

6. Land Management, Ownership, and Planning Influences

6.1 Overview

6.1.1 Introduction

Management of lands within the New Melones Lake Area is influenced by conditions both within and outside of the planning area. Likewise, both the quality of visitors experiences and visitors safety result from such features as commercial services, facilities, transportation features, fire management, and trespassing. This section describes land use practices that affect the way lands in the New Melones Lake Area are managed and preserved, and infrastructure features that are managed by either Reclamation or a separate entity and which directly or indirectly affect planning at New Melones.

This section is organized into the following subsections:

- **General Land Use.** This subsection describes general land use on Reclamation lands and influences on land use in the New Melones Lake Area.
- **Commercial Services-Concessions.** This subsection describes concessionaire agreements and other services that are offered by operators in the absence of agreements.
- **Facilities.** This subsection describes non-commercial facilities offered by Reclamation. These facilities include developed recreation areas, the headquarters and visitor's center, and undeveloped recreation areas.
- **Fire Management:** This subsection describes Reclamation's approach to management of wildfire in the New Melones Lake Area.
- **Transportation:** This subsection describes local transportation routes and uses, as well as the roads and access available in the New Melones Lake Area.
- **Trespassing:** This subsection describes issues associated with trespassing both onto and from Reclamation lands.
- **Utilities.** This subsection includes discussion of management of water, electricity, sewage, and communications infrastructures in the New Melones Lake Area.
- **Range Management.** The range management subsection describes grazing allotments, use of prescribed fire, and invasive weed species control within the planning area.

- **Public Health and Safety.** This subsection describes management and availability of features designed to protect and enhance public health and safety, and issues that influence public health and safety.

6.1.2 Specific Mandates and Authority

Land Use

- Mining Law of 1872, as amended;
- The Recreation and Public Purposes Act of 1926, as amended;
- Land and Water Conservation Fund Act of 1965, as amended;
- Federal Land Transaction Facilitation Act of 2000;
- Federal Cave Resources Protection Act of 1988, as amended;
- The Declaration of Taking Act of 1931;
- The Condemnation Act of 1888, as amended;
- The Engle Act of 1958;
- The Federal Power Act of 1920, as amended;
- The Act of May 24, 1928, as amended;
- The Carey Act of 1894, as amended;
- Unlawful Enclosures Act of 1885;
- The Act of December 22, 1928, as amended;
- Sections 2275 and 2276 of the Revised Statutes, as amended;
- 43 CFR 402: Sale of Lands in Federal Reclamation Projects;
- 43 CFR 420: Off-road vehicle use;
- 43 CFR 429: Procedure to process and recover the value of rights-of-use and administrative costs incurred in permitting such use;
- Reclamation Manual Directive/ Standard LND 03-01: Land Withdrawals, Withdrawal Reviews and Withdrawal Revocations;
- Reclamation Manual Directive/ Standard LND 05-01: Real Estate Appraisal;
- Reclamation Manual Directive/ Standard LND 06-01: Land Acquisition;
- Reclamation Manual Directive/ Standard LND 08-01: Land Use Authorizations;
- Reclamation Manual Directive/ Standard LND 08-02: Land Disposal;
- Reclamation Manual Directive/ Standard LND 09-01: Real Property Management Records;
- Reclamation Manual Directive/ Standard LND 09-02: Payments in Lieu of Taxes (PILT);
and

- Reclamation Manual Directive/ Standard LND 011-01: Disposal of Bridges and Crossings on Reclamation Land.

Concessions

- Reclamation Manual Policy LND P02: Concessions Management;
- Reclamation Manual Directive/ Standard LND 04-01: Concessions Management by Reclamation; and
- Reclamation Manual Directive/ Standard LND 04-02: Concessions Management by Non-Federal Partners.

Facilities Management

- Reclamation Manual Policy LND P05: Environmental Management Systems-
- Reclamation Manual Policy FAC P01: Emergency Management-
- Reclamation Manual Policy ENV P01: Hazardous Waste and Materials Management-
- Reclamation Manual Directive and Standard ENV 02-03: Pollution Prevention-Hazardous and Solid Waste Minimization-
- Reclamation Manual Directive and Standard FAC 01-01: Emergency Management-

Fire Management

- Protection Act of September 20, 1922 (42 Stat. 857; USC 594);
- Reciprocal Fire Protection Act of May 27, 1955 (69 Stat. 66; 42 USC 1856, 1856a);
- Economy Act of June 30, 1932 (47 Stat. 417; 31 USC 686);
- Disaster Relief Act, Section 417 (Public Law 93-288);
- Annual Appropriations Acts for the Department of the Interior;
- The Multiple-Use Sustained-Yield Act of June 12, 1960;
- The Forest and Rangeland Renewable Resources Planning Act of August 17, 1974; and
- Healthy Forests Restoration Act, December 2003 (PL 108-148).
- United States Department of the Interior Manual (910 DM 1.3)
- 1995 Federal Wildland Fire Management Policy
- 2001 Updated Federal Wildland Fire Management Policy (1995 Federal Wildland Fire Management Policy Update)
- 1998 Departmental Manual 620 Chapter 1, Wildland Fire Management General Policy and Procedures

Transportation

- Federal-Aid Highway Act of 1958, 1962, 1966, 1968, and 1973, as amended;
- Highway Safety Act of 1966, as amended;
- Architectural Barriers Act of 1968, as amended; and
- Surface Transportation Act of 1978 and 1982, as amended.
- **Executive Order 11644 (37 Federal Register [FR] 2877), as amended by EO 11989 (42 FR 26959h)**, requires Federal agencies to adopt rules regulating OHV use on public lands and to adopt a designation process and designation criteria to protect land resources and promote public safety. The stated underlying authority for issuance of the orders is NEPA (42 USC 4321).

Range Management

- The Taylor Grazing Act of 1934 (43 USC 315) states “[T]he Secretary of the Interior is authorized, in his discretion, by order to establish grazing districts or additions thereto...of vacant inappropriate and unreserved lands from any part of the public domain...which in his opinion are chiefly valuable for grazing and raising forage crops[.]...” The act also provides for the classification of lands for particular uses;
- The Public Rangelands Improvement Act of 1978 (43 USC 1901) provides that the public rangelands be managed so that they become as productive as feasible in accordance with management objectives and the land use planning process established pursuant to 43 USC 1712;
- 43 CFR 4100 (Grazing Regulations); and,
- General Allotment Act of 1887, as amended.

Public Safety

- The Federal Water Pollution Control Act of 1977 (33 USC 1323) requires Federal land managers to comply with all Federal, state, and local requirements, administrative authority, process, and sanctions regarding the control and abatement of water pollution in the same manner and to the same extent as any nongovernmental entity;
- The CWA of 1972, as amended (33 USC 1251) establishes objectives to restore and maintain the chemical, physical, and biological integrity of the nation’s water;
- The Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA), as amended (42 USC 9601 et seq.), also known as Superfund, is primarily intended to address risks posed to human health and welfare or the environment resulting from releases or potential releases of hazardous substances. Other key acts related to CERCLA include the following:
- Emergency Planning and Community Right-to-Know Act of 1986 (EPCRA) amends CERCLA/SARA (42 USC I 100 1) and adds sections 120 and 121 dealing with Federal facilities;

- Community Environmental Response Facilitation Act of 1992 (CERFA) amends CERCLA Section 120(h) (42 USC 9620);
- Pollution Prevention Act of 1990 (42 USC 13 101);
- Resource Conservation and Recovery Act of 1976, as amended (42 USC 6901 et seq.);
- Toxic Substances Control Act of 1976 (15 USC 2601 et seq.);
- Federal Insecticide, Fungicide, and Rodenticide Act of 1975 (7 USC 136 et seq.);
- Clean Air Act of 1970, as amended (42 USC 7401 et seq.);
- Safe Drinking Water Act of 1974, as amended (42 USC 300 et seq.);
- Transportation Safety Act of 1974; Hazardous Materials Transportation Act amendments of 1976 and 1990 (49 USC 1801 et seq.);
- Atomic Energy Act of 1954 (42 USC 200 If);
- Uranium Mill Tailings Radiation Control Act of 1978, as amended (42 USC 2014 et seq.);
- Nuclear Waste Policy Act of 1982 (42 USC 10101 et seq.); and
- Executive Order 11514, Protection and Enhancement of Environmental Quality, March 5, 1970.
- National Oil and Hazardous Substances Pollution Contingency Plan (40 CFR Part 300);
- Occupational Safety and Health Act of 1970, as amended;
- Lead-based Paint Poisoning Prevention Act, as amended;
- Reclamation Manual Policy ENV P01: Hazardous Waste and Materials Management;
- Reclamation Manual Policy ENV P02: Pest Management;
- Reclamation Manual Policy SAF P01: Occupational Safety and Health Program Policy;
- Reclamation Manual Directive/Standard ENV 01-01: Pest Management/Resource Protection (Integrated Pest Management) Program;
- Reclamation Manual Directive/Standard ENV 01-02: Public Notification of Aerial Pesticide Applications on Lands Managed Directly by Reclamation;
- Reclamation Manual Directive/Standard ENV 02-03: Pollution Prevention-Hazardous and Solid Waste Minimization;
- Reclamation Manual Directive/Standard FAC 01-01; and
- Reclamation Manual Directive/Standard FAC 01-03: Hazardous Materials.

6.1.3 Other Plans That May Be Considered

Management at New Melones is coordinated with adjacent Federal land owners to ensure consistency with their management plans. The BLM is revising the RMP for lands that they manage in proximity to New Melones Lake, and an opportunity exists to coordinate with the BLM during this process on common management issues such as traffic and trespassing.

Reclamation also participates in the Fire Safety Council, which is a multiagency entity that wrote the Highway 108 Fire Safety Master Plan. The following plans provide guidance for management of lands adjacent to New Melones Lake:

- Folsom BLM-Sierra Draft RMP (August 2006);
- Tuolumne County General Plan (December 1996);
- Stanislaus National Forest Land and Resource Management Plan (October 1991) and Forest Plan Direction Update (July 2005).
- There is an interagency working group composed of Reclamation and other city, county, state, and Federal agencies (Brooks 2007b). The purpose of the working group is to keep local city and county leaders informed about activities at New Melones Lake.
- The fire and fuels management program is consistent with the fire planning effort at national and state levels, including the National Fire Plan. Planning documents address cooperating agencies and existing planning efforts in the region and nationally.
- **Calaveras County General Plan** The Calaveras County General Plan recommends the following: identify a system of classification and new road placement consistent with the existing road system to reflect areas suitable for land development; secure funding for state highway improvements needed to keep pace with increased development to provide for the public safety; and provide and maintain a state highway system with capacity to serve projected state highway traffic at acceptable levels of service.
- **Calaveras County Regional Transportation Plan (RTP).** The Calaveras County 2005 RTP provides a coordinated 20-year vision of the regionally significant transportation improvements and policies needed to efficiently move goods and people in the Calaveras County region. The purpose of the RTP is to provide a vision of transportation services and facilities for 10- and 20-year planning horizons.
- **Tuolumne County Regional Transportation Plan (1996).** Prior to 1996, Tuolumne County's RTP served as the Circulation Element of the County's General Plan, and was designed to be the base document for all transportation planning in the County. In 1996, the General Plan contained a separate Circulation Element that more closely correlated land development with the circulation system.
- **Draft Tuolumne Community Plan (2006).** The Tuolumne Community Plan, which will become a part of the Tuolumne County General Plan, has been proposed to address planning issues specific to the development of the Tuolumne community. Goals include promoting safe, efficient transportation systems consistent with community character.
- **City of Angels Camp General Plan (Draft 2006).** The City of Angels Camp Circulation Element of the General Plan provides goals, policies, and implementation programs aimed at balancing the city's already overburdened transportation system with the need to accommodate an increasing population of residents and visitors while maintaining the rural character of Angels Camp.
- **Angels Camp Bypass** Angels Camp is located at the junction of SR 4, which provides access to the High Sierras to the north, and SR 49, which provides access to New Melones

in the south. Due to the increasing interregional traffic on both routes, nearly every intersection along the route experiences congestion and delay. The problem is exacerbated during periods of peak recreational traffic. The Angels Camp Bypass, which is approximately 2.4 miles long, is expected to divert the majority of interregional traffic on SR 4 from Murphy's Grade Road and downtown Angels Camp. Construction of this project is scheduled to begin in early 2007.

