

LOCAL AGENCY FORMATION COMMISSION FOR SAN BERNARDINO COUNTY

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DATE: FEBRUARY 7, 2012 
FROM: KATHLEEN ROLLINGS-McDONALD, Executive Officer
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TO: LOCAL AGENCY FORMATION COMMISSION

SUBJECT: Agenda Item #11: Service Review for the Remainder of the Mountain Communities

INITIATED BY:

San Bernardino Local Agency Formation Commission

RECOMMENDATION:

Staff recommends the Commission receive and file the review of the remainder of the unincorporated mountain communities that that were not a part of the overall Mountain region service review, which includes the Waterman Canyon area, the Mountain Home Village, Forest Falls, and Angelus Oaks (including the Seven Oaks and Barton Flats areas).

INTRODUCTION

San Bernardino LAFCO has chosen to undertake its service reviews on a regional basis. The Commission has divided the county into five separate regions, with the San Bernardino Mountain (Mountain) region defined as generally being the territory within the San Bernardino National Forest encompassing the communities of Crest Forest, Lake Arrowhead, Hilltop, and Bear Valley.

This report covers the remainder of the Mountain region that is not in any of the four communities identified above. Most of the areas that are identified in this report are small communities that have little or no access to services, nor are they within the boundaries of a special district for which the Commission establishes a sphere of influence. However, a service review is provided to identify and provide information on the services delivered, or lack of services, within these community pockets that exist in the Mountain region.

LOCATION AND DESCRIPTION

The communities identified in this report include: 1) Waterman Canyon along the southeastern portion of the Mountain region generally located along State Route (SR) 18 between the City of San Bernardino and the community of Crest Forest; 2) Mill Creek Canyon which include the communities of Mountain Home Village and Forest Falls generally located at the east end of the Mountain along SR 38; and 3) Angelus Oaks (including the Seven Oaks and Barton Flats area) also located at the east end of the Mountain just north of Mill Creek Canyon along SR 38.

Below is a map (Figure 1) illustrating the LAFCO defined communities in the Mountain region and the general location of the communities identified in this report, a copy of which is included as part of Attachment #1.

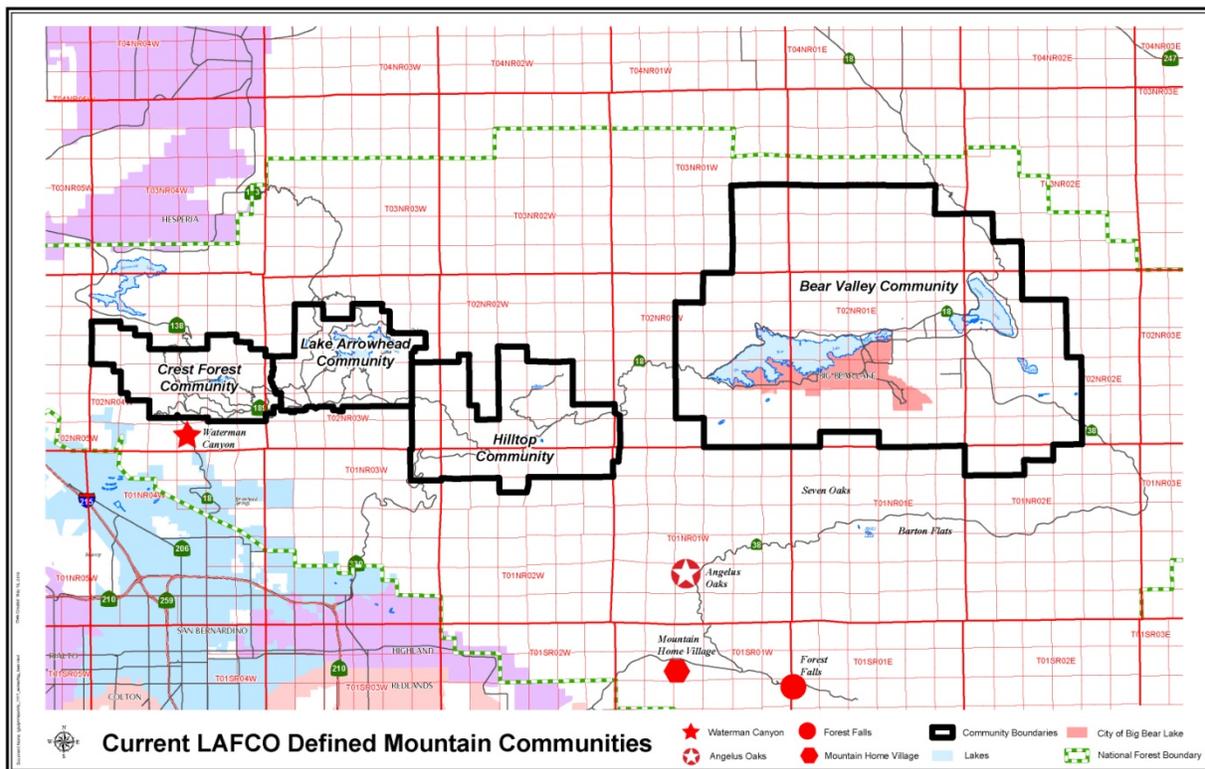


FIGURE 1

Waterman Canyon

Waterman Canyon, which has an average elevation from 2,900 and 3,700 feet, is located north of the City of San Bernardino, just south of the community of Crest Forest. The community, which has approximately 100 full time residents, is generally south of Panorama Point, east of Marshall Peak, and west of Arrowhead Peak (approximately 7 miles north of the Interstate 210 Freeway along SR 18).

Mill Creek Canyon Communities

1. Mountain Home Village

Mountain Home Village lies along Mill Creek Canyon. The area is located approximately 5 miles northeast of the community of Mentone along SR 38 with an elevation of approximately 3,800 feet. The community, which has approximately 170 full time residents, lies right alongside Mill Creek (a tributary of the Santa Ana River), north of Yucaipa Ridge and south of Mountain Home Peak.

2. Forest Falls

Forest Falls is another community along Mill Creek Canyon located 3 miles easterly of Mountain Home Village. The area, with an average elevation between 5,000 and 6,000 feet, is located north of Cedar Mountain and Little San Gorgonio Peak, and south of the San Gorgonio Wilderness. The community has a population of approximately 950 full time residents and is best known for its waterfalls on Vivian and Falls Creeks.

Angelus Oaks

Angelus Oaks is a community located along SR 38, approximately four miles north of Mountain Home Village and Forest Falls. The area, which has an average elevation between 5,500 and 5,700 feet, is located generally located west of Constance Peak and north of Glen Martin Creek. The community has a population of approximately 290 full time residents.

