



# United States Department of the Interior

BUREAU OF LAND MANAGEMENT  
Riverside District Office  
1695 Spruce Street  
Riverside, California 92507

IN REPLY REFER TO

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(C-069.92)

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MAY 15 1980  
Barstow Resource Area  
150 Coolwater Lane  
Barstow, CA 92311

Dear Interested Citizen;

Enclosed for your information is a copy of the final Afton Canyon Interim Management Plan.

The draft plan was released in late October 1979. By the end of the public comment period in early January 1980, over sixty individuals and groups had commented on the draft. These comments were considered very carefully and helped to shape the final plan.

I wish to reemphasize the interim nature of the Afton Canyon Interim Management Plan. Some modification of the plan may be necessitated as a result of decisions made in the final desertwide plan (expected to be complete in September 1980). We decided to proceed with development of this management plan prior to the completion of the desertwide plan because of the sensitive nature of the area's values, the significant public use of those values, and to ensure immediate protection of Afton Canyon's resource values.

Thank you for your interest in the Bureau's planning process for Afton Canyon Recreation Area.

Sincerely yours,

*Bruce Otterfeld* ACTING  
Gerald E. Hillier  
District Manager

Enclosure

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ENERGY

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AFTON CANYON

Interim Management

Plan and Environmental

Assessment Record

Barstow Resource Area  
150 Coolwater Lane  
Barstow, CA 92311

April 1980

Prepared By: Department of the Interior  
Bureau of Land Management  
Riverside District  
Cima Resource Area

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## OUTLINE

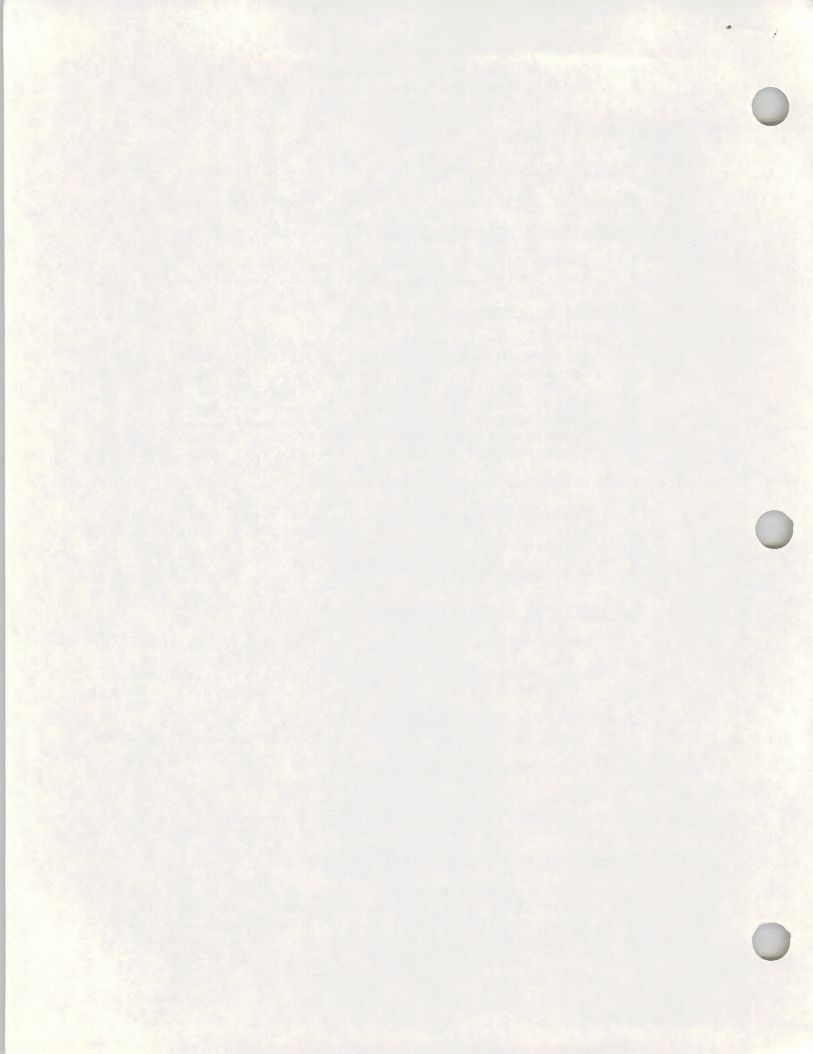
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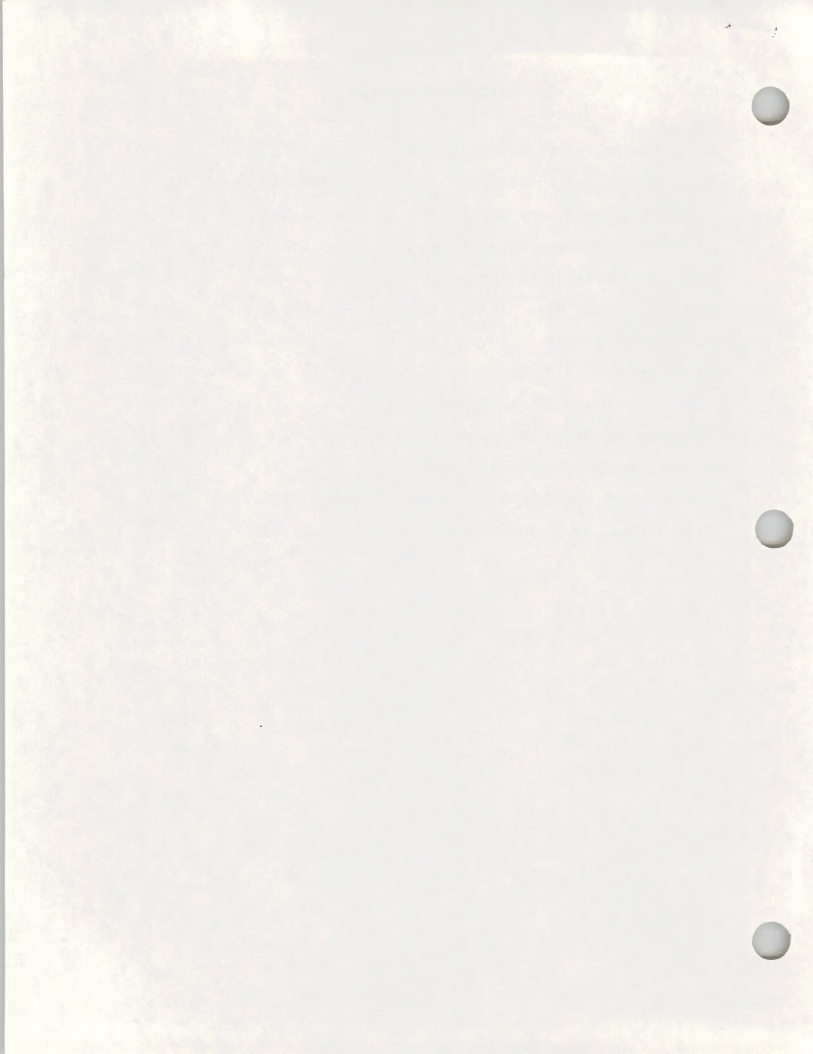
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AFTON CANYON

&

VICINITY







## I. INTRODUCTION

### A. Setting

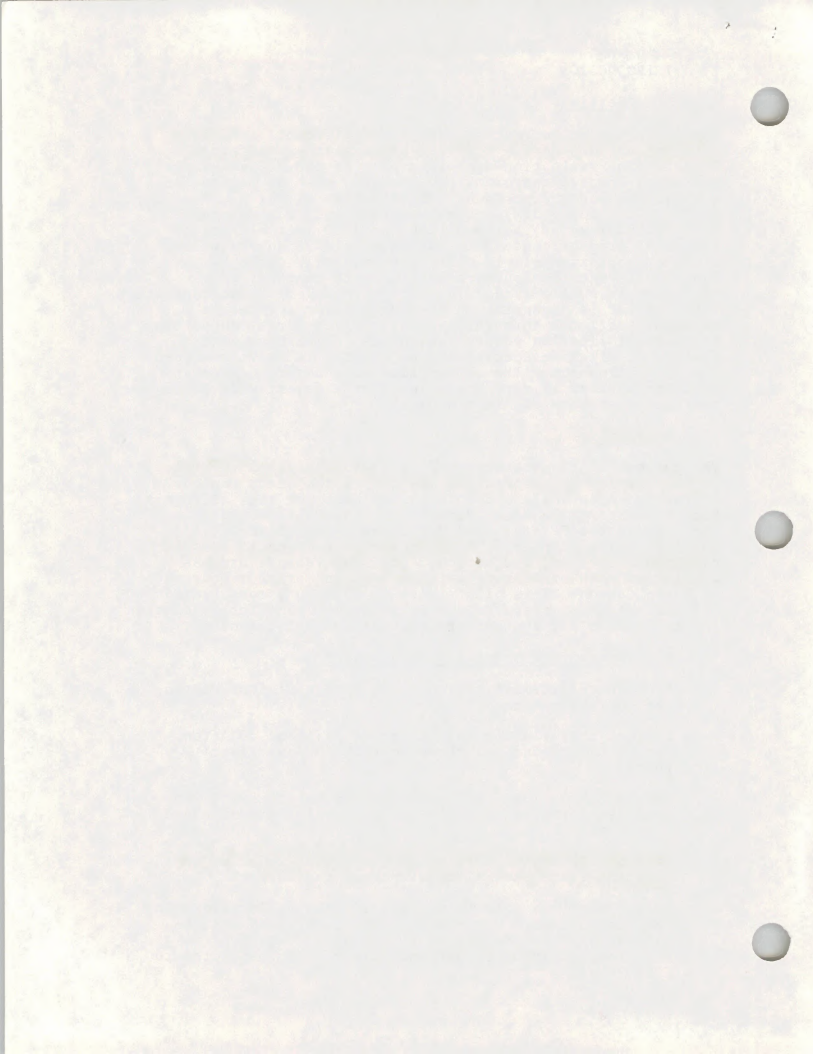
The Afton Canyon Recreation Area is significant since it contains one of the few riparian areas in the California Desert. The recreation area is a part of the Mojave River drainage, located approximately 35 miles east of Barstow in central San Bernardino County, California, (T. 11 N., R. 5 E.; T. 11 N., R. 6 E., SBM -- Cave Mountain and Cady Mountain USGS 15' quadrangles) between 1200 and 3700 feet elevation. The total area of concern is approximately 28 square miles, of which approximately 12 miles are privately owned by individuals and the Southern Pacific Land Company; the remainder is public land. The canyon is a well known recreation site. Water is perennial at the surface for a three to seven mile stretch through the Mojave River Gorge, supporting thickets of riparian vegetation, ponds, a marshland and a variety of wildlife species in the midst of a heavily eroded desert environment. The combination of a desert canyon and riparian habitat is rare when viewed on a desert-wide basis making the scenery at Afton unusual.

### B. Purpose

The purpose of the Management Plan is to establish interim guidelines for the protection and use of the Afton Canyon Recreation Area while a comprehensive plan for the California Desert Conservation Area (mandated by the United States Congress in the Federal Land Policy and Management Act of 1976) is being completed. Since the construction of the BLM campground in 1968, recreational off-road vehicle use has conflicted with other recreational uses and other resources at Afton Canyon. This plan's goal is to ensure conservation and protection of resource elements through conflict resolution and to provide for appropriate multiple use of resources.

### C. Summary of Major Recommendations

- Provide enforcement personnel to manage visitor use in the recreation area.
- Protect the wildlife habitat areas adjacent to Afton Canyon campground and throughout the Mojave River gorge.
- In the Canyon Zone, allow the use of vehicles only on designated routes and allow camping only in designated locations.
- In the Backcountry Zone, allow the use of vehicles on existing routes and allow dispersed camping.
- Allow campfires only in designated camping locations in the Canyon Zone. Campfires in the campground will be allowed only in designated fire rings. Campfires in the proposed group campground will not be restricted to fire rings.



- **Prohibit the collection of firewood in the recreation area.**
- Provide an area for **group camping with equestrian facilities.**
- **Prohibit firearm use** within one mile of the campground.
- Provide for interpretation of the Afton Canyon area through signs and a descriptive flyer.

#### D. Background

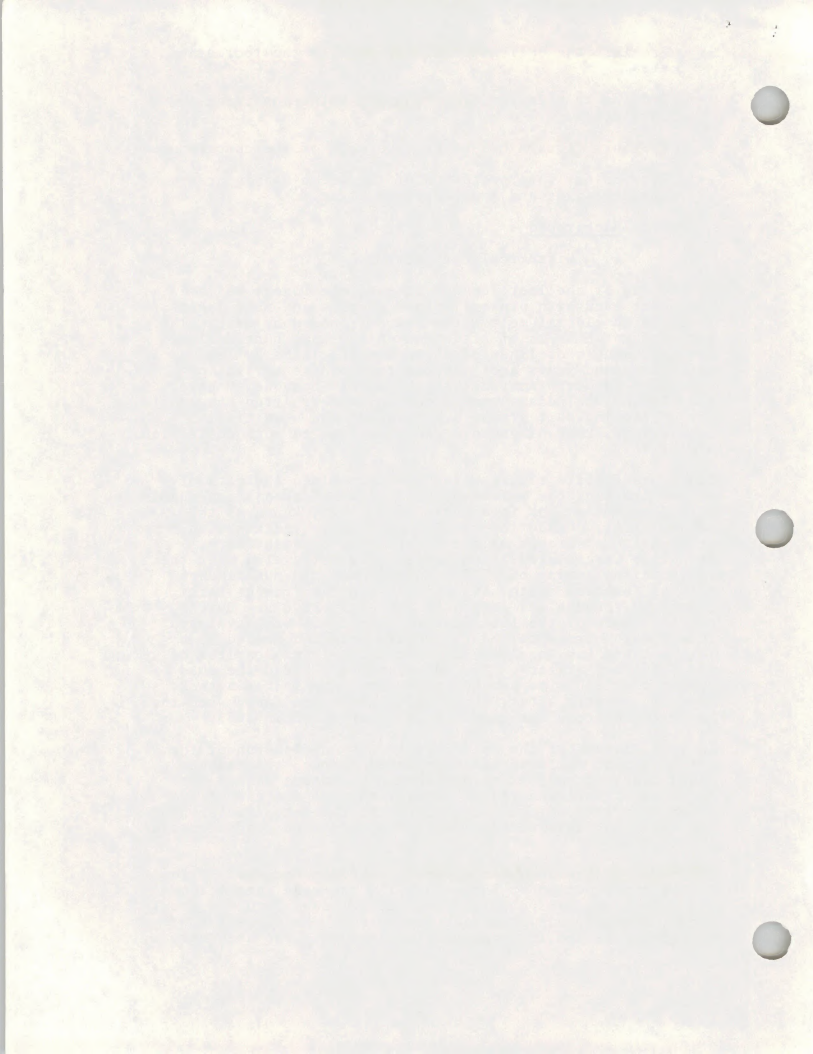
##### 1. Historical Perspective

At the end of the last Ice Age, the Mojave Desert was a different land with pinyon-juniper forests and many lakes filled with glacial melt water and surrounded by game. The earliest known users of Afton Canyon may have hunted along the shrinking shorelines of these Ice Age lakes as long as 5 to 10 thousand years ago. At the time of the arrival of Europeans in North America, the Panamint Shoshone, Mohave and Chemehuevi Indians used areas in or near Afton Canyon for collecting salt around dry lakebeds and used trails, rock cairns, rock alignments and intaglios to mark collection areas.

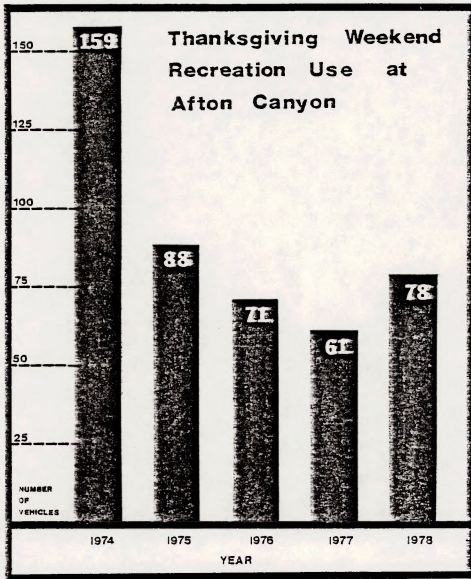
Since prehistoric times, water has determined the path of anyone crossing the Mojave Desert. Afton Canyon's dependable stream became a link in a chain of springs, known as the Mojave Trail, connecting the Colorado River Indians with other cultural groups on the coast. The Spanish Padre, Francisco Garces, led by an Indian guide, traveled over the route in the spring of 1776. Mountainmen and pathfinders such as Jedediah Smith, Kit Carson, and the Fremont Party journeyed through the canyon in the early 1800's. During the last half of the 19th Century, the trail was developed into a wagon track called the Mojave Road and served as a link between Los Angeles and Prescott, Arizona, capital of the Arizona Territory. Army detachments guarded the road during the 1860's to protect travelers from Indian attack; however, shortly after, the road's importance faded when the Santa Fe Railroad was completed further south in 1883.

In 1905, tracks of the Salt Lake to Los Angeles run of the Union Pacific Railroad were completed through the canyon. Flood damage occurred in 1938 when high waters washed out sections of railroad grade. Travel through the canyon by motor vehicle remained difficult until the late 1960's when the railroad constructed a private maintenance road alongside the tracks.

**Afton Canyon has been a recreation spot for decades.** Prior to the construction of Interstate 15, the road into Afton was primitive, and very little traffic flowed into the area. Still, many persons camped at the site of the present BLM campground before its construction in 1968. The area has











been popular with sightseers, hikers, rockhounds, bird watchers, picnickers, researchers, and campers, many using ORVs as a primary means of reaching outlying areas of the recreation area via roads and jeep trails.

In the last decade, the use of ORVs for a purely recreational experience (as opposed to ORV use in support of another activity such as rockhounding) has increased at Afton. This recreational ORV use includes hill climbs and cross-country travel off existing roads and trails. The focus of this use in the area has centered around the Afton Canyon campground. Off-road vehicles such as motorcycles and dune buggies are most common weekends; weekdays are still dominated by the more traditional recreational activities.

Two recent natural events of significance are the flooding of the Mojave River in 1969, when peak streamflow reached 18,000 cfs, resulting in some damage to campground facilities, and a fire caused by a hot train brake which burned 20 acres in the riparian mesquite thickets adjacent to the campground in June of 1978. Both events point out potential hazards to Afton visitors.

## 2. Recreation Use

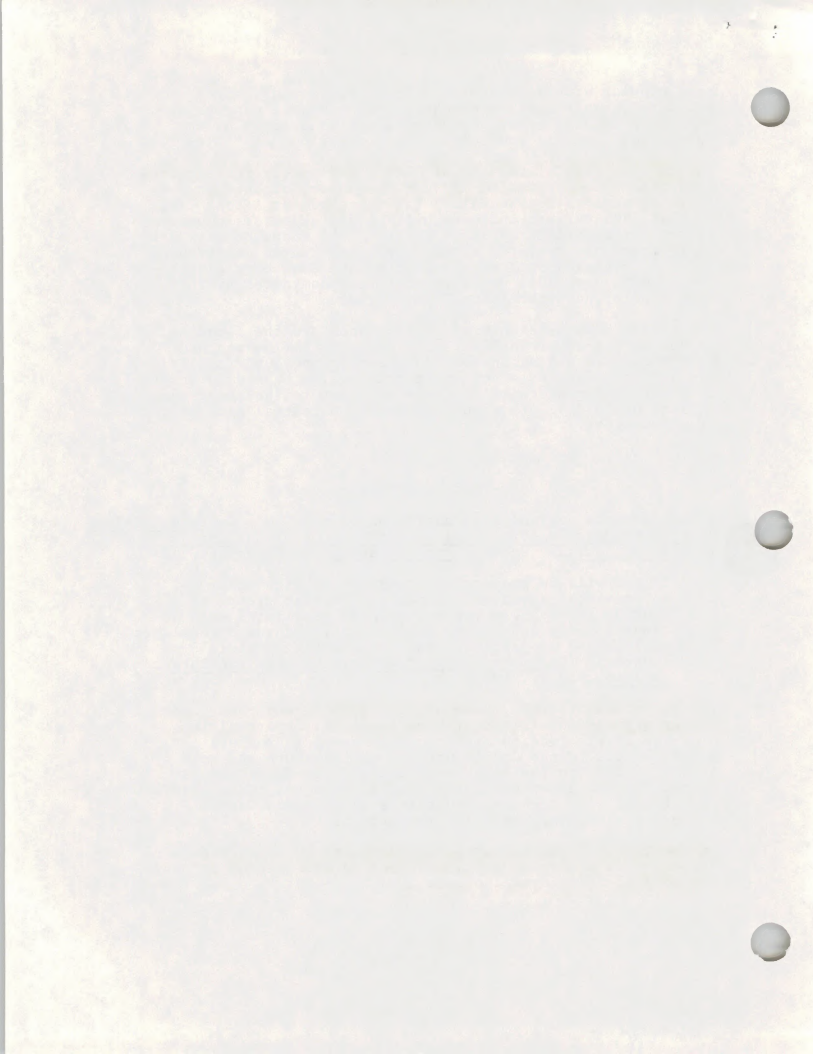
### a. Off-road Vehicle Use

Afton Canyon's current designation under the BLM's Interim Critical Management Program for Vehicle Use on the California Desert is special design. Under a special design designation:


"Plans will be prepared in cooperation with other governmental agencies and public interest groups to provide for vehicle use and related facilities such as camping areas and access roads. Until plans are completed vehicle use is permitted only on existing vehicle routes." (California Desert Vehicle Program Brochure and Map, G.P.O., 1977).

The variety of terrain, ease of access, and many roads and trails provide any driver with recreational opportunities. Old jeep trails lead to mines in the Maverick Brothers Mountains and in the Cady Mountains to the south and west of Afton. Access to the south rim of the Afton Gorge can be gained from Basin or Afton railroad sidings via these scenic jeep trails. On the Cave Mountain side of Afton Canyon there are also mine roads and jeep trails.

In the last decade, resource damage caused by unmanaged recreational off-road vehicle use has become evident in many portions of the recreation area.




#### b. Informal Target Shooting




Informal target shooting takes place in the Afton Canyon Recreation Area. This type of use is sporadic and not necessarily associated with hunting, although, non-game species of wildlife are sometimes shot. Complaints of uncontrolled firearm use in the campground have been received by BLM from campers.

#### c. Hunting




Hunting takes place in the Mojave River Gorge and surrounding uplands for dove and quail. At present, hunting success is considered marginal due to low populations of upland game. The decline in game populations has been noted since the development of the BLM campground at Afton.

#### d. Camping




There is one designated camping area in Afton Canyon. Facilities include 22 campsites, chemical restrooms and a limited potable water supply. Campers also use numerous other undeveloped sites throughout the recreation area. Campfires are not confined to campground fire pits. There are no posted restrictions on wood gathering.

#### e. Equestrian Use




Tremendous opportunities exist in the Afton Canyon area for trail rides by clubs and individual riders who can enjoy a variety of terrain and scenery. No developed facilities exist for such use, since stock is not permitted in the campground, and there are no horse corrals.

#### f. Hiking

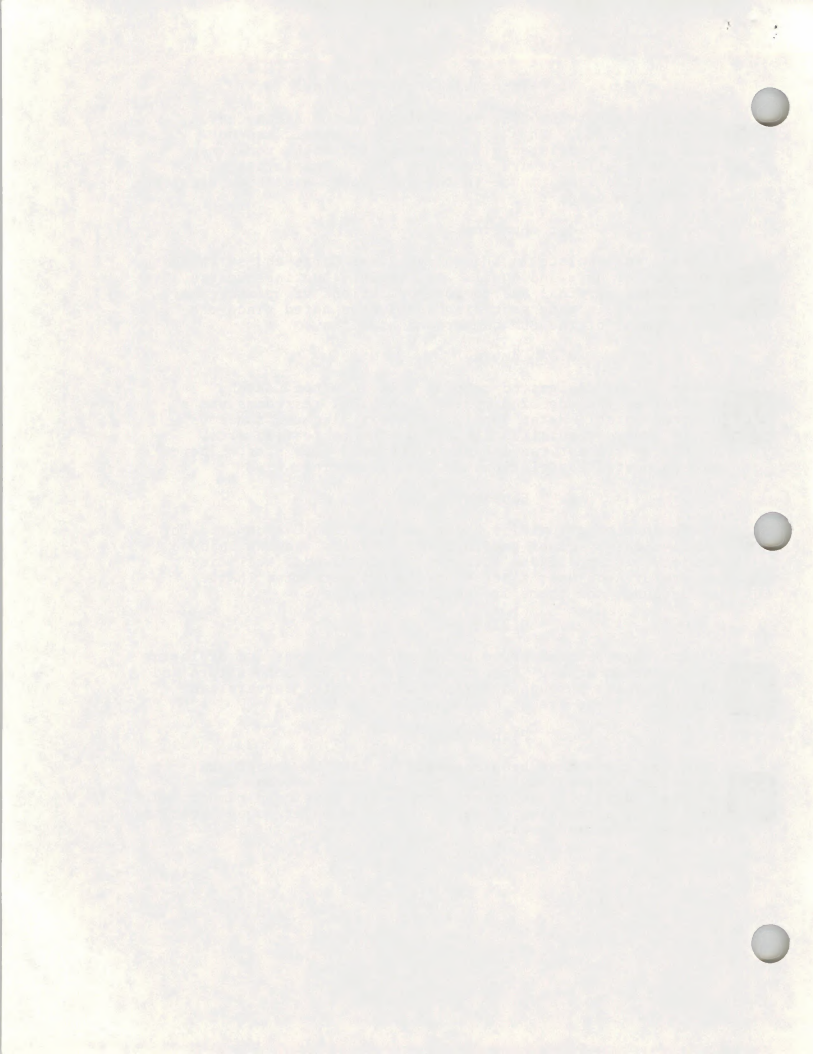


Hikers have been observed using various canyons and exploring the riparian areas. Opportunities exist for both nature and hiking trails through a variety of habitats, terrain and scenery. There are no developed hiking trails.

