within the lands managed by Reclamation, without any distinction between the relative importance of individual components. The research design will pull together existing regional information in order to identify historic themes and research issues that are important, develop research questions relating to these themes and issues, and outline the kinds of data needed to answer these questions. In this way Reclamation will be able to define criteria for determining what types of sites and features are important to the district. Further, Reclamation will also be able to determine those sites and features whose research or other values are limited. The research design is expected to be a valuable tool for land use planning, for streamlining cultural resource compliance activities and in guiding future cultural resource studies.

3.2 Prehistoric Resources

3.2.1 Current Conditions

A cultural sequence spanning 10,000 years has been proposed for the New Melones Recreation Area. The oldest documented occupation is the Clarks Flat Phase (ca. 8000-6000 B.C.), known from a few locations and most clearly defined at Clarks Flat. This period is defined primarily based on spear points used by early hunters who occupied temporary camps. This sequence is shown in Table R-11.

Table R-11: Chronological Framework for Cultural Resources

Time Period	Dates	Defining Characteristics
Clarks Flat	8000-6000 B.C.	Spear points left by hunters
Stanislaus	6000-3500 B.C.	Use of grinding tools, wider variety of resource use
Texas Charley	3500-1000 B.C.	Percussion-flaked stone industry but little evidence of habitation
Calaveras	3500-1000 B.C.	Distinct type of spear points and milling tools
Sierra	1000 B.C.- 500 A.D.	Extensive occupation of lands now part of New Melones lake Area, indicated by midden deposits
Redbud	500-1300 A.D.	Distinctive cultural style not continuous with previous or later phases
Horseshoe Bend	1300-1848 A.D.	Bedrock mortars, midden deposits, architectural remains, cemeteries, and or other evidence of large, permanent populations.
Peoria Basin	1848-present	Abandonment of traditional lifestyle, transition to modern cultural style

Occupation of the three or four sites during the subsequent period (6000-3500 B.C.) is represented by greater artifact diversity, including extensive use of grinding tools that may reflect visits by more than one group. The range of resources exploited expanded to seeds and,

possibly, other plant sources. This unit has been defined as the Stanislaus Phase based on research at Clark Flat.

Two or more cultural phases are encompassed by the 3500-1000 B.C. timeframe. The Texas Charley Phase (ca. 3500 B.C.) is represented by a distinctive, percussion-flaked stone industry but little evidence of habitation. The Calaveras Phase includes locations marked by specific types of spear points and milling tools for the processing of plant foods. As with the preceding period, the 3500-1000 B.C. interval evidently was a time of fairly widespread but ephemeral site use. The two phases ascribed to this period seem unrelated based on material culture, and perhaps were separate in time also.

The Sierra Phase (ca. 1000 B.C.-A.D. 500) represents both extensive and intensive occupation of the New Melones Recreation Area. Twelve of the twenty-four identified Sierra Phase sites feature midden deposits and other indicators of long-term occupation. The following A.D. 500-1300 period, however, seems to have been a time of only limited activity by small groups. Although 24 sites have yielded artifacts ascribed to this period, only three (Redbud Phase) have midden soils. The Redbud Phase does not appear to reflect cultural continuity with previous or latter phases in the area. Late prehistory (ca. A.D. 1300-1848) is identified in 54 sites of the Horseshoe Bend Phase, of which 42 have bedrock mortars, midden deposits, architectural remains, cemeteries, and or other evidence of large, permanent populations. Identified with the ancestral Miwok, the Horseshoe Bend Phase represents the most intensive use of the New Melones planning area at any time in prehistory. The sequence ends with the Peoria Basin Phase, which includes the transition into historic use and the ultimate breakdown of traditional lifeways in the area (DRMP 1995).

The summary information included in the New Melones Archaeological District NRHP nomination form does not distinguish between prehistoric and historic Native American sites. Historic-era Native American sites in the New Melones Lake planning area are similar to prehistoric sites and features but include artifacts indicating contact with Euro-Americans.

The nomination form identifies 215 Native American sites that were classified according to features visible during surface inspection. Sixteen of these were included in more than one category. Characteristic features that occur either singly or in combination with other features include middens, bedrock mortars, house pits, petroglyphs, and quarry debris. Sites also include lithic debris, stone tools, fire-affected rock, and unmodified bone and shell. Sites that include bedrock mortars without other cultural evidence are the most common. Bedrock mortars are also common at sites containing midden deposits and are present at almost all of the house pit sites. The number of bedrock mortars on individual sites range from 1 to 341, indicating the importance of this activity in the New Melones Lake planning area. Petroglyphs were found at five locations. Four open quarries and four cave quarries were recorded. In all, 23 caves show evidence of human use, but 12 of these only include evidence of fires and cannot be tied through other evidence to prehistoric times.