- **North/South Connector Project.** State Route 49 provides access to New Melones for visitors coming from the south or the east. The current traffic pattern on SR 49 through downtown Sonora currently carries up to 20,200 vehicles per day during peak months, causing delays through the downtown area. The North/South Connector Project is a feasibility study of several potential alignments to meet the local and regional transportation needs for improved circulation, access, and safety. The final report will be presented to the Tuolumne County Board of Supervisors in the spring of 2007. The Board will then consider whether to continue into the preliminary design and environmental documentation phase of the project.
- **Fire Protection Services.** New Melones is part of the California Mutual Aid System, a system where all local and state agencies have an agreement to assist in emergency situations. Reclamation is the only Federal agency that is not a member of the National Fire Plan agreement, which is the Federal equivalent of the California Mutual Aid System. Reclamation is not a member because it is not considered a "land manager." It would be beneficial for Reclamation to join the National Fire Plan agreement in order to qualify for Federal support.
- **Medical Services.** New Melones Lake is part of the California Mutual Aid System.

6.1.4 Trends

General Land Use. Residential development may continue to encroach on Reclamation lands, causing increased trespass and land management issues. Rural residential development could continue to expand around surrounding existing clusters, such as areas along Jackass Hill and French Flat Road.

Commercial Services and Concessions. Increased recreational demand is resulting in pressure to allow more houseboats and develop more marina facilities like the one at Glory Hole.

Fire Management. Wildland fires in the western US have become increasingly dangerous due to the proximity of structures and a build-up of fuels (invasive weeds or vegetation that would have burned more often, but due to successful fire suppression continue to accumulate). In response to the risks wildland fires pose to firefighters and the impacts on communities, the National Fire Plan (NFP) was initiated by a partnership of government land management agencies in 2000. This coordinated effort to protect communities and natural resources from increasingly severe wildfire resulted in the 10-Year Comprehensive Strategy and specific goals and objectives to guide fire management planning (Reclamation 2006b). In addition to the guidance provided by the NFP, the fire regime condition class (FRCC) method was established. FRCC is an interagency, standardized tool for determining the degree of departure from reference condition vegetation, fuels, and disturbance regimes. Assessing FRCC can help guide management

objectives and set priorities for treatments. Reference conditions are vegetation and disturbance attributes that can sustain current native ecological systems and natural fire regimes. Reference conditions are determined by experts through professional judgment, published literature, and historical information using standardized computer models. This quantitative method links landscape-scale assessments and stand-level classifications (Hann et al. 2003). The objective of this method is to target those areas exhibiting the greatest departure from reference condition as priority for fuel treatment.

Development around New Melones Lake and surrounding areas continues to increase as demand for recreation and housing in the area increases. Greater numbers of people, homes, and structures within the WUI, coupled with accumulating hazardous fuels due to fire suppression and the lack of fuel management measures, creates a dangerous situation. Many of Reclamation's lands are highly fragmented and not easily accessible, further increasing the fire hazard. The three FMUs (Reclamation 2006b) in the decision area list WUI as a major decision factor. As the WUI continues to grow, it will become more of a driving factor on fire suppression and fuels management in the future.

Smoke management and associated air quality concerns may increase as resource users and residences increase in and around the project area, potentially limiting prescribed burning activity.

Noxious and invasive weed species will continue to colonize disturbed sites. This trend will likely increase if fire severity and size increases and if fuels continue to build up as a result of fire suppression.

Transportation. Projected increases in population will result in increased demand on roads within the project area; use of the New Melones Lake Area is expected to increase 20 percent over the planning period. The increase in travel demand on the roadway system will require increased cost for roadway maintenance and rehabilitation. Since the existing roadways and facilities were not designed to carry large amounts of traffic, roadway improvements will be required to keep up with this growth.

Trespassing. Reclamation will continue to enforce policies related to trespass onto or the unauthorized use of the land and water under Reclamation's jurisdiction. Trespass and unauthorized use, when permitted to continue, deprive the public of its rightful use and enjoyment of the public lands. It is the general policy of Reclamation to facilitate and ensure the proper use of land resources. Benefits to the public as a whole resulting from non-exclusive uses of Federal lands is the primary management emphasis.

Utilities. Recent and planned upgrades to the utilities infrastructure have improved the provision and reliability of water services (Brooks 2007a). The need to provide additional wastewater and solid waste services continues to change as recreation demands change. Changes in recreation demands include new types of recreation in new areas and fluctuating user levels.

Range Management. Reclamation previously leased 4,394 acres of land in two areas (Bear Creek and Glory Hole Recreation Areas) for livestock grazing. Subject to a grazing suitability analysis, grazing may continue, but its purpose and intensity would be directed by water quality

concerns, by vegetation management goals (usually related to fuel loading), and by policies and actions identified in current Reclamation guidance.

Public Health and Safety. Boating activities, safety concerns, law enforcement incidents, and accidents are increasing at New Melones Lake Area (Laird 2007) and will probably continue to increase as population and visitor rates increase. Speeding and drinking alcohol while boating are the primary safety problems that are increasing on the lake. In the campgrounds, speeding and improper boat hauling methods are of concern.

Safety concerns related to abandoned mines, illegal drugs, and illegal dumping are increasing because the number of visitors to New Melones Lake Area is increasing.

Requests for law enforcement services are increasing because the number of visitors to New Melones Lake Area is increasing (Laird 2007). It is likely that many law infraction incidents at New Melones Lake Area will continue to go unchallenged. Requests for fire protection services remain constant, but requests for medical services are increasing because the number of visitors to New Melones is increasing (Laird 2007).

6.2 General Land Use

6.2.1 Current Conditions

Approximately 13,864 acres of land above the gross pool reservoir level (1,088 feet above mean sea level) surrounding New Melones Lake Area are administered by Reclamation (Figure R-8). Approximately 5,405 acres of the surrounding lands are designated for recreation and wildlife purposes, and 4,065 acres are held as operations or open space lands.

Included in the 5,405 acres of land designated for recreation and wildlife purposes, 2,520 acres encompass the Peoria Wildlife Management Area (PWMA). The PWMA was acquired by USACE to partially mitigate for loss of approximately 10,000 acres of fish and wildlife habitat associated with expanding the reservoir.

Within Reclamation resource area lands, easements are managed by both Reclamation and adjacent land owners. Pacific Gas and Electric (PG&E) maintains a transmission line easement along the southwestern edge of the Reclamation boundary at the base of Table Mountain. Also, PG&E operates and has an easement for an afterbay dam that is related to the Stanislaus Powerhouse near Clarks Flat. Also in the Camp Nine management area, Northern California Power Agency and Calaveras County Water District jointly operate the Collierville Powerhouse which is also partially located on Reclamation lands. Tuolumne County Irrigation District (TCID) also maintains a permanent easement for a water intake structure, pumping plant, switchyard, 100,000-gallon storage tank, 16-inch pipeline, and roadway access to the pump station. The TCID easement is off of Old Abbeyes Ferry Road approximately two miles north of Parrotts Ferry Bridge.

Adjacent Land Management and Uses. Lands adjacent to the project boundary are mostly undeveloped and are used primarily for grazing and for open space values. The largest adjacent land owners are BLM and USFS. Adjacent BLM lands are managed primarily for watershed protection and for preserving and improving forage and wildlife habitat. Six grazing allotments and twenty-two mining claims are held on BLM lands that adjoin Reclamation lands. The grazing allotments are categorized as custodial allotments with a year-round season of use. Of the 22 mining claims adjacent to the New Melones Resource Area, only one is actively mined near French Flat on the southeastern side of the reservoir.

The Stanislaus National Forest adjoins Reclamation lands at Clarks Flat and near the South Fork area of the New Melones Resource Area. The USFS has one grazing allotment adjacent to Reclamation lands in Clarks Flat. The 480-acre allotment has a season of use from May 1 through September 15.

Residential development continues to encroach on Reclamation lands as population in the area increases, causing increased trespass and land management issues. Rural residential development has expanded around existing clusters, such as areas along Jackass Hill and French Flat Road. Management conflicts and discrepancies could be reduced if Reclamation were to minimize and consolidate right-of-way and easement grants in the New Melones Lake Area.

6.2.2 Resource Management

Guidance Documents

Specific management actions for land use are not given in the 1976 Management Plan. Internal guidance for land use management comes from the following draft documents:

- New Melones Project Area Draft Fire Management Plan-2006
- New Melones Draft Resource Management Plan-1995

Table R-30 lists management guidance for land use management.

Table R-30: Summary of Current Guidance for Land Use

Internal Guidance	Source
<p>Encourage and support cooperative planning within the Stanislaus watershed between Reclamation, other affected Federal, state, and local agencies, and the public.</p> <p>-Continue communications with representatives from Reclamation, BLM, USFWS, CDFG, Calaveras and Tuolumne Counties, and others to share information and work cooperatively on resource protection and public safety issues.</p> <p>-Review and/or participate in the development of General Plans and Resource Management plans on adjacent lands to ensure that land use decisions and activities are compatible with those at New Melones.</p> <p>-Comment on environmental documents for new major projects within the watershed to ensure that potential adverse effects on Reclamation lands are mitigated to the fullest extent.</p> <p>-Coordinate with the Tuolumne and Calaveras County Departments of Planning to</p>	<p>DRMP 1995</p>

Internal Guidance	Source
<p>review and contribute to all resource and land use plans that may affect the Stanislaus watershed.</p> <p>-Encourage Tuolumne and Calaveras Counties to monitor ongoing and reclaimed mining operations for compliance with permitting criteria.</p>	
<p>Work with appropriate agencies to regulate land use activities under their jurisdiction at New Melones.</p> <p>-Encourage the CDFG to monitor and enforce rules and regulations related to hunting and fishing.</p> <p>-Maintain and oversee contract obligation with both Tuolumne and Calaveras Counties to provide law enforcement services.</p>	DRMP 1995
<p>Resolve jurisdiction uncertainties with appropriate agencies.</p> <p>-Resolve land ownership and jurisdictional uncertainties with USFS and BLM when discrepancies are identified.</p>	DRMP 1995
<p>Minimize and consolidate right-of-way and easement grants on Reclamation lands; if granted, monitor and enforce for compliance with permit measures.</p> <p>-Avoid/minimize the approval of future easements and rights-of-way over Reclamation lands. If allowed, new easements (e.g., roadways, electrical transmission lines, pipelines, structures, and facilities) must follow alignments of existing easements and adhere to strict guidelines to avoid potential environmental impacts.</p> <p>-Ensure proper environmental compliance prior to construction and monitor compliance after construction by easement grantees and/or contractors. As indicated and required through a monitoring program, steps shall be taken to correct any resource degradation problems immediately.</p>	DRMP 1995
<p>Inform cooperators of changes to maps by acquiring or disposing of Reclamation lands.</p>	DFMP 2006
<p>Ensure the California Department of Forestry and Fire Protection – Tuolumne-Calaveras Ranger Unit (CDF-TCU) has updated maps for fire suppression annually.</p>	DFMP 2006

6.3 Commercial Services, Concessions, and Licenses

6.3.1 Current Conditions

Concessionaire agreements are used by Reclamation to achieve needed recreational support services, programs, and facilities and as a means for disseminating public use information. The primary concessionaire at New Melones Lake Area runs the New Melones Lake Marina at the Glory Hole Management Area. The marina provides rentals of houseboats, patio boats, fishing boats, and jet skis. There are 20 rental houseboats and 38 private houseboats docked at the marina, and an additional 50 private houseboats are docked at mooring balls in the cove. The marina also rents boat slips and runs a store offering food, beverages, and fishing tackle. The marina also has a boat fueling station, sewage pump-out service, propane sales, baggage cart service, etc.