A few miles northeasterly past Angelus Oaks (along SR 38) is the Seven Oaks and Barton Flats area, where there are multiple public Forest Service campsites and group camps run by various churches and non-profit organizations, including the YMCA. The two largest and most active camps are the Boy Scout Camp Tahquitz and Camp Cedar Falls. Camps associated with the YMCA include Camp Round Meadow, Camp Arbolado, Camp Ta Ta Pochon, and Camp Edwards. Forest Service campsites include the Barton Flats Campground, the San Gorgonio Campground, and the Heart Bar Campground. Other non-profit camps include Camp De Bonneville Pines, Camp LaVerne, Camp JCA, etc. Jenks Lake, a 10-acre mountain lake, hosts fishing and picnic activities.

The USGS map below (Figure 2) shows the general location of Seven Oaks and the Barton Flats area. This map also illustrates the location of the camps within the area.

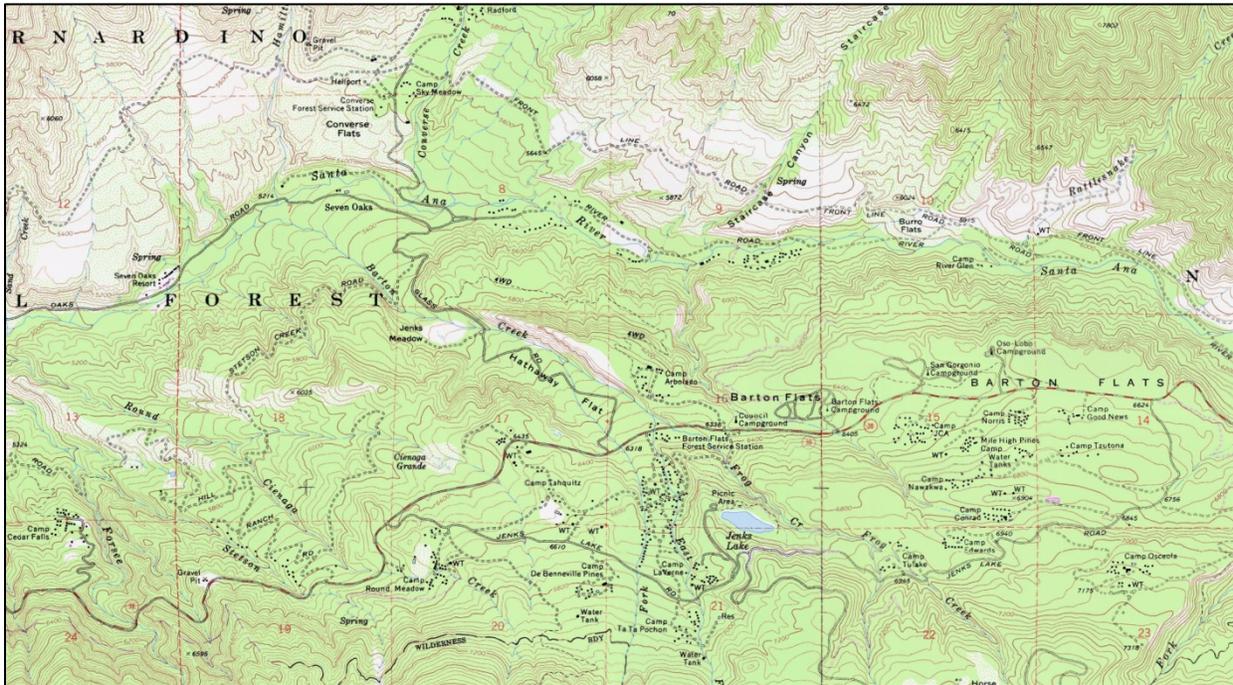


FIGURE 2

SCHOOL DISTRICTS

At the August 2010 LAFCO Workshop, the Commission directed staff to include information on the K-12 school districts as a part of the community discussion for its mandatory service reviews, to include a discussion of boundaries and shared facilities, in order to gain additional perspective on the community of interest. Below is a map (Figure 3) that shows the different school districts that serve the communities identified in this report.

Waterman Canyon

The Waterman Canyon area is within the San Bernardino City Unified School District. There are a number of elementary school facilities that are located below the foothills (Arrowhead, Parkside, Hillside and North Park). For secondary education, Golden Valley Middle School and Cajon High School are the schools assigned for the area.

Mill Creek Canyon Communities and Angelus Oaks

Mountain Home Village is primarily within the Yucaipa/Calimesa Joint Unified School District, Forest Falls is within the Redlands Unified School District, and Angelus Oaks is within the Bear Valley Unified School District, all of which have available inter school district transfers. Fallsvale Elementary School is operated by the Bear Valley Unified School District and serves the three communities. Bus service is provided to Moore Junior High and Redlands East Valley High School, both part of the Redlands Unified School District.

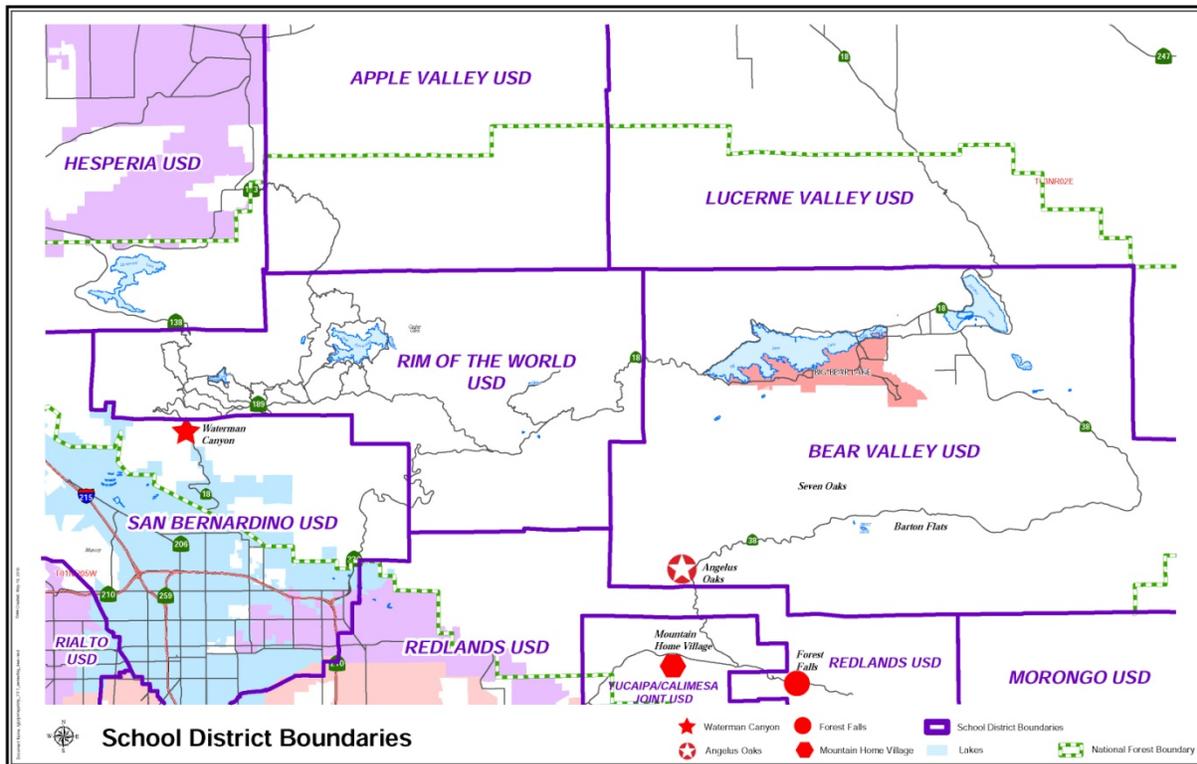


FIGURE 3

COMMUNITY HISTORY

The following provides a historical perspective of the communities identified in this report. The information used was gathered mainly from historical literature and the internet, particularly from the following websites: wikipedia.com, rimoftheworldhistory.com, and forestfalls.com.