Sixty-six sites have been totally inundated in the permanent pool and are unavailable for further interpretation or study due to their inaccessibility. Ninety-six sites are entirely or partially within the fluctuating pool and have been subject to wave action, erosion from cyclical inundation, and

exposure. Sites in this zone are also most susceptible to damage from lakeside recreational use and vandalism. Permanent features such as bedrock mortars would be less likely to be damaged, but their information potential is limited in absence of other archaeological deposits that are easily damaged. There are 69 sites above the flood zone. These are generally more accessible than they were prior to filling the lake but have not been subject to the level of impacts of those in the other zones. However, there has not been a monitoring program and it is likely that there have been past and ongoing impacts due to erosion, construction, recreational use, and vandalism (Moratto et al. 1988).

3.2.2 Resource Management

Guidance for protection of prehistoric resources comes from the 2006 Draft Fire Management Plan and the 1996 Cave Management Plan. Please see section 3.1.3 for a discussion of current management of all cultural resources. Management actions or guidance for prehistoric resources is given in Table R-12 below.

Table R-12: Management Actions for Prehistoric Resources

Decision	Source
<p>Reclamation will manage cultural resources in the New Melones Project Area as called for in the Memorandum of Agreement (MOA) for the New Melones Project, Reclamation Policy and Directives and Standards for Cultural Resources Management and the Inadvertent Discovery of Human Remains on Reclamation Lands, Department of the Interior Departmental Manual 411, the National Historic Preservation Act, the Archaeological Resources Protection Act, the Native American Graves Protection and Repatriation Act, 36 CFR Part 800, 36 CFR Part 60, 36 CFR Part 79, and 43 CFR Part 10.,</p>	<p>Reclamation Manual LND P01 Reclamation Manual LND 02-01 Reclamation Manual 07-01 DOI 411 DM 1-3 National Historic Preservation Act Archaeological Resources Protection Act Native American Graves Protection and Repatriation Act</p>
<p>Whenever possible, protect historic properties by avoidance through Reclamation's planning process.</p>	<p>Reclamation Manual LND P01</p>
<p>For site-specific projects, consider the effects to cultural resources through implementation of the Section 106 process of the National Historic Preservation Act (NHPA), Archeological Resources Protection Act (ARPA), and the Native American Graves Protection and Repatriation Act (NAGPRA).</p>	<p>National Historic Preservation Act 36 CFR Part 800 Archaeological Resources Protection Act Native American Graves Protection and Repatriation Act</p>
<p>For site-specific projects, consider the effects to cultural resources through implementation of the Section 106 process of the National Historic Preservation Act (NHPA), Archeological Resources Protection Act (ARPA), and the Native American Graves Protection and Repatriation Act (NAGPRA).</p>	<p>Archaeological Resources Protection Act Native American Graves Protection and Repatriation Act</p>

Internal Guidance	Source
In emergency circumstances, where heavy equipment was employed without prior on-site coordination, Reclamation will conduct post-fire archaeological evaluations to assess and document equipment damage to cultural resources. Damage assessments and possible mitigation work may be required.	DFMP 2006
Reduce hazardous fuel loadings in order to reduce fire intensity levels, which will minimize negative fire effects on natural and cultural resources in the unit and will mitigate the potential for catastrophic fires. Fuel reduction projects will be subject to Section 106 compliance prior to implementation.	DFMP 2006
Minimize publicity and access to sensitive cave locations; avoid constructing trails to caves and install gates where necessary for conservation purposes.	New Melones Lake Revised Cave Management Plan. 1996
Require permits and review for all research projects within and around cave resources.	New Melones Lake Revised Cave Management Plan. 1996

3.3 Historic Resources

3.3.1 Current Conditions

Historic Setting

The most significant event in the historical period for the New Melones planning area was the Gold Rush. By the end of 1849, some 10,000 people had arrived in the Stanislaus River area. Hostilities between miners and the native groups, coupled with the effects of introduced diseases, resulted in substantial population losses. The Miwok tribe retreated to remote areas. Among the miners were large numbers of Hispanics, Chinese, and other ethnic groups. Competition resulted in open conflict, violence, and prejudicial laws.

A transportation network of roads and waterways was established very quickly for the conveyance of people and freight. The transportation system included pack trains, freight wagons, stagecoaches, and ferries.

