

SIERRA NATIONAL FOREST FIRE PROTECTION SERVICE

The Sierra National Forest Bass Lake Ranger District respond to wildfires within their Direct Protection Area (DPA) or as a mutual aid resource to cooperating agencies. Services include response to wildfire and structural fires, hazardous materials spills, medical emergencies, and vehicle accidents, within their zone of influence or as needed through mutual aid agreements. Mutual aid agreements are held through a Five Party Agreement with the California Office of Emergency Services, California Department of Forestry and Fire Protection, USDI Bureau of Land Management, and USDI National Park Service.

The Sierra National Forest Bass Lake Ranger District operates a Type 3 engine, crew, and one Wet Patrol unit at the Jerseydale Station, with a second Type 3 engine and crew and one Wet Patrol working out of the Mariposa County Fire Department, Midpines Station on Highway 140. A Type 3 engine crews consist of five personnel assigned seven days per week for a minimum of 90 days, which usually extends through the peak fire season from June 1 through October 15. A Type 1 helitanker is located at the Mariposa Airport. The District would like to make the Mariposa Airport a permanent site pending the agreement with the Mariposa County Fire Department and County Commissioners. Finally, a Type 3 engine and crew is located at Westfall Station on Highway 41 near Fish Camp.

The District has no plans for further expansion other than building a new joint station at Midpines for a co-location with the Mariposa County Fire Department and a joint station at Fish Camp. All facilities currently meet Forest Service requirements for providing adequate wildland fire protection in the area. Resource requirements are determined by fire history and, to a lesser degree, response time. If response times are deemed inadequate or previous fires dictate the need for new equipment or staff expansion, then new resources may be acquired. Current staffing levels are adequate to meet U.S. Forest Service responsibilities in Mariposa County (Personal communication, Curtis Palmer, District Fire Management Officer, Bass Lake Ranger District (formerly Minarets/Mariposa Ranger District), Sierra National Forest, September 26, 2002.)

AUTOMATIC AND MUTUAL AID AGREEMENTS

Since many towns or jurisdictions are near County borders or are near other, more established towns, automatic and mutual aid agreements allow the various areas to contract services when needed to provide the best possible fire protection services. For example, the MPUD volunteer fire company, CDF, and County Fire Department have entered into Automatic and Mutual Aid Agreements, which allow the fire departments and companies to share fire protection capabilities. This allows each fire protection server to respond to structural and wildland fires within and outside of their jurisdictions. It should be noted the CDF is the responsible agency for all wildland fires. In other instances, border towns like Don Pedro have entered into a mutual aid agreement with neighboring counties, such as Tuolumne County in the case of Don Pedro. Other areas, such as towns within Yosemite National Park, have agreements between local, state, and federal agencies to provide the best possible services and protection to residents and visitors.

6.2.06 LAW ENFORCEMENT

MARIPOSA COUNTY SHERIFF

The Mariposa County Sheriff's Office is the primary law enforcement agency for Mariposa County covering 1,455 square miles and no incorporated cities located in the county. The

Mariposa Sheriff's Office currently serves 17,400 residents and 651,244 visitors to Mariposa County annually. The Mariposa County Sheriff's Office also provides Coroner/Public Administrator, Animal Control, Search and Rescue, boating and safety on county waterways, Civil Service, Court Security, Corrections and Emergency 911 Dispatch. Mariposa County Sheriff's Office provides the primary services for Coroner, Civil Service and Animal Control inside Yosemite National Park. The California Highway Patrol is responsible for traffic enforcement and accident investigation along roadways in the County. The County also patrols BLM and US Forest Service Lands and receives supplemental funding from these agencies to carry out law enforcement on federal lands. In fiscal year 2001-2002 the combined budgets of the Sheriff's Offices was \$5,631,579, which was offset by \$1,705,883 generated by the department through various services such as housing inmates wards of the California Youth Authority and fees (dog licenses, fingerprints, etc.) among others. Although Yosemite National Park has its own law enforcement unit, the Mariposa County Sheriff's Department is the primary service provider for coroners' service, and civil service in the park and aids with animal control.

The Mariposa County Sheriff's Office operates out of eight (8) facilities, with the main office and five of the facilities located in the Town of Mariposa. The facilities located in the Town of Mariposa consist of Administration/Operations, Dispatch Center, Property/Records, Investigations, Animal Control, Volunteer Programs Facility, and the Adult Detention Facility on Highway 49 North, two miles from the Main Office. There are 16 personnel employed at the detention facility. There are 140 personnel operating out of the Mariposa offices, of which approximately 100 are Search and Rescue and SCOPE volunteers. The Don Pedro facility houses the boating safety program and consists of three employees. There is also a store front office in Greeley Hill with three deputies for the North County area. The Greeley Hill office also serves as a base for the SCOPE program in the North County. Deputies from the main office supplement the North County area.

The patrol deputies are assigned take home patrol units. This allows for fast response to emergencies from their residences providing a better service. Current staffing levels are listed in Table 6-7 below.