Waterman Canyon

In 1852, the Mormons built a road up Waterman Canyon to obtain timber from the mountains for the construction of buildings throughout the valley. In 1891, Congress enacted the Forest Reserve Act, and in 1893 the San Bernardino Forest Reserve was established due to general neglect of conservation practices and environmental needs. Completion of the 101 Mile Rim of the World Highway in 1915 improved access to the mountains and by the early 1920s, a summer and winter resort began in different parts of the Mountain region. Homes were being built in Crestline, Lake Arrowhead and the adjoining forest, including Waterman Canyon.

Waterman Canyon was named after Robert W. Waterman who owned a ranch in the area comprising of several hundred acres. He was elected Lt. Governor in 1886 and later became Governor after the death of Governor Bartlett in 1887 and served until 1891. Waterman became well known as owner of the Waterman Mine near Barstow. Waterman

Canyon was home to the Club Oaks (later Camp Sophia), which dates back to the early 1930s.

Mill Creek Canyon Communities

As the Mormons began to settle in San Bernardino, the demand for lumber also increased. For a time, one of the supplies was from a small mill in Mill Creek Canyon. In addition, the Redlands Electric Light and Power Company used Mill Creek to create the Mill Creek No.1 hydroelectric generating plant in 1893, which was the first three phase power transmission plant in the United States. Mountain Home Village and Forest Falls were fast becoming the closest alpine villages near San Bernardino.

Mountain Home Village has been in existence since it was subdivided in the early 1920s, known then as the Mill Creek Canyon Park subdivision. In 2006, the Mill Creek Canyon Homeowner's Association acquired additional property adjacent to the original site, which has been subdivided into larger lot sizes.

Forest Falls is just three miles above Mountain Home Village and continues up along Mill Creek Canyon surrounded by the National Forest. Because of its year-round waterfalls, and an abundance of giant trees, many refer to Forest Falls as "little Yosemite". The falls, for which the community is named, descends from the northern edge of the canyon of Mill Creek. The community is also known for its trails that lead up into the San Gorgonio Wilderness.

Angelus Oaks

The community of Angelus Oaks is surrounded by the National Forest. A cowboy by the name of Charles Martin established a homestead in the area, which was later named 'Glen Martin'. Glen Martin became a control point for those travelling from the valley to the Big Bear and Barton Flats area, which consisted of a few accommodations and the Camp Angelus Ranger Station.

In 1961, the paving of the newly established SR 38 was completed. This road cuts through the middle of the community and, to this day, remains as the only way in and out of Big Bear from the east end of the Mountain. In 1962, Seven Oaks and Camp Angelus Post Offices were combined (closing the Seven Oaks location), and the remaining post office was renamed as "Angelus Oaks". This is how the community got its name, as it remains today.

REVIEW OF REGIONAL AND COMMUNITY SERVICES

The communities identified in this report are served by multiple public and/or private entities. The following provides a summary of the services provided within these communities:

Water

Community Water Systems

There are a number of private water companies and/or mutual water companies that serve the communities identified in this report. The map below (Figure 4) illustrates the general location of these water service providers.

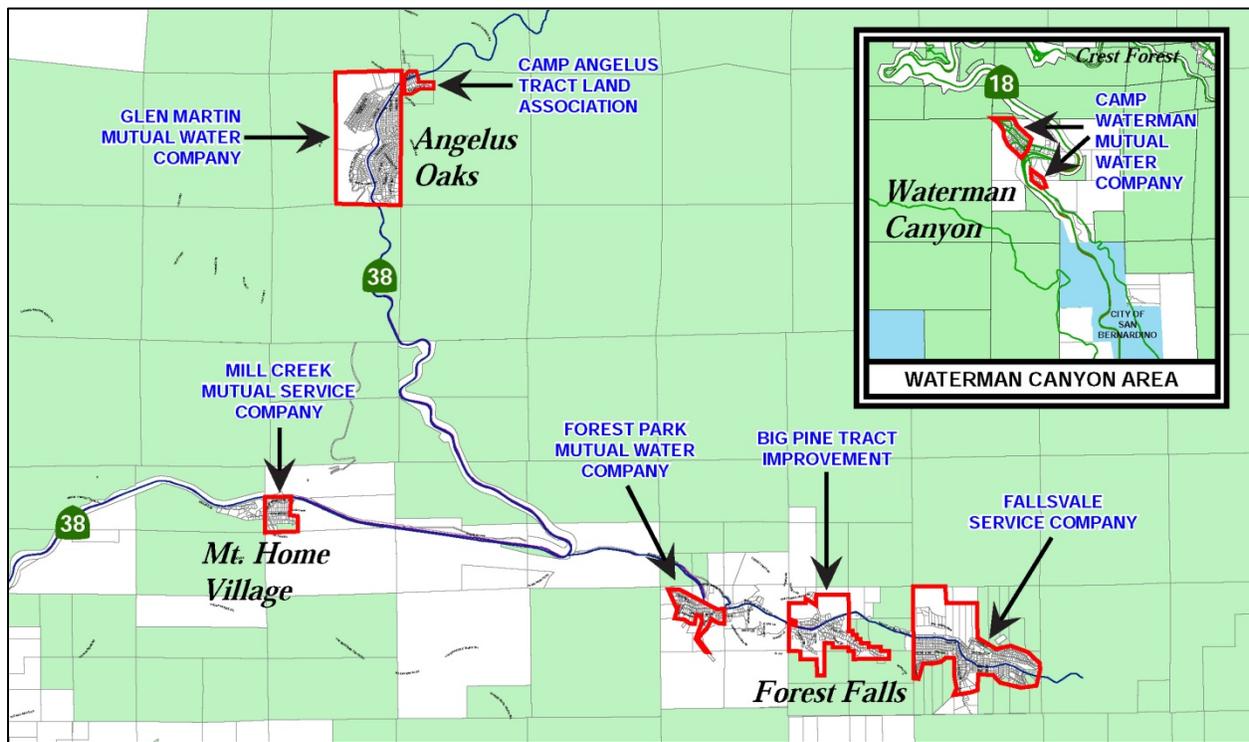


FIGURE 4

Waterman Canyon Area

Camp Waterman Mutual Water Company

The Camp Waterman Mutual Water Company (Camp Waterman Mutual) is a mutual water company that serves the Old Waterman Canyon community and is classified as a community water system. As such, the Company is under the jurisdiction of the State of California Department of Corporations as to the number of shares allowed for water services. According to the California Secretary of State database, the company has

been in existence since 1922. The water system is regulated by the County of San Bernardino – Division of Environmental Health Services (hereinafter identified as the “County EHS”). The last inspection completed by County EHS on the system was in March 2010.