#### g. Picnicking




Many day users have been observed in the BLM campground. Those interviewed have come from the Barstow area. No special facilities exist other than the developed campground. Picnicking also takes place at scattered undeveloped locations in the recreation area.






#### h. Sightseeing




Visitors come to enjoy the Afton Canyon scenery on foot, by horseback or by vehicle. The colorful badland formations downstream from the campground contrast with the riparian areas which include the free-flowing Mojave River, riparian thickets and a marsh.

#### i. Rockhounding



The Afton Canyon area is the best rockhounding area between Barstow and Baker along I-15. Most of the collecting occurs in the mountain canyons south of the Mojave River Gorge. It is a well known collecting area for both individuals and clubs.

#### j. Nature Study and Observation



Individuals, colleges, universities, and museums study the unusual botany, zoology, geology, paleontology, archaeology, and hydrology at Afton Canyon. Recreational bird watching and other informal forms of nature study are also pursued. No on-site interpretation of these resources has been attempted.

### 3. Other Resources

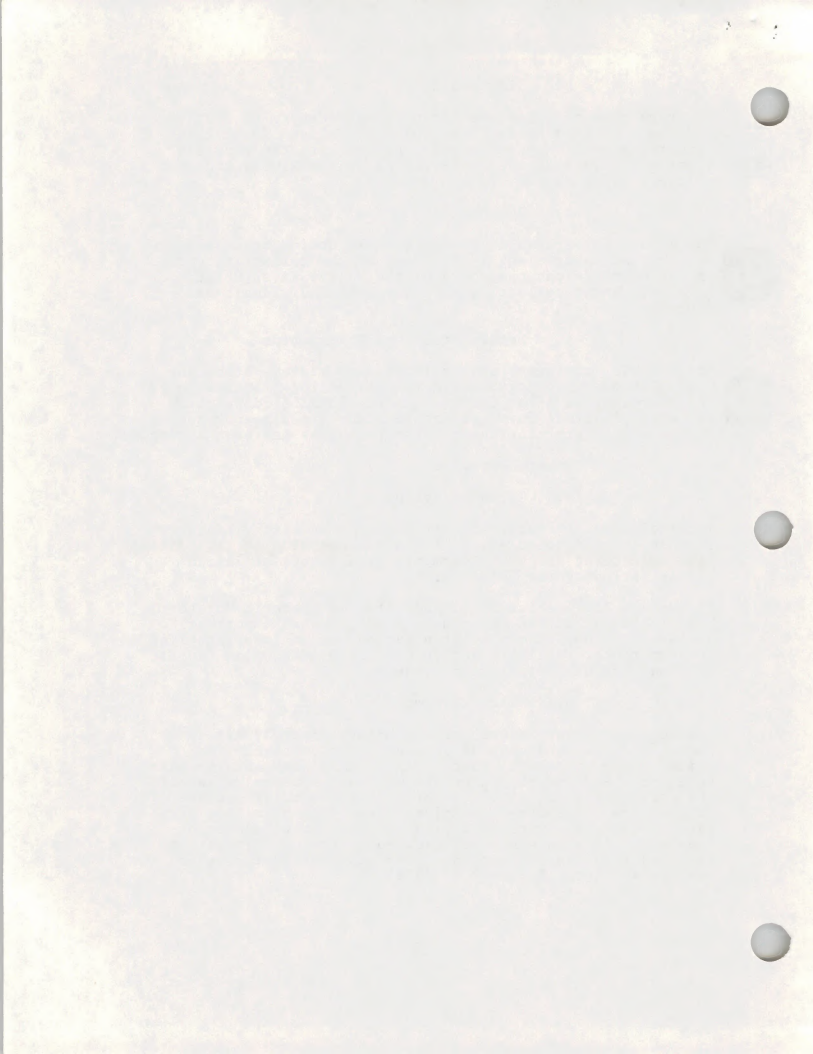
#### a. Cultural Resource

Archaeological resources in Afton Canyon and its vicinity include sleeping circles, rock tools, economically significant salt collecting areas and segments of a number of Indian trails including the Mojave Trail.

The Mojave Trail which developed into the historic Mojave Road (also called Old Government Road), was an important avenue for frontiersmen. Afton Canyon was an important link in that route. Still in active operation, the Union Pacific Railroad has historical significance.

#### b. Water Resource

Surface water systems such as the Mojave River at Afton Canyon are rare and unusual in a desert ecosystem. The Mojave River originates in the San Bernardino Mountains near Lake Arrowhead and is fed by snowmelt and seasonal rainfall. The stream at Afton is the river's last perennial surface flow before it reaches the Mojave River Sink near Soda Dry Lake. The river supports a rich and diverse community of freshwater life ranging from micro-organisms and insects to fish and riparian vegetation. When last tested the water quality was good (December 6, 1978).



#### c. Vegetative and Wildlife Resources

Afton Canyon is significant because it contains one of the few true riparian areas in the California desert. The ponds, marshes and stream, with their numerous species of riparian plants, provide habitat for wildlife species found only in a few other widely scattered riparian areas. The mesas and low mountains surrounding Afton support Mojave Desert scrub type vegetation (characterized by creosote bush) and a variety of desert wildlife species. Over 180 species of birds have been documented here, desert bighorn sheep water in the Mojave River Gorge during summer months and the easternmost known population of the western pond turtle lives in standing water, attesting to the variety and rarity of the living resources in Afton Canyon Recreation Area.

#### d. Geologic and Mining Resource

In prehistoric times, the California Desert was a lush savannah with broad lakes. Consequently, today it contains a wealth of fossils. The Afton area is a source of vertebrate fossils of animals peculiar to the western United States one to fifteen million years ago. One of the lakes supporting this life, Lake Manix, was formed by recurrent faulting which dammed the ancestral Mojave River at Afton Canyon. The well preserved remains of a Lake Manix gravel bar northwest of the campground is an outstanding example of this type of late Ice Age formation.

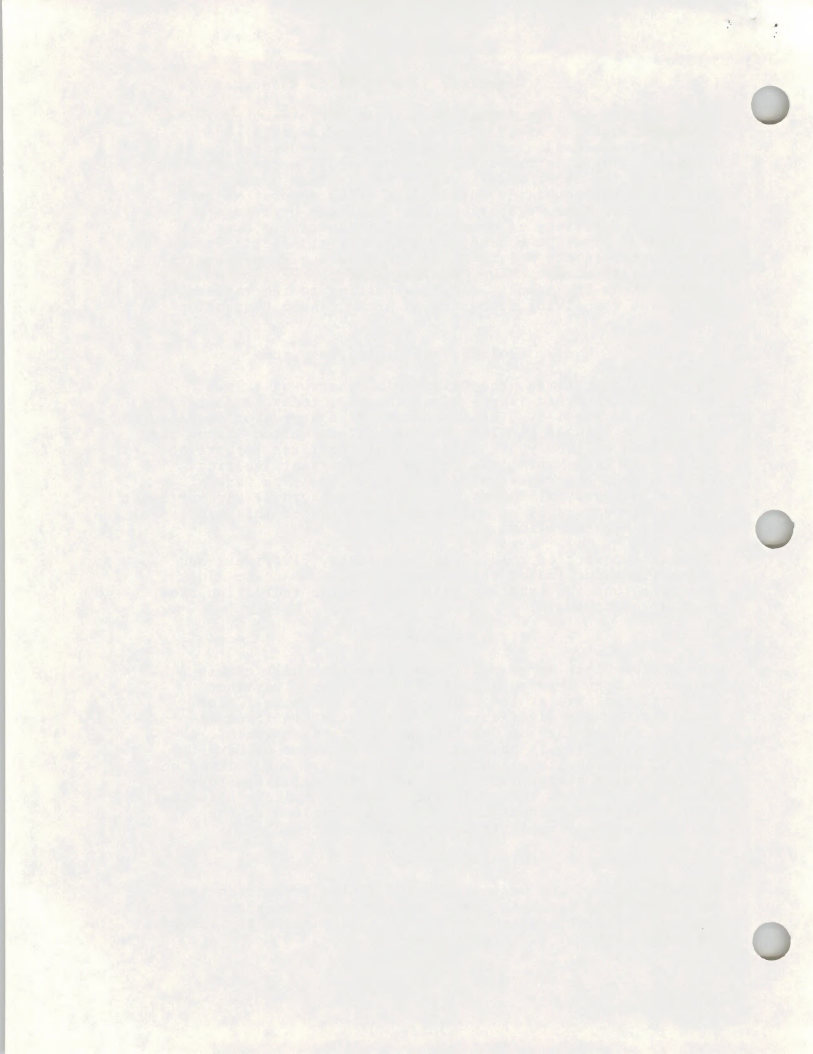
Mineral deposits of gold, iron, manganese, fluorspar, and magnesite occur inside the recreation area. Active mines for limestone and iron lie just outside the recreation area boundary near Basin.

#### e. Visual Resource

The Mojave River Gorge walls are steep with high cliffs broken by heavily eroded badland formations. Distinct alluvial fans lie at the mouths of side canyons. Color combinations are diverse; shadows are stark in low angle light. The variety of vegetation types, which include a freshwater marsh, is unusual. The combination of desert canyon, running stream and marshland is rare when viewed on a desert-wide basis. There are some cultural intrusions which detract from scenic quality; among these are hillsides with scars from recreational off-road vehicle use, the railroad and its facilities, and the campground.

#### f. Grazing Resource

A small part of the western portion of the recreation area is grazed by a variable number of livestock under an ephemeral grazing lease arrangement. The total acreage of the allotment on public land is 1,213.61 acres.





#### 4. Factors Affecting Recreation Use

##### a. Access

The Afton Canyon Recreation Area is easily accessible to the public. A 3-1/2 mile graded county road leads to the campground from the Afton Interchange along I-15. The road is suitable for most recreational vehicles, but due to two steep grades and rough conditions after adverse weather, the road may be difficult for long trailers or low-clearance vehicles.

##### b. Interstate 15

The campground is less than 4 miles from Interstate 15, which handles traffic between Las Vegas and Los Angeles. Some recreation area users are travelers looking for a place to camp.

##### c. Nearby Population Centers

Within 200 miles of Afton Canyon is Los Angeles County, with a population of over 10 million people. Barstow, located within 35 miles of Afton Canyon, has a population of approximately 20,000.

##### d. Afton Road Services

The Stuckey's at the Afton Road I-15 Interchange offers the closest gasoline, lunch counter and telephone to Afton Canyon.

##### e. Union Pacific Railroad

The service road which follows the Union Pacific Railroad right-of-way through Afton Canyon is the only vehicle access through the Mojave River Gorge. Use of this route is exclusively under control of the railroad and reserved for their use.

Trains are noisy, but biologists have found that wildlife adapt easily to this short duration interruption which may occur more than a dozen times per day.

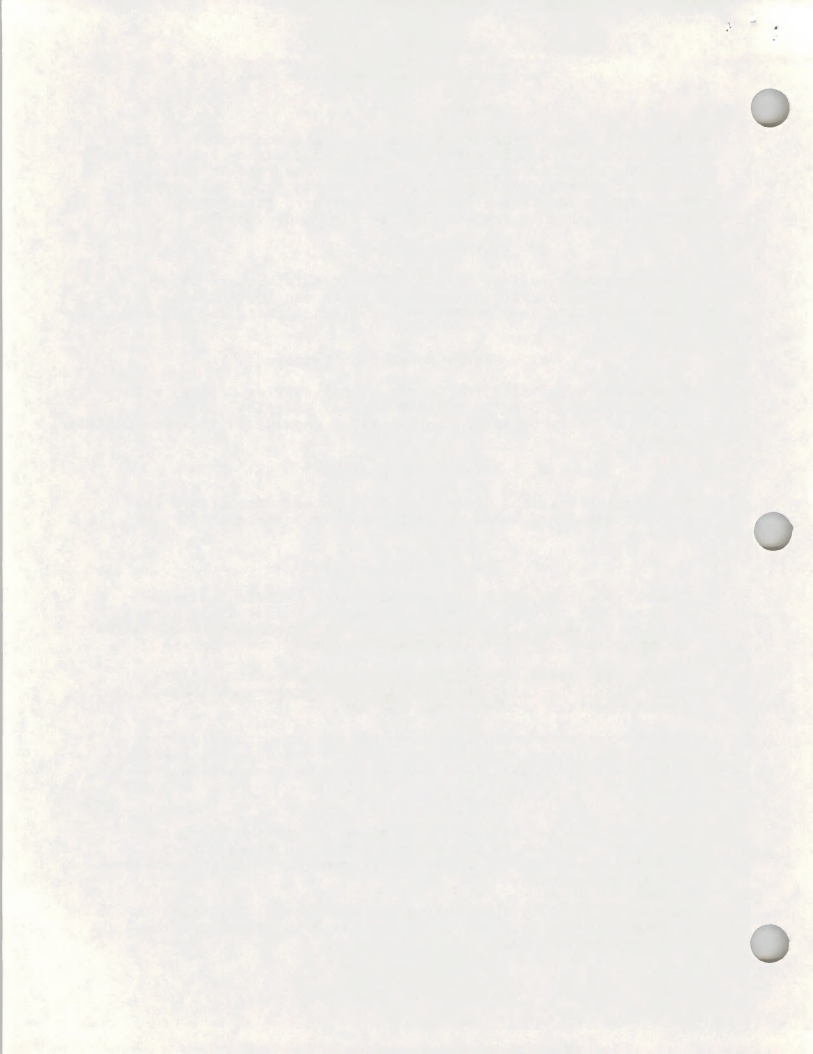
Several railroad employees live near the campground on the south side of the Mojave River at Afton Siding. The residence area consists of dwellings and railroad maintenance equipment.

##### f. Hazards

Both licensed and unlicensed motorcycles use the roads in the area. Because of the winding turns and blind corners, speeding motorcyclists sometimes present a hazard to themselves and other motorists.

As demonstrated by the fire in the summer of 1978, there is a potential for brush fires in the riparian vegetation in the campground area.





During hunting seasons, and when indiscriminate target shooting occurs, a hazard exists.

The campground, which lies in the Mojave River flood plain, was flooded in 1969. A sign reading, "Caution - area subject to flooding beyond this point," stands where Afton Road enters the flood plain. The 100 year flood plain has been studied by the United States Army Corps of Engineers to determine if a flood hazard exists for recreationists using Afton Canyon. They determined that due to the levee downstream from the Union Pacific Railroad bridge near the campground, flooding presents no significant threat to camper's lives. However, a rising backwater from a major flood could be a nuisance as about one foot of water could flood the campground.

Freight trains of the Union Pacific Railroad travel through Afton Canyon several times per day. Potential hazard exists for any person or vehicle standing on or too close to the tracks when trains pass by.

#### **E. Constraints**

At the present time no completed Resource Management Plan exists for Afton Canyon. Therefore, there are no management planning constraints or restrictions on this management plan. An Environmental Assessment Record identifies additional protective measures and constraints.



## II. OBJECTIVES

### A. Recreation Management Objective

Provide for appropriate recreation use, interpretation and facility management in the Afton Canyon Recreation Area.

### B. Administrative Management Objective

Provide the personnel, jurisdictional authority, and facilities necessary to achieve recreation and other resource objectives for the recreation area.

### C. Other Resource Management Objectives

#### 1. Wildlife Resource Objectives

Manage recreation use to protect both wildlife and wildlife habitat from any further human-related impacts and to enable recovery of damaged habitat.

#### 2. Water Resource Objectives

Manage recreation use in a manner that will maintain the water quality and the existing streamflow for all recreational and wildlife requirements.

#### 3. Visual Resource Objective

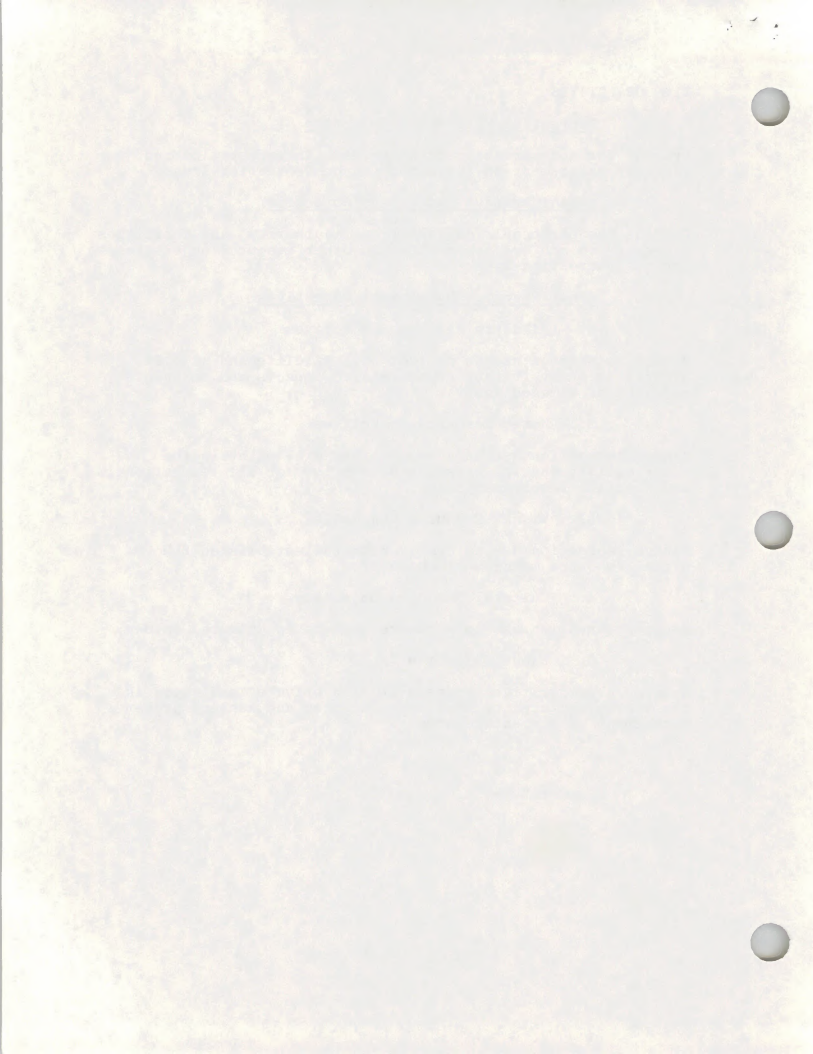
Manage recreation use to comply with the established BLM visual resource management objectives.

#### 4. Cultural Resource Objective

Manage recreation use to minimize impacts to cultural values.

#### 5. Lands Objective

Develop a cooperative arrangement with private landowners in the recreation area to facilitate signing and achieve proper management of the entire area.





### III. THE MANAGEMENT PLAN

#### A. Management Goal

Manage recreation to resolve conflicts between various users, minimize adverse impacts on other resources, and provide for appropriate recreation uses consistent with good resource management practices.

Carry out the management of recreational activities with minimal intrusions and impacts on sensitive resource elements. The scenic, cultural, geological, biological and ecological values are all recognized as leading elements of the resource.

The Federal Land Policy and Management Act of 1976 provides for the protection and enhancement of public lands. Interim management of the Afton Canyon Recreation Area will provide for administrative controls to protect the resources from unauthorized uses and abuses, and to increase public awareness of the program to ensure the protection and conservation of the area.

#### B. Management Philosophy

Past experiences at Afton Canyon point out the desirability of regulating and protecting facilities, resources and users within the recreation area. Administrative controls will initially rely heavily on creating a strong BLM presence in the area to establish the new policies. Once these policies have been established, visitor compliance with rules as indicated on signs will play the largest role in regulating campground use, with an assist by regular ranger patrols.

Because of the wide variety of recreational uses and individual users, recreation opportunities will be left unstructured, except where activities conflict or impair the enjoyment of other activities or the maintenance of other resource values.

#### C. Recreation Management Zones

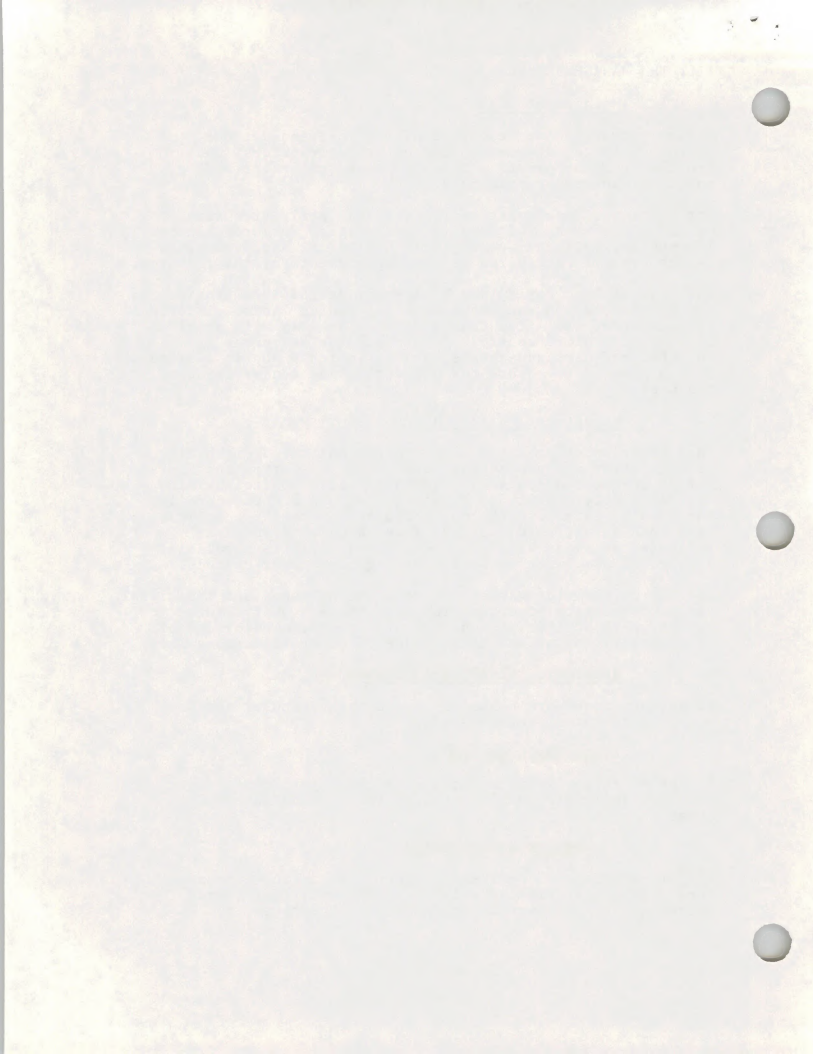
Management zones are necessary to define vehicular access and provide for different needs.

##### 1. Canyon Zone

A zone of intensive management with the majority of ranger patrols, designated vehicle routes and designated camping areas.

##### 2. Backcountry Zone

Ranger patrols will be less frequent than in the Canyon Zone. Vehicles will use existing roads and trails, and there will be no restriction on camping locations.