Table 6-7: Sheriff Personnel (2005)

Division	Personnel
Administration	1 Sheriff 1 Undersheriff 2 Captains 3 Office Technicians
Jail Facility	1 Lieutenant 2 Sergeants 13 Jail Officers
Field Services Main Office	5 Sergeants 2 Detectives 22 Patrol Deputies .5 Bailiff part time
Boating Safety	3 Deputies
Animal Control	3 Animal Control Officers
Dispatch 911	7 Dispatchers
Property/Maintenance	1 Officer

Source: Personal Communication, Joel Bibby, Captain,
Mariposa County Sheriff's Office, May 26, 2005

NATIONAL PARK SERVICE

The National Park Service has primary authority and responsibility over property and people within Yosemite National Park. State and County agencies are involved only during the most serious cases, except in Wawona and Foresta where the County Sheriff may participate in civil cases occurring on private property, and El Portal where residents are subject to state and County jurisdiction as well as National Park Service jurisdiction. The National Park Service and Mariposa County have agreed upon a Memorandum of Understanding that allows the National Park Service to have primary responsibility in El Portal. The National Park Service provides first response to the area and is the primary authority over minor incidents on federal land in El Portal. The County Sheriff has primary authority over state law enforcement, which is approximately 80 percent of the incidents involving criminal prosecution (Yosemite Valley Plan, 1-A, 3-152).

Currently, there are 159 visitor protection personnel employed in Yosemite to meet the needs of the entire park area. This includes law enforcement, search and rescue, fire suppression, and emergency medical treatment. There is also a magistrate court and detention facility staffed by the Fresno District Court in Yosemite Valley. Visitor and resource protection personnel operate on an annual budget of \$5,962,500 million (Yosemite Valley Plan, 1-B, 4.1-158).

CALIFORNIA HIGHWAY PATROL

The California Highway Patrol (CHP) enforces the California Vehicle Code, California Penal Code, and any investigations for traffic accidents or other related incidents occurring on highways and County roadways within its jurisdiction. The CHP has an office at 5264 Highway 49 North in the town of Mariposa and a temporary modular unit in Coarsegold. Currently, there are 26 departmental employees, of which 22 are sworn uniformed officers, two are sworn uniformed supervisors, one is a sworn uniformed commander, and the

remainder are civilian administrative personnel. To keep service levels well maintained, the CHP has purchased equipment, such as radar, preliminary alcohol screening device and has installed these devices in patrol vehicles. Central Division personnel also provide assistance through shift deployment and an Air Operations Unit. There are no future plans for facility expansion in Mariposa. Deployment specific to the County is determined through tracking traffic collisions and the needs of the communities. Therefore, the CHP will continue to evaluate the needs of the community as well as review traffic collision records in order to maintain current service levels (Personal communication, Lieutenant Jennie Baldon, CHP, December 5, 2002).

6.2.07 ADDITIONAL COMMUNITY SERVICES

MOUNTAIN CRISIS SERVICES

Mountain Crisis Services provides domestic violence prevention and support programs in the County. They operate a 24-hour crisis line and have a business office in Mariposa that is open Monday through Friday between 9:00 a.m. and 5:00 p.m. Services include a shelter for battered women and their children, crisis counseling, temporary restraining orders, court advocacy, resources and referrals, support groups, and volunteer programs. There are two support groups that meet weekly to help women recognize abusive behavior, causes of abusive behavior, and means to overcome domestic abuse experiences. The program is supported by funds received from the State of California, Department of Health Services, Maternal and Child Health Branch and Office of Criminal Justice Planning (Person communication, Kathie Butler, April 09, 2002).

CHILD CARE

There are a number of childcare facilities in the County, particularly in the town of Mariposa. The Infant/Child Enrichment Services, Inc., a non-profit community based organization funded by the State Department of Education, Child Development Division, provides childcare resources and referrals to county residents. They refer parents to licensed family childcare and center-based childcare programs free of charge. Available child care facilities in the County include the Almost Like Home Before and After Schooling Center, the Mariposa Children's Center, Mariposa County Head Start, Mariposa Lutheran Childhood Discovery Program, and El Portal Child Development Center, among others. In addition, services are available in nearby Oakhurst and other towns outside Mariposa County for border residents.

There are two childcare facilities serving Park employees. The Yosemite Valley Daycare Center serves 52 children and operates at full capacity. The program can accommodate approximately 30 infant and school age children at the same time. Thirty percent of the children utilizing this facility are from Park employee households. The El Portal Child Development Center also serves children of Park employees. The center serves 15 to 20 infant and school age children, but has the capacity to serve up to 40 children. (Yosemite Valley Plan, 3-152).

COMMUNITY SERVICE DISTRICTS

LAKE DON PEDRO COMMUNITY SERVICE DISTRICT

The Lake Don Pedro Community Service District (LDPCSD) reserves 5,160 acre-feet of Lake McClure water per year from the Merced Irrigation District (MID). This equates to

approximately 4.59 million gallons per day (MGD) of water from MID. The District currently uses about 500 acre-feet of water per year, leaving an unused allocation of 4.15 MGD. At approximately 450 gallons per connection (see below) the total water allocation could service approximately 10,200 connections (Personal communication, Bob Kent, Lake Don Pedro Community Service District, October 8, 2002).