The water system has approximately 30 connections with a few inactive connections. The area has a total population of approximately 100. The system consists of two wells that pump directly to two gravity storage tanks. The tanks then gravity feed into the distribution system.

Water Supply

Camp Waterman Mutual’s water supply comes from wells. The table below provides a summary of its overall source of water (wells and/or others):

Source	Status	Capacity (GPM)	Comments
Groundwater:			
• Well #2 (vertical well)	Active	84	
• Well #3 (vertical well)	Active	54	
• Well #1 (vertical well)	Inactive	n/a	Covered with a steel plate – used to check depth of water table
Total Production		128	
Surface Water: <i>(None Used)</i>			
Connections with other systems:			
None			

Camp Waterman Mutual has adequate water capacity with a required source production of 70 GPM. The system has a capped inactive well, which is being used to monitor the depth of the water table. Due to the Old Fire in 2003, most of the homes in the community were destroyed and have not been rebuilt.

Storage

Camp Waterman Mutual has a total of 0.1 MG of storage capacity, which according to the County EHS report, is adequate to meet current demand for the system. The table below provides a summary of its water storage facilities:

Reservoir Name	Type	Capacity (gal)	Zone
Old Corrugated Tank	Steel corrugated	50,000	n/a
New Bolted	Bolted steel	50,000	n/a
Total Storage		100,000	

As County EHS identified in its report, both storage facilities are in decent condition.

Water Distribution

Camp Waterman Mutual's distribution system has a single pressure zone (30-60 psi) and its main lines vary between two and six inches of either steel or PVC piping. As County EHS identified in its report, its distribution system appears to be in good condition.

Mill Creek Canyon Area (Forest Falls and Mountain Home Village)

Mill Creek Mutual Service Company

The Mill Creek Mutual Service Company (Mill Creek MSC) is a mutual water company that serves the Mountain Home Village community and is classified as a community water system. As such, the Company is under the jurisdiction of the State of California Department of Corporations as to the number of shares allowed for water services. According to the California Secretary of State database, the company has been in existence since 1924. The water system is regulated by the County EHS. The last inspection completed by County EHS on the system was in April 2010.

The water system has approximately 85 connections with a total population of approximately 300. The system purchases its water from the City of Redlands.

Water Supply

Mill Creek MSC's water supply comes from the City of Redlands. The table below provides a summary of its overall source of water (wells and/or others):

Source	Status	Capacity (GPM)	Comments
Groundwater:			
<ul style="list-style-type: none"> Source of water: City of Redlands Well #2 (Mill Creek area) 	Active	>100	The system purchases water from the City of Redlands
Surface Water: <i>(None Used)</i>			
Connections with other systems:			
<ul style="list-style-type: none"> City of Redlands 	Active		Continuous

As County EHS identified in its report, Mill Creek MSC has adequate source capacity given the required source production of 100 GPM.

Storage

Mill Creek MSC has a total of 0.085 MG of storage capacity, which according to the County EHS report, is adequate to meet current demand for the system. The table below provides a summary of its water storage facilities:

Reservoir Name	Type	Capacity (gal)	Zone
Storage Tank #1	Welded steel	42,000	n/a
Storage Tank #2 (new)	Welded steel	43,841	n/a
Total Storage		85,841	

The County EHS report also indicates that both storage facilities are in good condition.

Water Distribution

Mill Creek MSC's distribution system has a single pressure zone (50-60 psi) using 4-inch of either steel or PVC piping. The old steel water mains are currently being replaced with new PVC piping.

Forest Park Mutual Water Company

The Forest Park Mutual Water Company (Forest Park Mutual) is a mutual water company that serves the western portion of the Forest Falls community and is classified as a community water system. As such, the Company is under the jurisdiction of the State of California Department of Corporations as to the number of shares allowed for water services. According to the California Secretary of State database, the company has been in existence since 1939. The water system is regulated by the County EHS. The last inspection completed by County EHS on the system was in May 2010.

The water system has approximately 92 connections with a few inactive connections. The area has a total population of approximately 304. The system consists of four wells, a concrete reservoir, and two gravity storage tanks. The system is divided into two pressure zones and separated with a valve due to elevation differences between their respective storage tanks.

Water Supply

Forest Park Mutual's water supply comes from wells. The table below provides a summary of its overall source of water (wells and/or others):

Source	Status	Capacity (GPM)	Comments
Groundwater:			
• Well 1 (horizontal well)	Active	29	
• Well 2 "Old Granite" (horizontal well)	Active	30	
• Well 3 (horizontal well)	Active	28	

• Well 4 (vertical well)	Active	24	
• Smith Well	Inactive	n/a	
Total Production		111	
Surface Water: <i>(None Used)</i>			
Connections with other systems:			
None			

As County EHS identified in its report, Forest Park Mutual has adequate source capacity given the required source production of 100 GPM. However, if any of its wells failed for any reason, the system may be unable to keep up with the demand.

Storage

Forest Park Mutual has a total of 0.26 MG of storage capacity, which according to the County EHS report, is adequate to meet current demand for the system. The table below provides a summary of its water storage facilities:

Reservoir Name	Type	Capacity (gal)	Zone
Storage Tank 1	Steel Bolted	105,000	System 1
Concrete Reservoir	Concrete	25,000	System 1
Storage Tank 2	Steel Bolted	128,000	System 2
Total Storage		258,000	

The County EHS report for Forest Park Mutual also indicates that both of its steel storage facilities are in good condition. However, the concrete reservoir was identified as leaking at several places and vulnerable to contamination.

Water Distribution

Forest Park Mutual's distribution system is comprised of two pressure zones: the upper zone (52-72 psi) and its lower zone (25-120 psi) serves approximately 92 residential service connections and its main lines vary between 2½ and six inches of either steel or PVC piping. As County EHS identified in its report, its distribution system appear to be in good condition.

Big Pine Tract Improvement

The Big Pine Tract Improvement (Big Pine) is a private retail water provider that serves the central portion of the Forest Falls community and is classified as a community water system. According to the California Secretary of State database, the company has been in existence since 1926. The water system is regulated by the County EHS. The last inspection completed by County EHS on the system was in May 2010.

The water system has approximately 136 connections with a few inactive connections. The area has a total population of approximately 300. The system consists of four wells and five gravity storage tanks. The system has two pressure zones with storage tanks at different places. The Wood Street tanks serve 40 residences and the Corral Road tanks serve the rest of the distribution system.