In time, easily worked placer deposits were exhausted. Gold extraction shifted to large-scale hardrock and hydraulic mining, requiring large investments of money, labor, and equipment. Water had to be diverted and transported to placer deposits lacking it, and hydraulic power was also needed to operate ore-crushing machinery. Extensive ditch and flume systems were built at considerable expense. Concurrently, small-scale agriculture became more important, and many former miners turned to a form of subsistence agriculture, supplementing it with limited mining.

At the turn of the century, renewed interest in hardrock gold mining was stimulated by new extractive technologies that made it possible to process low-grade ore. Heavy capital investment was needed to acquire rights to existing claims and to purchase equipment for the increasingly mechanized milling procedures. The work force was paid poorly and consisted largely of

Mexican, Italian, and Slavic immigrants. Operating these new mining enterprises at a profit required efficient transportation and low-cost electricity. Work on the Sierra Railway began in 1897, spurred not only by the mineral wealth of the region, but also by its timber resources and agricultural potential. The completed railway stimulated market-oriented agriculture and timber harvesting, in addition to the renewed mining operations.

The development of hydraulic power also bolstered the economy of the region sporadically during construction episodes and provided a more efficient form of power for mining and timber milling operations. Hydroelectric power developed as an outgrowth of mining operations that were responsible for the construction of water impoundment, diversion, and conveyance systems. Electricity was generated downstream at Knights Ferry by 1896, and by 1897 a much larger generating facility had been built near Electra in Calaveras County. In the planning area, the Stanislaus Power House was constructed between 1906 and 1910, followed by the old Melones Dam and Power House in the mid 1920s.

The economic boom of the first decade of the twentieth century did not last. The economy of the middle Stanislaus River area was subject to fluctuation in demand for its raw materials resources. Thus, a pattern of development punctuated with periods of economic recession characterized the history of the area through the first half of the 20th century (DRMP 1995).

The NRHP nomination form identifies 402 historic-era sites dating from the 1840s until modern times. It does not include those Native American sites that may have an historic component. The sites represent a variety of activities and include archaeological evidence of the various ethnic groups that used and occupied the area. Historic sites were classified according to their predominant function, theme, or inferred activity. Multiple classifications were applied to some of the sites.

The functional site groupings reflect a variety of cultural remains and include data from both surface and subsurface artifact deposits. More than a third of the sites are classified as mining only. These include both large-scale industrial mines and evidence of more limited mining operations. Mining deposits include tailings, water channels, prospect pits, shafts, and mining equipment. Sites classified as residential typically include stone walls, foundations, wooden structures, fireplaces, ranch and farming structures, farm equipment, water features, and domestic trash deposits. The mining/residential group contains evidence of mining activities in combination with residential deposits. More complex are residential/mining/agriculture sites representing towns such as Bostwick Bar and Robinsons Ferry/Melones and Pine Log. The water transport and storage group consists of dams, flumes, ditches, culverts, pipes, water troughs, stock dams, and other features associated with water use and control. Transportation and communication sites include ferry crossings, bridges, roads, and railroads. Miscellaneous sites include rock walls and structures of unknown function, cemeteries, caves with historic artifacts, and sites with domed stone ovens that may be indicative of ethnic customs.

Seventy-five sites or features have been totally inundated in the permanent pool and are unavailable for further interpretation or study due to loss of physical integrity and setting. There are 226 sites that are entirely or partially within the fluctuating pool and have been subject to wave action, erosion from cyclical inundation, and exposure. Sites in this zone are also most

susceptible to damage from lakeside recreational use and vandalism. There are 147 sites above the flood zone. These are generally more accessible than they were prior to filling the lake but have not been subject to the level of impacts of those in the other zones. Historic-era resources are often more visible on the landscape than prehistoric resources and are subject to more visitation. There has not been a monitoring program, and it is likely that there have been past and ongoing impacts due to erosion, construction, recreational use, and vandalism (Moratto et al. 1988).

3.3.2 Resource Management

Management actions specific to historic resources come from Reclamation-wide management documents, while internal guidance is given in the 1995 Draft RMP and the Draft Peoria Wildlife Management Area EA. Please see section 3.1.3 for a discussion of current management for all cultural resources. Management actions or guidance for historic resources is given in Table R-13 below.