# LEGEND

## RECREATION MANAGEMENT ZONES

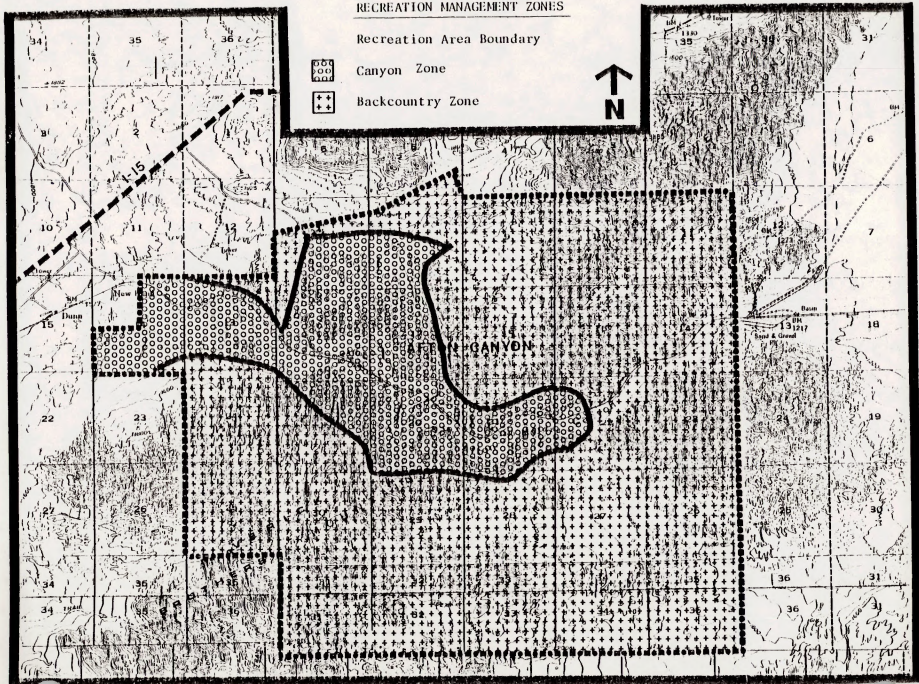
Recreation Area Boundary

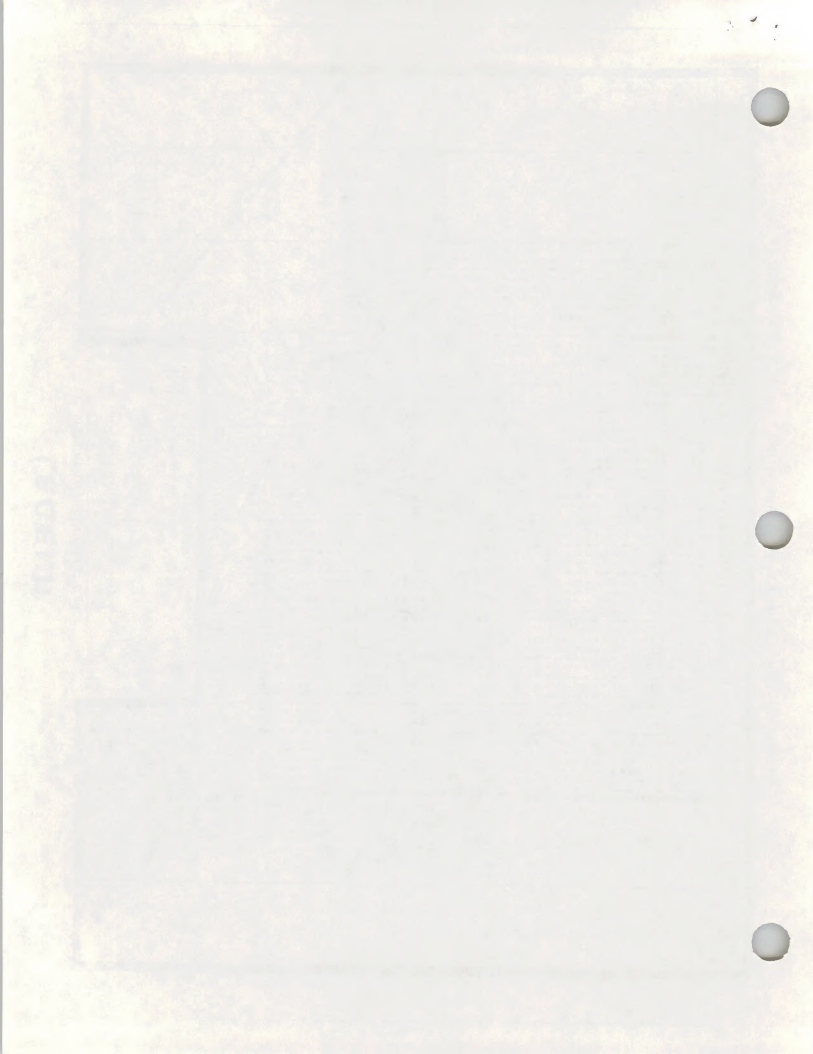


Canyon Zone



Backcountry Zone











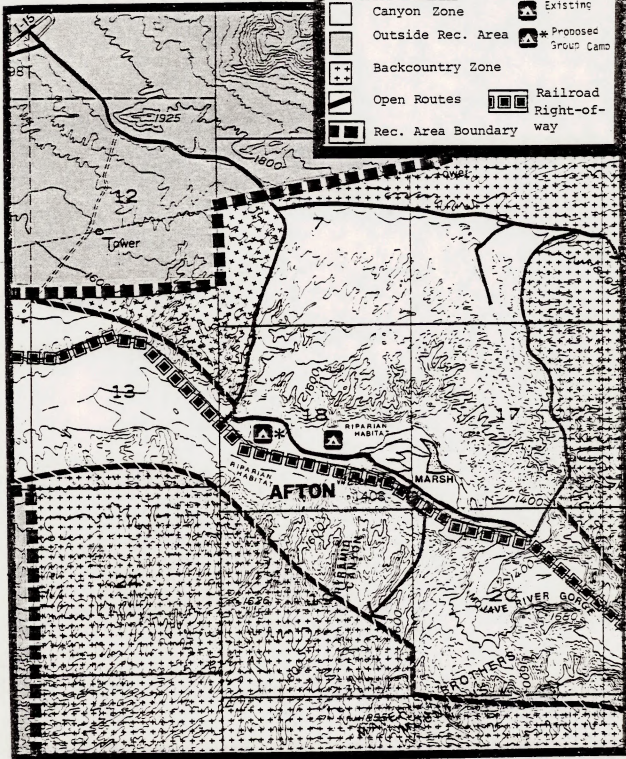




# LEGEND

Close-Up of Campground Area  
Showing Management Zones &  
Open Routes

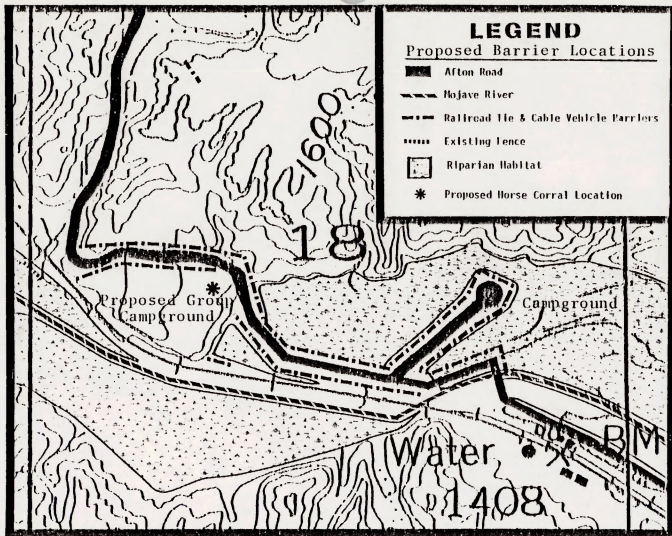
- |   |                   |   |                       |
|---|-------------------|---|-----------------------|
|  | Canyon Zone       |  | Existing              |
|  | Outside Rec. Area |  | Proposed Group Camp   |
|  | Backcountry Zone  |  | Railroad Right-of-way |
|  | Open Routes       |  | Rec. Area Boundary    |



T. 11 N., R. 5 E. & R. 6 E. SBM Cave Mtn. & Cady Mtn. USGS Quadrangles







T. 11 N., R. 6 E., Sec. 18 SBM Cave Mtn. & Cady Mtn.  
USGS Quadrangles



## D. Recreation Programs and Actions

### 1. Off-Road Vehicle Use

#### Management Goal

Halt the decline in resource values in the recreation area while providing for managed recreational use of off-road vehicles.

#### Actions

- a. Allow vehicle use in the Canyon Zone only on designated routes. Sign Recommended routes in the Backcountry Zone. Develop a master plan of vehicle routes in the Backcountry Zone with the help of users. Until the Backcountry Plan is developed and routes are designated, use of existing Backcountry Zone routes will continue.
- b. Install physical barriers along portions of the Afton Canyon Road and the perimeter of the campground to prevent vehicles from entering sensitive habitat.
- c. Establish a speed limit of 25 mph in the recreation area. This will be the maximum speed allowed unless otherwise posted.

#### Discussion

Numerous conflicts arising from unmanaged off-road vehicle use in the recreation area have resulted in a need to designate routes, to sign routes, and to install barriers.

Enforcement of already existing campground rules will reduce both dust and noise disturbances to campers.

#### Implementation

Publish the vehicle use restrictions in the Federal Register and in local, State and Federal publications designed to alert the general public to these changes.

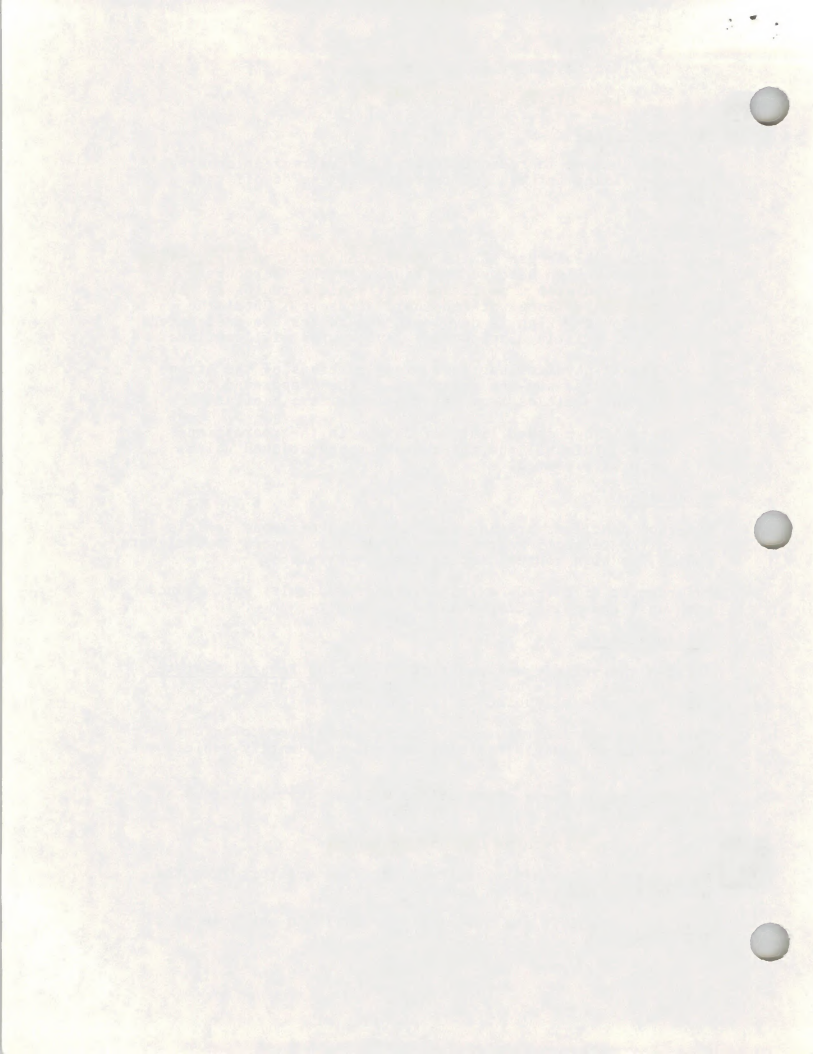
Post signs and distribute an interpretive flyer to inform the public of vehicle restrictions and to identify vehicle routes.

Enforcement of these restrictions will be carried out by an authorized law enforcement official.

### 2. Firearms Use and Hunting

Management Goal - Minimize the hazards to visitors from the use of firearms in Afton Canyon.

Actions - Prohibit the use of firearms within one mile of the campground.





Discussion - No shooting will be permitted within one mile of a campground. Some users are disregarding posted campground firearm regulations and have discharged firearms inside the no shooting area.


Due to hazards associated with the discharge of firearms in an intensively used recreation area, certain management restraints must be implemented to assure visitor safety. The Bureau has no authority to directly regulate hunting seasons or restrictions. This is under the jurisdiction of the California State Fish and Game Department. The Bureau can, however, regulate shooting activities by imposing a "no shooting" or "no firearms" regulation in an area.

The proposed action is not designed to discriminate against hunters or target shooters, but is intended to protect the visitors to Afton Canyon.

Implementation - Post signs to inform the public and define the restricted areas.

The enforcement of these restrictions will be the responsibility of an authorized law enforcement official.

### 3. Camping



Management Goal - Provide opportunities in the recreation area for both developed, undeveloped and group camping but not at the expense of the natural and cultural values of Afton Canyon.

#### Actions

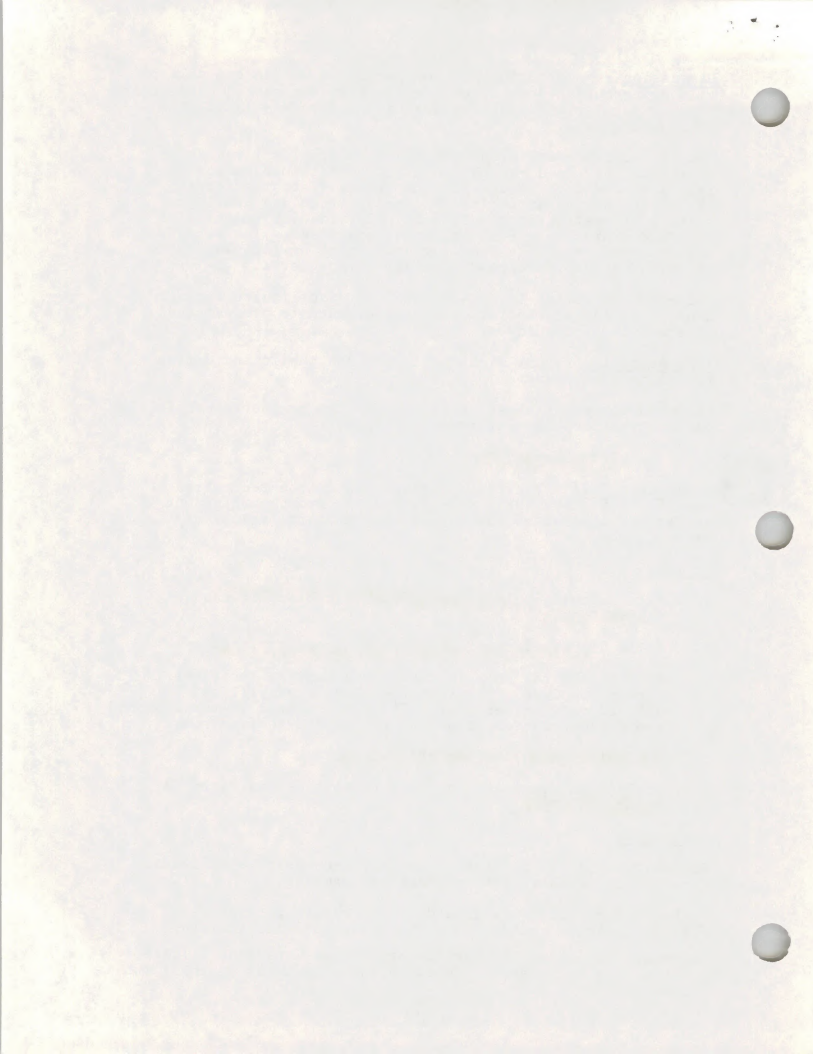
- a. Allow camping only in designated locations in the Canyon Zone.
- b. Allow dispersed camping in the Backcountry Zone.
- c. Allow campfires only in designated camping locations in the Canyon Zone. Fires in the campground will be allowed only in designated firepits. Fires in the proposed group campground will not be restricted to fire rings.
- d. Prohibit the collection of firewood.
- e. Provide an area with sanitary facilities and water for group camping.

#### Discussion

Sensitive wildlife habitat at Afton Canyon must be protected from impacts resulting from unmanaged camping.

With the potential fire hazard, required use of approved fire receptacles would reduce the chance of fire accidents.

Firewood collecting has been identified as impacting wildlife habitat. Desert campers should be educated to bring their own firewood.



There is need for a group camping area with sanitary facilities and water. Sanitary facilities will help ensure water quality.

#### Implementation

Identify camping areas on informational and directional signs and in an interpretive flyer.

Install concrete fire rings at each campsite in the developed campground.

Post signs prohibiting the collection of firewood.

Both enforcement and non-enforcement personnel will make contact with campers to explain camping regulations and why campers should bring firewood to the desert.

Install sanitary facilities and water tank at the group site.

Enforcement of all regulations will be carried out by an authorized law enforcement official.

#### 4. Equestrian Use



Management Goals - Improve opportunities for horseback riding in the Afton Canyon Recreation Area by providing facilities.

Action - Construct a corral and hitching area at a suitable site.

Discussion - Horseback riding is a popular activity in the Afton Canyon Area. By Federal regulation (Title 43 CFR, Chapter II, Part 8363.1-5(d)) stock is not permitted in the campground, but no equestrian facilities exist at an alternative site. Future needs may also warrant an equestrian trail system which could route users to the scenic and cultural highlights of the area.

Implementation - Construct a corral and hitching posts.

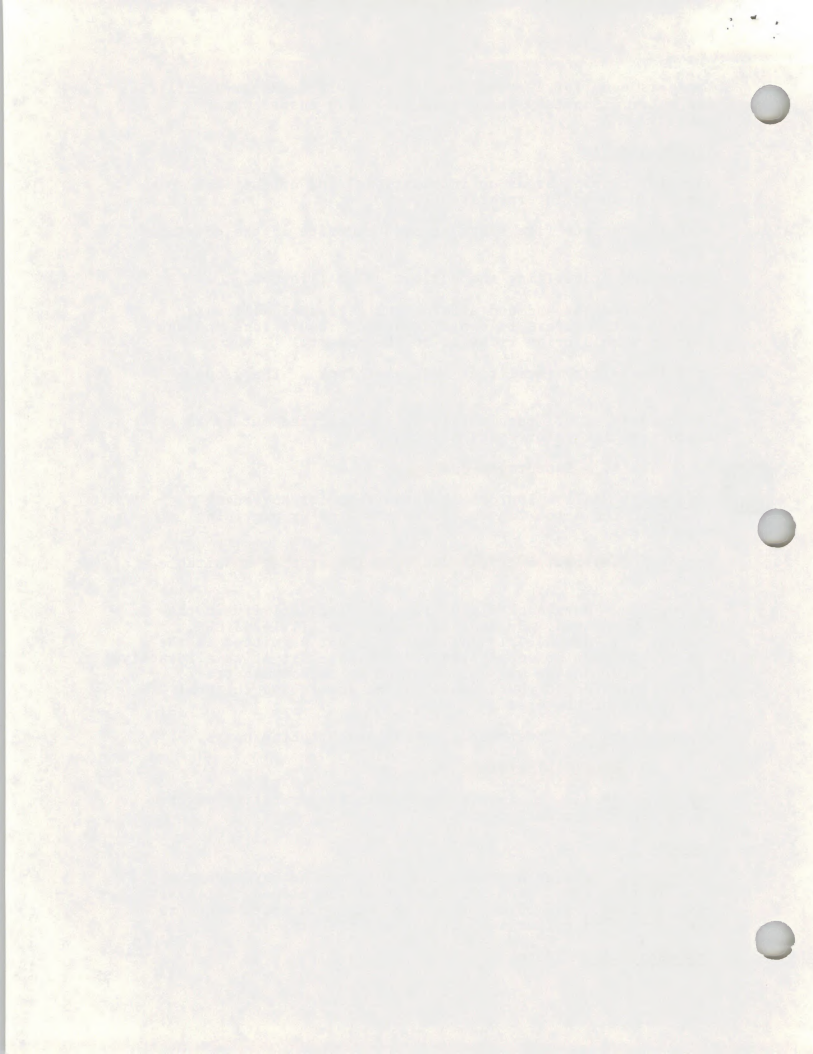
#### 5. Hiking Use

Management Goals - Maintain opportunities for hiking in the Afton Canyon Recreation Area.

Actions - None.

Discussion - Hiking use takes place in the Afton Canyon area but, at this time, does not warrant any developed trails or trail system. Any future trail system could route users to the scenic and cultural highlights of the area.

Implementation - None.





## 6. Picnicking Use

Management Goal - Maintain areas for picnicking that do not conflict with other uses.

Action - None.

Discussion - At the present time, existing facilities are adequate to provide for picnicking use.

Implementation - None.

## 7. Sightseeing and Nature Study

Management Goal - Maintain sightseeing and nature study opportunities through the proper management of all resources.

### Actions

- a. Provide for interpretation of the Afton Canyon area through signs and a descriptive flyer.
- b. Insure rehabilitation (natural or mechanical) of roads, trails or disturbed areas within the Canyon Zone which are not designated for vehicle use as part of the proposed vehicle route system.
- c. Establish two nature trails: One for foot traffic, one for horses or vehicles.

Discussion - Numerous individuals, colleges and museums use the Afton Canyon Area for formal and informal nature study. Others visit the area simply because it is a nice place to camp and sightsee. The scarcity of wetland environments in the Mojave Desert further increases Afton Canyon's value as a place for nature study and sightseeing.

Interpretation will enhance the quality of this recreational experience.

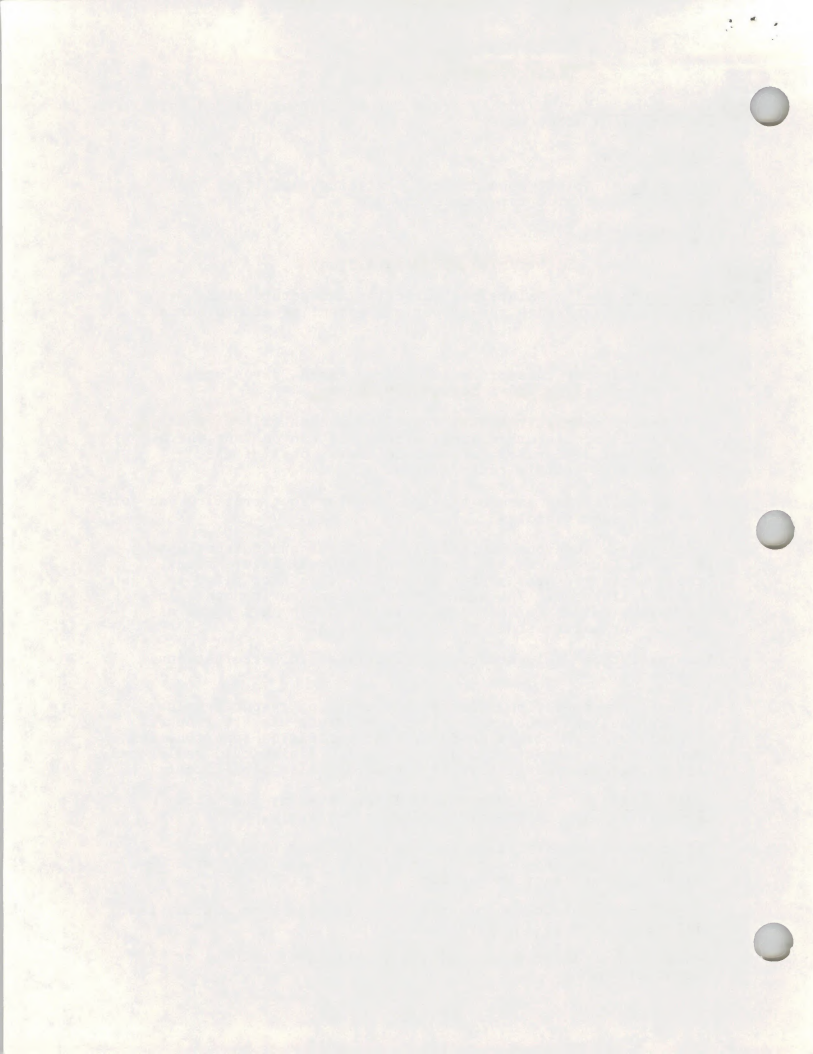
Through interpretation, visitor awareness of resource values is increased and problems with inappropriate use are reduced. Emphasis will be placed on describing recreation opportunities, regulations, restrictions, and closures. Biological, geological, archaeological, and historical themes are also significant.

Implementation - An interpretive flyer covering the Afton Canyon area will be prepared and made available.

Interpretive signs will be erected explaining natural and cultural values and points of interest. These signs will be inexpensive and easy to replace.

Layout and construct nature trails. (The horse or vehicle trail will be on an existing loop route.)

Rehabilitate closed roads and trails utilizing natural or mechanical means.



## 8. Rockhounding

Management Goals - Maintain opportunities for rockhounding in the Afton Canyon Recreation Area.

Actions - None.

Discussion - Rockhounding is a dispersed activity depending upon the availability of specimens and access to collecting areas. The Bureau has no control over the natural forces of erosion or the occurrence of collectible rocks and minerals. The proposed designation of vehicle routes is not expected to affect access to collecting areas.

Implementation - None.

### E. Administrative Programs and Actions

#### 1. Visitor Protection

Visitors will be advised of the potential hazards present in the recreation area, i.e., heat, wildfire, mine hazards, poisonous animals (insects, scorpions, spiders and rattlesnakes), and water quality. A BLM brochure outlines these and other items concerning visitor protection and will be stocked at the campground.

#### 2. Enforcement

Law enforcement patrol at Afton will involve utilizing trained Bureau employees with enforcement capabilities. Patrol of Afton Canyon will be increased to levels necessary to effectively manage visitors and resources. A BLM caretaker will be based in a trailer at the Afton campground during the high use season.

#### 3. Maintenance

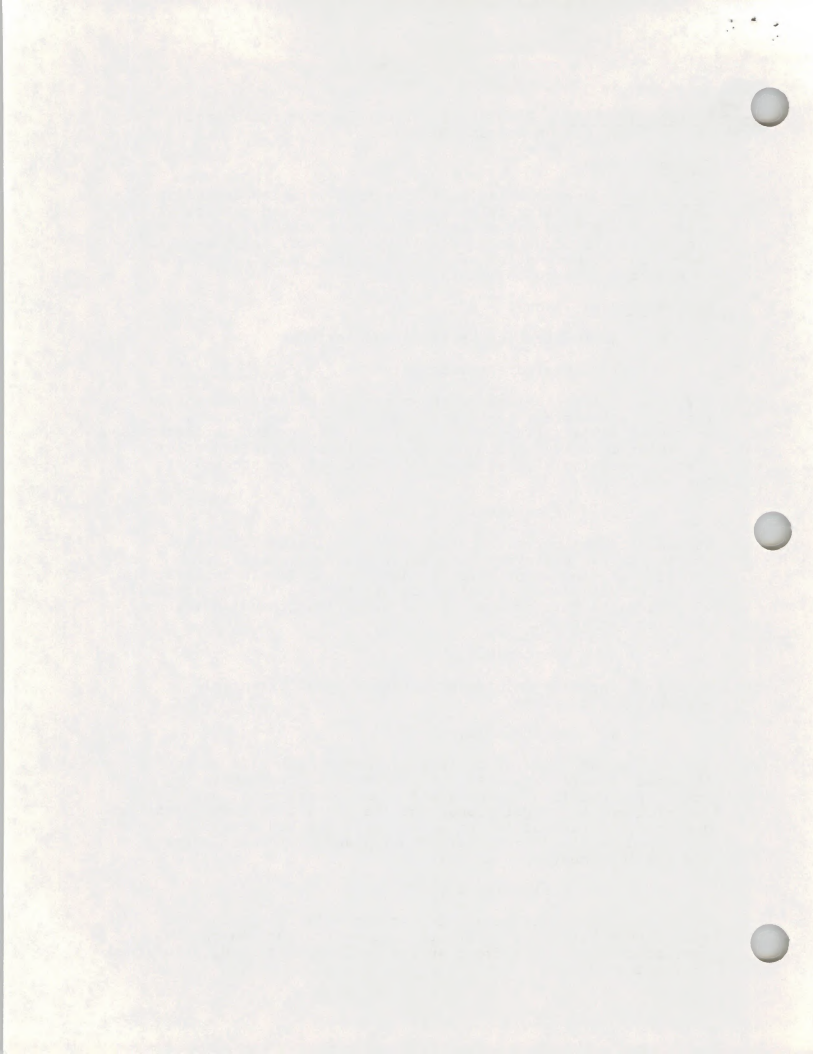
An active facility maintenance program is an essential element of this plan.