Reclamation supports concessionaire agreements with private enterprises to achieve needed recreational support services, programs, and facilities and to disseminate Reclamation information (Reclamation 1995). All concessionaire contracts include explicit measures related to the notice and dissemination of public information, communications equipment necessary in the event of emergencies, medical emergency provisions, and spill emergency response measures.

The marina concessionaire at New Melones Lake Area holds a County Non-Community Water Permit for the marina's water system and a Calaveras County Store Permit for the convenience store at the marina (Reclamation 1995). The concessionaire also holds a fuel permit for the convenience store and a State of California license for selling beer and wine, which includes a Federal tax stamp from the Federal Bureau of Investigation.

Whitewater boating activities are popular, particularly in the summer months, but are heavily dependent upon low reservoir water levels (Reclamation 1995). The Stanislaus River, when it is not inundated by New Melones Reservoir, offers generally forgiving to fairly difficult rafting runs. Depending upon seasonal water fluctuations, commercial rafting companies may offer organized guided raft trips down the river. Most of the whitewater boating consists of organized permittees that provide day-long, guided raft trips; however, several individuals also kayak and raft the reservoir/river.

Unpermitted commercial outfitters offer guided gold panning expeditions at New Melones (Reclamation 1995). Gold panning is an unregulated activity and is allowed throughout the area. Unpermitted fishing guide services and an unpermitted float plane school are also occurring on the project. Reclamation is seeking voluntary compliance of these unpermitted commercial services with 43 CFR 423, 429 and other directives. Per 43 CFR 429, all commercial activities, events, and occupation or use of Federal land must obtain a land use authorization such as a "right of use" permit. Permitted uses are listed in Section 6-10.

The Marina Concessionaire at Glory Hole would like to put more houseboats on the lake. Increased recreational demand results in pressure to develop more marina facilities like the one at Glory Hole. Additional requests include allowing for guided horseback riding, guided kayak/canoe tours, guided lake tours by boat, RV campgrounds with hookups, houseboat/boat storage and repair facilities etc.

Licenses Reclamation licenses the Sonora Radio Controlled Flyers (RC Flyers) and New Melones Water Skiers Inc. to operate in the New Melones Lake Area. These licenses allow these non-profit organizations to operate on Reclamation land with the understanding that the organizations operate the water ski course (located in the South Bay Planning Area) and radio controlled airplane strip (located downstream of the dam) in a way that is fully open to the public.

California Department of Forestry (CDF) has a lease agreement to run Baseline Conservation Camp on approximately 66 acres of Reclamation land. The facility is self-contained and has its own water treatment plant and power source. In this case, CDF pays Reclamation rent to house their facility on Reclamation land. The rent in this case is an exchange in which Baseline provides New Melones services such as fire fuels reduction which at the end of the year total a

certain number of CDF crewmember hours. The benefits of this agreement to New Melones Lake Area include fire suppression, recreation area maintenance, and wildlife habitat enhancement.

6.3.2 Resource Management

Current management of commercial services, licenses and concessions is under authority of 43 CFR 429, 43 CFR 423, Reclamation Manual LND PO2, LND PO4, LND 04-01, LND 04-02, PEC 01-01. Reclamation may “promote appropriate opportunities for private sector development of recreation facilities and services when an opportunity exists for a reasonable profit for the operator, an appropriate return of fees to the Government, and reasonable user fees and charges to the public”(LND PO4).

Decision and Guidance Documents

- New Melones Draft Resource Management Plan-1995

Table R-31 lists current management guidance for commercial services and concessions.

Table R-31: Summary of Current Guidance for Commercial Services and Concessions

Internal Guidance	Source
Explore and, where appropriate, support concessionaire agreements with private enterprises to achieve needed recreational support services, programs, and facilities and to disseminate Reclamation information.	DRMP 1995
Require that all concessionaire contracts include: 1) explicit measures related to the notice and dissemination of public information; 2) communications equipment necessary in the event of emergencies; 3) medical emergency provisions; and 4) spill emergency response measures.	DRMP 1995 CFR 423, Concession Management by Reclamation LND 04-01, Concession Management by Non-Federal Partners LND 04-02

6.4 Facilities

6.4.1 Current Conditions

New Melones Lake Area is in a rural area among the foothills of the west slope of the Sierra Nevada. Altaville, Angels Camp, Columbia, Springfield, Sonora, Copperopolis, and Jamestown are the closest towns to the reservoir.

Each year, approximately 800,000 visitors take advantage of the various recreational opportunities at New Melones Lake Area (Reclamation 2007a). Facilities at New Melones Lake are found at Glory Hole and Tuttle town Recreation Areas, the visitor's center, and undeveloped areas. The types of facilities include access and parking facilities, day-use facilities, overnight facilities, and support facilities. There are other miscellaneous facilities, such as amphitheater, trailhead parking areas, and playgrounds. The types and number of facilities at New Melones Lake Area are identified in Appendix C.

Developed Recreation Areas. Developed recreation areas are designated by Reclamation for recreational use and have been developed in conformance with the Master Plan (Reclamation 1995). Glory Hole Recreation Area is in Calaveras County in the mid-basin area and is accessed from Highway 49 via Whittle Ranch Road. The recreation area is composed of the following three areas: 1) the main portion, which includes the large peninsula extending into the reservoir; 2) the New Melones Lake Marina; and 3) Angels Creek, which is north of the main area.

The Tuttle town Recreation Area is in Tuolumne County in the mid-basin area and is accessed from Highway 49 via Reynolds Ferry Road (Reclamation 1995). The recreation area is on a large peninsula extending into the reservoir.

The administration area and visitor's center is in Tuolumne County near the Highway 49 Stevenot Stanislaus River Bridge (Reclamation 1995). It is accessed from Highway 49 along and adjacent to the old Highway 49 road. The area is on the gradual incline of the north-facing side of Jackass Hill. In addition to housing Reclamation's administration and maintenance operations facilities, the area also has a visitor's center and restroom facility.

The Dam Overlook is in Tuolumne County and is accessed via Peoria Flat Road from Highway 108/120 (Reclamation 1995). The area contains viewing shelters, a restroom, and a parking lot. The view from the overlook is of the west side of New Melones Dam, the powerhouse, and the Stanislaus River. The overlook facility was built to enable public viewing for the dam and powerhouse construction. Once construction was completed, the facility became obsolete and has been closed to the public since that time.

Reclamation constructed playgrounds in camping areas shortly after the lake was filled. During winter 2007, the playgrounds will be removed because of safety concerns.

Undeveloped Recreation Areas. Undeveloped recreation areas are sites that were planned for future development in the DRMP but remained undeveloped or with minimum basic facilities. These areas are presently used, having been designated by Reclamation for dispersed recreational use, as well as other uses such as wildlife management. Various facilities are found in the nine undeveloped recreation areas identified in Appendix C. Vehicle access, including both car-top and trailered boat launching occurs at the Mark Twain undeveloped lake access, which is actually the old Highway 49 route. Parrotts Ferry undeveloped lake access, also a former roadway, was formerly open to trailered boat launching/vehicle access but is currently open only for foot traffic/hand launching. Both former roadways have deteriorated and are in disrepair because of shoreline erosion undercutting the road and hillside.

Most of the facilities in the developed areas are meeting current recreation demands from the public, except when the water level in the lake is high and during peak visitor periods (Brooks 2007b). Parking areas are inundated when the water level in the lake is high, resulting in a lack of parking space. During peak visitor periods, there is a lack of Americans with Disabilities Act (ADA)-accessible facilities, reservable group picnic spots, fish-cleaning stations, pay phones, and showers at the campgrounds. High water level day use parking, parking at the marina, and overflow parking for campers is also lacking.

The undeveloped areas do not have facilities to support current or future levels of visitor activities (Brooks 2007b). Undeveloped areas have limited parking, restroom, and refuse facilities, and lack vehicle barriers, fencing, signage, and visitor information boards.

6.4.2 Resource Management

Management actions for facilities include:

- Annual Facility Condition assessments;
- Tracking and reporting requirements under the Government Performance and Results Act (GPRA);
- Five year periodic reviews of recreation facilities and infrastructure;
- Annual inspections and 5 year external reviews of concession facilities;
- Accessibility surveys;
- Programmed funding for Extra-ordinary Replacement, Maintenance and Repair (RAX program); and
- Maximo computerized maintenance tracking program.

6.5 Fire Management

6.5.1 Current Conditions

Wildland Fire. Fire is an integral part of California's Sierra Foothill landscape. Historically, frequent low- or mixed-severity fire was common at New Melones. Now, much of this area has transitioned to stand-replacing fire due to increased fuel loads and overstocking. Wildland fire fuels consist of live and dead vegetation, including branches (on the tree or on the ground), leaves, needles, seeds, and cones. Wildland fire fuels continue to accumulate due to successful fire suppression and a lack of prescribed fire and other fuel reduction strategies.

Fuel conditions have also been affected by an increase of nonnative invasive species such as star thistle (*Centaurea solstitialis*). Burning tends to stimulate star thistle germination and may lead

to more robust plants following fire due to reduced competition from native species. In addition, star thistle retains moisture longer and grows larger than native plants; thus, the fuel it creates is more concentrated and burns slower and hotter, increasing fire severity.

Deteriorating forest health creates fuel conditions that contribute to high-intensity fires. Tree density, dense patches of shrubs, and introduced weeds increase fuel loads and competition among species, promoting tree mortality and disease and resultant high-intensity fire.

Fire Management Units. Fire is managed in three distinct Fire Management Units (FMU) on New Melones Project Lands (New Melones, Stanislaus, and Peoria-see Figure R-9). An FMU is any land management area definable by objectives, management constraints, topographic features, access, value to be protected, political boundaries, fuel types, and major Fire Regime groups that set it apart from the management characteristics of an adjacent FMU. The New Melones unit’s primary resource management strategy is to protect the wildland-urban interface (WUI) and high-value watersheds; the Stanislaus unit’s primary strategy is to protect watersheds and the WUI; and the Peoria unit is primarily managed to protect high-value habitat and the WUI (Reclamation 2006b).

New Melones FMU consists of four fuel types totaling 6,589 acres (Table R-32). The eight planning units (PU) in the FMU are Tuttle town French Flat, Bear Creek, Dam and Spillway, West Side, Greenhorn Creek, Glory Hole, and Carson. The northern half of Bear Creek and the eastern two-thirds of Carson are managed under different FMUs. Fire and fuels management in this unit are necessary to protect resource values such as water quality, watershed values, private property, developed recreation sites, cultural resources, special status species, wildlife habitat, air quality, recreation, and visual resources. The following communities/WUI areas are at risk from wildland fire: Angels Camp, Stanislaus, Tuttle town, Jamestown, Carson Hill, Cloy House, Copperopolis, and Jackass Hill.