In an April 1985 letter, Binkley and Associates, the consulting engineer for the District, prepared information regarding the service level capacities of the water system. Since the preparation of the letter, nothing has changed to alter the information contained in it. This letter is summarized below.

**Table 6-8: Lake Don Pedro Community Service District
Water Service Capacities**

Service Connections		
	Present Capacity	Design Capacity
Lake McClure Intake, 18" Raw Water Transmission Line	3,500 gpm	3,500 gpm
Water Treatment	700 gpm	2,100 gpm
Treated Water Storage	4.7 mg	9.4 mg

Source: Binkley and Associates

The water system equipment inventory for the LDPCSD includes the following:

- | | |
|-----------------------------|--|
| 7 water storage tanks | 2 float pumps |
| 480 fire hydrants | 10 distribution pumps |
| 343 street valves | 1 well |
| 6 booster pump stations | 86 miles of main line pipe in the Water Distribution System |
| 12 pressure reducing valves | Water Treatment Plant |
| 2 intake pumps | Source: Bob Kent, Lake Don Pedro Community Service District |

YOSEMITE ALPINE COMMUNITY SERVICE DISTRICT

The Yosemite Alpine Community Service District currently provides snow removal and water service to the 46 properties within the Community Service District. Road maintenance is also provided to roads that fall within the district that are not county maintained. The Yosemite Alpine Community Service District has the ability, though not currently exercised, to provide sewage disposal, garbage collection, recreational facilities, street lighting, library facilities, street improvements, and underground utilities, to name the major items (Personal communication, Jack Hoover, Yosemite Alpine Community Service District, October 8, 2002).

6.3 UTILITIES

Utilities are an essential part of a community’s functioning. Each community must have a system for water delivery or access, wastewater disposal, trash disposal, communications, and energy supplies. Since the County is comprised of numerous small towns spread throughout relatively remote areas of the County, there are a number of local utility service providers. In

addition, the portion of the County within the National Park System has its own utility systems. The following sections describe these services in the County.

6.3.01 WATER AND SEWER SYSTEMS

MARIPOSA PUBLIC UTILITY DISTRICT

The Mariposa Public Utility District was established in 1947 under the Public Utilities Act of 1921, as contained in Sections 15501 through 18055 of the California Public Utilities Code. The District was formed in response to a report and recommendation prepared by the Mariposa Planning Commission. At issue was the provision of water, sewer, and fire protection services in the Mariposa town site. The documents, which establish the MPUD, do not delineate specific purposes or functions for the District. Under the law, a public utility district has the following powers:

1. It can acquire and operate works for supplying the District's inhabitants with light, water, power, heat, transportation, phone or other means of communication, or means for disposition of garbage, sewage, or refuse.
2. It may purchase and distribute such services and commodities and acquire and operate a fire department, ambulance service, street lighting system, public parks, playgrounds, golf courses, swimming pools, recreation and other public buildings and drainage works, including street improvements.

MPUD provides water, sewer, and fire protection services to the town of Mariposa. In 1984, an additional 553 acres were annexed to its 320 acres, creating a total District area of 873 acres.

MPUD is an Independent District; policy is established by a Board of Directors. The Board consists of five members elected at large. Directors must be a resident and qualified elector of the District. MPUD is essentially an enterprise district. The Board sets charges for services provided by the District. These charges are collected on a monthly basis for each department. The District currently has 702 service connections and services a population of approximately 1,800 (Source, Mark Rowney, MPUD, 2005).

MPUD WATER SERVICE

Water is supplied from three sources: the Saxon Creek Project, Stockton Creek Reservoir, and water wells within the service area. The Saxon Creek Water Project consists of a pump station located adjacent to the Merced River near Saxon Creek. The pump station is equipped with two 1,000-horse-power pumps, which can expand to include a third pump. The current capacity of the pump station is 2,400 gallons per minute, which can expand to 3,200 gallons per minute with the addition of the third pump. The Merced River water right license provides for a maximum diversion of 7 cubic feet (3,150 gallons per minute) and 5,000-acre feet per year. Water from the Saxon Creek Project is pumped through a 43,000-foot, 12-inch pipeline. A one million-gallon steel water tank is located at the highest elevation; water flows by gravity to the 10-inch pipeline leading to the water treatment facility below the Stockton Creek Dam (Source, Mark Rowney, MPUD, 2005).

STOCKTON CREEK RESERVOIR

MPUD owns and operates a 440 acre foot reservoir on Stockton Creek approximately one mile from the town of Mariposa. The Stockton Creek dam was built in 1949-1950. There is

a 7,000-foot-long, 10-inch pipeline from the dam to the water treatment facility near town. The District uses the Stockton Creek Reservoir as the primary water source. Water from the Saxon Creek water project is used when the Stockton Creek reservoir levels are low and/or are of poor water quality. The electricity cost of pumping water from the Merced River is a significant consideration in selecting surface water sources.