Water Supply

Big Pine's water supply comes from wells. The table below provides a summary of its overall source of water (wells and/or others):

Source	Status	Capacity (GPM)	Comments
Groundwater:			
• Well #1 (horizontal well)	Active	100	Main source of production
• Well #2 (horizontal well)	Inactive	n/a	Inactive due to its high iron content
• Well #3 (horizontal well)	Active	15	
Total Production		115	
Surface Water: <i>(None Used)</i>			
Connections with other systems:			
• Fallsvale Service Co.		(50)	Emergency connection

As County EHS identified in its report, Big Pine has adequate source capacity given the required source production of 100 GPM. However, if any of its wells failed for any reason, the system may be unable to keep up with the demand.

Storage

Big Pine has a total of 0.18 MG of storage capacity, which according to the County EHS report, is adequate to meet current demand for the system. The table below provides a summary of its water storage facilities:

Reservoir Name	Type	Capacity (gal)	Zone
Wood Tank #1	Welded steel	20,000	Upper
Wood Tank #2	Welded steel	20,000	Upper
Wood Tank #3 (new)	Welded steel	100,000	Upper
Corral Tank 1	Welded steel	20,000	Lower
Corral Tank 2	Welded steel	20,000	Lower
Fire Tank (fire protection only)	Steel bolted	(210,000)	
Total Storage		180,000	

The County EHS report for Big Pine also indicates that all of its storage facilities are in good condition.

Water Distribution

Big Pine’s distribution system is comprised of two pressure zones: the upper zone (50-60 psi) serves approximately 40 residential service connections and its lower zone (50-60 psi) serves the rest of the distribution system. Its main lines vary between four and eight inches of either steel or PVC piping. The steel water mains, which are old, are currently being replaced with PVC piping. Big Pine is planning to add new lines to feed the entire distribution system from the Wood Street tanks.

Fallsvale Service Company

The Fallsvale Service Company (Fallsvale SC) is a mutual water company that serves the eastern portion of the Forest Falls community and is classified as a community water system. As such, the Company is under the jurisdiction of the State of California Department of Corporations as to the number of shares allowed for water services. According to the California Secretary of State database, the company has been in existence since 1925. The system is regulated by the State Department of Public Health – Division of Drinking Water and Environmental Management and is required to file with the California Department of Corporations.

Records obtained from the State Department of Public Health (DPH) identifies that the last inspection performed by DPH on the system was in November 2010. The system was originally permitted by the State in 1960. The system has an active permit with the State from 1960. It is unknown to LAFCO staff if there is an older permit with the State (previously through the CDPH- Bureau of Sanitary Engineering) prior to the current one on file. Two amendments to the original permit have been issued; Amendment No.1 for approval of the Big Falls Well (1992) and Amendment 05-13-09PA-013 for its 0.1 MG galvanized steel Rock Drive tank (2009).

The water system has approximately 485 connections (470 residential + 15 commercial) with a few inactive connections throughout the system. The area has a total population between 700 (permanent) and 1100 (seasonal).

Water Supply

All of Fallsvale SC’s water supply comes from wells. The table below provides a summary of its overall source of water (wells and/or others):

Source	Status	Capacity (GPM)	Comments
Groundwater:			
<ul style="list-style-type: none"> Snow Creek Horizontal Well 	Active	205	Primary source Fluctuates between 160-205 GPM

• Big Falls Well	Active	200	Used during high system demand
Total Production		405	
Surface Water: <i>(None Used)</i>			
Connections with other systems:			
None			

As DPH identified in its report, Fallsvale SC has adequate source capacity to meet its Maximum Daily Demand (MDD) of 257 GPM if both wells are operating. However, if any of Fallsvale SC's wells failed for any reason, the system may be unable to keep up with the demand since neither source can meet the system's MDD on its own. In addition, if production from its main well (Snow Creek) drops, the system may not be able to meet its demand as well. Fallsvale SC should begin exploring additional water sources to have the ability to meet demand if one of its current sources fails. It should also develop a water conservation plan to be implemented in case of a well failure and the system demand cannot be met.

Storage

Fallsvale SC has a total of 0.425 MG of storage capacity, which DPH identified as adequate to meet current demand for the system. The table below provides a summary of its water storage facilities:

Reservoir Name	Type	Capacity (gal)	Zone
Cedar Drive Tank	Bolted steel	100,000	Lower
Rock Drive Tank	Bolted steel	100,000	Upper
Snow Canyon #1	Bolted steel	20,000	Upper
Snow Canyon #2	Bolted steel	20,000	Upper
Alger Creek Tank	Bolted steel	45,000	Lower
Snow Creek Tank	Bolted steel	140,000	Upper
Total Storage		425,000	

All of Fallsvale SC's reservoirs were identified by DPH as being in good condition. All the tanks in need of maintenance have been replaced with new tanks.

Water Distribution

Fallsvale SC's distribution system is comprised of two (2) pressure zones: the upper zone (80-90 psi) serves approximately 123 active connections and its lower zone (70-100 psi) serves approximately 357 active connections. 65 percent of Fallsvale SC's water mains are made of PVC, 6-8 inches in diameter, and are in good condition. The rest of its water mains are made of steel, 1.5-4 inches in diameter, which are aging - but in fair condition. Fallsvale SC's main focus for the future is continuing its mainline replacement program by replacing its undersized mains with 6-inch and 8-inch mains.

In addition, it has been looping the system by adding sections of mainline to eliminate dead ends and decrease the potential of stagnant water.

Angelus Oaks Area

Glen Martin Mutual Water Company

The Glen Martin Mutual Water Company (Glen Martin Mutual) is a mutual water company that serves the Angelus Oaks community and is classified as a community water system. As such, the Company is under the jurisdiction of the State of California Department of Corporations as to the number of shares allowed for water services. According to the California Secretary of State database, the company has been in existence since 1923. The system is regulated by the State Department of Public Health – Division of Drinking Water and Environmental Management and is required to file with the California Department of Corporations.

Records obtained from the State Department of Public Health (DPH) identifies that the last inspection performed by DPH on the system was in July 2010. The system has an active permit with the State from 1991 (Permit No. 04-91-09). It is unknown to LAFCO staff if there is an older permit with the State (previously through the CDPH- Bureau of Sanitary Engineering) prior to the current one on file. An amendment to the permit on file was issued in 2002 (Amendment No.1) to change the status of Well #1 from standby to active.

The water system has approximately 338 connections (325 residential + 13 commercial) with several inactive connections throughout the system. The area has a total population between 450 (permanent) and 790 (seasonal).

Water Supply

All of Glen Martin Mutual's water supply comes from wells. The table below provides a summary of its overall source of water (wells and/or others):

Source	Status	Capacity (GPM)	Comments
Groundwater:			
• Well 1 (Robinson)	Active	264	Used during peak system demand
• Well 2 (New)	Active	311	Primary source
• Horizontal	Active	8-36	
Total Production		583-613	
Surface Water: <i>(None Used)</i>			
Connections with other systems:			
None			

The DPH report identifies that Glen Martin Mutual has adequate water source capacity. If the main well that produces 311 GPM fails for any reason, the rest of the system wells can still produce approximately 272 GPM (87 percent of the water produced from its main well). Therefore, the system's capacity is adequate and reliable to meet its 2009 MDD of 119.06 GPM.