New Melones FMU had 57 fires from 1994 to 2003, averaging 91 acres. The largest fire burned 3,212 acres, 62 percent of the total acres (5,186) burned. Wildland fire has been controlled with aggressive fire suppression activities (Table R-33). Eighty-six percent of the fires were human-caused, while fourteen percent were attributed to natural causes.

Table R-32: Fuel Types Represented in the New Melones FMU

Fuel type	Acres	Percent
Annual grassland	179	3
Blue oak-foothill pine	5,650	85
Chamise-redshank chaparral	190	3
Montane chaparral	570	9
Total	6,589	100

Table R-33: Historic Fire Ignitions in the New Melones FMU (1994 to 2003)

Size Class (acres)	Number of Ignitions	Total Acres Burned
A (0.0-0.2)	32	2
B (0.3-9.9)	16	48
C (10-99.9)	4	65
D (100-299.9)	3	610
E (300-999.9)	0	0
F (1000-4999.9)	2	4,462
G (5,000+)	0	0
Total	57	5,187

Source: Reclamation 2006c

Stanislaus FMU consists of six fuel types totaling 4,341 acres (Table R-34). The PUs in the FMU are Camp Nine, Stanislaus River Canyon, Parrotts Ferry, Mark Twain, Carson, and Coyote Creek. Fire and fuels management in this unit are necessary to protect resource values such as water quality, watershed values, private property, developed recreation sites, cultural resources, special status species, wildlife habitat, air quality, recreation, and visual resources.

Table R-34: Fuel Types Represented in the Stanislaus FMU

Fuel type	Acres	Percent
Blue oak woodland	50	1
Blue oak-foothill pine	2,964	68
Chamise-redshank chaparral	940	22
Montane hardwood	129	3
Montane hardwood-conifer	85	2
Ponderosa pine	173	4
Total	4,341	100

Source: Reclamation 2006c

The following communities/WUI areas are at risk: Forest Meadows, Vallecito, Columbia, Italian Bar, Clark Flat, Jackass Hill, Skunk Ridge, Natural Bridges, Douglas Flats, and Murphy.

Stanislaus FMU had 42 fires from 1994 to 2003, averaging 384 acres. The largest fire burned 14,280 acres, 88 percent of the total acres (16,144) burned. Table R-35 displays the number and size of fires between 1994 and 2003. Ninety-three percent of the fires were human-caused, while seven percent were attributed to natural causes.

Table R-35: Historic Fire Ignitions in the Stanislaus FMU (1994 to 2003)

Size Class (acres)	Number of Ignitions	Acres
A (0.0-0.2)	20	1
B (0.3-9.9)	15	23
C (10-99.9)	2	40
D (100-299.9)	1	100
E (300-999.9)	3	1,700
F (1000-4999.9)	0	0
G (5,000+)	1	14,280
Total	42	16,144

Source: Reclamation 2006c

Peoria FMU consists of four fuel types totaling 3,788 acres (Table R-36). The two PUs in the FMU are Bear Creek and Peoria Wildlife Area. The northern half of Bear Creek is managed under the New Melones FMU. Fire and fuels management in this unit is necessary to protect resource values such as private property, Federal and state infrastructure, water quality, watershed values, private property, developed recreation sites, cultural resources, special status species, wildlife habitat, habitat impact mitigation area, air quality, recreation, grazing, and visual resources. The following communities/WUI areas are at risk: Peoria Flat, Rawhide Flat, Copperopolis, and scattered rural housing developments in the area.

Table R-36: Fuel Types Represented in the Peoria FMU

Fuel type	Acres	Percent
Annual grassland	89	2
Blue oak-foothill pine	3,673	96
Chamise-redshank chaparral	18	1
Montane chaparral	8	1
Total	3,788	100

Source: Reclamation 2006c

Peoria FMU had 11 fires from 1994 to 2003, averaging 1 acre. The largest fire burned 6 acres, 60 percent of the total acres (10) burned. Table R-37 displays the number and size of fires between 1994 and 2003. Ninety-one percent of the fires were human-caused (camp fires, smoking, fire use, incendiary or equipment), while nine percent were attributed to natural causes.

Table R-37: Historic Fire Ignitions in the Peoria FMU (1994 to 2003)

Size Class (acres)	Number of Ignitions	Acres
A (0.0-0.2)	5	1
B (0.3-9.9)	6	10
C (10-99.9)	0	0
D (100-299.9)	0	0
E (300-999.9)	0	0
F (1000-4999.9)	0	0
G (5,000+)	0	0
Total	11	11

Wildland fires in the western US have become increasingly dangerous due to the proximity of structures and a build-up of fuels (invasive weeds or vegetation that would have burned more often, but due to successful fire suppression continue to accumulate). In response to the risks wildland fires pose to firefighters and the impacts on communities, the National Fire Plan (NFP) was initiated by a partnership of government land management agencies in 2000. This coordinated effort to protect communities and natural resources from increasingly severe wildfire resulted in the 10-Year Comprehensive Strategy and specific goals and objectives to guide fire management planning (Reclamation 2006b). In addition to the guidance provided by the NFP, the fire regime condition class (FRCC) method was established. FRCC is an interagency, standardized tool for determining the degree of departure from reference condition vegetation, fuels, and disturbance regimes. Assessing FRCC can help guide management objectives and set priorities for treatments. Reference conditions are vegetation and disturbance attributes that can sustain current native ecological systems and natural fire regimes. Reference conditions are determined by experts through professional judgment, published literature, and historical information using standardized computer models. This quantitative method links landscape-scale assessments and stand-level classifications (Hann et al. 2003). The objective of this method is to target those areas exhibiting the greatest departure from reference condition as priority for fuel treatment.

Development around New Melones Lake Area and surrounding areas continues to increase as demand for recreation and housing in the area increases. Greater numbers of people, homes, and structures within the WUI, coupled with accumulating hazardous fuels due to fire suppression and the lack of fuel management measures, creates a dangerous situation. Many of Reclamation's lands are not easily accessible, further increasing the fire hazard. The three FMUs (Reclamation 2006b) in the decision area list WUI as a major decision factor. As the WUI continues to grow, it will become more of a driving factor on fire suppression and fuels management in the future.

The CDF-TCU is the principle agency responsible for fire suppression in the project area. On adjacent BLM lands the levels of resources available have not allowed for ideal fire management (BLM 2006b). Competition among agencies for CDF staff and equipment could lead to a lack of

personnel and equipment to accomplish fuel treatment goals, resulting in a backlog of high priority fuels management projects.

Smoke management and associated air quality concerns may increase as resource users and residences increase in and around the project area, potentially limiting prescribed burning activity.

Noxious and invasive weed species will continue to colonize disturbed sites. This trend will likely increase if fire severity and size increases and if fuels continue to build up as a result of fire suppression.

6.5.2 Resource Management

Decision and Guidance Documents

- New Melones Project Area Draft Fire Management Plan-2006
- New Melones Draft Resource Management Plan-1995
- New Melones Vegetation Management Plan-1997
- New Melones Master Plan-1976

Fire management direction has been defined first by the 1976 Master Plan and most recently in the 2006 New Melones Project Area Draft Fire Management Plan. The draft FMP presents an integrated set of policies and management actions that focus on mitigating fire hazard near infrastructure and residences by reducing fuel loads and the probability of human ignitions.

Management guidance common to all FMUs includes the following:

- Suppressing all wildfires through aggressive attack;
- Reducing hazardous fuel loads with emphasis on WUI areas, high-value infrastructure, and critical watersheds;
- Implementing post-fire rehabilitation with native species, as appropriate, to protect water quality, potential for invasive species, native species diversity, and resource values;
- Protecting water quality;
- Protecting wildlife resources;
- Protecting wetlands, riparian areas, and sensitive vegetation resources;
- Protecting fisheries resources;
- Protecting cultural resources;
- Protecting soil resources; and
- Protecting air resources.

Table R-38 presents specific fire and fuels management objectives for the FMUs.

Table R-38: Wildland Fire Management Objectives and Strategies by FMU

Management Objective	New Melones Unit	Stanislaus Unit	Peoria Unit
Wildfire			
Target individual wildfire size	< 1 acres or 90% success rate	≤ 10 acres or 90% success rate	≤ 10 acres or 90% success rate
Maximum target acres burned per decade	250	1,000	500
Prescribed fire			
Target annual acres	25 to 100	50 to 250	50 to 250
Target decadal acres	500	1,500	1,500
Non-fire fuel reductions			
Target annual acres	100	10	75
Target decadal acres	1,000	100	750

Source: Reclamation 2006c

Table R-39 lists current management guidance for fire management.

Table R-39: Summary of Current Decisions and Guidance for Fire Management

Decision	Source
Use natural or in-place barriers (e.g., roads, streams, ponds, wetlands) to minimize the need for fireline construction.	National Fire Plan 2004
Limit open campfires to designated overnight campgrounds and within provided fire rings and pedestal grills. Prohibit open fires in all areas during periods of high fire danger.	43 CFR 423, Recreation Policy 2005
Internal Guidance	
100% protection of adjacent communities and resource/social values at risk from unwanted wildfire. Community and resource/social values specifically include critical wildlife habitat.	DFMP 2006
Minimize pollution resulting from wildfire suppression while recognizing safety and operational priorities of fighting wildfires.	DFMP 2006
Project lands are within a USFS and CDF mutual aid zone, with the CDF having responsibility for fire control. Fire prevention and suppression activities will be supervised and coordinated by the CDF through the Unit Chief stationed at the Tuolumne/Calaveras Unit in San Andreas.	DFMP 2006
Minimize the use of bulldozing firelines in high erosion areas. If unavoidable, construct on contour or stabilize with waterbars to control erosion.	DFMP 2006
Fire suppression strategies should be tailored to address areas of significant constraints including critical habitat for wildlife, T&E species, areas of soil instability, areas of other critical resource constraints (cultural), and where plant communities are at risk due to current conditions/times of year or other ecological constraints.	DFMP 2006

Internal Guidance	Source
<p>Actions will be taken in these identified areas to protect the sensitive sites from damage by heavy mechanized equipment.</p>	
<p>Burned area environmental response (BAER) plan will be followed.</p> <p>-Consider nonpoint sources of pollution resulting from wildfire suppression and rehabilitation, while recognizing safety and operational priorities of fighting wildfires.</p> <p>-Consult with staff archaeologist, botanist, wildlife biologist, and other staff specialists to evaluate fire and suppression operations effects and determine if additional restoration is necessary.</p> <p>-Revegetate burned areas with native plant species.</p>	DFMP 2006
<p>Meet resource, watershed, wetlands, wildlife, fisheries, cultural and vegetation/fuels management goals and objectives through the appropriate use of fire and non-fire fuel treatments. Implement appropriate decisions as identified in the final draft New Melones Fire Management Plan.</p>	DFMP 2006
<p>Maintain adequate grass and brush clearance directly adjacent to roads and in recreation areas consistent with the Integrated Pest Management Plan and special status plant requirements.</p>	DFMP 2006
<p>In prescriptions for burns, firelines should be constructed on contour or stabilized with water bars and/or other appropriate techniques to control erosion, protect water quality, and prevent rolling fire brands. Prevent runoff from directly entering waterbodies.</p>	DFMP 2006
<p>Fuel breaks and firebreaks will be designed in a manner that minimizes impacts to aesthetic, scenic, and ecological resources, and consider resource objectives for vegetation management, wildlife habitat management, soil stabilization public safety, ignition sources, and safety of fire-fighting personnel.</p> <p>-Create fuel breaks with blended or feathered edges through selective thinning and by cutting indentations in brush to create bays.</p> <p>-Retain clumps of unmodified vegetation within fuel breaks to provide cover and food for wildlife.</p> <p>-Retain mature oaks for their wildlife benefits and scenic qualities.</p>	DFMP 2006
<p>Fuel hazard reduction activities will be designed and implemented to maintain adequate grass and brush clearance directly adjacent to high use roads and in Reclamation recreation areas during the fire season, consistent with Vegetation Management Plan for New Melones Lake objectives and special status plant requirements.</p>	DFMP 2006
<p>Suppress fires that threaten life, property, and public safety.</p>	DRMP 1995
<p>Implement site closure procedures during periods of extreme fire danger according to the state fire warning system.</p> <p>-Post and gate main entry points to Reclamation lands. Signs will give the current fire hazard warning status and/or the reason for site closure, if necessary under extreme fire hazard conditions.</p>	DRMP 1995

Internal Guidance	Source
Use low-intensity prescribed burns to establish fire breaks within wetland/riparian buffer zones.	DRMP 1995
Carefully plan burning to adhere to weather and fuel conditions that will help achieve the desired results while minimizing water quality impacts.	DRMP 1995

6.6 Local Transportation Routes and Uses

6.6.1 Current Conditions

Road Access. The road system serving the project area consists of the state highways, county roads, and private roads used for motor vehicle traffic, as seen in Figure R-10.