The distribution of water from both surface water sources is limited to the Mariposa Town Planning Area as it existed in 1995 by Water Right License Area of Use requirements. (Source, Mark Rowney, MPUD, 2005)

WATER TREATMENT FACILITY

The District owns and operates a water treatment facility that provides filtration, disinfection, and some corrosion control. All surface water sources are treated at the facility. The treatment facility capacity is 500 gpm, or .720 million gallons per day (Personal Communication, Mark Rowney, MPUD, September 24, 2002).

In addition, the District operates four wells within the District boundaries that are connected directly to the water distribution system. Two of the wells are equipped with chemical feed equipment that injects chlorine during well operation. The total capacity of these four wells is approximately 270 gallons per minute (Source, Mark Rowney, MPUD, 2005).

WATER DISTRIBUTION

Water is distributed through four pressure zones, which serve different areas of the town. Pressure Zone 1 is supplied by a 1,000,000-gallon water tank near the treatment facility and serves the downtown area, Bullion Street, Jones Street, Jesse Street, and the Howard Street areas. The original distribution system constructed during the early 1950's was replaced in 2004-2005. Approximately 17,000 feet of 6" and 8" steel pipe was replaced with 6", 8" and 10" PVC pipe.

A pump station at Jones and Bullion Streets and a pump station at the hospital supply Zones 2 and 4. These two pump stations pump water into a 1,000,000-gallon water tank one mile north of the hospital from Zone 1. The areas serviced by Zones 2 and 4 include Hospital Road, the Campbell Tract, the Mueller Tract, Smith Road, and the east side of Highway 49 north from Smith Road to the CDF station. Approximately 90 percent of the Zones 2 and 4 distribution systems are relatively new and have been installed according to current standards. The supply pipe between the two pump stations is 6" ductile iron pipe installed in 1952. The pipe is in very good condition. However, due to size of pipe the supply to fill the 1,000,000 gallon tank is limited and must be considered in the planning for significant development within the pressure zone. Zone 3 is supplied by three wells near Idle Wheels that pump water into a 72,000-gallon concrete tank. Zones 2 and 3 are connected through a pressure-reducing valve. Therefore, if there is a system failure or large pressure drop in Zone 3, water from Zone 2 will automatically flow into Zone 3. Zone 3 was constructed in 1976 from PVC pipe.

In 2004, the District pumped 17,146,143 gallons of water from wells, treated 122,777,000 gallons of water from the Stockton Creek Reservoir, and 37,596,000 gallons of water from the Merced River. The existing sources of water will provide an adequate supply for the next ten to twenty years, depending upon growth and water quality/quantity rights requirements. However, the treatment facility is operating at nearly peak capacity during peak water use days. Recent changes in the Federal surface water treatment rule and water quality regulations have affected the capacity and operation of the treatment facility. Currently, the treatment facility does not meet new disinfection by-product requirements. In addition, the turbidity

requirements (maximum) were reduced 40% in January of 2005. The treatment facility has not violated the new turbidity standard, however, the operation has become more difficult and the District has not experienced a full year of operation under the new turbidity standard. The District is currently reviewing new treatment technologies and pursuing funding options to address the new drinking water regulations as well as increasing treatment capacity. (Source, Mark Rowney, MPUD, 2005).

MPUD WASTEWATER SERVICE

MPUD provides wastewater collection and treatment within the District, primarily the town of Mariposa. The existing treatment facility which was constructed in 1984 provides secondary treatment through an oxidation ditch. The treatment plant is able to process a maximum of 610,000 gallons per day, but currently operates at 40% of capacity. During the winter months the treatment facility reaches peak capacity when there is heavy rainfall. The District is currently monitoring flow and performing smoke tests to identify infiltration areas in the collection system. The most recent NPDES permit requires the District to perform the infiltration study. Repairs will be made as failing portions of the collection system are identified. The treatment plant conducts secondary wastewater treatment and directly discharges treated water into surface waters. It is operated under an NPDES permit issued by the California Regional Water Quality Control Board, which is renewed every five years. The permit was last renewed in June 2000. Application has been submitted for a new permit. Discharge from the facility consistently meets NPDES requirements. However, the District is concerned that future permit renewal conditions may change the facility's capacity or require major changes in the treatment system.

The sewer system, originally constructed in 1958, collects wastewater through a gravity flow system of 8-inch diameter and 6-inch diameter vitrified clay pipelines. These lines are in need of repair. Some areas have been extended or replaced with PVC pipe, but the District is currently working on an infiltration system to determine where future repairs are most needed. The treatment facility has capacity for considerably more development provided that the NPDES permit does not reduce capacity when it is renewed in 2005, but portions of the distribution line are at capacity and will need to be replaced (Source, Mark Rowney, MPUD, 2005).

FISH CAMP WATER AND SEWAGE DISPOSAL SYSTEMS

In addition to individual private wells, there are three primary water supply systems that operate as separate entities. These water supply systems provide all of the domestic water to the community of Fish Camp through surface springs and groundwater wells (Fish Camp TPA, Specific Plan, and EIR, 10-11). Sewage disposal in Fish Camp relies completely on individual septic tanks and underground leachfield systems, although the service districts discussed below have the ability to gain authorization for a combined sewage system.