#### 4. Public Affairs

The key to successfully implementing this plan will be to implement a well organized public awareness program to advise the public of ongoing and proposed programs, new restrictions and regulations, and the recreational opportunities available in the recreation area. This program should be developed in close coordination with law enforcement efforts and the implementation of this plan.

#### 5. Monitoring Use

Develop an efficient means of systematically gathering and analyzing visitor use information to monitor use in the recreation area. Traffic counters will be installed, maintained and monitored.





## F. Facility and Site Development

The aesthetic, historic and biologic integrity of the entire Afton Canyon Recreation Area must be of prime consideration in all development. In keeping with the historic railroad use of Afton Canyon, railroad ties and other railroad paraphernalia will be used in construction whenever possible to convey this major theme.

### 1. Campgrounds

#### a. Developed

Afton Canyon Campground - A low, unobstrusive barrier of railroad ties and cable will be constructed around the campground perimeter to prevent vehicles from entering the sensitive wildlife habitat areas. Additional posts will be installed around campsite parking pads and the campground loop road to keep vehicles on the road and on the parking pads. Concrete fire rings will installed.

#### b. Group

The group campground will be signed and its location indicated on the campground kiosk map and in an interpretive flyer. Chemical toilets and trash receptacles will be installed in the group campground. The perimeter of the group campground will be defined by posts or markers.

### 2. Equestrian Facilities

Horse Corral - Two horse corrals and a hitching post will be constructed at the group camping area. These facilities will be of a temporary nature. Materials used will reflect the railroad theme.

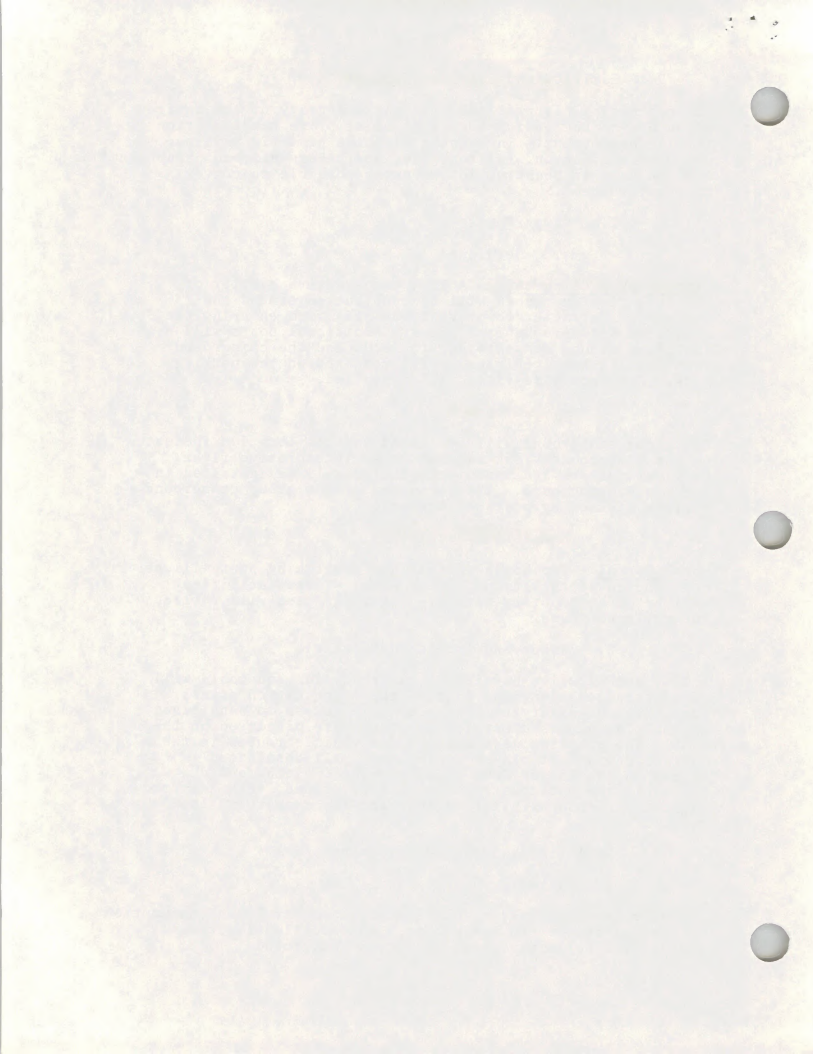
### 3. Roads and Trails (vehicular)

A low, unobstrusive barrier of railroad ties and cable will be constructed along the edge of the Afton Canyon access road where necessary to manage vehicle access to sensitive areas. The proposed barrier locations are displayed on the maps. The proposed designations for vehicle routes in the Canyon Zone are displayed on the map. All designated routes in the Canyon Zone will be signed. Recommended routes in the Backcountry Zone will be signed. BLM has road maintenance responsibilities only for the campground loop road.

## G. Utilities and Sign Development

### 1. Water

The only developed water source designated for human consumption is located at the BLM campground. And additional water source will be installed at the group campground.



## 2. Sanitation

The restrooms to be located at the group campground will be chemical and of a temporary nature. The restrooms will be maintained as needed.

## 3. Signs

A signing program will be developed which will provide consistency and standardization in the placement and type of signs used. Due to potential vandalism, all signs will be low cost and easy to replace.

## H. Interpretive Program Development

### 1. Interpretive Flyer

An interpretive flyer will be prepared and made available to the public describing recreation opportunities, hazards, new restrictions and new regulations in the recreation area. The flyer will include a map of the designated roads and trails. This flyer will be a low-cost publication of no more than 2 pages which will be distributed in dispenser boxes on-site, and at BLM offices and visitor centers.

### 2. Information Kiosks

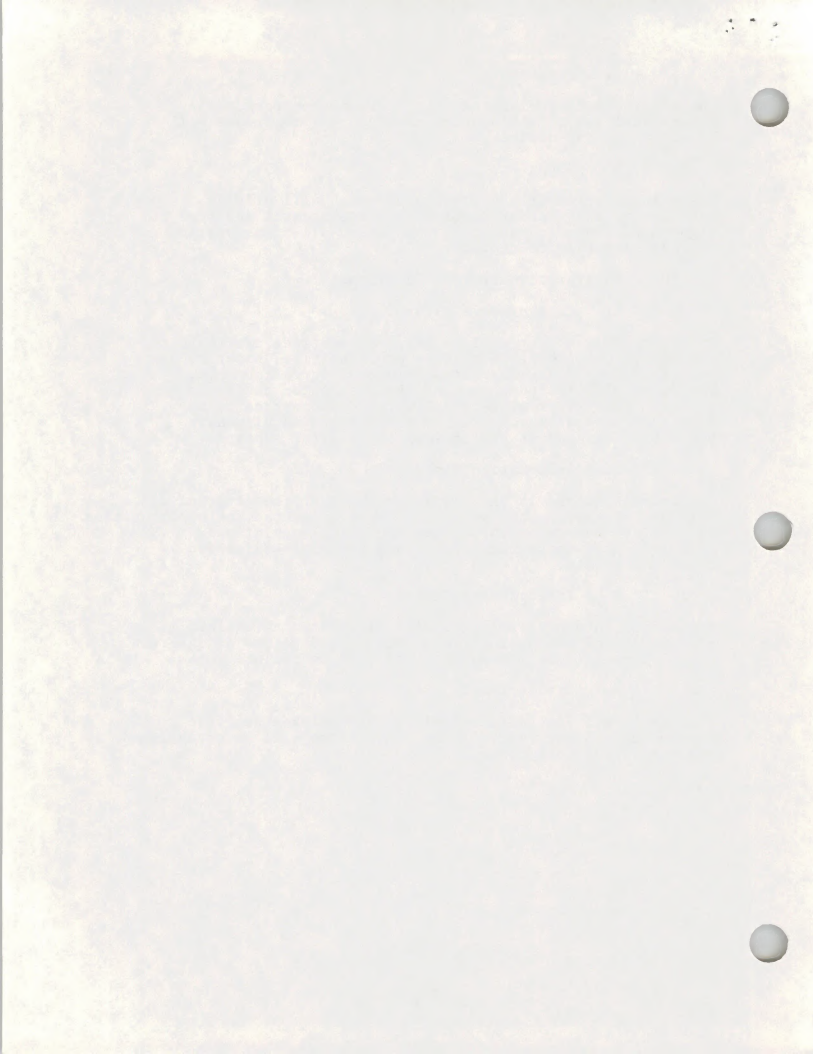
Information kiosks in the campgrounds and at the junction of I-15 and the Afton road will also describe recreation opportunities and the new management practices including regulations, locations of camping facilities, and a map of designated roads and trails.

### 3. Interpretive Signs

Additional interpretive signs will be erected to explain biological and cultural values, hazards and points of interest. These signs will be inexpensive and easy to replace.

### 4. Nature Trails

A nature trail for foot use will be established near the campground. A nature trail for vehicle use will be established on an existing loop route.



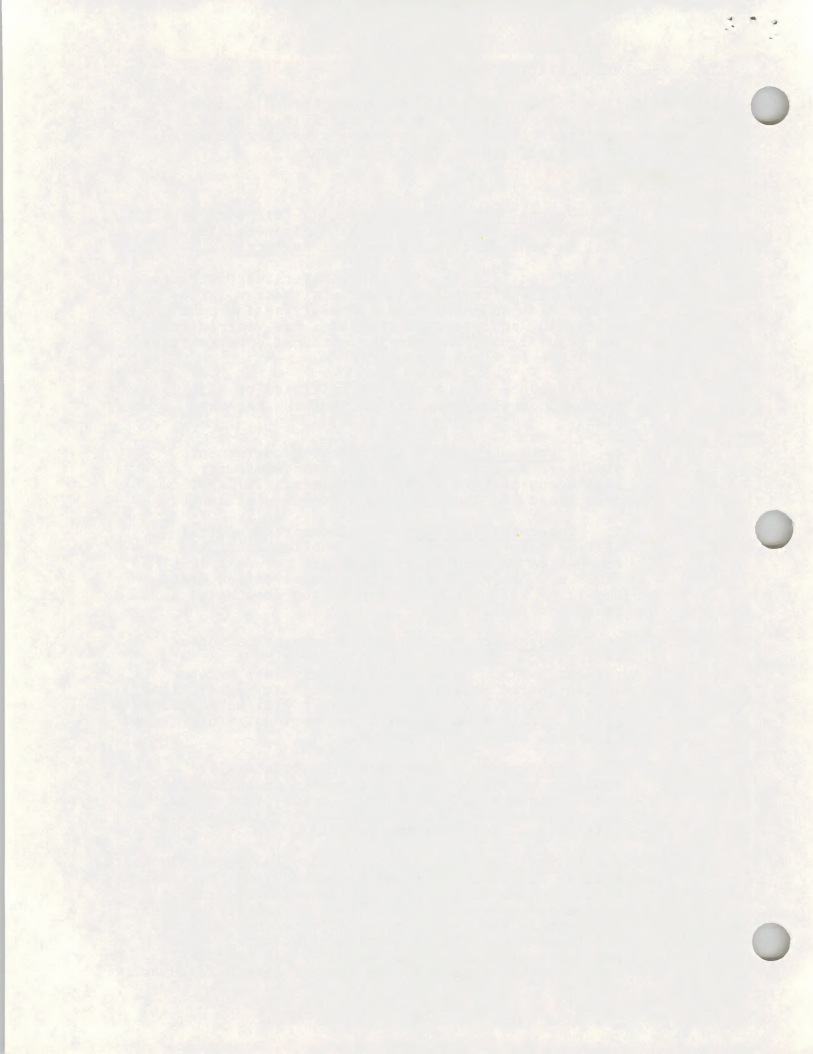


#### IV. THE IMPLEMENTATION PLAN

Implementation of this plan will be accomplished in three phases. These phases are not tied to specific deadline dates, but indicate the general sequence of events required to implement this plan in an organized manner.

##### A. Phase I

1. Federal Register Publication - Proposed use restrictions identified in the Management Plan will be published in the Federal Register.
2. Public Affairs - The BLM, Riverside District, Office of Public Affairs, will initiate a series of articles and news releases advising the public of ongoing and proposed programs, new restrictions and regulations, and the recreational opportunities available in Afton Canyon.
3. Layout - Layout will be initiated on all proposed developments listed in The Management Plan.
4. Signing Program - A cooperative agreement will be completed with private landowners for signing on private lands. Sign needs will be determined and the required signs requisitioned.
5. Interpretive Flyer - An interpretive flyer will be made available to the public describing recreation opportunities, hazards, new restrictions and new regulations in the recreation area. The flyer will include a map of the designated roads and trails.
6. Enforcement - BLM law enforcement personnel will patrol the Afton Canyon Recreation Area on a regular basis. As enforcement personnel become active in the recreation area, all use restrictions will be enforced. A BLM caretaker will be stationed at Afton Canyon during high use periods. Enforcement will be a continuing program.
7. Maintenance - Maintenance functions will continue on all existing facilities in the recreation area including all structures, roads, fences and any areas needing litter cleanup or rehabilitation. This will be a continuing program.
8. Visual Contrast Rating - All proposed developments will be analyzed using the Bureau's Visual Contrast Rating System to determine their potential impact on the visual environment. This system is designed to identify the visual contrast between a proposed development and its surrounding landscape. Once contrasts are identified, measures can be taken to reduce their impact through special design features.



9. Monitor Visitor Use - Collect visitor use data by utilizing traffic counters.

10. Water Resources - Monitor water quality and stream flow of the Mojave River at Afton Canyon to fulfill water resources objectives.

B. Phase II

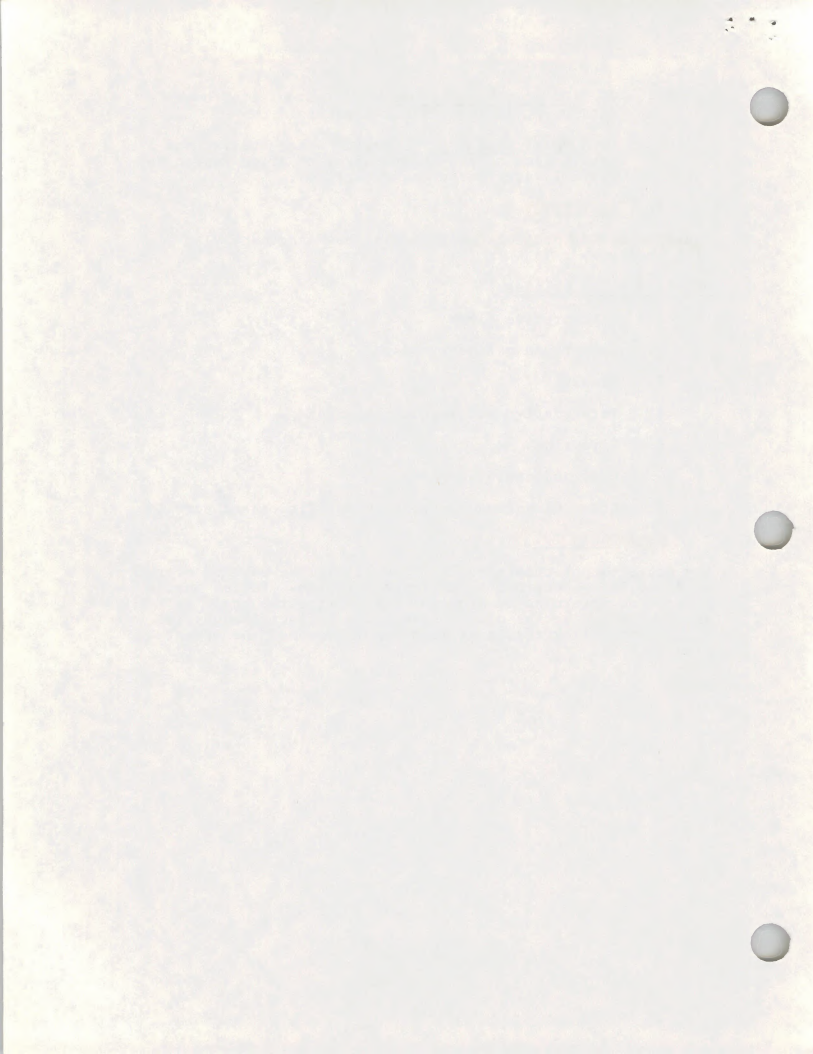
Construction of projects outlined in the Management Plan will proceed.

Development Priorities

1. Interpretive flyer
2. Campground perimeter posts
3. Kiosks
4. Interpretive and regulatory signs
5. Fire rings
6. Post and cable barriers
7. Group campground sanitation facilities and corral

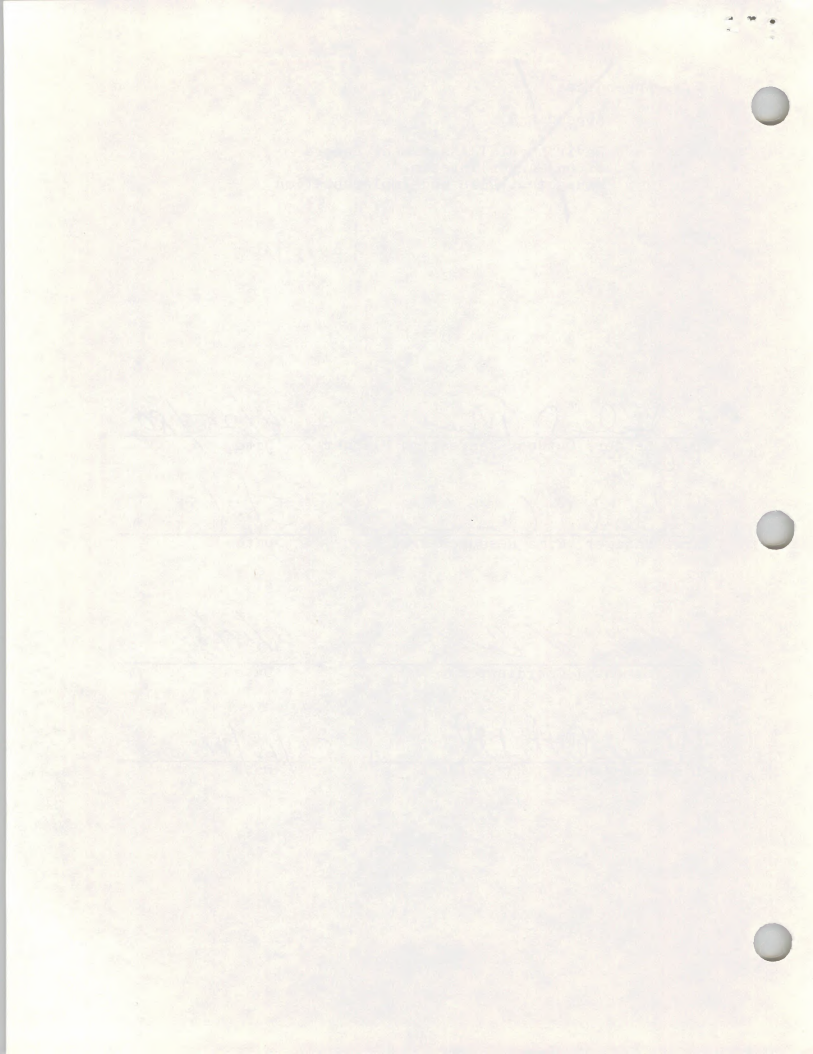
C. Phase III

Any projects not completed in Phase II will be carried over to Phase III. Continue to implement program. Review entire project to determine if programs are meeting the goals of the plan. Revise the plan as needed to reflect changes in management policy resulting from the release of the Desert Plan in FY81.









V. Appendices

Appendix A.

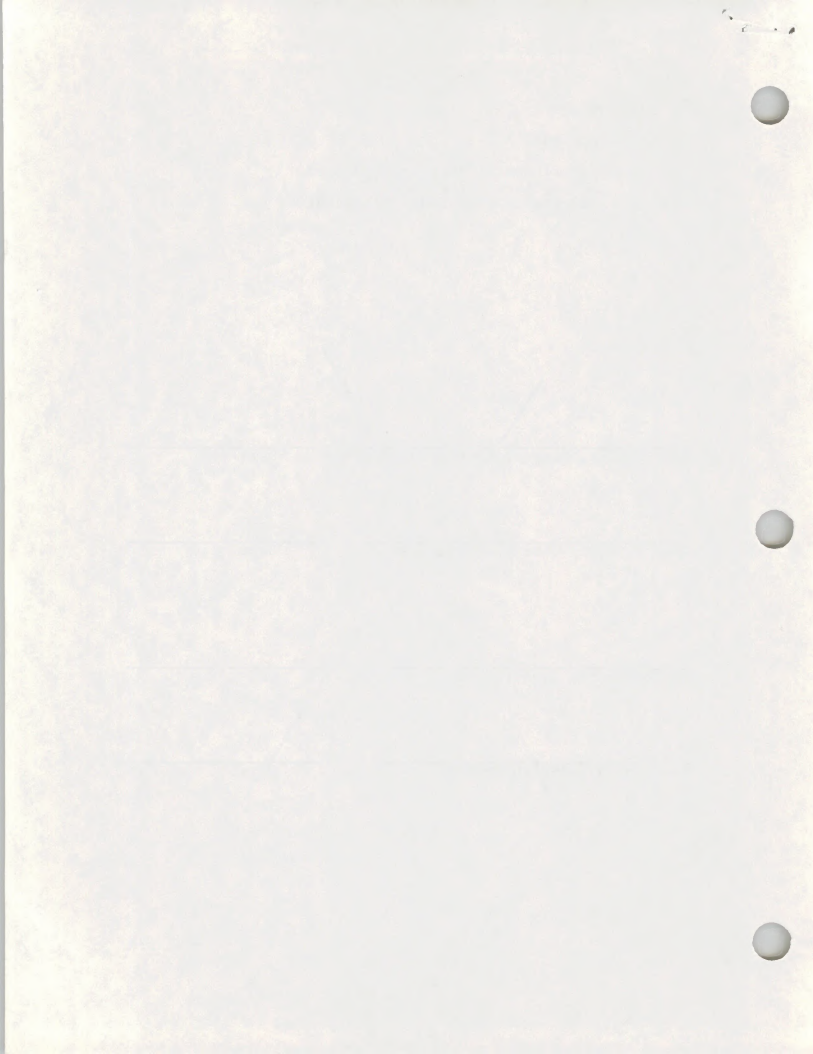
Environmental Assessment Record  
Afton Canyon Interim  
Management Plan and Implementation