SR 49. SR 49 provides access to the recreational areas of the New Melones Lake Area from Angels Camp in the north and Sonora in the south. Both commuters and tourists use the highway, as it is the primary access roadway between Tuolumne County and Calaveras County. The highway links communities in the Sierra foothills and acts as “Main Street” for the City of Angels (Angels Camp). SR 49 meets with SR 4 at the north end of Angels Camp. Both state routes are owned and maintained by Caltrans.

Annual Average Daily Traffic (AADT) volume is defined as the total two-way traffic volume on a roadway over the year divided by 365 days. Caltrans traffic counts reflect an estimate of annual average daily traffic by compensating for seasonal fluctuation, weekly variation, and other variables. The recordation of AADT is necessary for presenting a comprehensive picture of traffic flow, evaluating traffic trends, computing accident rates, and planning and designing highways. Roads surrounding New Melones Lake Area include SR 49, Highway 108/120, O’Byrnes Ferry Road, Glory Hole Road, Rawhide Road, Tutletown Road, Springfield Road, Parrotts Ferry Road, Camp Nine Road, New Peoria Flat Road, and Peoria Flat Road. The highest AADT volume in Calaveras County in 2004 was 16,700, observed on SR 49 in Angels Camp on Murphy’s Grade Road. Table R-40 presents AADT data for SR 49.

Table R-40: Calaveras County Annual Average Daily Traffic (AADT)

SR 49	2002	2003	2004
Tuolumne/Calaveras County Line	5,500	5,500	5,900
Angels Camp, Centennial Road, South	5,500	5,500	5,900
Angels Camp, Centennial Road, North	7,600	8,000	8,100

Reclamation facilities are accessible from SR 49 at the following locations:

Whittle Ranch Road turnoff to Glory Hole Recreation Area. Whittle Ranch Road is owned and maintained by Reclamation. It consists of two lanes and is in good condition. Circulation and roadways within the campground areas are generally well positioned and adequately signed and maintained. Access to the marina from Whittle Ranch Road is well marked; however, the road leading down to the marina is somewhat hazardous due to its steep incline and composition of loose gravel material at lower lake levels. Access to the boat ramps is generally good. From the end of Glory Hole Road non-motorized access to the Westside Management Area and Bowie Flat Management Area is possible along unimproved fire road.

Reynolds Ferry Road turnoff to Tuttle town Recreation Area. Reynolds Ferry Road is owned and maintained by Reclamation at about a mile from SR 49 to its terminus. This road is in excellent condition. Boat ramp access is generally good at this recreation area.

Minor paved road to Reclamation Headquarters and Mark Twain Unimproved Day Use Recreation Area. The two-lane paved road from SR 49 to Reclamation Headquarters and the recreation area is the former SR 49, and is owned and maintained by Reclamation. It is in good condition to the headquarters area but deteriorates somewhat from the headquarters gate to the recreation area.

Minor paved road to Old Town (Melones) Unimproved Day use Recreation Area. The two lane paved road from SR 49 to the recreation area is gated approximately 0.1 mile from the SR 49 junction. However there is non-motorized vehicle access to Old Town (Melones) Unimproved Day use Recreation Area.

Rawhide Road (Tuolumne County Road E5) turnoff to Shell Road to Table Mountain and Peoria Wildlife Management Area (PWMA). Rawhide Road is a well maintained, paved, two-lane county road that is accessible from two points along SR 49. Shell Road, a county road for the first 2.59 miles from its intersection at Rawhide Road, starts as a well maintained, two-lane then one lane, paved road. At the 1.6 mile mark and beyond it becomes a poorly maintained, two-track dirt road which serves as a utility road for Reclamation access to PWMA, the dam, and for emergency vehicles. This road is open to equestrian, hiking, biking, and hunting use by the public. PWMA is closed to public vehicles as per the PWMA EA (Reclamation 2007). Another way to access Bear Creek Management Area, an unimproved recreation area, would be to travel to Peoria Wildlife Management Area as described then to travel north and west of the public parking along Shell Road. No vehicle access into Bear Creek Management Area is permitted.

Rawhide Road (Tuolumne County Road E5) turnoff to French Flat Road to French Flat Day Use Recreation Area – Rawhide Road is a well maintained, paved, two-lane county road that is accessible from two points along SR49. French Flat Road, a county road, is a well maintained two lane paved road which at two miles enters gated Bureau of Land Management land. At this point public vehicle access is restricted, however there is a very poor unpaved road approximately 0.5 miles in length which crosses BLM land and connects with Reclamation property.

Rawhide Road (Tuolumne County Road E5) turnoff to Old Melones Road to Bear Creek Recreation Area - Rawhide Road is a well maintained, paved, two-lane county road that is accessible from two points along SR49. Old Melones Road, a county road, is a well maintained two lane paved road which at approximately 0.5 miles has gated non-motorized access to Bear Creek Recreation Area.

Parrotts Ferry Road. Reclamation facilities are accessible from Parrotts Ferry Road at the following locations:

The two lane paved road from Parrots Ferry Road to the recreation area is gated approximately 0.1 mile from the Parrotts Ferry Road junction. However, there is non-motorized vehicle access to Old Parrotts Ferry Unimproved Day use Recreation Area and New Melones Lake.

Camp Nine Unimproved Day Use Recreation Area. Approximately 3 miles of Camp Nine Road is on land owned by Reclamation. This portion of the road is owned by Reclamation, but maintained via a road maintenance agreement with the Collierville Powerplant, owned by Calaveras County Water District (CCWD) and operated by Northern California Power Authority (NCPA). The remainder of Camp Nine Road is privately owned by 22 landowners, with easements to PG&E and NCPA. In exchange for access rights, the power companies are responsible for the maintenance of the road. Reclamation's access rights across the privately owned portion of Camp Nine road are based on prescriptive easement. PG&E's Stanislaus Powerplant is located across the New Camp Nine Bridge and at the end of the road along the Tuolumne County side of the river. This road is on Reclamation property until it reaches land owned by PG&E for the powerplant. PG&E has easement rights to access the powerplant across Reclamation land, and Reclamation has easement rights to access across PG&E land. It is in fair to poor condition with numerous potholes, eroded shoulders, and deteriorated guardrails. It has two lanes and in some places has deteriorated to one lane.

Coyote Creek Nature Trail and Natural Bridges. The paved two-lane turnoff and dead end public road from Parrotts Ferry Road to the trailhead is owned and maintained by Reclamation. It is in fair condition. Designated parking stalls are not available. The Natural Bridges area has limited parking.

New Melones Flat Road. Reclamation facilities are accessible from SR 108/ SR120 at the following locations:

Minor paved road to Peoria Equestrian Staging Area to Peoria Wildlife Area – From SR108/SR120 to get to Peoria Equestrian Staging Area, one turns west onto county road E15/O'Byrne's Ferry Road for approximately .2 miles and then turns north onto New Peoria Flat Rd for approximately three miles, until the Baseline Conservation Camp entrance. At this point, a public parking lot is available to the right approximately .2 miles down an access road. The parking lot provides non-motorized access to Peoria Wildlife Area and the radio control flyers facility.

Minor paved road to Overlook - From SR108/SR 120 to get to the Overlook, one turns west onto county road E15/O'Bryne's Ferry Road for approximately 0.2 miles and then turn north onto New Melones Dam Rd/New Peoria Flat Rd for approximately three miles. From this point

motorized public access to the Overlook has been restricted. However non-motorized access to the Overlook is possible by following Old Melones Rd/Old Melones Dam Rd for approximately two more miles.

Lake Only Access. Three management areas, Dam and Spillway Management Area, Westside Management Area, and Bowie Flat Management Area can only be accessed by the public via New Melones Lake.

Boat and Personal Watercraft Use. Motorized boats are the principle means to access and enjoy many of the recreation opportunities available at New Melones Lake Area. Motorboats support activities such as waterskiing, fishing, sightseeing, and power boating. House boating and jet skiing are other popular motorized boating activities on the reservoir. Boat launch ramps with courtesy docks are located in Glory Hole and Tuttle town Recreation Areas. Boaters must have the required safety equipment (e.g., lifejackets, ski flag, fire extinguisher, etc.) on board their boat, as required by the US Coast Guard and California Department of Boating and Waterways. Kayaks, canoes, and sailboats used in public waters are expected to have similar safety equipment.

Projected increases in population will result in increased demand on roads within the project area; use of the New Melones Lake Area is expected to increase 20 percent over the planning period. The increase in travel demand on the roadway system will require increased cost for roadway maintenance and rehabilitation. Since the existing roadways and facilities were not designed to carry large amounts of traffic, roadway improvements will be required to keep up with this growth. Reclamation is working with county planning departments to ensure proposed development projects have legal access across Reclamation land before approving.

6.6.2 Resource Management

Decision and Guidance Documents

- 43 CFR 420
- New Melones Draft Resource Management Plan-1995
- New Melones Master Plan-1976

Table R-41 lists current management guidance for transportation.

Table R-41: Summary of Current Decisions for Transportation

Decision	Source
Roads above gross pool in the main lake area will be paved. Roads below gross pool will have a stabilized aggregate surface. Major access and circulation roads will have a maximum sustained grade of 10 percent and a maximum pitch grade of 12 percent.	Master Plan 1976
Surface runoff will be adequately controlled by grade, ditches, and drainage structures; flume downdrains will be used to guard against the formation of runnels or channels. Culverts or bridges will control cross drainage. They will be located as required and sized in accordance with current California culvert practices.	Master Plan 1976
Signs, markers, guideposts, guardrails, and center line and shoulder striping will be provided on surfaced roads for traffic control and safety purposes. Standard guardrails will be used on fill slopes over 10 feet and on all daylight or fill slopes in steep terrain. Movable signs and barriers will be used below gross pool level. For further traffic control and safety, slow-down bumps will be provided where needed on circulation roads. Barriers will be installed to prevent vehicles from going off the travelway and generally will be constructed of natural materials such as large rocks, timber, and logs.	Master Plan, 1976
The access and circulation roads will be designed in accordance with criteria contained in Technical Manuals 5-822-2 and 5-822-5, except as otherwise directed.	Master Plan, 1976
Adequate parking facilities will be provided within each area for the planned design day load.	Master Plan, 1976
Operation of seaplanes for other than recreational purposes is prohibited (commercial, pilot training etc.) Operation is prohibited within 1500 feet of dam and within 500 feet of an occupied beach. Landings and takeoffs permitted only on water at least 1000 feet from any shoreline and in designated landing area. No overnight moorage or beaching of seaplanes except in designated concession operated resort areas.	Reclamation Seaplane Policy, 2006

6.7 Trespass Issues

6.7.1 Current Conditions

Prohibited acts on Federal land include grazing or watering livestock, trespass into areas specified as off limits to public access (e.g., operations facilities and areas with sensitive ecological or cultural resources), using motorized vehicles in any areas other than on paved or specified roads, construction, placing, or maintaining any kind of road, trail, structure, fence, enclosure, communication equipment, pump, well, or other improvement without a permit.