YOSEMITE RESORT PROPERTIES WATER AND WASTEWATER SYSTEM

The existing Yosemite Resort Properties (SilverTip Lodge) Water System is privately owned and operated. Water comes from springs in the Sierra National Forest. Water is currently collected in a 85,000-gallon metal storage tank and receives chlorination treatment before entering the distribution system. It is filtered before entering the storage tank and again after discharge from the storage tank. This system serves the SilverTip Lodge complex primarily and a small residential section north of the lodge and west of Highway 41 (Block D Subdivision, 25 connections).

The new SilverTip Resort Village development will result in an expansion of the system together with improvements. In addition to the two springs, water will come from four on-site wells. The system will include four wells yielding in excess of 152 gallons per minute and two springs producing approximately 16 gallons per minute, creating a total yield of 168 gallons per minute. Estimates show that maximum day demand at SilverTip Resort Village will be 57 gallons per minute. Therefore, the system will have more than sufficient capacity to meet the demand. Well No.5 provides the majority of water for the system; yet, even if Well No.5 were unavailable, the remaining three wells and springs would yield 64 gallons per minute, which still meets the prospective demand. Water storage capacity will also increase to be between 400,000 and 500,000 gallons. Approximately 410,000 gallons are required to provide for adequate fire sprinkler service to the structures on-site (Personal communication, Ronald B. Coleman, Executive Vice President, Pacific US Real Estate Group, October 14, 2002).

There is no community sewer system in the area. Homes and businesses (with the exception of the Tenaya Lodge) are currently connected to septic systems. Wastewater from the SilverTip Resort Village will be collected at an on-site wastewater treatment plant. The wastewater will be treated and either disposed or reused on-site for landscape irrigation purposes. The resort is expected to produce approximately 54,000 gallons per day of wastewater on average. Wastewater treatment facilities will consist of gravity sewers, lift stations, a wastewater treatment plant, emergency storage pond, effluent storage tanks, a subsurface leachfield system, and a landscape irrigation system utilizing treated wastewater. Water treatment will include tertiary treatment methods including fine screening, flow equalization, primary clarification, biofilters, secondary clarification, denitrification, chemical flocculation, pressure sand filtration, and disinfection. An emergency generator and lined emergency pond with capacity for three days flow or 210,000 gallons are also included.

YOSEMITE ALPINE COMMUNITY SERVICE DISTRICT

This District is managed by an elected Board of Directors and serves over 46 connections in the Yosemite Alpine Village subdivision. Water comes from two wells, and is collected in two 43,000-gallon tanks. Water is distributed through a 4 to 8 inch diameter Transite and PVC pipeline system.

FISH CAMP MUTUAL WATER COMPANY

The Fish Camp Mutual Water Company is owned by its customers (approximately 74 residents). The water sources are three wells drilled to varying depths (100 to 1,000 feet.). These wells provide between 10 and 30 gallons of water per minute. There are also four storage tanks that can hold approximately 110, 000 gallons of water. Water is transmitted through steel and PVC pipes. Supply and demand levels are currently unknown. The Fish Camp Mutual Water Company serves only a portion of the Fish Camp community (Blocks A, B, and C) and has 78 connections. Currently there is capacity for approximately 10 – 12 additional connections.

COULTERVILLE SERVICE AREA

Water and sewer service is provided to residents of Coulterville by the Coulterville Service Area operated by MPUD. Water is drawn from a local well system. There are only six service hook-ups available to new customers at this time, revealing that the system is near capacity. Without upgrades and expansion of the system, future development will be constrained unless private wells and septic systems are developed.

LAKE DON PEDRO COMMUNITY SERVICE DISTRICT

The Lake Don Pedro Subdivision, which includes portions of Tuolumne County, is served by a private water system that comprises the Lake Don Pedro Community Service District (LDPCSD). The District currently supplies potable water, but does not operate a wastewater facility. Presently, the District is approximately 8,000 acres in size. Current capacity at the water treatment plant is one million gallons of water per day. The District presently operates at between 35 and 40 percent of capacity, and usage can peak at 65 to 90 percent of capacity. The District operates seven treated water storage tanks with a capacity of 4.7 million gallons. Operating capacity of these storage tanks ranges from 25 to 50 percent depending on the location zone. The average daily flow of water is 0.33 million gallons, ranging from a low of 0.02 million gallons to a high of 0.90 million gallons. The raw water pumped to the treatment plant comes from Lake McClure, which is operated by the Merced Irrigation District. Approximate intake capacity is 5.04 million gallons per day. Intake capacity is dependent on the level of the lake. The District also owns and operates a ground water well, well capacity is 0.17 million gallons per day. There are no facilities in the District in need of repair and existing service levels meet all District requirements. Service demands are determined by using “industry standards” and by reviewing historical records for usage by District customers. Although the District is currently updating its long-term expansion plans, there are no facility expansions planned at this time. The District is in the process of contract discussions with the Merced Irrigation District for a quantity of water and place of use of that water (Personal Communication, Bob Kent, October 8, 2002).