~~\_\_\_\_\_~~ Team Leader, Outdoor Recreation Planner ~~\_\_\_\_\_~~ Date

~~\_\_\_\_\_~~ Area Manager, Cima Resource Area ~~\_\_\_\_\_~~ Date

~~\_\_\_\_\_~~ Environmental Coordinator ~~\_\_\_\_\_~~ Date

~~\_\_\_\_\_~~ District Manager, Riverside ~~\_\_\_\_\_~~ Date





Afton Canyon Interim Management Plan  
Environmental Assessment Record

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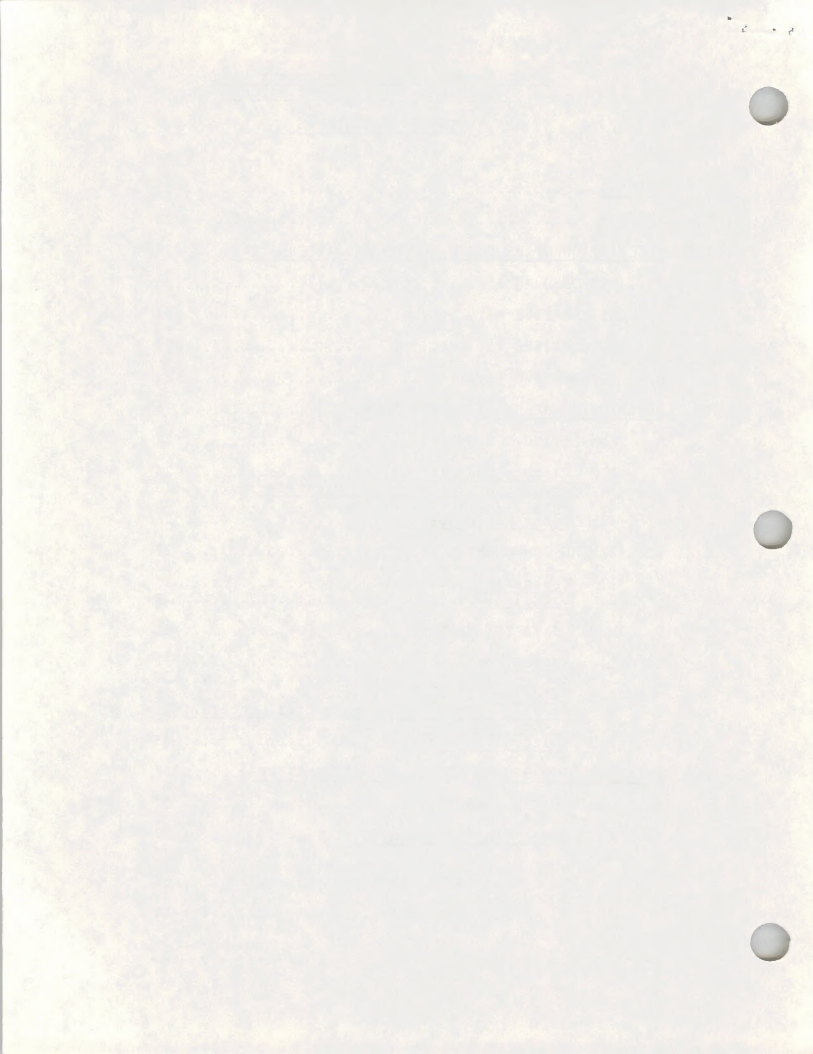
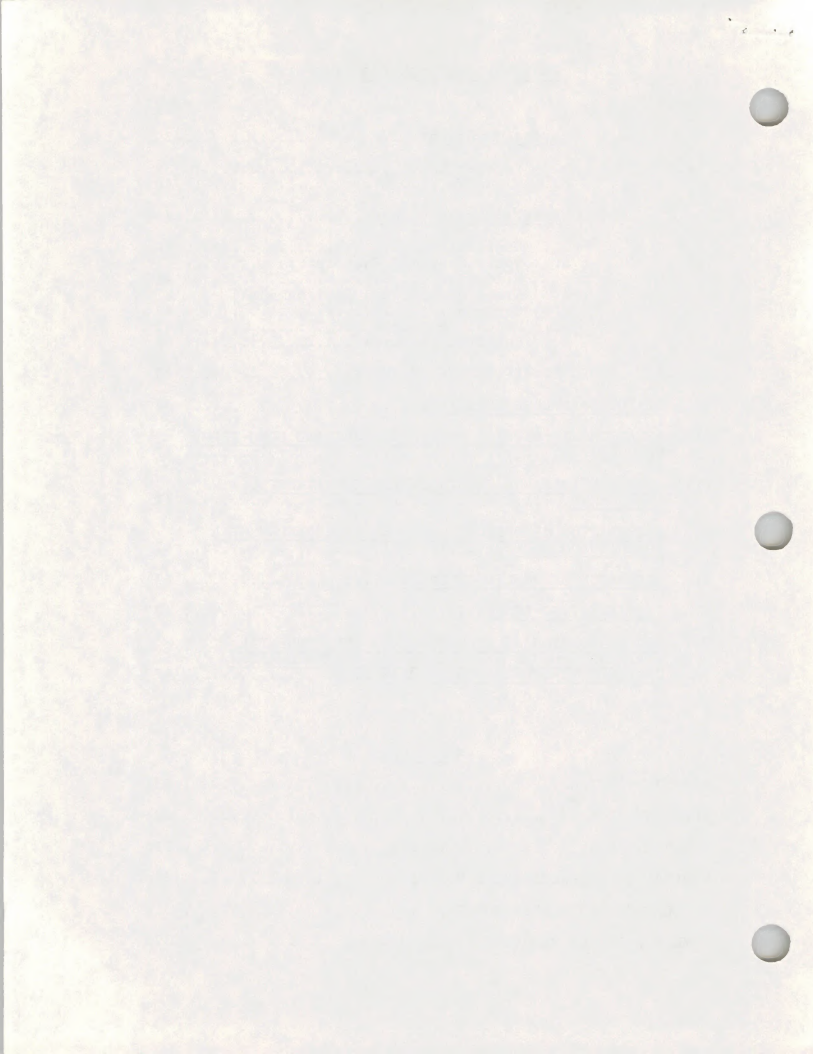


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## I. SETTING

Afton Canyon is a well known recreation site. The Mojave River flows perennially at the surface for a 3 to 7 mile stretch through the Mojave River Gorge, supporting thickets of riparian vegetation, ponds, a marshland and a variety of wildlife species in the midst of a heavily eroded desert environment. The combination of a desert canyon and riparian habitat is rare when viewed on a desert-wide basis making the scenery at Afton unusual. The recreation area is located approximately 35 miles east of Barstow in central San Bernardino County, California. The total area of concern is approximately 28 square miles of public and private land.

## II. PURPOSE

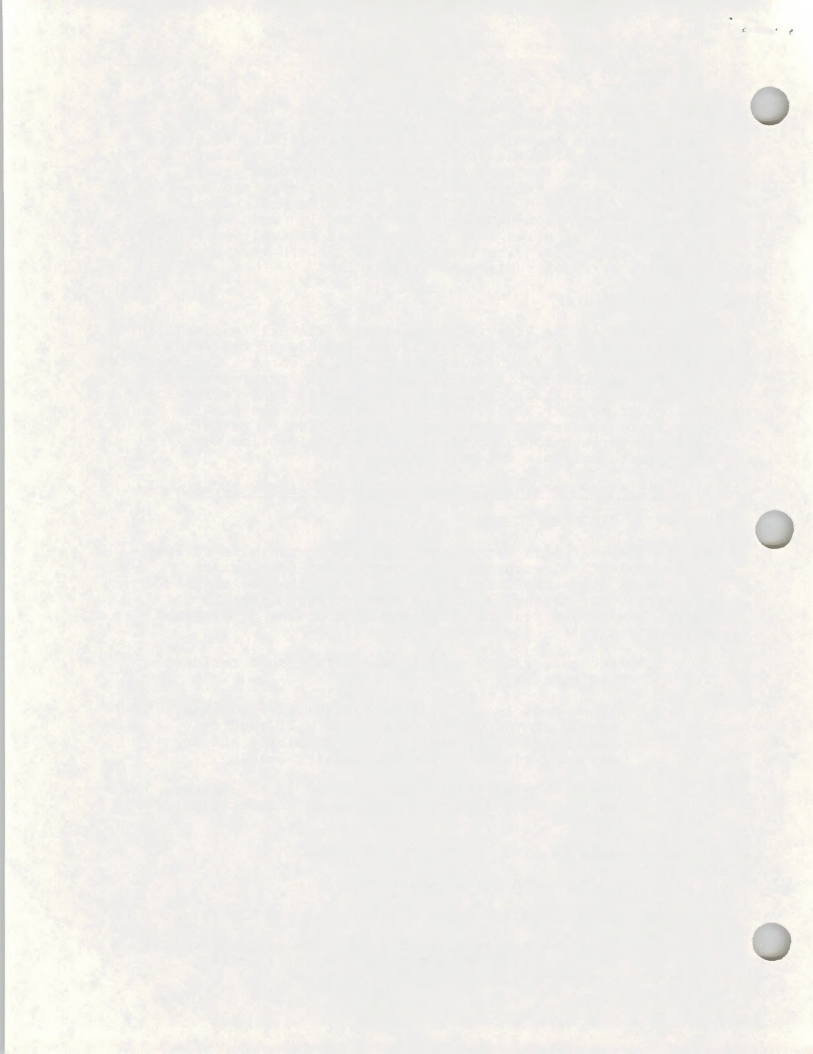
The purpose of the Recreation Management Plan is to establish interim guidelines for the protection and use of the Afton Canyon Recreation Area during the period in which a comprehensive plan for the California Desert Conservation Area (mandated by the United States Congress in the Federal Land Policy and Management Act of 1976) is being completed. The plan's goal is to ensure conservation and protection of resource elements through conflict resolution and to provide for appropriate multiple use of resources.

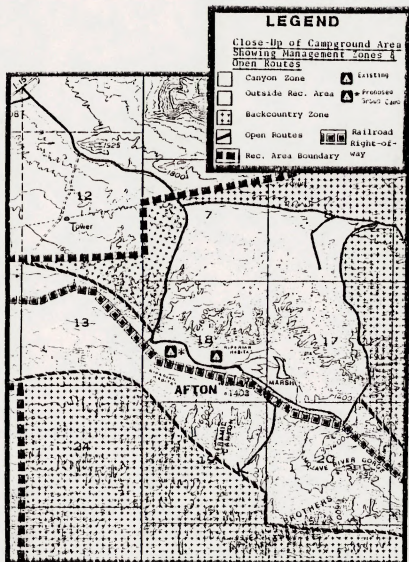
## III. DESCRIPTION OF THE PROPOSED ACTION AND ALTERNATIVES

### A. PROPOSED ACTION

To resolve conflicts between various users, minimize adverse impacts on other resources, and provide for appropriate recreation uses consistent with good resource management practices, the following actions are proposed (see Afton Canyon Management Plan for complete description of proposed actions and full scale maps):

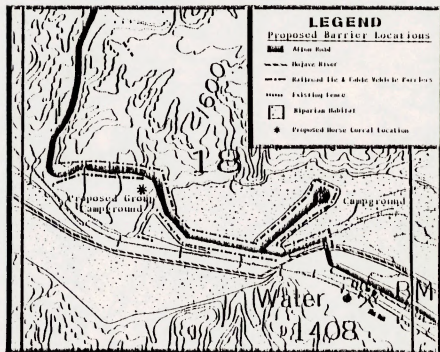
1. Increase ranger patrols and establish a resident BLM caretaker
2. Allow vehicle use only on designated roads and trails in the Canyon Zone (this will require additional signs and physical barriers) and on existing routes in the Backcountry Zone.
3. Limit camping to designated areas in the Canyon Zone. Allow dispersed camping in the Backcountry Zone.
4. Improve fire control procedures.
5. Initiate an interpretive program.
6. Rehabilitate damaged areas (roads and trails).
7. Some recreation uses will be expanded (equestrian) and some will be restricted (target shooting, recreational off-road vehicle use)





T. 11 N., R. 5 E., &amp; R. 6 E. SBN Cave Mtn. &amp; Cady Mtn. USGS Quadrangles

PROPOSED ACTION (see pages 10-a, 10-b,  
& 10-c for enlarged maps)

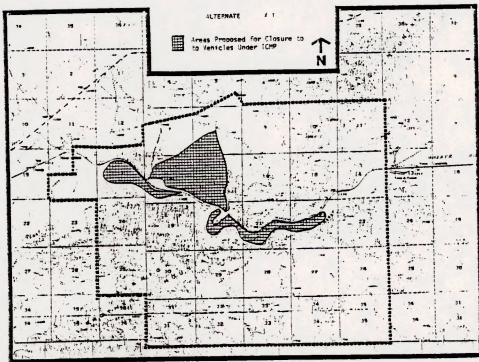


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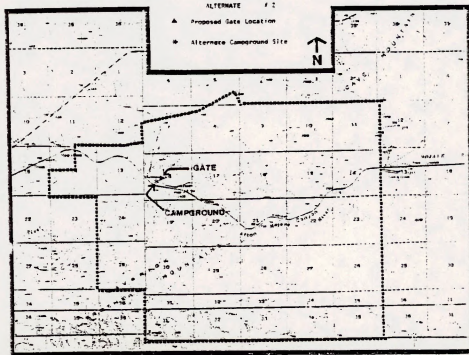
Year	1950	1951	1952	1953	1954	1955	1956	1957	1958	1959	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046	2047	2048	2049	2050	2051	2052	2053	2054	2055	2056	2057	2058	2059	2060	2061	2062	2063	2064	2065	2066	2067	2068	2069	2070	2071	2072	2073	2074	2075	2076	2077	2078	2079	2080	2081	2082	2083	2084	2085	2086	2087	2088	2089	2090	2091	2092	2093	2094	2095	2096	2097	2098	2099	2100																				
Population	150,000,000	155,000,000	160,000,000	165,000,000	170,000,000	175,000,000	180,000,000	185,000,000	190,000,000	195,000,000	200,000,000	205,000,000	210,000,000	215,000,000	220,000,000	225,000,000	230,000,000	235,000,000	240,000,000	245,000,000	250,000,000	255,000,000	260,000,000	265,000,000	270,000,000	275,000,000	280,000,000	285,000,000	290,000,000	295,000,000	300,000,000	305,000,000	310,000,000	315,000,000	320,000,000	325,000,000	330,000,000	335,000,000	340,000,000	345,000,000	350,000,000	355,000,000	360,000,000	365,000,000	370,000,000	375,000,000	380,000,000	385,000,000	390,000,000	395,000,000	400,000,000	405,000,000	410,000,000	415,000,000	420,000,000	425,000,000	430,000,000	435,000,000	440,000,000	445,000,000	450,000,000	455,000,000	460,000,000	465,000,000	470,000,000	475,000,000	480,000,000	485,000,000	490,000,000	495,000,000	500,000,000	505,000,000	510,000,000	515,000,000	520,000,000	525,000,000	530,000,000	535,000,000	540,000,000	545,000,000	550,000,000	555,000,000	560,000,000	565,000,000	570,000,000	575,000,000	580,000,000	585,000,000	590,000,000	595,000,000	600,000,000	605,000,000	610,000,000	615,000,000	620,000,000	625,000,000	630,000,000	635,000,000	640,000,000	645,000,000	650,000,000	655,000,000	660,000,000	665,000,000	670,000,000	675,000,000	680,000,000	685,000,000	690,000,000	695,000,000	700,000,000	705,000,000	710,000,000	715,000,000	720,000,000	725,000,000	730,000,000	735,000,000	740,000,000	745,000,000	750,000,000	755,000,000	760,000,000	765,000,000	770,000,000	775,000,000	780,000,000	785,000,000	790,000,000	795,000,000	800,000,000	805,000,000	810,000,000	815,000,000	820,000,000	825,000,000	830,000,000	835,000,000	840,000,000	845,000,000	850,000,000	855,000,000	860,000,000	865,000,000	870,000,000	875,000,000	880,000,000	885,000,000	890,000,000	895,000,000	900,000,000	905,000,000	910,000,000	915,000,000	920,000,000	925,000,000	930,000,000	935,000,000	940,000,000	945,000,000	950,000,000	955,000,000	960,000,000	965,000,000	970,000,000	975,000,000	980,000,000	985,000,000	990,000,000	995,000,000	1,000,000,000
GDP	100,000,000,000	110,000,000,000	120,000,000,000	130,000,000,000	140,000,000,000	150,000,000,000	160,000,000,000	170,000,000,000	180,000,000,000	190,000,000,000	200,000,000,000	210,000,000,000	220,000,000,000	230,000,000,000	240,000,000,000	250,000,000,000	260,000,000,000	270,000,000,000	280,000,000,000	290,000,000,000	300,000,000,000	310,000,000,000	320,000,000,000	330,000,000,000	340,000,000,000	350,000,000,000	360,000,000,000	370,000,000,000	380,000,000,000	390,000,000,000	400,000,000,000	410,000,000,000	420,000,000,000	430,000,000,000	440,000,000,000	450,000,000,000	460,000,000,000	470,000,000,000	480,000,000,000	490,000,000,000	500,000,000,000	510,000,000,000	520,000,000,000	530,000,000,000	540,000,000,000	550,000,000,000	560,000,000,000	570,000,000,000	580,000,000,000	590,000,000,000	600,000,000,000	610,000,000,000	620,000,000,000	630,000,000,000	640,000,000,000	650,000,000,000	660,000,000,000	670,000,000,000	680,000,000,000	690,000,000,000	700,000,000,000	710,000,000,000	720,000,000,000	730,000,000,000	740,000,000,000	750,000,000,000	760,000,000,000	770,000,000,000	780,000,000,000	790,000,000,000	800,000,000,000	810,000,000,000	820,000,000,000	830,000,000,000	840,000,000,000	850,000,000,000	860,000,000,000	870,000,000,000	880,000,000,000	890,000,000,000	900,000,000,000	910,000,000,000	920,000,000,000	930,000,000,000	940,000,000,000	950,000,000,000	960,000,000,000	970,000,000,000	980,000,000,000	990,000,000,000	1,000,000,000,000																																																																																
Life Expectancy	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100	101	102	103	104	105	106	107	108	109	110	111	112	113	114	115	116	117	118	119	120	121	122	123	124	125	126	127	128	129	130	131	132	133	134	135	136	137	138	139	140	141	142	143	144	145	146	147	148	149	150	151	152	153	154	155	156	157	158	159	160	161	162	163	164	165	166	167	168	169	170	171	172	173	174	175	176	177	178	179	180	181	182	183	184	185	186	187	188	189	190	191	192	193	194	195	196	197	198	199	200															



### LEGEND



### LEGEND





## B. ALTERNATIVE #1

This action would use already existing management policies and regulations to manage the recreation area. Of the proposed actions listed above, only parts 1 and 2 (slightly modified) would be enacted. This alternative would utilize the BLM's Interim Critical Management Program for Vehicle Use on the California Desert (ICMP) and Title 43 Code of Federal Regulations. Part 2 would be modified to limit vehicular use only to existing roads and trails, with only signs used to control access. Under the ICMP, sensitive areas may be closed to vehicle use. Sensitive habitat for wildlife and areas of cultural and visual concern near the campground would be closed to vehicles (see map).

## C. ALTERNATIVE #2

This action would enact the proposed actions with some major modifications which are listed below:

1. Relocate all campgrounds out of the canyon bottom.
2. The only road designated for vehicular use in the recreation area would be the Afton Road. Beyond the proposed relocation site for the campground, only vehicles operated by persons with a prior, valid existing right would be permitted. (A gate is proposed for this purpose.) Remaining roads would be removed or rendered unusable.
3. Equestrian opportunities would not be expanded.

## D. ALTERNATIVE #3 -NO ACTION

The no action alternative would perpetuate the existing situation in which the Bureau has little control of recreation activities in Afton Canyon.

## IV. DESCRIPTION OF THE EXISTING ENVIRONMENT

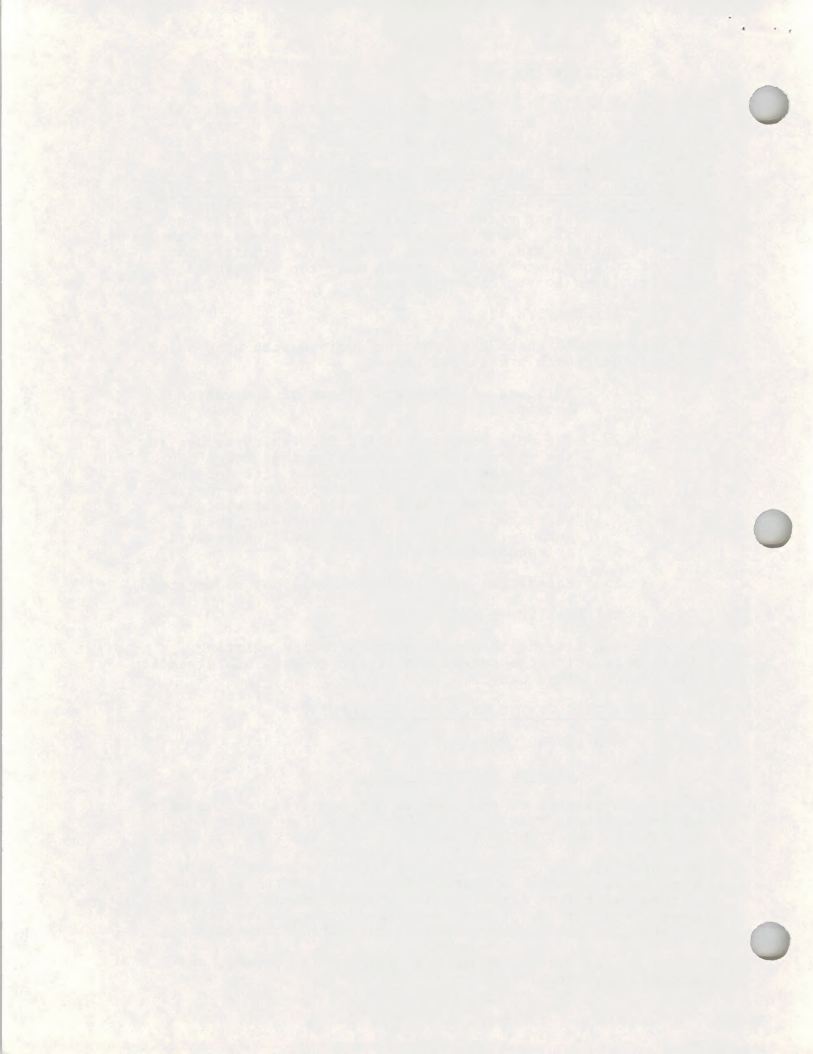
### A. NON-LIVING COMPONENT

#### 1. Climate and Air Quality

The general climate of the area is hot and arid, with summer high temperatures ranging from 100° to 115° F. Winter low temperatures may drop below freezing with highs in the 70's.

Total precipitation is from 2 to 5 inches per year. Rain during winter months is generally slow and gentle allowing moisture sufficient time to soak into the ground. Occasionally, during winter storms or summer thunderstorms, rains fall hard and fast causing heavy runoff and major flash flooding.

Typical of the desert, winds are frequent and strong, and humidity is generally low.

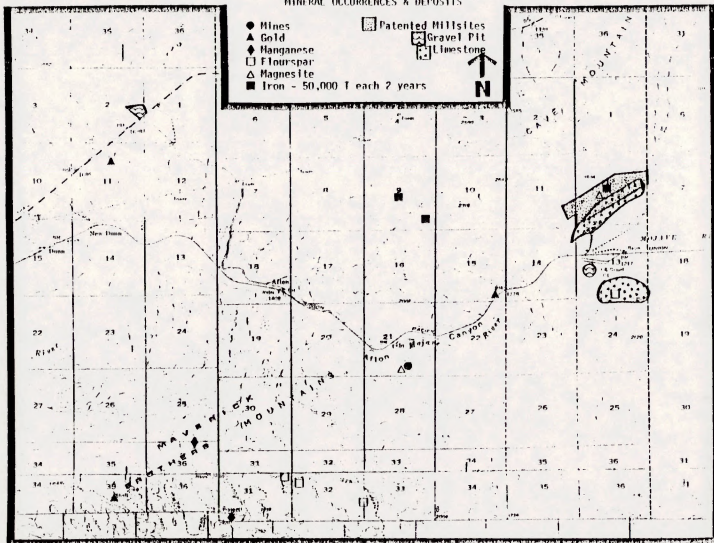




# LEGEND

MINERAL OCCURRENCES & DEPOSITS

- Mines
- ▲ Gold
- ◆ Manganese
- Fluorspar
- △ Magnesite
- Iron - 50,000 T each 2 years
- ▣ Patented Hillside
- ▢ Gravel Pit
- ▣ Limestone





Present sources of smog are minimal, the major source being emissions from passing vehicles along Interstate 15. During summer months, occasional hazy conditions result from water vapor and, sometimes, from smog "spillover" from the Los Angeles basin. Due to unmanaged recreational off-road vehicle use, dust raised by speeding vehicles is a recurrent problem in the campground area.

## 2. Topography, Geology and Minerals

### a. Topography and Physiography

The Afton Canyon study area lies in the East Mojave Desert province, in an arid climatic zone. It is characterized by the barren slopes of the Cady and Cave Mountains and their sandy and gravelled pediment and alluvial fans. The Afton Canyon cuts an easterly course through the northeast trending mountain units. The canyon's base level lies at 1,200 feet above sea level, and surrounding peaks rise to 3,600 feet.

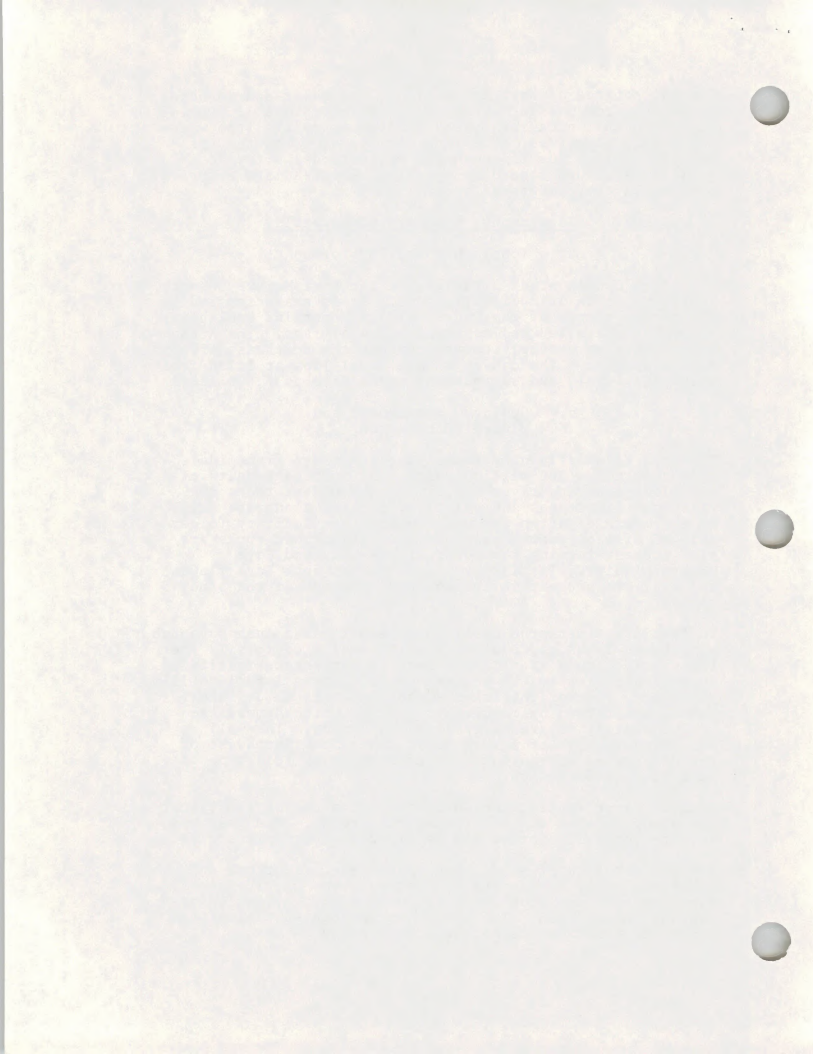
### b. Geology, Structure, and Mineral Occurrence

The area is underlain by rocks ranging in age from middle Paleozoic time (300 million years ago) to recent units of windblown sand and river deposits. The oldest rocks are Paleozoic limestones and dolomite, located along the walls of the mouth of Afton Canyon. Younger pre-Tertiary (older than 65 million years) granites and metamorphic rocks are also present forming the cores of the Cady and Cave Mountain units. Tertiary volcanic rocks, both lava flows and ash, are present in the southern portion of the study area.