Trespassing, vandalism, and illegal dumping are common problems within the New Melones Planning Area, especially in areas that are difficult to access or patrol. Adjacent grazing livestock often access Reclamation lands through poorly maintained fencing or areas where fencing has been taken out illegally.

The following areas within the New Melones Lake Area have been, and will remain, closed until further notice. Note that the type of closure varies by location (Brooks 2007a).

- a. New Melones Powerplant and Vicinity, including outlet works and river downstream to buoy line, and Visitor overlook, and area leased to and occupied by California Division of Forestry, Baseline Conservation Camp. Closed to public vehicles, hunting, and fishing;
- b. New Melones Dam and Spillway. Closed to all public access;
- c. Old Parrotts Ferry Road. Closed to public vehicles;
- d. Peoria Wildlife Management Area. Closed to public vehicles;
- e. Melones Recreation Area. Closed to public vehicles;
- f. French Flat Recreation Area. Closed to public vehicles; and
- g. Bear Creek Recreation Area. Closed to public vehicles.

Reclamation will continue to enforce policies related to trespass onto or the unauthorized use of the land and water under Reclamation's jurisdiction. Trespass and unauthorized use, when permitted to continue, deprive the public of its rightful use and enjoyment of the public lands. It is the general policy of Reclamation to facilitate and ensure the proper use of land resources. Benefits to the public as a whole resulting from non-exclusive uses of Federal lands is the primary management emphasis.

6.7.2 Resource Management

Decision and Guidance Documents

- 43 CFR 420
- New Melones Master Plan- 1976
- New Melones Draft Resource Management Plan-1995

Table R-42 lists current management guidance for trespass issues.

Table R-42: Summary of Current Decisions and Guidance for Trespass Issues

Decision	Source
The New Melones Power Plant and vicinity are closed to public vehicles, hunting and fishing: including outlet works and river downstream to buoy line, and Visitor overlook, and area leased to and occupied by California Division of Forestry, Baseline Conservation Camp.	43 CFR 423
The New Melones Dam and Spillway are closed to all public access.	43 CFR 423
The following areas are closed to public vehicles: Old Parrotts Ferry Road, Peoria Wildlife Management Area, Melones Recreation Area, French Flat Recreation Area, and Bear Creek Recreation Area.	43 CFR 423
The New Melones Lake Project is designated in its entirety as a Special Use Area pursuant to 43 CFR 423, for the protection of public health and safety, the protection and preservation of cultural and natural resources, the protection of environmental and scenic values, scientific research, the security of Reclamation facilities and the avoidance of conflict among visitor use activities. Reclamation has established schedules of visiting hours, public use limits, special uses and other conditions, restrictions and prohibitions on particular uses or activities.	43 CFR 423
43 CFR 423 and subsequently established special use area regulations are used to maintain law and order and protect persons and property within the New Melones Lake Project.	43 CFR 423
Internal Guidance	Source
Unauthorized entry into caves containing significant paleontological finds would be prohibited. Sensitive caves would be accessed in a manner that would not adversely affect cave organisms or cave microclimate.	DRMP 1995
Reclamation would continue to enforce policy related to trespass onto, or the unauthorized use of, the land and water under its jurisdiction. Trespass and unauthorized use, when permitted to continue, deprives the public of its rightful use and enjoyment of the public lands. It is the general policy of Reclamation to facilitate and ensure the proper use of land resources. Benefits to the public as a whole resulting from nonexclusive uses of Federal lands is the primary management emphasis.	DRMP 1995
Prohibited acts on Federal land include the grazing or watering of livestock, trespass into areas specified as off-limits to public access (e.g., operations facilities and areas with sensitive ecological or cultural resources), the use of motorized vehicles in any areas other than on paved or specified roads, construction, placing, or maintaining any kind of road, trail, structure, fence, enclosure, communication equipment, pump, well, or other improvement without a permit.	DRMP 1995
Reclamation would enforce its general policy related to trespass or unauthorized use, as follows: "Clear, and keep clear, all lands of trespasses and unauthorized uses. In resolving trespass or unauthorized use issues, priority will be given to those trespasses which are not in the best public interest, or are not compatible with the primary uses of the land. In cases where a trespass or unauthorized use has occurred, prompt resolution of the conflict is encouraged. Seek to resolve unauthorized uses and trespasses before they become permanently established. When violations do occur, Reclamation will seek first to negotiate solutions to resolve all violations. Attempts to	DRMP 1995

Internal Guidance	Source
negotiate solutions to unauthorized uses and trespass will be the first priority, using the courts will be a last resort. In the event such negotiations fail, Reclamation will take those actions necessary to protect the public interest and project lands.”	
Reclamation would pursue cooperation aimed at preventing unauthorized use and trespass by implementing a program of public information, education, and contact (for example, through signs, pamphlets, maps, and public notices).	DRMP 1995
Reclamation would eliminate unpermitted grazing and water access on lands under its jurisdiction.	DRMP 1995
Reclamation would initiate a program to periodically patrol areas where unpermitted grazing or water access occurs.	DRMP 1995
Reclamation would enforce its off-road vehicles policy, which states that all Reclamation lands are closed to off-road vehicles, except for those areas specifically designated for such use (43 CFR 420). No off-road vehicles are allowed at New Melones Lake; vehicles must remain on paved or other specified hard surface roads. In accordance with 43 CFR 420, vehicular use would permit access to fire, emergency, or law enforcement vehicles and those used for officially designated purposes.	DRMP 1995
Reclamation would initiate a program to periodically patrol areas where off-road vehicle use is known to occur.	DRMP 1995

6.7.3 Other Plans That Will Be Considered

Management at New Melones Lake Area is coordinated with adjacent Federal land owners to ensure consistency with their management plans.

6.8 Utilities

6.8.1 Current Conditions

Electrical Services. PG&E provides electrical service to the headquarters, visitor’s center, maintenance building, a private concessionaire at Glory Hole Recreation Area marina, and the southern end of the reservoir for dam operations and an archeological storage facility and Baseline camp (Brooks 2007a). Western Area Power Authority (WAPA) provides electrical service to Glory Hole and Tuttle town Recreation Areas. With few exceptions, all of the electrical lines are aboveground. Some electrical lines are owned by Reclamation; these are maintained by WAPA, which may contract out maintenance work to PG&E occasionally. Solar panels on top of the maintenance building provide electricity to the immediate buildings.

Water. A needs assessment identifies water system demands at New Melones Lake Area (Reclamation 2001). The assessment was based on planned recreation facilities identified in the Master Plan (USACE 1976). Table R-43 summarizes projected system demands.

Table R-43: Estimated Peak-Day (Gallons) Water Demand for 2040

Recreation Area	Day Use	Campers	Total Demand
Tuttletown	48,405	36,225	84,630
Glory Hole	48,750	56,700	105,450
Angels Arm	19,905	17,500	37,405
	Visitors	Staff	
Visitor's Center	6,600	150	6,750
Administration Offices	1,200	0	1,200
Total	123,660	111,775	235,435

Source: Reclamation 2001

Reclamation maintains one 50,000-gallon water storage tank and one 80,000-gallon tank at Tuttletown Recreation Area, one 36,000-gallon tank at Angels Arm, and one 50,000-gallon tank at Glory Hole Recreation Area (Brooks 2007a). There are also two 16,000-gallon tanks at the Glory Hole Recreation Area marina. One of these, installed in 2005, is owned by Reclamation and is used for water storage; the other is owned by the marina operator.

Glory Hole Recreation Area has two wells that provide water for public uses, including in the restrooms and for water spigots (Brooks 2007a). A third well at the marina is used by staff and for concessionaire operations, such as cleaning houseboats and filling houseboat hot tubs. Treatment of water from the reservoir at Glory Hole Recreation Area no longer occurs.

Tuttletown Recreation Area will have a new well at the end of this fiscal year because the current well does not provide enough water (Brooks 2007a). The treatment plant will still be used to treat the well water for odor and taste.

Angels Arm has a new water treatment plant, installed in 2006, that treats water from the reservoir (Brooks 2007a).

The headquarters, maintenance building, and visitor's center are served by a well. Approximately 25 personnel are served by the well. There is no potable water available at any of the undeveloped recreation areas.

Waste

Wastewater. A Needs Assessment identifies wastewater systems demands at New Melones Lake (Reclamation 2001). The assessment was based on planned recreation facilities identified in the Master Plan (USACE 1976). Table R-44 summarizes projected system demands.

Table R-44: Estimated Maximum Wastewater Production Rates (Gallons per Day) for 2004

Recreation Area	Day Use and Campers
Tuttletown	60,766
Glory Hole	43,741
Visitor's Center and Administration Offices	1,070
Total	51,721

Source: Reclamation 2001

Glory Hole and Tuttletown Recreation Areas and the Baseline Conservation Camp generate wastewater that is piped to evaporation ponds and then to polishing ponds (Brooks 2007a). Some of the wastewater is then applied to spray fields.

Glory Hole Recreation Area generates wastewater at the campground, restrooms, boat launches, recreational vehicle (RV) dump station, houseboats, and floating restrooms (Brooks 2007a). It is either piped to or trucked to wastewater lagoons, or it is taken off site by private commercial services.

Tuttletown Recreation Area generates wastewater at the restrooms and RV dump station (Brooks 2007a). The wastewater at the RV dump station is trucked to the wastewater lagoons. The wastewater at the restrooms is either piped to the wastewater lagoons or taken off site by private commercial services.

The headquarters, maintenance building, and visitor's center generate wastewater that is piped to a nearby leach field (Brooks 2007a). Approximately 25 personnel generate wastewater in this area.

The Baseline Conservation Camp at the southern end of the reservoir has a California Department of Corrections Facility and CDF facility (Brooks 2007a). The wastewater from these facilities is piped to the evaporation ponds. The power plant is also at the southern end of the reservoir. The wastewater from the power plant is kept in a holding tank for off site removal by private commercial services.

Portable toilets are located at all of the recreation areas (Brooks 2007a). The waste from the portable toilets is either taken off site by private commercial services or to the wastewater lagoons.

Solid Waste. Private commercial services remove solid waste (Brooks 2007a). The closest transfer stations to the reservoir in Calaveras County are Red Hill in Vallecito and Copperopolis in Copperopolis (Calaveras County 2007). The closest transfer station to the reservoir in Tuolumne County is Cal Sierra Transfer Station in Sonora (Tuolumne County 2007).

Communications. A microwave tower on top of Peoria Mountain is used for communications between headquarters and the dam (Brooks 2007a). Peoria Mountain is in the southern portion of Reclamation lands. Tuttletown Recreation Area has a radio repeater that is used for communications between Reclamation personnel.