YOSEMITE NATIONAL PARK

WATER SYSTEMS WITHIN YOSEMITE NATIONAL PARK

Of the 20 public water systems in Yosemite National Park, only two (Tuolumne Meadows and Wawona) are large surface water systems. Since the Wawona system takes water directly from the South Fork of the Merced River, it can easily become constrained in the late summer months and early fall when water flows are low. During periods of low water availability, the Park mandates water conservation efforts. However, efforts are being made to either pipe water into the Wawona area from Mariposa Grove, or drill additional wells to offset low water availability.

Three wells, a 2.5-million gallon storage tank, and water distribution lines supply Yosemite Valley. This water distribution system has the capacity to produce approximately 3.8 million gallons per day.

Six wells adjacent to the Merced River supply water to the El Portal area. This system consists of three storage tanks with a total capacity of 900,000 gallons that can produce 350,000 gallons per day. These systems are in need of upgrade and repair to meet the current demands for water. (Yosemite Valley Plan 3-167, 168)

YOSEMITE WASTEWATER SYSTEMS

Wastewaters from El Portal and Wawona are treated at the National Park Service El Portal Wastewater Treatment Plant and Wawona Wastewater Treatment Plant. The El Portal Wastewater Treatment Plant is located at Railroad Flat and has a capacity of 1 million gallons per day. There are five wastewater treatment plants within Yosemite: El Portal, Hodgdon Meadow, Tuolumne Meadows, Wawona, and White Wolf. (Yosemite Valley Plan 3-167).

CONCERNS OVER SEPTIC SYSTEMS

Septic systems are individual wastewater treatment systems that use the soil to treat small wastewater flows. Septic systems consist of septic tanks, distribution boxes, a drainfield, and conveyance lines. Household wastes are temporarily held in the septic tank to allow solids to separate out from the wastewater through the process of primary treatment. As the solids fall to the bottom of the tank, the wastewater flows into the distribution box that distributes the water evenly into gravel-filled drainfield trenches. The wastewater runs through the gravel and seeps into the subsurface soil, which treats the water through natural soil filtration, also known as secondary treatment. Since most County residents and businesses are not connected to a central wastewater sewage system, there is an abundance of potentially hazardous septic tank each field systems in the County. If not installed properly, particularly in areas where the soil is not conducive to septic systems, water contamination and odors may occur. To combat this potential danger, the County established policies and standards to ensure that septic systems are properly engineered, constructed, and maintained under a number of slope, soil, and permeability constraints. These policies are listed in the Model Mountain County Development Program, Chapter 3, pages 9 through 11. These policies require that intense development projects be located in areas where public sewer service is available, or establish a public sewer system or special treatment system. In addition, subdivisions and other developments must demonstrate that the proposed site is suitable for private septic systems. If they cannot demonstrate suitability, they are required to prepare designs for alternative or engineered septic treatment systems. All subdivisions and development projects must provide for adequate areas to be set aside as primary and secondary leachfield sites. Environmental review policies are required to utilize soil variables to evaluate plan suitability and require a percolation test for parcels of 6 acres or less. In addition to these policies, there are a number of standards to ensure that septic systems are located in the proper areas and are engineered to prevent potential problems. As stated in the Model Mountain County Development Program, “The above policies provide a framework for evaluating a project proposal and the standards provide guidance for resolving difficulties in septic disposal by means other than central public treatment systems.”

Before installing a septic system, a septic application permit must be authorized by the Mariposa County Environmental Health Department. To obtain a permit, the application must show where the septic system is to be located on the property and soil data, including a soil bore and percolation test, must be available to determine if the soil is suitable for a septic system. The Mariposa County Environmental Health Department provides information, instructions, and general tips in maintaining a septic system. They recommend pumping out accumulated solids every three to five years to avoid serious health threats, environmental degradation (particularly to streams, groundwater, and lakes), reductions in property values, expensive repairs, and risks to the greater water supply. Fees associated with septic and well systems for residential permits range between \$385 per unit (includes septic system and wells) to \$469 for stand-alone permits. These fees are further discussed in the Population and Housing Section.

6.3.02 SOLID WASTE

The Mariposa County Department of Public Works operates the solid waste disposal facilities in the County. The landfill and Transfer Stations are operated, by the Mariposa County Public Works Department. The County requires a permit issued by the Health Department to collect waste. However, solid waste hauling is conducted by Mariposa County Total Waste Systems, Inc, (TWS) Fiske Disposal & the National Park Service. TWS and Fiske

have been granted franchises to collect waste in Mariposa County. TWS and Fiske Disposal provide commercial and residential solid waste hauling services throughout Mariposa County and the NPS provides hauling for Yosemite National Park.

The Mariposa County Sanitary Landfill is located 2.2 miles north of Mariposa on Highway 49. The County owns, operates, and manages the landfill. The landfill operating hours for the general public are 8:00 am to 4:00 pm Thursday through Monday closed on Tuesdays and Wednesdays. Commercial haulers can utilize the facility daily from 7am to 4pm. The recycling center operates on the same hours. The peak throughput at the landfill is permitted at 100 Tons Per Day, although approximately 12,000 tons per year are processed. Current permitted module capacity is 729,601 tons, Total acreage of the landfill is 58.69 acres, but only 40.3 acres are used for disposal purposes. The landfill accepts construction and demolition materials, mixed municipal solid waste, treated and dewatered sludge, tires, and other designated waste products. The landfill also accepts many recyclable materials and includes oil recycling, tires, metal, CRV Certified Buy Back Center. The landfill is inspected monthly.