In Tertiary times, the California Desert was a lush savannah with broad lakes, accounting for the wealth of fossils there today. The study area is a source of vertebrate fossils of animals peculiar to the western United States 1 to 15 million years ago. One of the lakes supporting this life, Lake Manix, was formed by recurrent faulting which dammed the ancestral Mojave River at Afton Canyon. The well preserved remains of a Lake Manix gravel bar northwest of the campground are an outstanding example of this type of late Ice Age formation.

Several large faults, including the Afton Canyon fault, cut the study area on east-northeasterly trends. The area has been tectonically active and is expected to remain active.

Mineral deposits of gold, iron, manganese, fluorspar and magnesite occur inside the recreation area. Active mines for limestone and iron lie just outside the recreation area boundary near Basin. The extent of unpatented claims on locatable minerals has not been determined.





### 3. Soils

Soils in Afton Canyon consist of excessively drained, sandy alluvium on level to gently sloping alluvial fans and floodplains in the Mojave River bottom; excessively drained, very stony or very rocky, sandy loams to sands developed from bedrock with very steep upland slopes of 9 to 75 percent with about 30 percent rock outcrops; and more stratified gravelly sandy alluvium.

Impacts have occurred to soil surfaces where off-road vehicle activity takes place. A hill-climb site near the campground exhibits rock and soil displacement exposing lighter colored soils beneath. Off-road vehicle activity of this type results in soil compaction, destruction of plant cover, direct mechanical displacement of soils downslope, and soil erosion by water. The displacement of rocks from the hill-climbs exposes lighter colored soil, resulting in highly visible strips of disturbance. Soils on level to gently sloping areas below the hill-climb site have been significantly compacted by off-road vehicle activity.

### 4. Water Resources

#### a. General Description

The Mojave River originates in the San Bernardino Mountains near Lake Arrowhead and is fed by snowmelt and seasonal rainfall. Downstream flow is controlled by Silverwood Reservoir and by the Mojave River Forks Dam. During non-flood periods, the river surfaces and sinks periodically as it percolates into the aquifers along its route. It flows past the communities of Victorville and Barstow, finally rising at Afton Canyon, before disappearing into the Mojave River Sink. Total drainage area above Afton is 2,121 square miles.

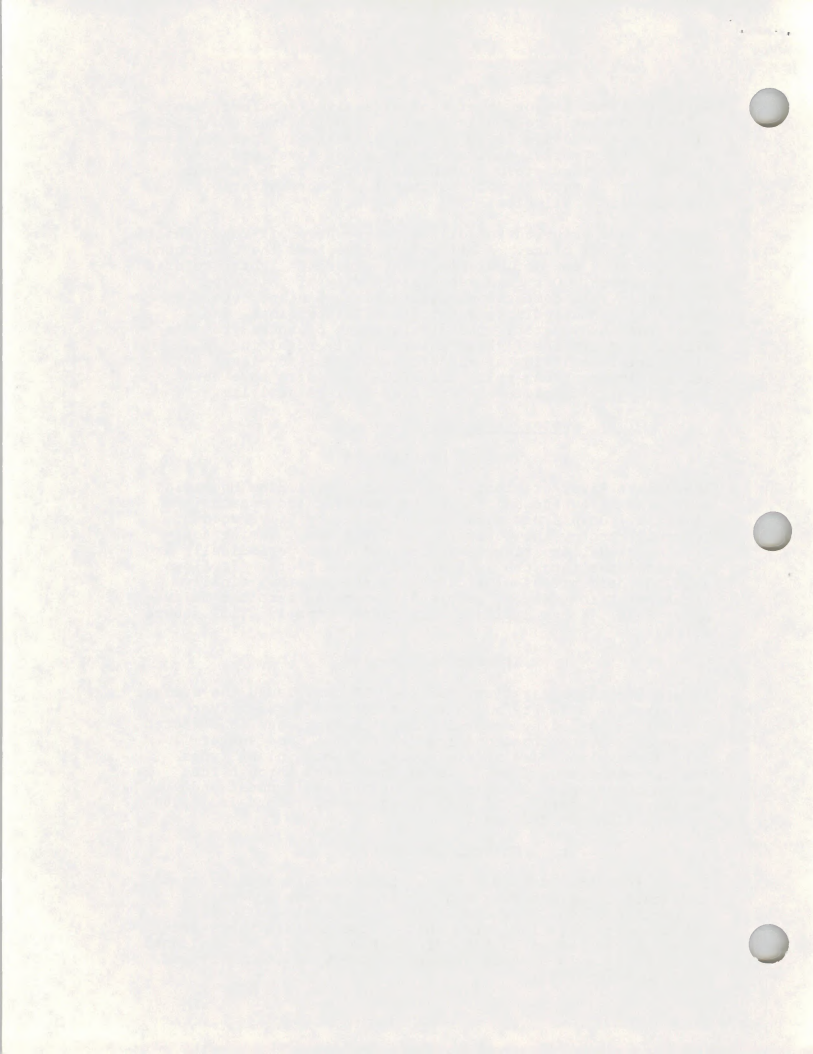
#### b. Streamflow Quantity

At a USGS gauging station near the BLM campground the average discharge is 5.14 ft<sup>3</sup>/s (28 year record). Mojave River streamflow is fed by several channel springs and is affected by groundwater extractions from upstream. Some summer periods have recorded no discharge, although plant types indicate continuous flow. Floods have swept through the canyon in the past changing the natural environment and destroying property. The peak discharge of record is 18,000 ft<sup>3</sup>/sec (January 26, 1969).

#### c. Channel Integrity

Except for the Afton Road ford, the streambed appears to be undisturbed and contains many pebbles, stones and rocks. Inspection of the ford during and immediately following vehicle crossings indicated that sediment disturbance and transient increases in turbidity are produced. Recreational activities could produce damage to riverbank stability and substrate integrity.





#### d. Water Quality

The water quality of the Mojave River at Afton Canyon was sampled on December 6, 1978. The water quality was excellent. Although a question exists concerning a large recorded concentration of total coliform bacteria, concentrations of other bacterial indicators were all within established limits. The river supported a rich and diverse community of bottom dwelling micro-invertebrates including the larvae of flies, damselflies, dragonflies, caddisflies, mayflies, adult and larval beetles, freshwater snails, and freshwater annelid worms. This diversity is indicative and typical of streams characterized by superior water quality. With the exception of values for total dissolved solids, chloride, fluoride, and boron, concentrations of chemical constituents met all of the water quality objectives established for the South Lahontan Basin. No sampled parameter indicates that the water is not fully suitable for the human contact that occurs as a normal part of the recreational activities at Afton Canyon. Because of its dependence on a diversity of changing land uses upstream and on the intensity of recreational activities taking place at Afton (activities which could produce additives to the water), the water quality at the Afton Canyon Recreation Area is highly vulnerable and subject to change.

#### e. Water Rights

The surface water and groundwater rights of property owners within the Afton Canyon study area are riparian and correlative, respectively, reflecting the fact that judicature of water rights by the State of California has not occurred. The status of water rights associated with the projected population growth of communities upstream will probably become increasingly appropriate in the future. Water uses upstream will increase and diversify, resulting in greater removal of groundwater before it reaches Afton Canyon. Several springs within the Mojave River channel are withdrawn under Public Water Reserve No. 107. No formal efforts have as yet been initiated to assert BLM's reserved water rights.

### B. LIVING COMPONENTS

#### 1. Vegetation

Afton Canyon is rare and unusual in that it is one of the few riparian areas in the California desert. The permanently flowing waters of the Mojave River are evidenced in the numerous species of riparian vegetation. The streambed contains dense mats of filamentous green algae (Chlorophyceae) and a heavy growth of periphyton, indicating continuous flow. Several species of sedges, rushes, cattails, reeds, and saltgrass grow along the banks of the river. Further from the river, on the riparian floodplain, grow a number of species of trees such as tamarisk, mesquite, willow, catclaw, cottonwood, and desert willow. Tamarisk and mesquite



may be found in dense and extensive stands. Shrubby species like arrowweed, mule fat and rabbitbrush further indicate riparian habitat and are quite common on the river floodplain.

Due to periodic flooding, bodies of standing water are created in the form of ponds and marshes. It is at these marshes where the densest stands of sedges, rushes, reeds, cattails and yerba mansa occur. Presently there is a marsh in the SW $\frac{1}{4}$  of Section 17, T. 11 N., R. 6 E. and another marshy area in the SW $\frac{1}{4}$  of Section 18.

A BLM campground is presently located in the SE $\frac{1}{4}$  of Section 17, T. 11 N., R. 6 E. Around the campground mesquite, tamarisk, and saltbush mix together with arrowweed and Russian thistle. Much of the ground is windblown sand with a few small grassy meadows. Some of the mesquite was burned away during a fire in the springs of 1978. This area and the tamarisk/arrowweed thickets immediately east of the campground are heavily riddled with ORV tracks.

The mesas above and surrounding Afton Canyon are reached by rocky slopes or sheer cliffs. The vegetation here is sparse and typical of relatively low elevation Mojave Desert scrub. The predominant species are creosote bush and bursage. Cheesebush and various species of cholla dominate the numerous washes and canyons of the area. Trails from various types of vehicle use can be found here as well.

No federally listed endangered or threatened species of plants are known to occur in Afton Canyon. In addition no rare or endangered species of plants on the California Native Plant Society's list are known to occur in the area.

## 2. Wildlife

The rare and unusual features of Afton Canyon that produce the abundance and diversity of riparian vegetation produce a concomitant abundance and diversity of wildlife. Many species occur in Afton Canyon that occur nowhere else in the desert save a few and widely scattered other riparian areas. This is particularly true of birds. Recent, unpublished BLM reports have documented 180 species of birds occurring at Afton Canyon (Weinstein, 1977; Cardiff, Cardiff, and Berry, 1977). Among the more significant are those species associated with riparian habitats such as Pintails, Teals, Rails, Coots, Gallinules, Grebes, Phalaropes, Snipes, Sandpipers, Egrets and Long-billed Marsh Wrens. American Bitterns, Marsh Hawks and Ospreys, which are on the Audubon Society's Blue List of bird species whose numbers or range is declining either regionally or throughout their range (Arbib, 1979) have also been observed at Afton Canyon. Intermittent recent breeding records exist for the Summer Tanager at Afton Canyon. This species is nominated for the BLM Sensitive Species List in California.







SPECIES LIST

\*\*Vegetation

Scirpus olnevi  
Scirpus acutus  
Scirpus americanus  
Juncus textilis  
J. balticus  
Typhus angustifolia  
Phragmites australis  
Distichlis spicata  
Tamarix aphylla  
T. parvifolia  
T. ramosissima  
Prosopis pubescens  
Salix gooddingii  
Acacia greggii  
Populus deltoides  
Chilopsis linearis  
Pluchea sericea  
Saccharis gludinosa  
Chrysothamnus paniculatus  
Anemopsis californica  
Atriplex canescens  
Atriplex lentiformis  
Salsola iberica  
Larrea tridentata  
Ambrisia dumosa  
Hymenoclea salsola  
Opuntia sp.  
Prosopis glandinosa

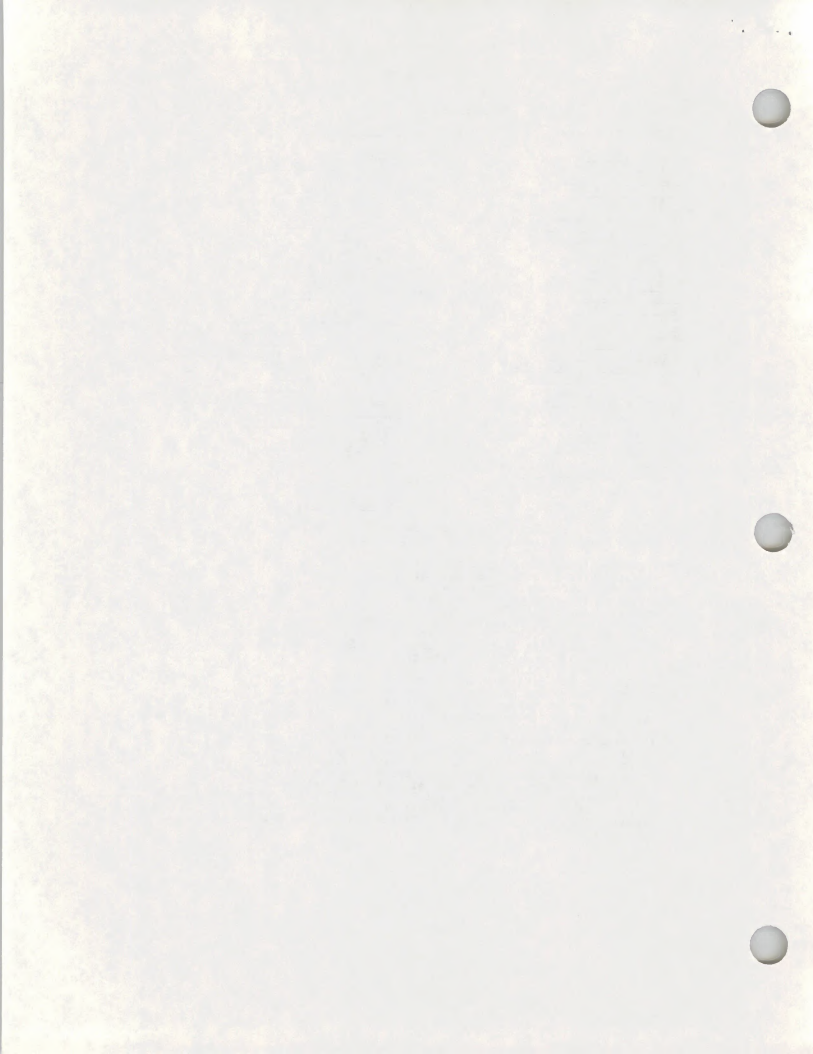
\*\*Wildlife

Piranga rubra  
Sotaurus lentiginosus  
Circus cyaneus  
Pandion haliaetus  
Falco mexicanus  
F. sparverius  
Accipiter striatus  
A. cooperi  
Tyto alba  
Nyctala mexicanus  
Bubo californicus  
Bubo punctatus  
 \*\*\*Gila mohavensis  
Gila orcutti  
Gila mohavensis x. orcutti  
Clemmys marmorata pallida  
Dipsosaurus d. dorsalis  
Phrynosoma platyrhinos californum  
Sauromalus o. obovatus  
Xantusia v. virgata  
Coleonyx v. variegatus  
Lampropeltis getulus californica  
Leptotyphlops humilis  
Ovis canadensis nelsoni  
Vulpes macrotis  
Sciurus arizonae  
Lepus californicus  
Taxidea taxus  
Canis latrans  
Felis rufus  
Urocyon v. melanurus

\* Representative species list (includes most, but not all of the plant species occurring in Afton Canyon).

\*\* Significant species (significant is defined here as pertaining to those species warranting partial or full protection under California law), those species currently listed on the National Audubon Society's Blue List of bird species whose populations, habitat and/or range is being reduced regionally or nationally, and game species or other species of wildlife which are of biological significance (such as being high on the food chain, or limited numbers or of specialized habitat preference).

\*\*\* Listed here for reference only. Neither occurs at Afton Canyon. The Mohave chub is believed to have evolved in isolation in the Mojave River and is considered to be the only species of fish endemic to that river. It is now completely hybridized with the presumed originally allopatric Arroyo chub throughout the Mojave River proper (Hubbs and Miller, 1942) and today only that hybrid exists in the river. The Mohave chub in its pure genetic form (found at several locations in the Mojave Desert) is presently listed as endangered on the Federal List of Endangered and Threatened Wildlife (Federal Register, 1970) and endangered by the State of California (State of California, Resources Agency, 1973) through California Administrative Code, Title 14, Section 670.5.



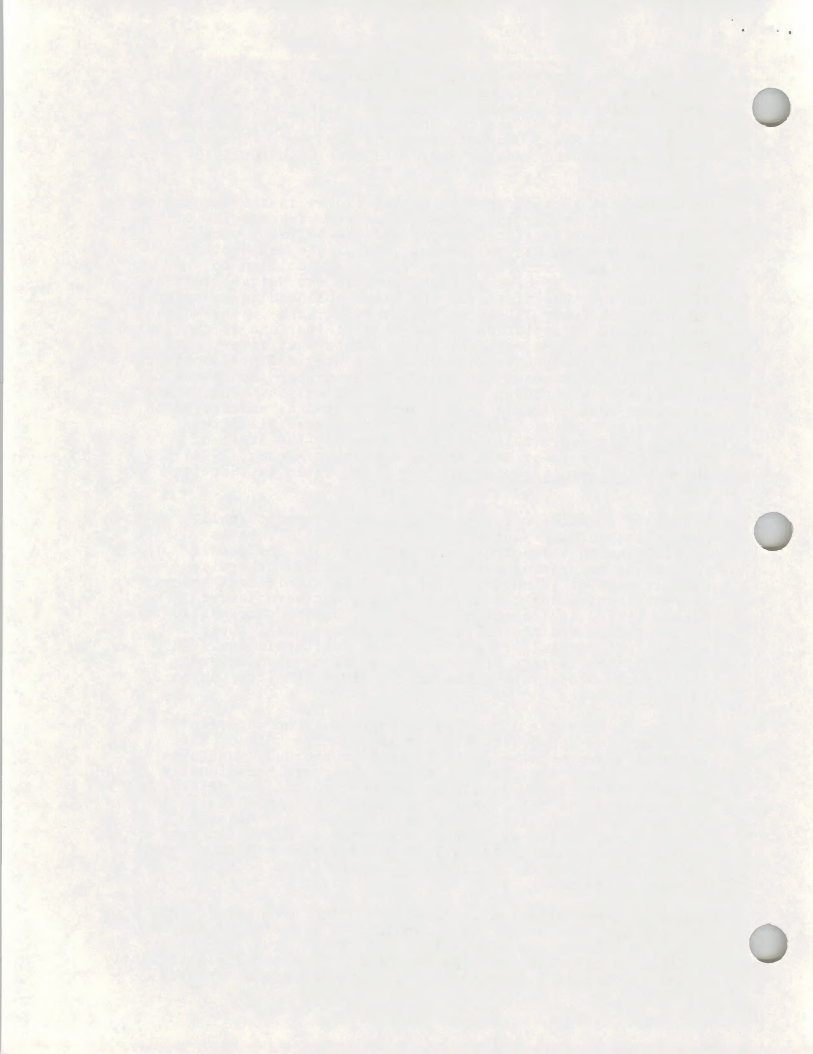
The extensive riparian habitat and surrounding steep and in accessible cliffs offer excellent foraging and nesting opportunities for a number of raptors which occur at Afton Canyon. Among these are the Prairie Falcon, American Kestrel, Sharp-shinned Hawk, Cooper's Hawk and Barn Owl. These species are on the Audubon Society's Blue List for 1979 (Arbib, 1979).

Of biological significance in desert biomes is the occurrence of amphibians evidencing permanent water. Two species of amphibians, the Pacific treefrog and the bullfrog were observed in Afton Canyon (Brown, 1978). The red-spotted toad very likely occurs here as well. In addition to amphibians, two species of fish occur in the Mojave River at Afton Canyon. One of these, the black bullhead is an upstream introduction (very likely from Silverwood Lake). The Mohave chub evolved in isolation in the Mojave River and is considered to be the only species of fish endemic to that river. It has now completely hybridized with the originally allopatric Arroyo chub throughout the Mojave River proper (Hubbs and Miller, 1942) and today only that hybrid exists. The Mohave chub (see species list) is presently listed as endangered on the Federal List of Endangered and Threatened Wildlife (Federal Register, 1970) and endangered by the State of California (State of California, Resources Agency, 1978) through California Administrative Code, Title 14, Section 670.5.

Bodies of standing water in Afton Canyon support small populations of the southwestern pond turtle. This is significant in that occurrence this far into the desert represents an area of outlying range for this otherwise coastal species (Stebbins, 1966). Other significant species of reptiles include the desert iguana, southern desert horned lizard and desert night lizard, desert chuckwalla, banded gecko, and the California kingsnake. All these species are partially protected under California law. In addition, the western blind snake has been taken in areas below rocky slopes along the Mojave River in Afton Canyon (Brown, 1978).

The Mojave River at Afton Canyon represents an important watering site for desert bighorn sheep. The bulk of the resident sheep population is located in the Cady Mountains to the south of the canyon although sheep are occasionally observed near Cave Mountain to the northeast. The desert bighorn sheep is fully protected under California law as is the kit fox which also occurs in Afton Canyon. Other significant species of mammals occurring in Afton Canyon include the desert cottontail, blacktail jackrabbit, coyote, and the bobcat which is currently undergoing a Federal Review of Status.

Human-related activities, primarily in the form of off-road vehicle use, are producing a cumulative, negative effect on wildlife populations and habitat. A recent study on the effects of off-road vehicles in Afton Canyon noted significantly fewer species of birds in areas of high ORV use as opposed





to areas receiving less vehicular traffic (Weinstein, 1978). Many species are being scared into sub-optimum habitats by continued ORV use. The report further noted additional habitat deterioration through illegal cutting of wood (primarily mesquite) and camping in undesigned areas as well as disturbance to and killing of wildlife through illegal shooting in and around the campground.

Desert bighorn sheep, a species which is highly sensitive to human disturbance, used to be more plentiful in the Afton Canyon area according to California Department of Fish and Game officials. The river, an important water source for the sheep, receives considerable off-road vehicle use and this has certainly resulted in a decreased use by the shepp. Over the years the net result is a decrease in population numbers. This same situation holds true for other species which are particularly sensitive to human intrusions such as the Prairie Falcon. The sheer, inaccessible cliffs of Afton Canyon provide excellent nesting opportunities for these raptors; however, continued disturbance will almost certainly drive parent birds from the nest, abandoning their young. See Appendix for species lists.

### C. HUMAN INTEREST VALUES

#### 1. Recreation

Afton Canyon is used extensively by campers, rockhounds, sightseers, hikers, birdwatchers, picnickers, equestrians, researchers and ORV enthusiasts. The area's popularity stems from its proximity to major population centers, its ease of access from Interstate 15 and the rare and unusual scenery found there. Since the construction of the BLM campground in 1968, recreational off-road vehicle use has conflicted with other recreational uses and other resources at Afton Canyon. (See the Afton Canyon Interim Management Plan pages 3-5 for more detail.)

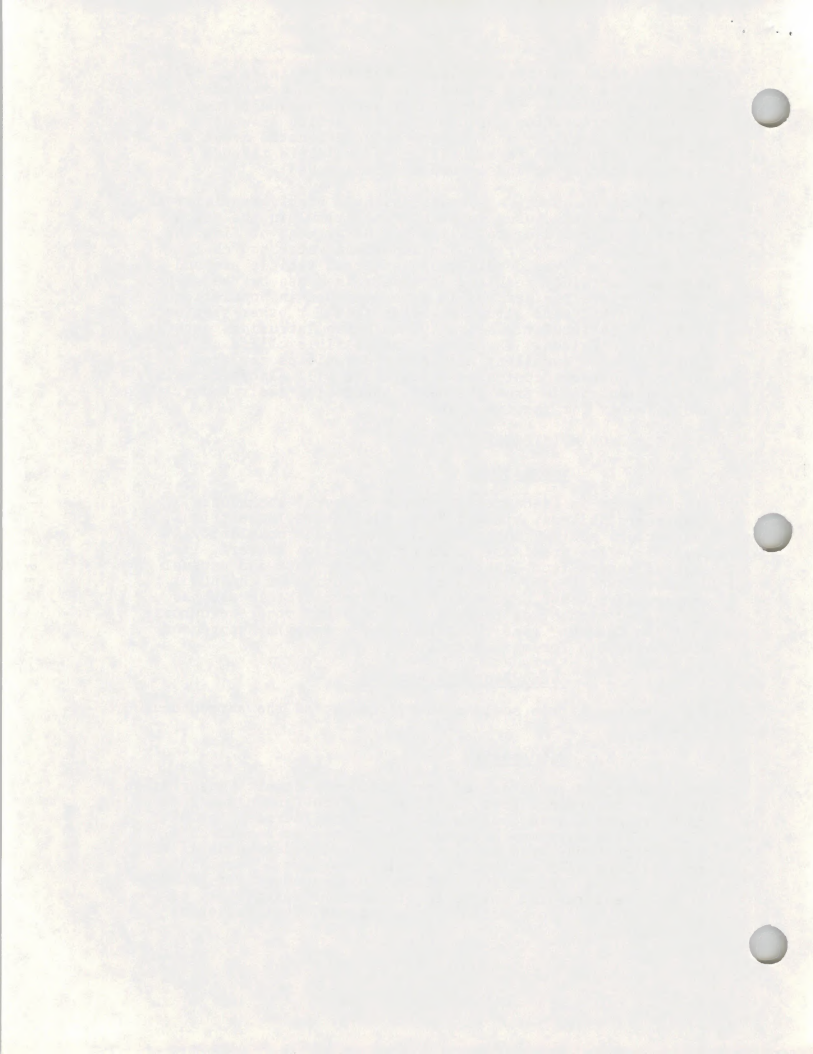
#### 2. Socio-Economic Factors

The area has little socio-economic impact on the surrounding region.