Storage

Glen Martin Mutual has a total of 0.334 MG of storage capacity, which DPH identified as adequate to meet current demand for the system. The table below provides a summary of its water storage facilities:

Reservoir Name	Type	Capacity (gal)	Zone
Main Tank #1	Welded steel	210,000	All zones
Main Tank #2	Bolted steel	101,000	All zones
Robinson Tank (transfer tank)	Bolted steel	22,800	Main tank through booster
Total Storage		333,800	

The inactivated Robinson Tank was replaced in December 2009 with a new tank. Main Tank #1 was recoated in 2007. All reservoir interior coatings are in decent condition.

Water Distribution

Glen Martin Mutual's distribution system is comprised of five pressure zones: Zone 1-Cedar (50-80 psi) serves approximately 92 active connections, Zone 2-Sugar Pine (70-100 psi) serves approximately 24 active connections, Zone 3-Manzanita (30-50 psi) serves approximately 120 active connections, Zone 4-Tripp Lane (70-110 psi) serves approximately 37 active connections, and Zone 5-Robin Oak (70-110 psi) serves approximately 48 active connections. Seventy percent of Glen Martin Mutual's water mains are made of steel, 1.5-6 inches in diameter, and are in fair condition. The rest of its water mains are made of PVC, 6-8 inches in diameter, which are in good condition. Glen Martin Mutual plans to continue its mainline replacement program to replace all its undersized non-standard pipelines with 6-inch PVC piping. Many other projects are currently lined up including a new telemetry system, office upgrades, recoating of Main Tank #1, and a new chlorinator.

Camp Angelus Tract Land Association

Camp Angelus Tract Land Association (Camp Angelus Tract) is a private retail water provider that serves a portion of the Angelus Oaks community near Upper Road (northeastern portion of the community) and is classified as a state small water system. According to the California Secretary of State database, the company has been in existence since 1971. The water system is regulated by the County EHS. The last inspection completed by County EHS on the system was in June 2010.

The water system supplies water to 30 seasonal cabins with five permanent residents. The system consists of two wells that pump directly to the concrete reservoir. The water is then pumped to the upper tanks. The upper tanks gravity feed 16 cabins and the rest are served by the concrete reservoir.

Water Supply

Camp Angelus Tract’s water supply comes from wells. The table below provides a summary of its overall source of water (wells and/or others), which according to the County EHS report, indicate that it has adequate water capacity:

Source	Status	Capacity (GPM)	Comments
Groundwater:			
• Well 1 (horizontal well)	Active	40-50	
• Well 2 (horizontal well)	Active	1-3	
Total Production		41-53	
Surface Water: <i>(None Used)</i>			
Connections with other systems:			
None			

Storage

Camp Angelus Tract has a total of 0.03 MG of storage capacity, which according to the County EHS report, is also adequate to meet current demand for the system. The table below provides a summary of its water storage facilities:

Reservoir Name	Type	Capacity (gal)	Zone
Tank 1	Concrete	25,000	n/a
Tank 2	Galvanized steel	5,000	n/a
Tank 3	Galvanized steel	5,000	n/a
Total Storage		30,000	

All of its storage facilities are in decent condition.

Water Distribution

Camp Angelus Tract’s distribution system has a single pressure zone (30-60 psi). The cabins are served by 3-inch water lines except for the lower six cabins, which are served by new 4-inch lines.

Transient, Non-Community Water Systems

There are a number of water systems in the area that are considered transient, non-community water systems. These are the systems that generally provide water service to the different camps in and around Angelus Oaks and Forest Falls. Some of the larger, notable systems are as follows:

a. Barton Flats Water System

The system consists of water from a tributary stream of the Santa Ana River (surface water) and three gravity storage tanks (total capacity 155,000 gal.) that supplies water to 15 campgrounds serving the campground employees and a large transient population.

b. Camp Cedar Falls

The system consists of water from Forsee Creek (surface water) and two storage tank (total capacity 238,500 gal.) that supplies water to an organized camp with 30 room hotel and 36 cabins. The system serves 5-8 fulltime employees and a large transient population.

c. Camp La Verne

The system consists of a single vertical well and a single underground concrete storage tank (capacity 100,000 gal.) that serves the seasonal organized campground with 18 cabins.

d. Camp Tahquitz BSA

The system consists of two active vertical wells (two other wells on standby) and two storage tanks (total capacity 250,000 gal.) that serves 250 campers per week in the summer months.

e. Forest Home, Inc.

The system consists of two separate water systems (due to pressure differences), the Forest Center and the Lakeside systems. The Forest Center system consists of two horizontal wells and two steel bolted storage tanks (total capacity 500,000 gal.) that serves the cabins located on the south side of the Valley of the Falls Drive. The Lakeside system consists of a spring source, a 120,000 gallon steel bolted storage tank and a 25,000 gallon pressure tank that serves the cabins on the north side of the road. Both systems have approximately 170 service connections including three permanent residences that serves 100 employees and a large transient population.

The rest of the water systems have either one or two sources of water (well or surface water source) with a total storage capacity of less than 100,000 gallons. These systems serve many of the other camp facilities including: Camp Arbolado, Camp Metoche, Camp Morning Star, Camp De Benneville Pines, Camp Round Meadow, Camp Ta Ta

Pochon, Laurel Pines Camp, Camp Heart Bar, and Falls Tract Cabin Owners Association.

Sewer

Currently, the areas identified in this report rely on septic tanks and subsurface disposal to treat and dispose of wastewater.

Fire and Emergency Response

The communities identified in this report are protected from residential fire and provided emergency medical aid by the San Bernardino County Fire Protection District (“County Fire”) which overlays most of the Mountain Region, with the exception of the areas that are currently served by an independent fire service provider (i.e. Crest Forest Fire Protection District, Running Springs Water District, Arrowbear Park Water District, Big Bear Lake Fire Protection District, and the Big Bear City Community Services District).

In addition, the U.S. Forest Service protects the surrounding federal forest lands. Wildland fires are under the jurisdiction of the California Department of Forestry and Fire Protection (Cal Fire) and the United States Forest Service (USFS). County Fire and its Mountain Service Zone have automatic and/or mutual aid agreements with the California Department of Forestry and Fire Protection and the US Forest Service. County Fire provides a full range of first-responder emergency medical services from basic first aid through paramedic (including ambulance service in some areas).

Below is a map (Figure 5) illustrating the fire service providers in the Mountain region and the general location of the communities identified in this report, a copy of which is included as part of Attachment #1.