In addition, there are four solid waste transfer stations and one auto dismantling station in the County. The Coulterville Transfer Station is located in Coulterville on Mary Harrison Mine Road, and is owned, operated and managed by the County. This transfer station accepts mixed municipal waste, tires, and other designated materials and is open on Friday from 9:00 a.m. to 4:00 p.m. and on Saturdays and Sundays from 8:00 a.m. to 3:00 p.m. The facility capacity is currently designed at a maximum of 60 cubic yards of disposal per day. This is a limited volume transfer operation that collects, sorts, and bundles waste materials for transfer. The facility also takes some recyclable materials. The Coulterville Transfer Station is inspected quarterly or more, as required.

The Fish Camp Transfer Station is located 2 miles north of Fish Camp and is open only on Sunday between 8:00 a.m. and 1:00 p.m. Although the land is owned by the US Forest Service, the County operates and manages the 0.6-acre station. The facility can handle a maximum of 60 cubic yards of disposal per day. The Fish Camp Transfer station is a limited volume transfer station where mixed municipal solid waste and tires are accepted and processed for transfer to the main landfill. This facility is inspected quarterly or more as required.

The Hornitos Solid Waste Transfer Station is located on St. Catherine Street in Hornitos. This facility is owned, operated, and managed by the County of Mariposa and is inspected quarterly or more as required. It is open on Saturday from 9:00 a.m. to 5:00 p.m. The Hornitos Transfer Station is currently designed to take a maximum of 60 cubic yards of disposal per day. This facility accepts mixed municipal solid waste, and tires, which are sorted, compacted, and bundled for transfer. The facility also takes other recyclable materials.

The fourth transfer station in Mariposa County is the Don Pedro Transfer Station at 9729 Merced Falls Road in Coulterville. This 1.5-acre facility is also owned, operated and managed by the County and is inspected quarterly. Its operating hours are between 10:00 a.m. and 5:00 p.m. Saturday through Monday and between 9:00 a.m. and 4:00 p.m. Thursday. The facility was designed to handle 60 cubic yards per day. Like the other transfer stations, this facility accepts mixed municipal solid waste and tires. The facility also takes oil, and other recyclable materials.

In addition to the landfill and four transfer stations, Pearson's Auto Dismantling facility at the CHP site on 2343 Highway 49 in the town of Mariposa is a major waste tire facility. The facility is owned and operated by A.G. Pearson and the County enforces health and safety practices at the facility. According to the California Integrated Waste Management Board, none of the facilities are in violation of state minimum standards (California Integrated Waste Management Board website, 1/19/01).

Fees associated with the use of the landfill and transfer stations are listed in Table 6-9 below. Mariposa county residents may self haul their garbage and recycling to the landfill or transfer stations. And they have the option to contract with two waste hauling companies that currently service Mariposa County for pick up service. It is estimated that the Mariposa County Landfill will reach capacity in 2063 at full build out. To reduce the amount of waste entering the landfill, the County is building an in vessel mixed solid waste (MSW) composting facility that includes a new recycling center and sort stations. The facility location is at the existing Mariposa County Landfill site. All garbage currently entering the landfill would go instead to the MSW Composting facility first. This includes all residential and commercial garbage from Mariposa County and Yosemite National Park. The project funding of approximately 8.3 million dollars was provided by the County of Mariposa, USDA, and Yosemite National Park. The YNP funding came in the form of a grant of 1.7 million and the USDA funding came in the form of a grant of 1.8 million and loan of 1.7 million. The remaining funds were contributed by Mariposa County. The project construction is well underway and the expected operational date is January/February 2006.

Table 6-9: Mariposa County Landfill and Transfer Station Disposal Fees

Waste Items	County Residents Fee	Non-County Residents Fee
Charges to Non-Commercial Haulers		
Rubbish: Normal charge (5-6 cans)	\$8.20 (\$8.50 at transfer stations)	\$27.25 Minimum
Greater than 1 cu. yd., per cu. yd. (pay by weight if more than a pound)	\$9.57 (\$11.00 at transfer stations)	\$32.50
Per can charge (4 cans or less)	\$1.64/bag/can (\$2.00 at transfer stations)	Not available
Annual Residential Pass (a)	\$162.75	Not available
Tires: Passenger Car/Pickup Truck Only	\$2.00, with rims add \$1.50	\$6.00
Bulky Items: Mattresses, Furniture, Appliances	\$5.50 each	\$27.50 each
Refrigerators (Freon extraction)	\$15.50 each	\$27.50 each
Charges to Commercial Haulers (b)		
Garbage Trucks (compacted)	\$70 per ton	Not available
Drop Boxes/Bins (uncompacted)	\$70 per ton	Not available
Drop Boxes/Bins (demolition materials and tree stumps)	\$70 per ton plus handling fee	Not available
Charges for Special Wastes (b)		
Tires: Truck (size 10.00-20 to 11.00-24)	\$4.00 each	\$16.25 each
Tractor (sizes larger than 11.00-24)	\$25.00 each or more call for pricing	\$38.00 each
Large equipment (grader tires and larger)	\$250.00 or more, call for pricing	\$325.00 each
Sanitary Sewer Sludge	\$70 per ton	Not available
		Not available
Brush & Clean Wood Waste (chippable)	\$70 per ton	\$265.00
Demolition Materials & Tree Stumps	\$70 per ton plus handling fees	\$265.00
Used Motor Oil	Recycler paid \$0.16 per gallon	Same
Used Oil Filters	No Charge	No Charge

Notes: Most Recyclable materials accepted at the landfill and transfer station are not subject to a fee.