#### 3. Wilderness


The Wilderness Inventory of the California Desert Conservation Area has determined that portions of Afton Canyon meets the criteria defined in Section 2(c) of the Wilderness Act of 1964. These portions have been designated as a part of a Wilderness Study Area (WSA). Congress will determine if the area will or will not become a wilderness area. Section 603(c) of the Federal Land Policy and Management Act (FLPMA) of 1976 requires the Bureau to protect the suitability of this study area for possible Congressional designation as wilderness.

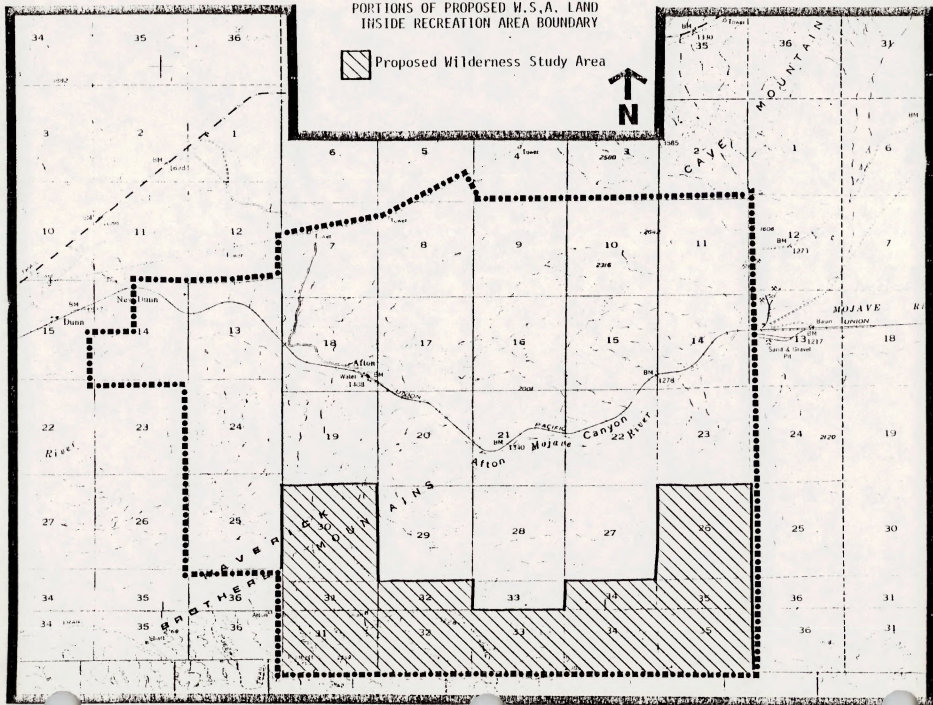


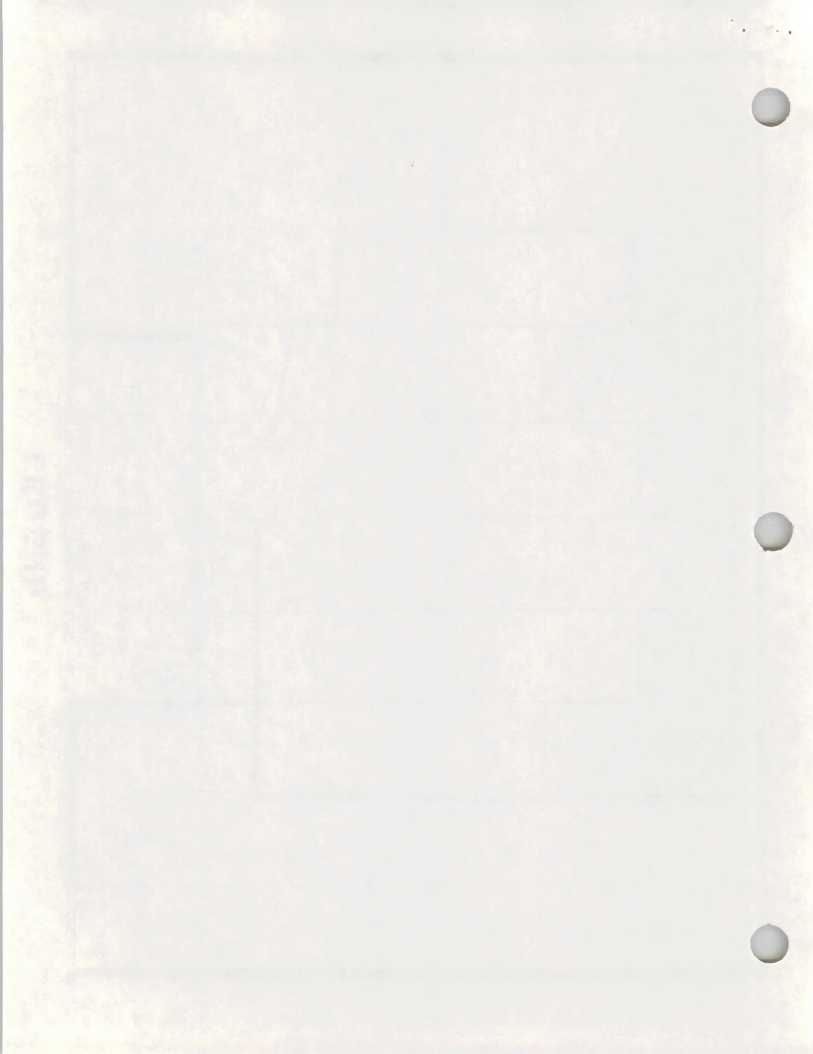


# LEGEND

PORTIONS OF PROPOSED U.S.A. LAND  
INSIDE RECREATION AREA BOUNDARY

 Proposed Wilderness Study Area





4. Areas of Critical Environmental Concern (ACEC)

The Desert Planning Staff has identified an area in Afton Canyon as a potential Area of Critical Environmental Concern for scenic, wildlife, vegetation and water resource values. The boundary of this area corresponds closely with the proposed boundary of the Canyon Zone.

5. Visual Resources

The Afton Canyon Recreation Area is divided into polygons whose landscape character and visual resource management (VRM) class are described below. These polygons and their ratings are shown on the attached map. The WSA lands inside the recreation area will be managed as VRM Class II during interim management. See VRM class definitions on page 32a.

a. Polygon 1 - VRM Class II

Landscape character: This polygon includes the Mojave River Gorge and forms the core of the recreation area. The canyon walls are steep with high cliffs broken by heavily eroded badland formations. Distinct alluvial fans lie at the mouths of side canyons. There is a diversity of color combinations and stark shadow detail in low angle light. Running water supports a variety of riparian vegetation types including freshwater marshlands. The combination of desert canyon, running stream and marshland is rare when viewed on a desert-wide basis making the scenery unusual. Major cultural modifications in the area include dirt roads, off-road vehicle scarring, old mine workings, a telephone line, the Union Pacific Railroad tracks with accompanying paraphernalia, a railroad siding with houses, and the BLM campground. Scenic quality is slightly depreciated by these inharmonious modifications but not so extensively that the scenic qualities are negated.

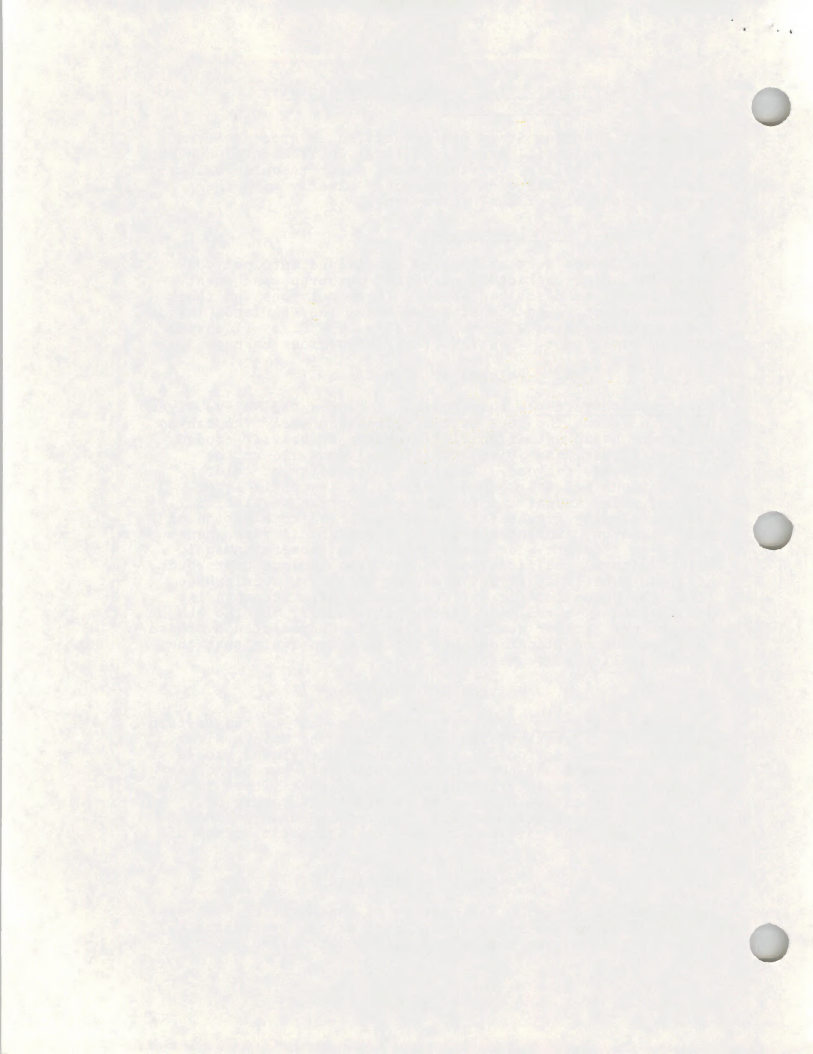
b. Polygon 2 - VRM Class III

Landscape Character: This polygon forms part of the western edge of the recreation area and includes the Mojave River Channel. Some sections of the channel have steep, eroded si Color is subdued and not a dominant element, but low angle light presents an interesting harmony of hues. There is a wash type vegetation due to the intermittent nature of streamflow and riparian plants that tap the underground water table. The railroad crosses the northeast corner of the polygon.








c. Polygon 3 - VRM Class II

Landscape character: This portion of the Maverick Brothers Mountains forms the southwestern part of the recreation area. The mountains are eroded into steep walled canyons

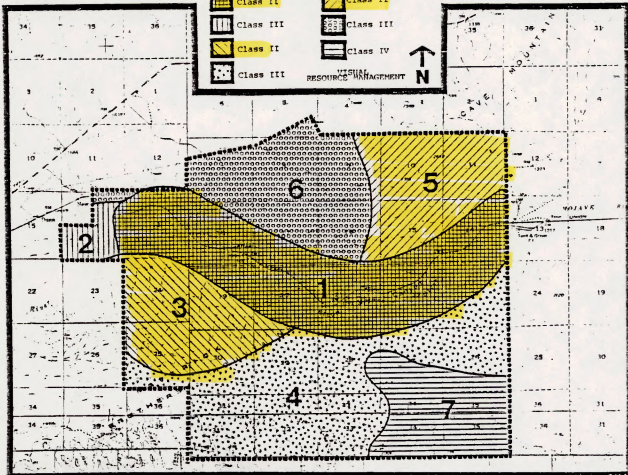




## LEGEND

	Class II		Class II
	Class III		Class III
	Class II		Class IV
	Class III		

VISUAL  
RESOURCE MANAGEMENT



### Visual Resource Management Classes

**Class I.** This class provides primarily for natural ecological changes; however, it does not preclude very limited management activity. Any contrast created within the characteristic environment must not attract attention. It is applied to wilderness areas, some natural areas, wild portions of the wild and scenic rivers, and other similar situations where management activities, through legislation or policy, are to be restricted.

**Class II.** Changes in any of the basic elements (form, line, color, texture) caused by a management activity should not be evident in the characteristic landscape. A contrast may be seen but should not attract attention.

**Class III.** Contrasts to the basic elements (form, line, color, texture) caused by a management activity may be evident and begin to attract attention in the characteristic landscape. However, the changes should remain subordinate to the existing characteristic landscape.

**Class IV.** Contrasts may attract attention and be a dominant feature of the landscape in terms of scale; however, the change should repeat the basic elements (form, line, color, texture) inherent in the characteristic landscape.



with colorful displays of green, pink, blue, and white. Vegetation is sparse and consists of creosote, cholla, and other low growing plants. There are mines and dirt roads but these modifications have only local impact due to variation in the terrain.

d. Polygon 4 - VRM Class III

Landscape character: The scenery in this portion of the Maverick Brothers Mountains is typified by colorfully eroded mountains covered by sparse creosote scrub type vegetation. There are mines and dirt roads, but these modifications have only local impact due to variation in the terrain.

e. Polygon 5 - VRM Class II

Landscape Character: This polygon, which includes part of Cave Mountain, is in the northeastern part of the recreation area. The area is mountainous but also eroded. Colorful formations in the south lead into blacks in the north. Vegetation is sparse and consists of creosote, cholla, and other low growing plants. Modifications in the area include dirt roads.

f. Polygon 6 - VRM Class III

Landscape character: This polygon forms part of the north-western portion of the recreation area. The Afton Canyon access road goes through the polygon along with a high voltage transmission line and associated powerline roads. Vegetation is limited to a few primary species dominated by creosote. The browns, tans, and greys throughout are muted and restricted to exposed surfaces of sand and small rocks.

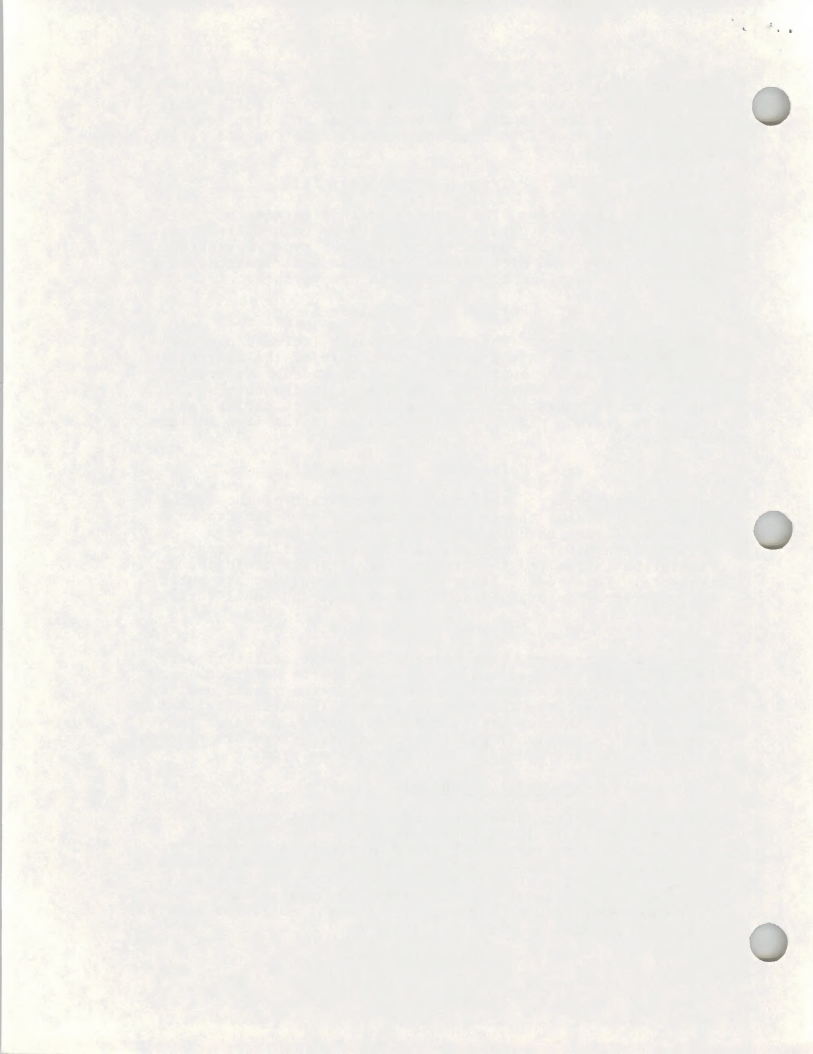
g. Polygon 7 - VRM Class IV

Landscape character: This polygon forms the southeast part of the recreation area and is adjacent to the Maverick Brothers and Cady Mountains which enhance the visual quality of the polygon. The landform is low rolling hills, bajadas and washes. There is little color variation, no water and vegetation is mostly creosote association. There are numerous off-road vehicle roads and trails in the polygon.

6. Cultural Resources

A cultural resource assessment of the project area was conducted which included both a search of the existing literature and an intensive survey of areas to be directly impacted by the discrete actions outlined in the Management Plan. Since cultural resources include both (1) physical remains, and (2) areas where significant human events occurred--even though evidence of the event no longer remains--both will be discussed in this section.





a. Physical Remains

Discrete actions outlined in the Management Plan will directly affect specific locations in the study areas. These specific locations were systematically surveyed for cultural resources.

1) Campground Area

The campground was constructed upon a recorded archaeological site which consisted of a deposit of lithic material, basically flake debitage. This site has been repeatedly inundated by floods and disturbed by the construction of the campground. Located on the river plain, the site has been repeatedly washed out. Remains in the campground are now disturbed and only sparsely scattered flakes can be found. Because the original provenience of the material remains cannot be determined, and because they have been chipped and broken by vehicles driving throughout the campground over a number of years, most of the utility for scientific purposes has been destroyed.

2) Designated Roads and Trails

All roads designated to remain open in the Management Plan were assessed by the archaeologist by vehicle; however, no obvious cultural resource loci was noted except in Pyramid Canyon where significant deposits are prevalent. Locations where barriers are to be posted contain no cultural material.

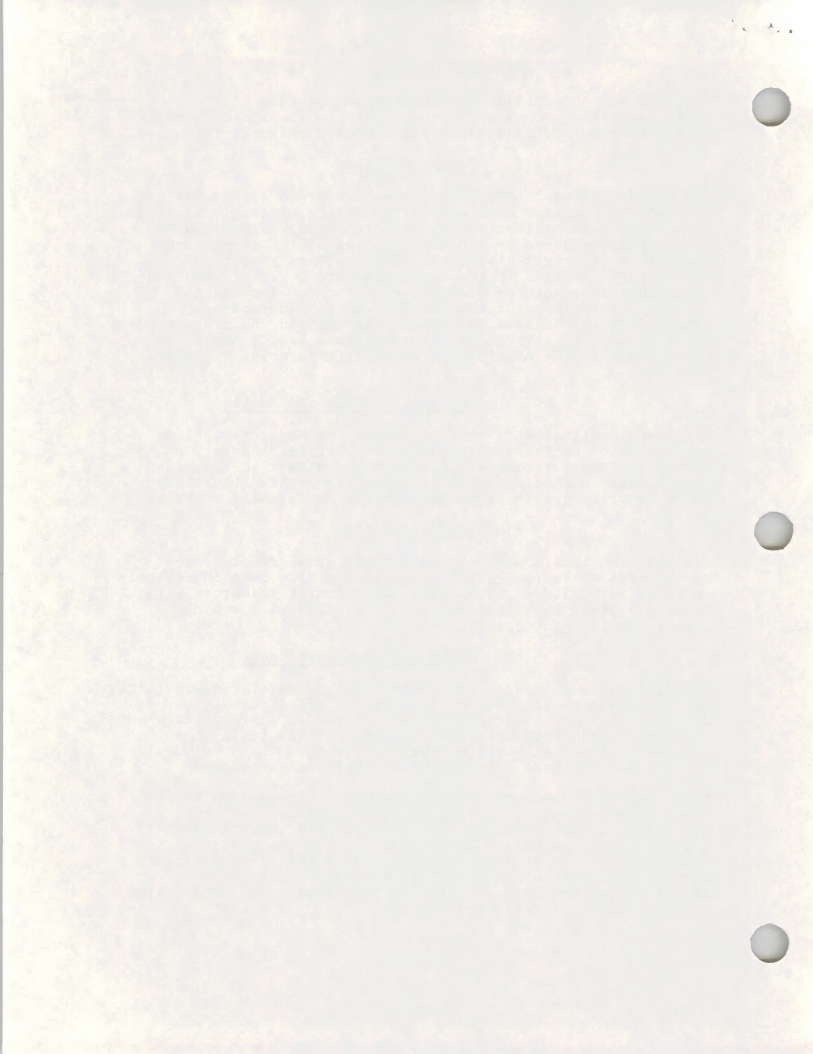
3) Equestrian Area

The proposed location of the equestrian group camping area, on the mesa above the existing campground site, was intensively surveyed for cultural resources. No cultural resources were located on this mesa; the surface is riddled with vehicle tracks, trails and recent fire pits.

4) Other Cultural Resources

During the field assessment, a number of cultural resource sites were located in areas not to be directly affected by the discrete actions. Bottle fragments (dated at approximately 1880) and a temporary prehistoric campsite and trail were located  $\frac{1}{2}$  mile distance from the campground. These cultural remains receive more adverse impact near the campground.

Other cultural resource material has been recorded in the Afton Canyon previous to this time, including a number of occupation sites (caves or rockshelters) and aboriginal foot trails. These sites and other areas within the project boundaries not to be directly affected by any of the discrete actions were not surveyed at this time since the overall impact of the proposed activity is beneficial (see Anticipated Impacts, Cultural Resource Section).



b. Significant Human Events

1) Prehistory

Prior to this time, no formal archaeological investigations have been performed in Afton Canyon (except a small area surveyed by the BLM for use as a horse corral). A number of important excavations were conducted along the lakes into which the Mojave River drains near Afton Canyon; these include (Cambell and Cambell, 1937) and (Drover, 1979) excavation at Soda Lake and East Cronese Lakes, respectively. Their research indicates that the study area may have been occupied by man for the past 10,000 years. Based upon typologically distinct artifactual remains, the intervening time to the historic period has been divided into discrete chronological units, each representing either different cultures or cultural adaptations to the desert environs. Traditionally, the project area has been occupied by the Chemehuevis (Southern Paiute), a group representative of the larger Uto-Aztecian linguistic family which entered Southern California between 1,000 and 1,500 years ago. Ethnographic data (Laidlaw, personal comm., 1979) and archaeological data (Drover, personal comm., 1979) indicates that the Chemehuevi usurped an earlier Yuman group which occupied the area. This group is referred to as the Desert Mohave and is believed to be a desert adapted branch of the Mohave Indians on the Colorado River.

Ethnographic data (Laidlaw, personal comm., 1979) also indicates that, at the time of European arrival in North America, Afton Canyon was used by the Panamint, Shoshone, Mohave and Chemehuevi for collection purposes. Although tule grass (Sagittaria latifolia), cattail (Typha spp.), and devils claw were collected, it was the salt crystals found along the river and the lake shores which were of important economic values to these ethnic groups. The crystals were so important for commercial trade and consumption that boundary lines were set up to delineate exclusive occupation areas around the shorelines; these were marked by cairns, petroglyphs, trails, rock alignments and intaglios. These boundary markers, also used as jurisdiction markers, were sometimes disputed resulting in minor skirmishes.

Segments of a number of Indian trails, including the Mojave Trail, are found in Afton Canyon and its vicinity. The Mojave Trail was a significant trading route linking the Mohave Indians of the Colorado River area with other cultural groups on the coast. After the Mohaves guided early explorers (including Fr. Garces in 1775-1776), the trail eventually evolved into a pack trail and later a wagon road called the "Mojave Road" and "the 31st parallel route." This road was important to the settlement and development of California; Afton Canyon was an important stopping place along the road due to the abundant water supply.





## 2) Historical Events

Following contact with Europeans and Americans, the traditional lifeways of many Native Americans changed. For example, following the introduction of the automobile, tourist trade on the West Coast was spurred. Within a 3-year period, 1929-1932, the Native American economic system was totally disrupted until it finally disappeared. Native Americans moved to population centers to obtain benefits and jobs, such as attending gas stations. At that time the Mojave Trail was, for the most part, abandoned by Native Americans.