Table R-13: Management of Historic Resources

Decision	Source
<p>Reclamation will manage cultural resources in the New Melones Project Area as called for in the Memorandum of Agreement (MOA) for the New Melones Project, Reclamation Policy and Directives and Standards for Cultural Resources Management and the Inadvertent Discovery of Human Remains on Reclamation Lands, Department of the Interior Departmental Manual 411, the National Historic Preservation Act, the Archaeological Resources Protection Act, the Native American Graves Protection and Repatriation Act, 36 CFR Part 800, 36 CFR Part 60, 36 CFR Part 79, and 43 CFR Part 10.,</p>	<p>Reclamation Manual LND P01 Reclamation Manual LND 02-01 Reclamation Manual 07-01 DOI 411 DM 1-3 National Historic Preservation Act Archaeological Resources Protection Act Native American Graves Protection and Repatriation Act</p>
<p>Whenever possible, protect historic properties by avoidance through Reclamation's planning process.</p>	<p>Reclamation Manual LND P01</p>
<p>For site-specific projects, consider the effects to cultural resources through implementation of the Section 106 process of the National Historic Preservation Act (NHPA), Archeological Resources Protection Act (ARPA), and the Native American Graves Protection and Repatriation Act (NAGPRA).</p>	<p>National Historic Preservation Act 36 CFR Part 800 Archaeological Resources Protection Act Native American Graves Protection and Repatriation Act</p>
<p>For site-specific projects, consider the effects to cultural resources through implementation of the Section 106 process of the National Historic Preservation Act (NHPA), Archeological Resources Protection Act (ARPA), and the Native American Graves Protection and Repatriation Act (NAGPRA).</p>	<p>Archaeological Resources Protection Act Native American Graves Protection and Repatriation Act</p>
<p>Whenever possible, protect historic properties by avoidance through Reclamation's planning process.</p>	<p>Reclamation Manual LND P01</p>

Internal Guidance	Source
Protect historic properties through the use of protective fencing, coverings, and exclusion, as applicable.	DRMP 1995
Protect historic properties through ranger patrol.	DRMP 1995
Avoid all known historic properties. Avoidance means that no activities associated with the Proposed Action that may adversely affect historic properties will occur within site boundaries. Portions of the Proposed Action may need to be modified, redesigned, or eliminated to properly avoid historic properties. When changes in proposed activities (e.g., project modifications) are necessary to avoid historic properties, these changes would be completed before initiating any activities.	Draft Peoria EA 2006

3.4 Traditional Cultural Properties/Sacred Sites

3.4.1 Current Conditions

The New Melones Lake Area encompasses lands traditionally used by the Central Sierra Miwok, who still maintain a strong local presence in the surrounding communities. There are three Federally recognized bands of Miwok who have reservation lands in Calaveras and Tuolumne Counties. Contact with Gold Rush-era settlers was devastating to the Miwok and other native populations. In addition to exposure to introduced diseases, they were the victims of much violence and discrimination. Even as they lost most of their land base, however, they continued the traditions of cultural and sacred use of lands and natural resources.

The extent of current Native American use of the New Melones planning area for traditional cultural purposes is unknown, and no traditional cultural properties have been identified in public documents. It is assumed that cultural use does occur and that there are areas where there are resources that would be of concern to Native American groups. During archaeological studies conducted prior to construction of the dam and filling of the lake, ceremonial structures, a mourning site, petroglyphs, cemeteries, isolated burials and mortuary caves were recorded. In conjunction with archaeological mitigations, the Miwok entered into a burial agreement with the National Park Service prior to the passage of NAGPRA. Federally recognized groups are consulted on Reclamation actions. It is unknown if other Native American or ethnic groups use the New Melones Lake Area for cultural purposes.

3.4.2 Resource Management

Table R-14 lists management actions that pertain to traditional cultural sites and sacred sites. Please see section 3.1.3 for a discussion of current management of all cultural resources.

Table R-14: Management of Traditional Cultural Sites and Sacred Sites

Decision	Source
<p>For site-specific projects, consider the effects to cultural resources through implementation of the Section 106 process of the National Historic Preservation Act (NHPA), Archeological Resources Protection Act (ARPA), and the Native American Graves Protection and Repatriation Act (NAGPRA).</p>	<p>National Historic Preservation Act 36 CFR Part 800 Archeological Resources Protection Act Native American Graves Protection and Repatriation Act</p>
Internal Guidance	Source
<p>Protect sensitive cultural resources by using Minimum Impact Suppression Tactics (MIST) and by coordinating with a Cultural Resource Advisor during fire suppression activities. Such activities must be coordinated with Reclamation cultural resources staff.</p>	<p>DFMP 2006</p>