(a) Limited to one minimum load per day (six 30-gallon cans of residential use)

(b) This refuse to be disposed at the Mariposa County Landfill only.

(c) Infectious wastes that have not been sterilized are not accepted.

Source: Mariposa County Department of Public Works, 6/1/05

6.3.03 ENERGY SUPPLIES

ELECTRICITY

Mariposa County is served by Pacific Gas and Electric Company (PG&E). In Yosemite, Wawona, El Portal, Foresta, and Hodgdon Meadow are served directly by PG&E. Other areas within Yosemite National Park are not served directly by PG&E, but by the National Park Service, which purchases energy from PG&E and resells the energy to various users. A 70,000-volt overhead transmission line carries electricity to old Cascades Powerhouse in Yosemite Valley. The old Cascades powerhouse only serves as a substation where power in

stepped down to 12,000 volts where 6-inch conduit conductors transport the electricity to another substation in Yosemite Village. (Yosemite Valley Plan 3-167)

NATURAL GAS AND PROPANE

Other forms of energy are supplied to County residents and businesses through private propane supplies that are delivered to the County and to its various users. Some of the main suppliers include Pro-Flame Gas Company, which supplies liquid propane and natural gas and Suburban Propane in Mariposa. Suburban Propane serves approximately 4,100 customers throughout Mariposa County and eastern Madera County and they offer tank service, delivery service, appliance repair, and after hours emergency service, among others. There are also a number of propane supply companies in nearby Oakhurst, Coarsegold, Big Oak Flat, and Merced. Propane supplies are delivered to the homes or businesses of customers in the County. Individual, private tanks are filled according to individual customer demand. Tank capacity ranges from 100 to 1,850 gallons. Typically, a 500-gallon tank provides ample storage for the average four-bedroom home; however average tank size in the County is 289 gallons. Propane is mainly used for home heating, but also powers home appliances. Propane is used by businesses primarily for heating purposes such as general space heating, furnaces, water heating/steam systems, cooking, and dryers. Businesses also use propane for powering appliances and equipment. Although government regulations and market fluctuations cause prices to rise and fall, the price of propane is usually lower than the price of electricity, sometimes 300 percent lower. The average price per gallon in the County for 2000-2001 was \$1.50 per gallon. The only constraints on the use of propane are County and State Codes. Government regulations require tanks to be located an appropriate distance from occupied structures. Such regulations do not pose a significant constraint on large parcels, but can constrain higher density development.

6.3.04 COMMUNICATIONS SYSTEMS

AT&T

AT&T provides telephone service to Yosemite National Park and the El Portal area through microwave transmission. Telephone service is transmitted through a series of above and below-ground lines throughout the Yosemite and El Portal areas. (Yosemite Valley Plan 3-167). AT&T does not offer services to any other areas within the County (Personal communication, Moses Garza, Pacific Bell, January 29, 2001). There is a long-distance transmission line near the south County border, however, this line does not enter into or serve Mariposa County.

SIERRA TEL COMMUNICATIONS GROUP

Sierra Tel Communications Group has provided a variety of communications services to residents in the Sierra Nevada and San Joaquin Valley areas since 1895. These services include local and long distance calling, business communications systems, answering services, digital video networking, and Internet service. Sierra Tel also provides cellular service in some of its regions; however, the topography and isolation of Mariposa County hinder and in some areas prevent consistent use of cellular services. A service questionnaire was sent to Sierra Telephone Company on January 24, 2001, March 14, 2001, July 9, 2001 and September 20, 2001; however, no response was received.

HORNITOS TELEPHONE COMPANY

Telephone service is provided in the town of Hornitos by the Hornitos Telephone Company, which operates its own service and repair systems. Additional service is provided to the towns of Catheys Valley, Mt. Bullion, Exchequer, and a small portion of Mariposa near Mt. Bullion, all areas adjacent to the town of Hornitos. Approximately 650 customers are served throughout the 600 square mile service area (Personal Communication, Chuck Greene, TDS/Hornitos Telephone, June 20, 2001). Hornitos Telephone Company provides basic local and long distance phone service (dial tone) as well as additional services such as voice mail, caller ID, call waiting, and other phone services. Satellite dish connections are also available, but Internet service is not yet available in Mariposa County through Hornitos Telephone. Service is provided through a series of fiber optic and copper cable lines. Improvements and system upgrades are customer driven; therefore, new connections and services are provided on an as needed basis or as the Public Utilities Commission demands. (Chuck Greene, TDS/Hornitos Telephone, June 20, 2001).