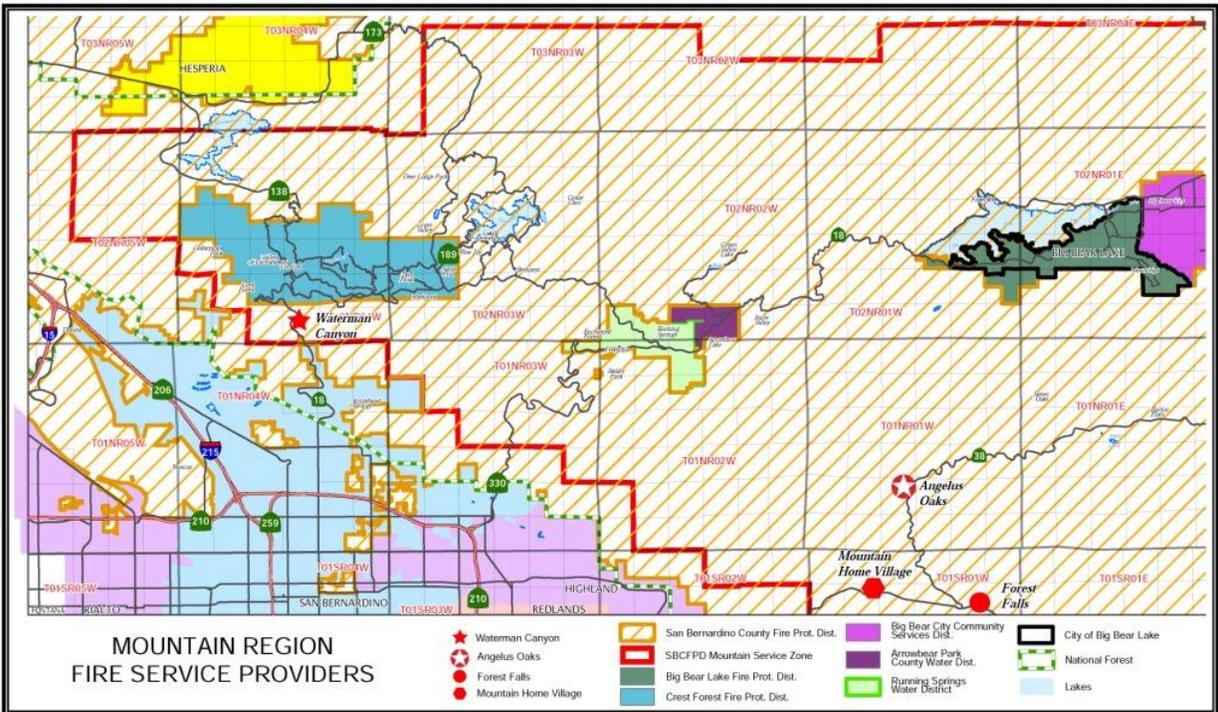


FIGURE 5

Waterman Canyon Area

There are no County Fire stations that can easily serve the Waterman Canyon area. The County Fire station that would respond to the area is Station 75 (Muscoy Station).

County Fire has an automatic aid agreement with the Crest Forest Fire Protection District (FPD) to provide a Fire Captain, 2 fire engines, and an ambulance from Panorama Point to the upper and lower Waterman Canyon area. The community is also served by the US Forest Service Station 36 (Waterman Station - located right in Waterman Canyon). USFS Station 36 is only a seasonal station that provides wildland fire protection to the area. In some cases, when the station is manned, Crest Forest FPD will request assistance from the USFS Station 36 for additional support.

County Fire also has an automatic aid agreement with the City of San Bernardino Fire Department to serve the area. Through the annexation of the Arrowhead Springs area to the City of San Bernardino, the City's Fire Department now provides fire protection and paramedic services to a portion of the lower Waterman Canyon area and continues to respond to the rest of the lower Waterman Canyon as well as the upper Waterman Canyon areas upon request.

Mill Creek Canyon Area (Forest Falls and Mountain Home Village)

Fire protection and emergency medical response services in Forest Falls and in the Mountain Home Village area were previously provided by the Forest Falls Fire Protection

District until July 1, 2008, the effective date of the County Fire reorganization. Since then, fire protection and emergency medical response services are provided by County Fire and its Mountain Service Zone. County Fire Station 99 (Forest Falls Station) is home to paid call crews from the local community that houses a Snow Cat, a Snow Loader, a Brush Patrol, two Fire Engines (Type I and II), a Light Rescue (Type I), and an ambulance among other equipment.

Additional fire protection service support is provided by County Fire Station #98 in Angelus Oaks and County Fire Station #9 in Mentone. In addition, the seasonal USFS Station 34 (Mill Creek Station) located in the City of Yucaipa's northern unincorporated sphere of influence area (Mill Creek Road and Bryant Street) also lends its support when it is manned.

In 2006, the Mill Creek Canyon Fire Safe Council (MCCFSC), representing residential and business stakeholders in the area, in cooperation with County Fire, the USFS, and CAL Fire, adopted a Community Wildfire Protection Plan (CWPP) for the Mill Creek Canyon area, a copy of which is included in Attachment #2. The Mill Creek Canyon CWPP provides a long-range concept of projects and goals that would benefit the residents of the two communities. It includes four specific goals that would reduce wildfire risks, including strategic fire breaks and fuel removal, improved residential defensible space around structures, expanded educational programs and information outreach, and infrastructure improvements related to the water systems in the area.

Angelus Oaks

Fire protection and emergency medical response services in Angelus Oaks were previously provided by County Service Area (CSA) 38 Zone B (Angelus Oaks) until July 1, 2008, the effective date of the County Fire Reorganization (LAFCO 3000). Since then, fire protection and emergency medical response services are provided by County Fire and its Mountain Service Zone. County Fire Station 98 (Angelus Oaks Station) is manned by paid call fire personnel from the local community. Station 98, which protects the communities of Angelus Oaks, Seven Oaks, and the Barton Flats area, has a Snow Cat, a Snow Loader, a Brush Patrol (Type IV), a Fire Engine (Type II), a Water Tender and an emergency generator.

Additional fire protection service support is provided by County Fire Station #99 in Forest Falls and County Fire Station #96 in Fawnskin. In addition, the seasonal USFS Station 17 (Converse Station) near Seven Oaks (which is open only in the summer time) also lends its support when manned. County Fire also has automatic aid agreement with the Big Bear City Community Services District (CSD) to provide fire protection and ambulance service in the Seven Oaks and Barton Flats area.

In 2005, the Angelus Oaks Fire Safe Council, in cooperation with County Fire, the USFS, CAL Fire, and other federal land management agencies managing land in the area, also adopted its own CWPP, a copy of which is included in Attachment #3. The Angelus Oaks CWPP identifies areas for hazardous fuel reduction treatments that will protect Angelus Oaks and its surrounding areas. The plan also recommends measures to reduce the ignitability of structures throughout the area.