Recent and planned upgrades to the utilities infrastructure have improved the provision and reliability of water services (Brooks 2007a). The need to provide additional wastewater and solid waste services continues to change as recreation demands change. Changes in recreation demands include new types of recreation in new areas and fluctuating user levels.

6.8.2 Resource Management

Decision and Guidance Documents

New Melones Master Plan- 1976

Table R-45 lists current management guidance for utilities.

Table R-45: Summary of Current Decisions for Utilities

Decision	Source
Maintenance of right of way utility crossings will be coordinated with Reclamation prior to any land alterations.	Master Plan 1976
Public telephones will be provided at the entrance stations and concession areas at Glory Hole and Tuttletown.	Master Plan 1976

6.9 Range Management

6.9.1 Current Conditions

Range conditions vary throughout the planning area. In general, the annual grass community that covers much of the planning area is stable and provides good range conditions. Restricted vehicular access to many areas and fire management methods have kept disturbance to a minimum in most areas. Areas that have been disturbed by inappropriate motor vehicle use, weed infestations, or wildfire may have lower quality range conditions in terms of providing for grazing or ecosystem health. Lack of livestock grazing has allowed vegetation to accumulate in some areas, leading to fuel loading conditions that could allow for hot, damaging fires.

Range management combines, at a minimum, application of fire science, weed control methodology, and sustainable grazing practices. Other aspects of Reclamation's overall management strategy, including banning the use of OHVs and restricting vehicular traffic in sensitive areas, assist in maintaining range conditions.

Prescribed Fire. The recently created Draft FMP recognizes fire as a resource to assist in managing for desired range conditions and proposes methods to incorporate prescribed fire into its range management program. The Draft FMP incorporates several aspects of the National Fire Plan, including use of the fire regime condition class (FRCC) method. FRCC uses established reference conditions created by assessment of ecological features and natural fire regimes in healthy rangelands. Features assessed in the field to determine FRCC include vegetative and disturbance attributes and can be used to determine the overall ecological health of a particular study area. This data will be used by Reclamation and partnering agencies to determine range

management priorities, including making decisions as to when and where prescribed fires may be appropriate.

Weed Control. Most of the grasslands found in the New Melones Lake Area have been converted from perennial native bunchgrasses to non-native annual grasses. Tree and shrub communities show a greater incidence of native species. In the Peoria Wildlife Management Area, which has extensive rangeland, 74 non-native species have been recorded (Evens et al. 2004), most of which are ground layer species. While many of these species have substantially replaced the role of native grasses in terms of providing forage for wildlife and livestock, others such as cheatgrass (*Bromus tectorum*) are able to change the fire and hydrologic regimes and seriously alter range conditions.

Grazing. The California Department of Finance (DOF) determined that in 2000, livestock produced \$10.4 million, cattle and calves produced \$3.3 million, and livestock products produced \$200,000 in Tuolumne County. In Calaveras County, cattle and calves produced \$6.7 million, and livestock and poultry products produced \$800,000 (DOF 2000). Both private and public grazing added to the county statistics. Six grazing allotments totaling 3,746 acres are located on BLM lands adjacent to the project area. One grazing allotment is permitted on USFS land in the Clark's Flat area. The allotment encompasses 480 acres and has a season of use from May 1 through September 15. Although historically allowed, no grazing is currently permitted on New Melones lands.

Reclamation previously leased 4,394 acres of land in two areas (Bear Creek and Glory Hole Recreation Areas) for livestock grazing. Subject to a grazing suitability analysis, grazing may continue, but its purpose and intensity would be directed by water quality concerns, by vegetation management goals (usually related to fuel loading), and by policies and actions identified in current Reclamation guidance.

6.9.2 Resource Management

Decision and Guidance Documents

- New Melones Draft Resource Management Plan-1995
- New Melones Draft Vegetation Management Plan-1997
- New Melones Draft Fire Management Plan- 2006

Table R-46 lists current management guidance for range management.

Table R-46: Summary of Current Decisions and Guidance for Range Management

Decision	Source
Livestock grazing will be initially eliminated from the Peoria Mountain area so there will be no food competition between wildlife and livestock. All grazing leases on New Melones are now expired and have not been renewed.	Master Plan 1976
Guidance	Source
Limited grazing for invasive species control and fuel reduction has been utilized by Reclamation and may occur in the future.	Integrated Pest Management Plan
Trespass grazing will be minimized through maintenance of fencelines and posting of signs. When trespass occurs, Reclamation will coordinate with local law enforcement for the removal of animals.	DRMP 1995
Reseed impacted grassland habitats with native seed.	DFMP 2006
Monitoring for pest detection of new types and increased severity of invasive species is coordinated with Calaveras Agricultural Department.	Integrated Pest Management Plan
Evaluate all pest problems and previous pest control measures.	DRMP 1995
<p>Fuel breaks and firebreaks will be designed in a manner that minimizes impacts to aesthetic, scenic, and ecological resources, and consider resource objectives for vegetation management, wildlife habitat management, soil stabilization public safety, ignition sources, and safety of fire-fighting personnel.</p> <ul style="list-style-type: none"> -Create fuel breaks with blended or feathered edges through selective thinning and by cutting indentations in brush to create bays. -Retain clumps of unmodified vegetation within fuel breaks to provide cover and food for wildlife. -Retain mature oaks for their wildlife benefits and scenic qualities. 	DFMP 2006
Maintain adequate grass and brush clearance directly adjacent to roads and in recreation areas consistent with the Integrated Pest Management Plan and special status plant requirements.	DFMP 2006
<p>Burned Area Environmental Response (BAER) Plan will be followed.</p> <ul style="list-style-type: none"> -Consider nonpoint sources of pollution resulting from wildfire suppression and rehabilitation, while recognizing safety and operational priorities of fighting wildfires. -Consult with staff archaeologist, botanist, wildlife biologist, and other staff specialists to evaluate fire and suppression operations effects and determine if additional restoration is necessary. -Revegetate burned areas with native plant species. 	DFMP 2006
<p>Fire suppression strategies should be tailored to address areas of significant constraints including critical habitat for wildlife, T&E species, areas of soil instability, areas of other critical resource constraints (cultural), and where plant communities are at risk due to current conditions/times of year or other ecological constraints.</p> <p>Actions will be taken in these identified areas to protect the sensitive sites from damage by heavy mechanized equipment.</p>	DFMP 2006
Project lands are within a USFS and CDF mutual aid zone, with the CDF having responsibility for fire control. Fire prevention and suppression activities will be supervised and coordinated by the CDF through the Unit Chief stationed at the Tuolumne/Calaveras Unit in San Andreas.	DFMP 2006

6.10 Public Health and Safety

6.10.1 Current Conditions

Reclamation provides that staff levels commensurate with recreation visitation in order to fully implement policies and management actions and to maintain the level and quality of safety and services expected by visitors to New Melones Lake Area. All Reclamation employees take safety training pertaining to the identification of public safety hazards. Reclamation's employees provide interpretive programs and public contact to educate the public about safety issues relating to boating, firearms use, natural hazards such as poisonous snakes, and use of fire. There is also a visitor's center to inform and educate the public about safety matters at New Melones Lake Area. Additionally, campground hosts provide information to campers and report public safety issues to the Reclamation staff (Laird 2007); campground hosts patrol the campground three times a day.

Use Permits. Permits are issued to regulate the allocation and intensity of use for activities that are in high demand or that have significant safety and/or environmental concerns (Reclamation 1995). Reclamation regulates the following activities through a permitting process (Laird 2007):

- White water rafting;
- Fishing derbies;
- Model aircraft use;
- Houseboat launch and retrieving;
- Mountain bike races;
- Triathlons;
- Search and rescue dog trials;
- CDF fire training;
- Large group camping events;
- Group events involving 8-12 rented houseboats that are operated together;
- Horseback trail ride events;
- Slalom water ski course events (right of use permit);
- Commercial recreation gold panning access to private gold panning area (right of use permit); and
- Others.

Concessionaire Agreements. Concessionaire agreements are prepared with private entities that are permitted to operate businesses at New Melones Lake Area. Agreements are used by Reclamation to achieve needed recreational support services, programs, public safety features, and facilities and as a means for disseminating public use information (Reclamation 1995). Concessionaire agreements include adequate water quality protection measures, public safety

requirements, medical and emergency response requirements, and environmental protection standards.

Recreation. There are a number of recreation zones for regulating the type of and intensity of use to protect sensitive resources and maintain public safety (Reclamation 1995). The various zones include the following:

- No Hunting Zones: No hunting is allowed within a half mile of existing recreational uses;
- Reservoir Management Zone A: All boating uses are allowed;
- Reservoir Management Zone B: 5 mph “No Wake Zone” provides for slow boating and fishing areas. This protects the health and safety of others in the marinas, docks, and boat launch areas and helps minimize shoreline erosion; and
- Reservoir Management Zone C: No boating is allowed in designated swimming areas and in areas off limits for operations (i.e., dam and spillway area).

Boaters must have required safety equipment such as lifejackets, ski flag, and fire extinguisher on board their boat, as required by the US Coast Guard and California Department of Boating and Waterways (Reclamation 2007). Reclamation seeks to comply with boating laws and regulations such as the California Boating Law of 2006 and the Harbors and Navigation Code.

Caves. Caves in the New Melones Lake Area are concentrated along the Stanislaus River near the South Fork confluence; in Coyote Creek, Grapevine Gulch, and Skunk Gulch; and in all areas of soluble limestone terrain (Reclamation 1995). The caves are important components of the natural and cultural systems, with an impressive range of resource values. Reclamation provides limited entry to caves in the Stanislaus River canyon due to safety hazards such as flooding.

According to the New Melones Lake Revised Cave Management Plan, caves can present a hazard to the untrained public (Reclamation 1996). Safety issues in or around caves involve the possibility of falling or getting lost. Because many of the caves are located on steep rock faces, access to caves may be hazardous. Depending on a variety of factors, caves at New Melones Lake Area may be gated or ungated.

Abandoned Mines. Reclamation closes unsafe or potentially hazardous areas (e.g., caves, old mine shafts, exposed steep areas, high fire hazard areas and time periods) in a manner compatible with ecological concerns (Reclamation 1995).

The exact number and location of abandoned mines is not centrally cataloged (Laird 2007). Some mines were filled in by the USACE at the beginning of the New Melones project. In an effort to avoid attracting visitors to potentially hazardous abandoned mines, these features are not signed or identified on public materials.

Illegal Drugs. Illegal drug use, sales, and manufacturing present potential public health and safety hazards at New Melones Lake Area. Manufacturing of drugs, such as methamphetamine and marijuana, occurs in isolated areas on Reclamation lands (Laird 2007). As a result, illegal

drug manufacturing material and hazardous waste is abandoned on New Melones lands, drug manufacturing areas are contaminated, and waste products may be dumped on the roadways. The presence of people involved in production, use, or sale of illegal drugs may present a hazard to other lake users who happen upon such activities.

Illegal Dumping. Illegal dumping of household hazardous waste is a problem at New Melones, especially on Reclamation land in Tuolumne County (Laird 2007). In Tuolumne County, the public pays to dispose of household hazardous waste, providing them with an incentive to dump household waste illegally. In Calaveras County, disposal of household hazardous waste is covered by land owners' taxes.

Public Services

Ranger Services. Reclamation has a staff of 15 permanent and seasonal rangers. Rangers' titles include Chief Park Ranger/Concession Specialist, Park Ranger, Park Ranger for Natural Resources, and Park Ranger VC Specialist. Examples of ranger duties include traffic and crowd control, concession oversight, campground maintenance, issuance of special use permits, natural resources maintenance and planning, volunteer management, education and outreach, interpretation, fee collection, and patrol. Reclamation rangers are not authorized to perform law enforcement duties (see next section).