Ambulance

Since 1988, the County of San Bernardino Board of Supervisors has authorized the implementation of ambulance provider Exclusive Operating Areas (EOAs) as authorized by Sections 1797 et seq. of the Health and Safety Code. The local emergency medical services agency for San Bernardino County to define EOAs is the joint powers agency known as the Inland Counties Emergency Medical Agency, or “ICEMA”. Below is a map (Figure 6) illustrating the EOAs in the Mountain region and the general location of the communities identified in this report, a copy of which is included as part of Attachment #1.

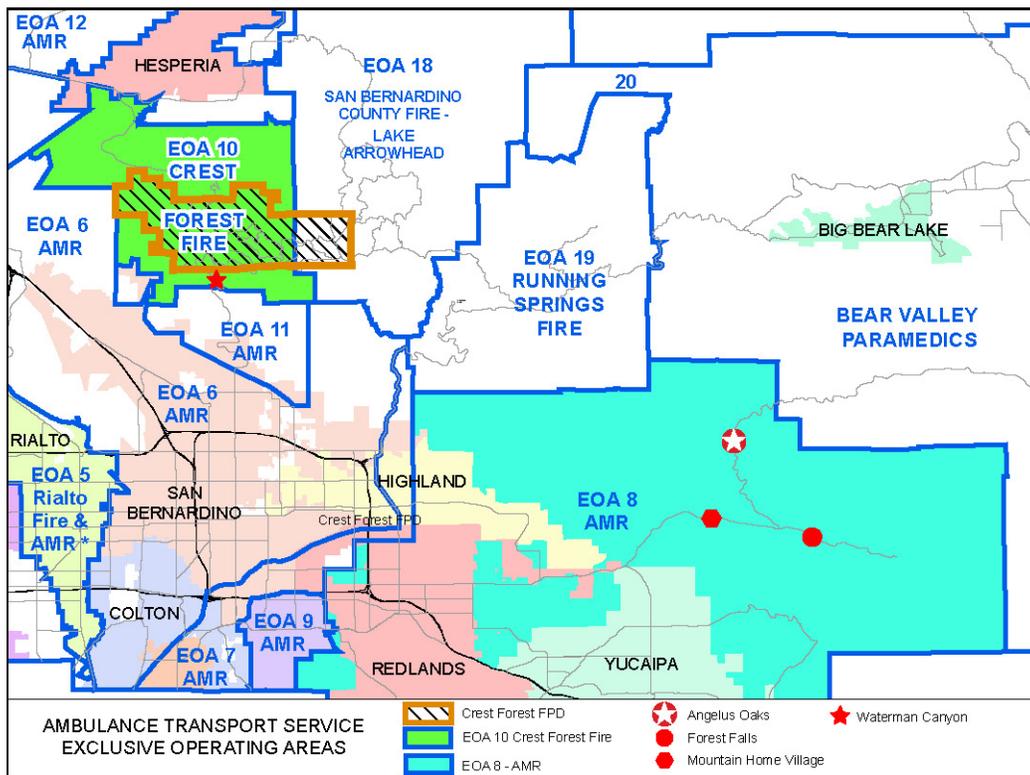


FIGURE 6

For the upper Waterman Canyon area, which is the core of the community, ambulance and paramedic services are provided by the Crest Forest Fire Protection District. The map above shows the areas within Crest Forest Fire FPD’s EOA (EOA 10) in yellow-green. The lower Waterman Canyon area (within the City of San Bernardino), is within the American Medical Response (AMR) EOA (EOA 11).

For the communities of Angelus Oaks, Forest Falls, and the Mountain Home Village area, ambulance and paramedic services are also provided by AMR. For the Seven Oaks and Barton Flats area, ambulance and paramedic services are provided by the Big Bear City CSD. The map above also shows the general location of these areas within AMR’s EOA (EOA 8) in blue-green and Bear Valley Paramedics EOA (EOA 20).

Law Enforcement

Law enforcement within the communities identified in this report is provided by the San Bernardino County Sheriff's Department.

Electricity

Southern California Edison provides electric power to majority of the Mountain region, including the areas identified in this report.

Streetlighting

Southern California Edison provides streetlighting service to majority of the Mountain Region, including the areas identified in this report. Streetlights within the areas identified in this report are mostly safety lights (normally located at major intersections or above signal lights) that are billed to CALTRANS or the County Public Works - Transportation Division. Any other streetlights are privately-owned (i.e. individual owner, non-profit organizations, HOA's, etc).

Within the unincorporated areas, the future need for streetlights will increase if the population grows, dependent upon the implementation of the County's Night Sky Ordinance, which is applicable in the Mountain region. The purpose of the Night Sky Ordinance is to encourage outdoor lighting practices and systems that will minimize light pollution, conserve energy, and curtail the degradation of the nighttime visual environment. The implementation of this ordinance points toward a limitation of the number of streetlights for the future and may limit them to commercial areas of these communities only.

Park & Recreation

The natural setting, which includes open space, recreational areas and natural resources, is the contributing factor to the rural mountain character. The area's natural features including lakes, streams, waterfalls, vegetation, wildlife, topography, rock formations, etc. are regional assets that are highly valued by residents of these areas and by visitors.

The National Forest provides additional opportunities for outdoor recreation, such as biking, hiking, fishing, and camping. These communities are completely surrounded by the San Bernardino National Forest. The community contains a number of campgrounds, organization camps and hiking trails, Jenks Lake, all of which draw not only camping excursions in the area during the winter and summer months, but tourism as well.

Solid Waste

Mountain Disposal (an affiliate of Burrtec), which serves the communities of Crest Forest, Lake Arrowhead and Hilltop, also serves the Waterman Canyon area. Mountain Disposal provides Christmas tree recycling, curbside bulky item pick-ups, electronic waste collection and also conducts community clean-up events. Mountain Disposal is located at 988 Waterman Canyon Road, Crestline, CA 92325.

Empire Disposal (also an affiliate of Burrtec) serves the Mountain Home Village area, Forest Falls, Angelus Oaks, and the Barton Flats area. Empire Disposal also provides the same type of services that Mountain Disposal provides (i.e. recycling, electronic waste collection, etc.).

Roads

Road and snow removal service within these communities is provided by either Caltrans (for all State highways) or the County's Public Works - Transportation Division (for all the County maintained roads). Other means of road service could be through the creation of zones to county service areas. None of these communities currently have or use county service areas for any type of localized road and snow removal service.

ADDITIONAL DETERMINATION:

Legal advertisement of the Commission's consideration has been provided through publication in *The Sun*, a newspaper of general circulation in the area as required by law.

RECOMMENDATION:

Staff recommends the Commission receive and file the report for the remainder of the unincorporated mountain communities that are identified in this report that were not a part of the overall Mountain region service reviews.

KRM/SM/MT

Attachments:

1. [Maps:](#)
 - Figure 1 – LAFCO Defined Communities Map
 - Figure 5 – Mountain Region Fire Service Providers Map
 - Figure 6 – Ambulance Transport Service Exclusive Operating Areas Map
2. [Mill Creek Canyon Community Wildfire Protection Plan \(2006\)](#)
3. [Angelus Oaks Community Wildfire Protection Plan \(2005\)](#)