Law Enforcement Services. Reclamation is developing a new policy to comprehensively describe the duties and responsibilities of rangers. Rangers are responsible for the law enforcement and medical services at New Melones Lake Area, therefore this revised policy may change some of the public services provided. The policy is expected in the fall of 2007 and will be included in this document as Appendix G when it becomes available.

Reclamation performs safety inspections and encourages lake visitors to comply with state and Federal safety laws and regulations, even though it does not have the authority to enforce agency or other Federal rules and regulations designed to provide for the safe and orderly management of the recreation facilities and surrounding resources at New Melones Lake (Reclamation 1995). Lack of enforcement authority constrains Reclamations management options since Reclamation rangers can only issue warnings if visitors choose to ignore management policy. Reclamation rangers also patrol recreational facilities, monitor compliance with permits and concessionaire agreements, and check on the condition of natural and cultural resources (Reclamation 1995).

Reclamation is able to contract with other Federal land management agencies such as BLM or the National Park Service (NPS) for policing personnel. Management of resources on Reclamation land emphasizes interagency coordination with Federal, state, and local agencies, including but not limited to USFS, BLM, Tuolumne County, Calaveras County, USFWS, CDF, and CDFG.

Federal, state, and local laws are enforced by the Sheriffs' Offices of Tuolumne and Calaveras Counties in their respective areas of jurisdiction (Reclamation 1995). When their services are needed, Reclamation contacts the Sheriff's department by radios that are carried in all Ranger vehicles and kept at Reclamation Headquarters. The California Highway Patrol (CHP) is responsible for enforcing the vehicle code. In general, the level of the Sheriff patrols and

presence at the New Melones Lake Area is limited, particularly given the size of New Melones Lake and its surrounding lands, heavy visitor use, and the frequent vandalism and theft incidents that continue to occur at all of the recreation areas. The local law enforcement agencies are unable to provide adequate proactive enforcement at the New Melones Lake Area due to insufficient resources (Reclamation 1995). These agencies respond to the law enforcement needs at the reservoir on a case-by-case basis as their resources permit, with each case considered according to the nature of the particular violation and available resources. There have been numerous incidents when county law enforcement officials have been unable to respond to Reclamation's law enforcement needs. In light of the budgetary situation these agencies face, it is likely that many law infraction incidents at New Melones Lake will continue to go unchallenged. Requests for law enforcement services are increasing because the number of visitors to New Melones is increasing (Laird 2007).

Tuolumne and Calaveras County Sheriff boat patrols share responsibility for enforcing boating laws at New Melones Lake and at Tulloch Reservoir (also on the Stanislaus River just south of New Melones Lake) (Reclamation 1995). Because both counties have many lakes they are responsible to patrol, staffing levels are inadequate to provide effective patrols on New Melones Lake (Laird 2007).

Reclamation currently has three boats available for use on the reservoir most of the year and provides infrequent boating safety patrols on the lake during the summer months (Reclamation 1995; Laird 2007). One of the boats is designated for patrolling the reservoir. Since Reclamation has no law enforcement authority, the focus of this patrol is to advise boaters of unsafe acts, inspect boating safety equipment, and provide boaters with current safe boating regulations and safety information. In addition, Reclamation patrol boats are used to provide assistance to disabled boats and mark boating waterways and hazards (Appendix F). Due to a lack of enforcement power and staffing limitations, boat patrols by Reclamation are inadequate at New Melones Lake to manage safety issues such as speeding.

New Melones Lake Area is within the CDFG Sierra District and Tuolumne County Region (Reclamation 1995). The CDFG issues fishing and hunting permits and is empowered to enforce the State Fish and Game Code, including issuing violations and revoking sport fishing and hunting privileges at New Melones Lake Area. CDFG also regulates catch from fishing tournaments and issues dredging permits as needed.

The PWMA access road crosses approximately 1.8 miles of the PWMA (Jones and Stokes 2006). This section of road was temporarily closed to public vehicles on December 15, 2002, as a preventative measure to stop increasing damage to natural resources from illegal and inappropriate uses by both local and non-local recreationists. Illegal actions including target shooting, poaching, off-road driving, fires, littering, dumping of large debris and hazardous materials, vandalism, and illegal camping have resulted in soil erosion, habitat degradation, and widespread damage to the natural resources and have compromised the safety of the public and adjacent landowners in the area. Closing the road to use by public vehicles has minimized further degradation of this area.

The Animal Control units of the respective counties are called approximately ten times a year, usually for a vicious dog or a distressed animal (Laird 2007). However, animal control typically responds to two of the ten calls a year.

Fire Protection Services. Reclamation evaluates and maps fire hazard throughout its lands with a focus on current and proposed recreational facilities and adjacent residences and structures (Reclamation 1995). Hazard analysis is based on fire behavior, fuel load, slope, probable location and rate of ignition, potential loss of life, potential loss of valuable property, and access restrictions.

The CDF is the primary agency responsible for wildfire suppression at New Melones (Reclamation 1995). The agency maintains a fire unit facility on Reclamation lands located on Peoria Flat Road within the PWMA. Minimum-security inmates staff this facility.

It is Reclamation's responsibility to provide for the initial response to any fires on its lands at New Melones that are accessible to them (Reclamation 1995). Reclamation's primary fire fighting equipment consists of the following (Laird 2007):

- Hydrant system in campgrounds;
- Hydrant system around administration buildings;
- Visitor's center and maintenance building with burglar alarms but no fire hydrant systems;
- A shaded fuel break on the visitor's center side of SR 49;
- Marina with fire alarms in the store and covered area of docks, water storage tanks, and a Trimex 30 Fire Foam System;
- Marina with hand-held fire extinguishers on open docks;
- Fire hydrant system on land around the marina; and
- Rangers carrying hand tools and 5-gallon water backpacks to put out campfires in case of emergency.

Reclamation's responsibility for fire suppression ends when a CDF fire unit or any fire unit having a mutual aid agreement with CDF arrives at the fire. Requests for fire protection services remain constant (Laird 2007).

Reclamation takes a proactive approach to preventing fires by clearing vegetation along roads and clearing overgrown vegetation from campgrounds and other areas where human use is likely to occur (Reclamation 1995). A shaded fuel break is on the visitor's center side of SR 49; another fuel break will be installed on the other side (Laird 2007). In addition, Reclamation participates in the Highway 108 Fire Safety Council, which prepares cooperative fire management strategies with other local fire control entities.

Vegetation clearing is carried out by mechanical means (bulldozers, tractors), chemical application (herbicides), and by hand with the assistance of the California Department of

Corrections (Sierra Conservation Corps inmate labor). Caltrans also carries out similar vegetation removal activities along SR 49.

Medical Services. Reclamation rangers on permanent status are required to have First Responder certification (Reclamation 1995). Temporary employees receive Basic First Aid and CPR training. Most medical emergencies are responded to by Reclamation rangers who provide some emergency medical assistance commensurate with their training until an ambulance or the fire department arrives at the scene. Rangers call the fire department for assistance. The responding fire department is decided by the coordinated 911 system (Laird 2007). Requests for medical services are increasing because the number of visitors to New Melones is increasing (Laird 2007).

Reclamation's New Melones ranger staff do not have the appropriate emergency medical response training necessary to carry out cave or cliff-face (rock climbing) rescues, nor do they have the authority to obtain this type of training (Reclamation 1995). Reclamation is responsible for managing the activities on lands under their jurisdiction and is thereby liable for the potential consequences of activities that occur on their lands.

In 2006, there were three rattlesnake bites (Laird 2007). Reclamation provides fliers to educate the public about rattlesnakes and removes rattlesnakes from campgrounds. Reclamation rangers may provide first aid to snakebite victims, but more extensive treatment is required and must be provided by area hospitals.

6.10.2 Resource Management

Decision and Guidance Documents

- 43 CFR 422
- 43 CFR 423
- New Melones Draft Resource Management Plan-1995
- New Melones Master Plan-1976
- Reclamation Safety and Health Standards- 2002
- New Melones Draft Fire Management Plan- 2006

Table R-47 lists current management guidance for public health and safety.

Table R-47: Summary of Current Decisions and Guidance for Public Health and Safety

Decision	Source
A project Safety Plan will be formulated by Reclamation. Under this plan, project personnel will identify common recurring hazards or unsafe conditions in all necessary areas.	Master Plan, 1976
Signs, markers, guideposts, guardrails, and center line and shoulder striping will be provided on surfaced roads for traffic control and safety purposes. Standard guardrails will be used on fill slopes over 10 feet and on all daylight or fill slopes in steep terrain. Movable signs and barriers will be used below gross pool level. For further traffic control and safety, slow-down bumps will be provided where needed on circulation roads. Barriers will be installed to prevent vehicles from going off the travelway and will generally be constructed of natural materials such as large rocks, timber, and logs.	Master Plan, 1976
Inform visitors of fire activity in the area, including suppression and prescribed burns, through the use of personal contact, announcements, signs, and news articles.	Master Plan, 1976
Internal Guidance	Source
Provide staff levels commensurate with recreation visitation in order to fully implement the policies and management actions of this RMP, as well as to maintain the level and quality of services expected by the visitors to New Melones.	DRMP 1995
<p>Until, and/or in the absence of full enforcement authority, explore additional law enforcement mechanisms to ensure that public safety and resource needs are met in Reclamation lands.</p> <ul style="list-style-type: none"> -Pursue obligation of both Tuolumne and Calaveras Counties to provide required boating law enforcement services. -Encourage the CDFG to increase their presence and patrols at New Melones. <p>Contract with the Tuolumne and Calaveras County Sheriff Departments and/or the BLM, USFS, NPS, or other appropriate Federal, state, or local agencies to provide increased law enforcement services.</p> <p>--Coordinate with applicable agencies (i.e., Tuolumne County, BLM, USFWS, CDFG, etc.) and appropriate private entities to develop measures to protect and preserve the ecological values of the Table Mountain formation. Measures would address issues such as access, recreational shooting, and the potential disturbance of vegetation, soils, and geologic features.</p>	DRMP 1995
<p>Prevent violations and increase visitor awareness through ranger visibility and a program of distributing public information related to applicable policies, rules, and regulations.</p> <ul style="list-style-type: none"> -Require that all concessionaire contracts include: 1) explicit measures related to the notice and dissemination of public information; 2) communications equipment necessary in the event of emergencies; 3) medical emergency provisions; and 4) spill emergency response measures. -Increase visitor awareness of applicable policies, rules, and regulations by implementing a program that includes signage and the distribution of pamphlets, maps, and other literature. 	DRMP 1995
Ensure adequate closure of all unsafe or potentially hazardous areas in a manner compatible with ecological concerns (e.g., caves, old mine shafts, exposed steep areas, high fire hazard areas, and time periods).	DRMP 1995

Internal Guidance	Source
Initiate a program to seek compliance and monitor boating activities to achieve compliance with state laws and regulations, reservoir management requirements, and general boating etiquette.	DRMP 1995
Ensure adequate closure of all unsafe or potentially hazardous areas.	FMP 2006
Provide staff levels commensurate with recreation visitation in order to fully implement the policies and management actions of this RMP, as well as to maintain the level and quality of services expected by the visitors to New Melones.	FMP 2006
The law enforcement program will be a multi-agency effort; state and county laws will apply to all project lands. Reclamation should consider contracting with the counties for project land law enforcement activities.	DRMP 1995