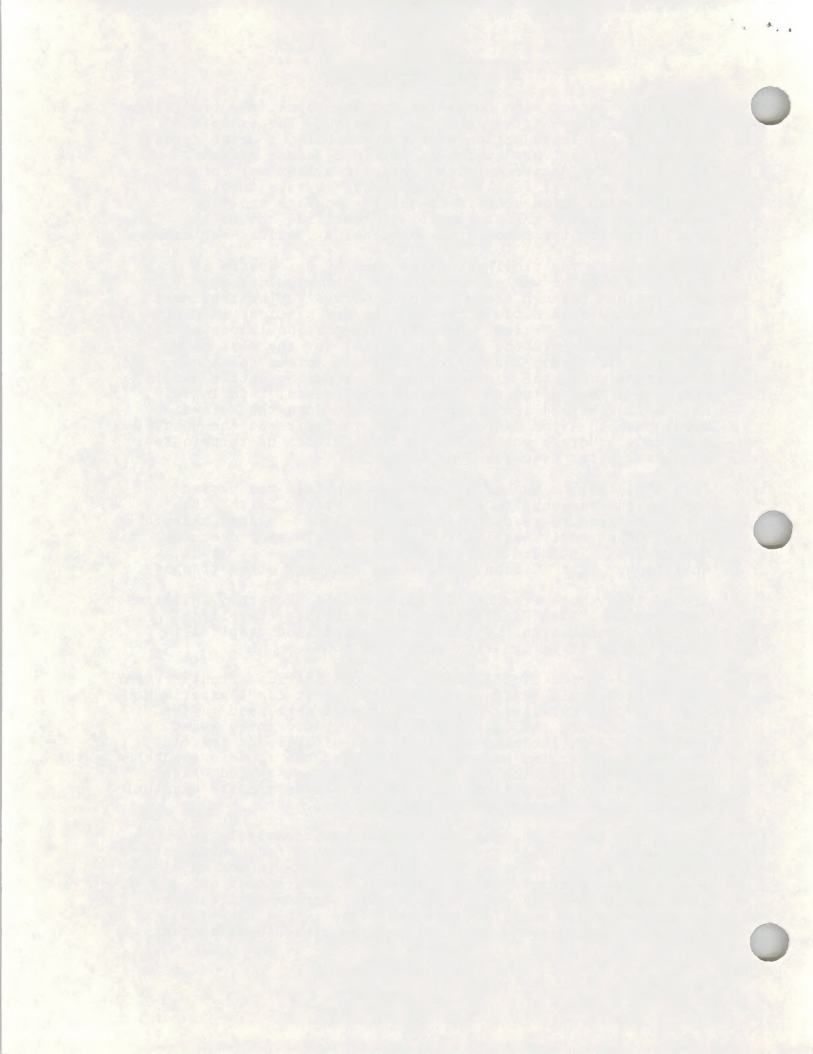
Historically, the trail was first used by Fr. Garces in 1775-1776 when he was accompanied by Mohave guides who directed him through Afton Canyon. Garces' objectives were met - he did find a route between the new missions in California and those in New Mexico. However, his mission to proselytize Mohave Indians into the Catholic faith, for the most part, was not fulfilled. The Mohave, instead, spread seeds of discontent among the mission Indians, stealing cattle and in other ways depredated the Spanish settlements. Late in 1819, Lt. Gabriel Moraga led a force of 50 men down the Mojave River through Afton Canyon, in order to strike at the Mohave homelands. Moraga was forced by difficulties of terrain to turn back after reaching Soda Lake.

From 1826-1831, a number of American mountain men passed through the canyon. In 1826, Jedediah Strong Smith - the first American to reach California overland - passed through Afton. Other early Americans to make the crossing over the Mojave Trail included William Wolfskill, George C. Yount, Christopher "Kit" Carson, Ewig Young and many other trappers.

Around 1854, both Francois X. Aubry and Lt. Robert S. Williamson explored the "35th Parallel Route," probably travelling through Afton Canyon. Williamson's expedition resulted in a large volume of information about the route.

During the period of 1857-1860, a famous American frontiersman, Edward Fitzgerald Beale, conducted the great camel experiment over the 35th Parallel Route. The camels were used in the road work during the development of the route for a wagon road. In 1868, the road was declared suitable for traffic. The immigrant trains and mailmen who used the route encountered many difficulties with the Mohave during that period which finally led to expeditions against the Mohave and the eventual establishment of army posts along the road.

During the Gold Rush, the route was used extensively by prospectors. By 1905 the railroad through Afton Canyon was completed as a segment of the Salt Lake Route to Los Angeles. Flood damage occurred in 1938 when high waters took out sections of the railroad grade. Travel through the canyon by motor vehicle was difficult until the 1960's when the railroad constructed a maintenance road alongside its tracks.



In summation, Afton Canyon is a strategic location for studying culture history. The juxtaposition of so many cultural groups during a long span of time and within the same time period is unusual for a single location. The raw material - the physical remnants - of these cultures should provide us with a better understanding of how these cultural groups related to each other.

c. Native American Concerns

Specific locations of religious and ceremonial sites are often considered by Native American groups to be sacred. Springs, such as the Afton Canyon Springs, are usually considered to be sacred. Such knowledge is often restricted, even within a given cultural group to certain native "experts." Public knowledge of special sacred areas or locations could be sufficient impact to destroy the site's sanctity.

V. ANALYSIS OF PROPOSED ACTION AND ALTERNATIVES

A. UNMITIGATED IMPACTS

1. Non-Living Components

a. Climate and Air Quality

1) Proposed Action

Little negative impact to air quality is anticipated as a result of the proposed action. The primary form of air quality degradation would be dust arousal resulting from vehicular traffic and surface disturbance during implementation of the recreation management plan recommendations. This impact is not anticipated to be of any consequence and may be judged as negligible. A positive impact would be less dust arousal by off-road vehicle use in the vicinity of the campground (management of vehicle use).

2) Alternative #1

Same as proposed action.

3) Alternative #2

Same as proposed action.

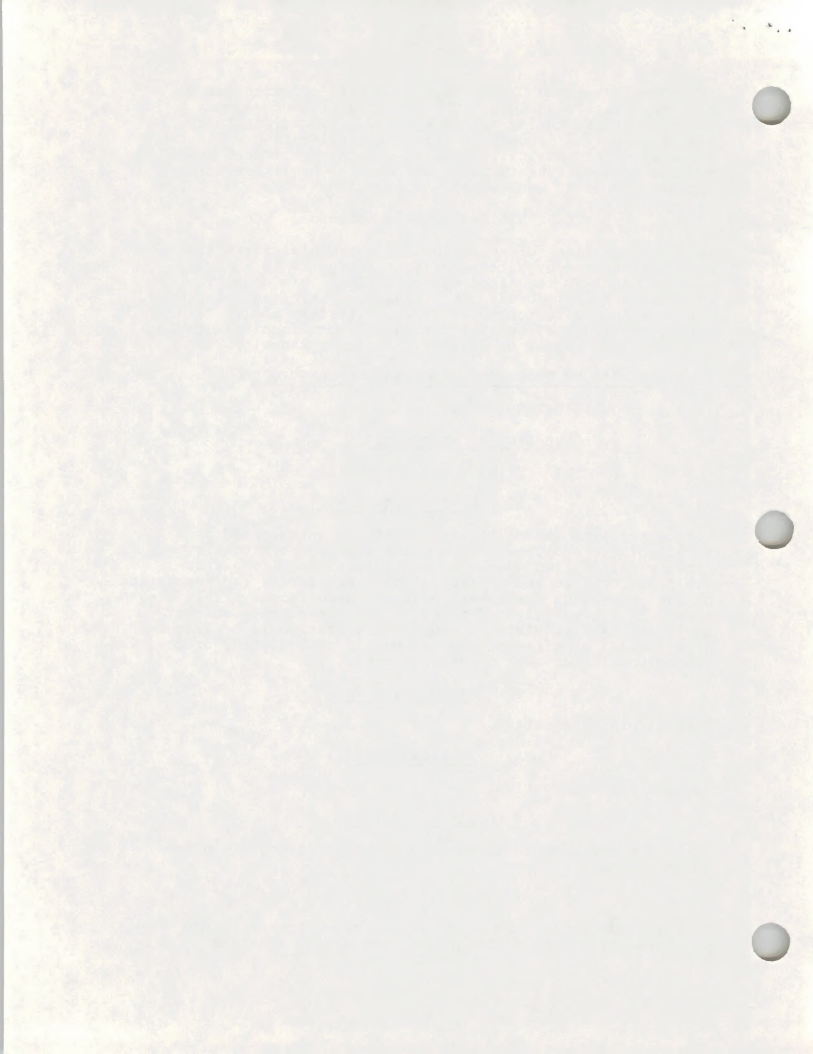
4) Alternative #3

Dust from vehicle use in the campground area would continue to be a problem.

b. Topography, Geology and Minerals

The proposed action and alternatives are not expected to have any impacts upon topography, geology or minerals.





c. Soils

1) Proposed Action

The closure of sensitive areas will help stop soil damage and will be a positive impact. The proposed rehabilitation of areas scarred by vehicles, by replacing the surface cover, would have a positive impact. The action would stabilize soil, gradually reduce erosion and allow the return of plant cover. The soil surface would be disrupted where proposed projects are constructed; this disturbance is considered to be of a minor nature with negligible impact.

2) Alternative #1

Except in areas proposed for closure to vehicles (under ICMP) this alternative would not relieve the existing problem, which is a downward trend in soil conditions due to indiscriminate ORV use. In the area proposed for closure, the impact would be a positive one, as further damage would be halted.

3) Alternative #2

Same as the proposed action.

4) Alternative #3

No action would perpetuate an already downward trend in soil conditions.

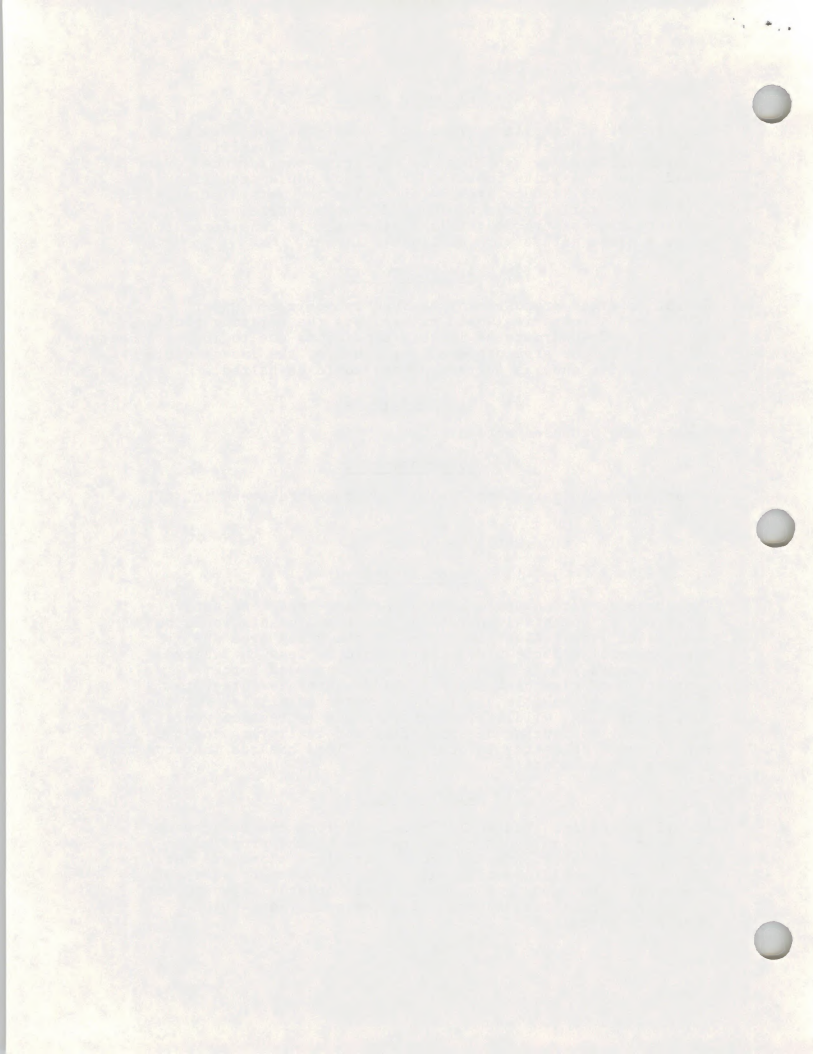
d. Water Resources

1) Proposed Action

The proposed action would have a positive impact on water resources as potential sources of water pollutants would be controlled (sanitation facilities in the group area and management of vehicle use); there would be less turbidity and suspended solids from vehicle crossings and better protection of riverbank stability and substrate integrity (management of vehicle use); future water quantities for the support of fish, wildlife, vegetation and recreation would be insured (monitoring of streamflow and quality); and the public would be better informed about flood hazards (interpretive signing and handouts).

2) Alternative #1

Positive benefits that would be derived from the management of vehicle use would not be as great as in the proposed action. Past experience has shown that signs alone are not effective in vehicle management. Thus, impacts to parts of the river might continue. Future water quantities would not be insured; potential sources of water pollution would remain uncontrolled.



3) Alternative #2

This alternative would have the same positive impacts as the proposed action. In addition, there would be even less turbidity and suspended solids from vehicle crossings (due to controlled access), and the campground would be removed from the floodplain.

4) Alternative #3

This alternative would not alleviate the potential impacts to riverbank stability, riverbank substrate integrity, and additives to the water coming from recreational activities and could possibly prevent the maintenance of future water rights.

2) Living Components

a. Vegetation

1) Proposed Action

Implementation of the proposed action would have a positive effect on the vegetation of the area. Presently the major impacts to vegetation are the destruction of riparian habitat through excessive and uncontrolled ORV use, illegal cutting and burning of the wood and the potential for fire. The Management Plan, if implemented properly, would alleviate, if not eradicate the causes of these impacts.

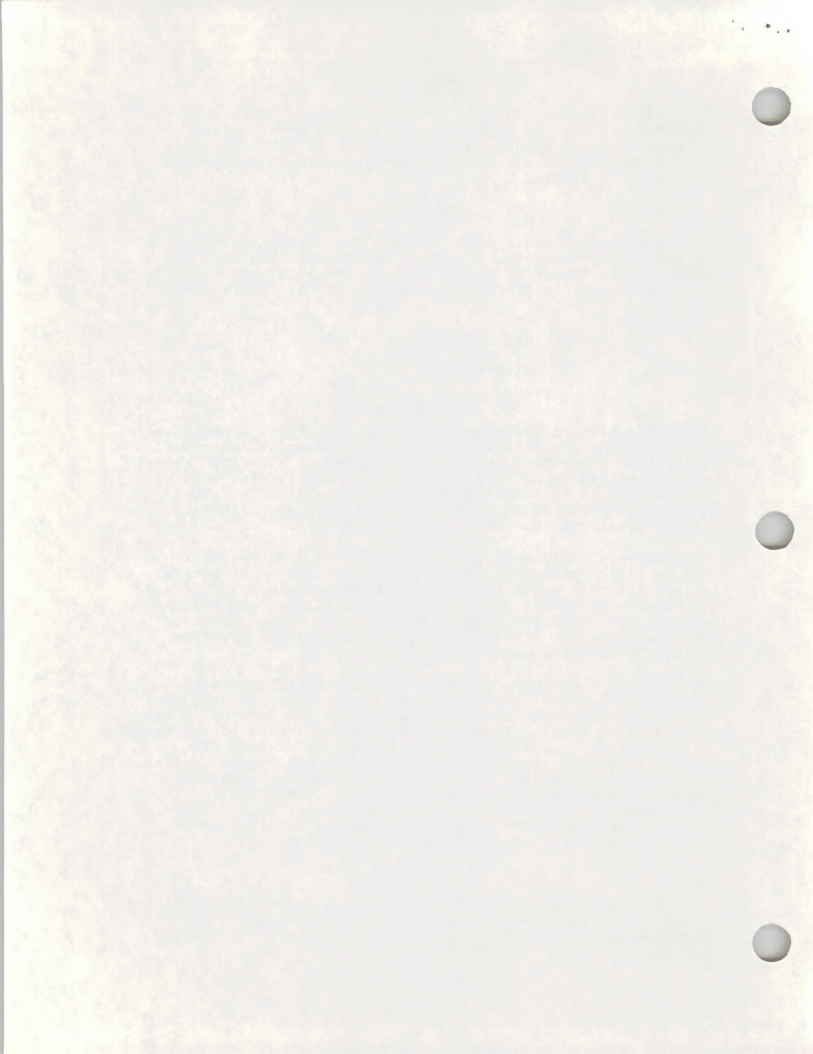
Physical disturbance to and degradation of some vegetation may be anticipated as a result of implementation of several of the discrete operations. Construction of an equestrian corral, construction of cable barriers, signing and posting are all actions which require physical, on-ground presence and are therefore likely to result in a mild but negative impact on existing vegetation.

Location of the group camping area and equestrian trails would impact existing vegetation. If the group camping area is to be located on the mesa up above the campground, in an area already heavily impacted, the ensuing impact to vegetation will be minor. Location of such a campsite down in the canyon bottom in the riparian habitat allowing stock grazing access to this habitat would have a substantial negative impact to existing vegetation. Likewise, the location of equestrian trails within the riparian habitat could also have a negative effect on the vegetation although this is not anticipated to be of any major consequence.

2) Alternative #1

Current impacts are described above. The proposed alternative would not be as effective as the proposed action, as past experience has shown signs alone are inadequate for vehicle management.





3) Alternative #2

Positive impacts would be the same as the proposed action, negative impacts are anticipated to be the same or even less intense.

4) Alternative #3

No action would perpetuate an already declining situation for this resource.

b. Wildlife

1) Proposed Action

The wildlife resource objectives of this Management Plan are to "manage wildlife resources to protect both wildlife and wildlife habitat from any further human-related impacts and to enable recovery of damaged habitat." The overall intent of this plan is positive toward wildlife; if implemented properly, this Management Plan should alleviate (and possibly eradicate some of) the causes of existing impacts to wildlife. It is therefore judged that implementation of this proposed action would have a beneficial impact on the wildlife and wildlife habitat of the area.

A certain amount of negative impacts to wildlife and habitat may be anticipated resulting from construction, signing and posting. These are discussed under "Vegetation" and can be expected to be of a minor nature. The same argument applies to the location of equestrian trails. Use of equestrian trails by riders and horses through the riparian habitat would result in disturbance to wildlife; however, equestrian use in Afton Canyon is minimal and, hence, no impact of any consequence is anticipated.

2) Alternative #1

The proposed alternative would have a positive impact similar to that of the proposed action, although past experience has shown that signs alone are inadequate for vehicle management.

3) Alternative #2

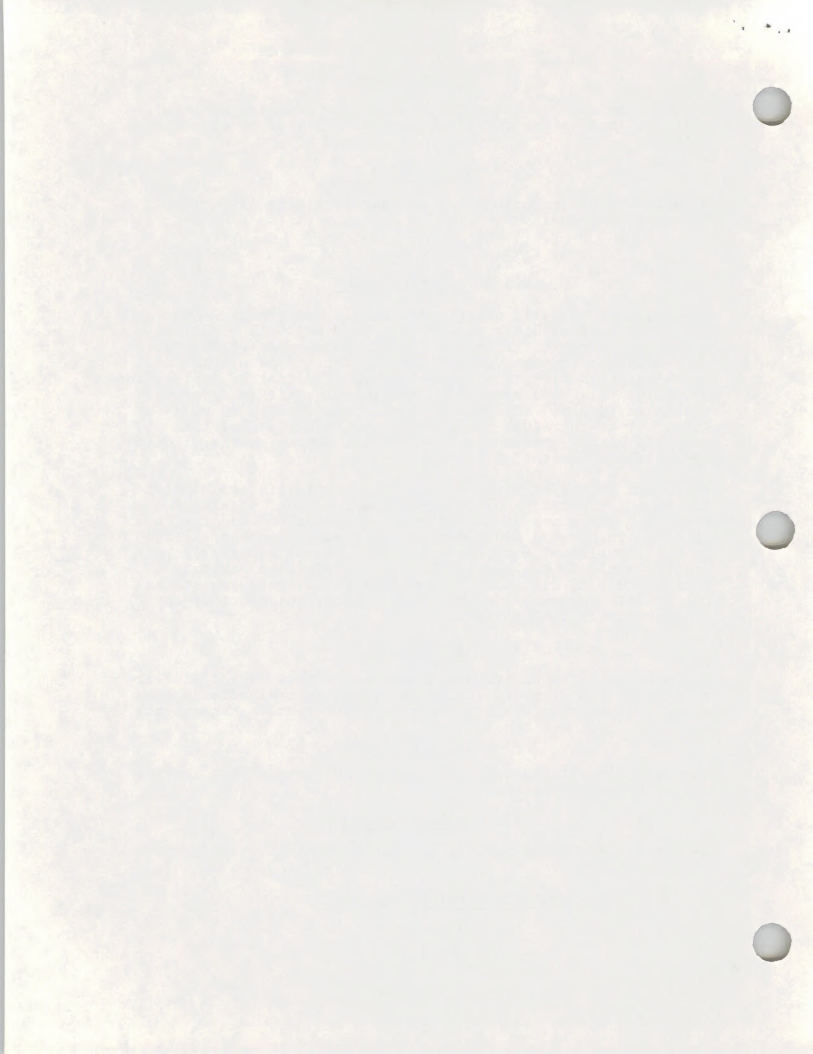
The proposed alternative would have a positive effect similar to the proposed action.

4) Alternative #3

No action will perpetuate an already declining situation for this resource.

3. Human Interest Values

a. Recreation



1) Proposed Action

Vehicle-oriented forms of recreation (such as rockhounding, sightseeing, camping, etc.) would not be seriously impacted by the proposed action, while non-vehicular forms of recreation would be encouraged and enhanced. Purely recreational ORV use would be altered as the use of designated routes in the Canyon Zone orridor and existing routes in the Backcountry Zone would be enforced. This negative impact to recreational ORV use is considered moderate.

Target shooting in the campground area would be restricted to one mile distance, but hunting in the Afton area would not be substantially impacted.

The proposed interpretive flyer would have a positive impact. Also, the addition of equestrian facilities would create beneficial impacts.

2) Alternative #1

This alternative would have a positive effect on recreation similar to the proposed action, except that equestrian opportunities would not be enhanced by the addition of facilities and the interpretive program would be less intense.

3) Alternative #2

All vehicle-oriented forms of recreation would be negatively impacted by this proposed alternative. The level of impact is estimated to be high as all opportunity for vehicle recreation would be eliminated. Non-vehicular forms such as hiking, backpacking, photography, etc., would be enhanced. Equestrian recreation would not be enhanced. Shooting and hunting would be affected as in the proposed action. The proposed interpretive efforts would have a positive impact.

4) Alternative #3

No action would perpetuate unmanaged recreation use at Afton. The conflicts between recreation uses and users would continue.

b. Socio-Economic Factors

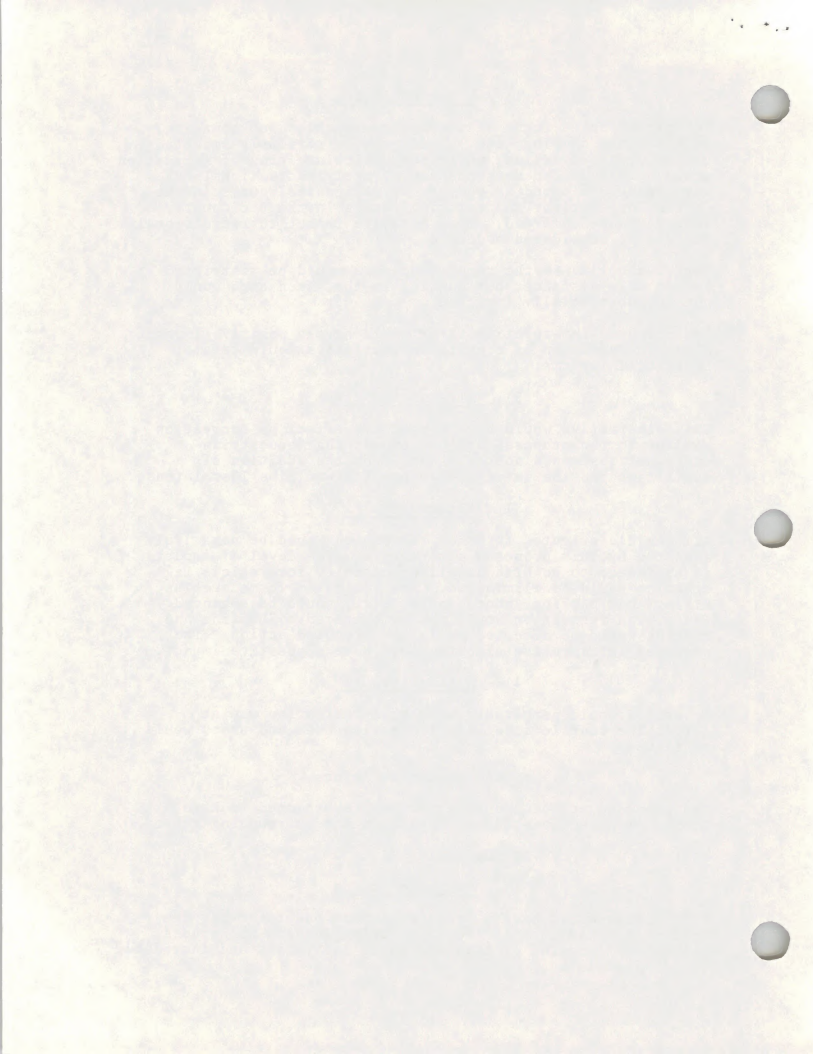
The proposed action and alternative are expected to have little or no socio-economic impact on the surrounding region.

c. Wilderness

1) Proposed Action

This action would have a positive impact on preserving the wilderness character of the area during interim wilderness management (signing of existing roads and trails and increased ranger patrols).





2) Alternative #1

This alternative should have a similar impact to the proposed actions, if the ICMP is enforced and if ranger personnel patrol the area.

3) Alternative #2

This alternative would have a positive impact exceeding that of the proposed action. If only those with valid prior existing rights would be allowed in the area, vehicle use would be negligible.

4) Alternative #3

This action might have a negative impact on preserving the wilderness character as the number of vehicle routes may proliferate with little or no ranger patrols and no directional signing.

d. Areas of Critical Environmental Concern (ACEC)

1) Proposed Action

This action would have a positive impact on protecting a potential ACEC in Afton Canyon (designation of vehicle routes, protection of sensitive habitats, increased patrol).

2) Alternative #1

This alternative would not be as effective in protecting the potential ACEC as the proposed action since past experience has shown that signs alone are not sufficient to manage vehicle use.

3) Alternative #2

This alternative would have an even more positive impact than the proposed action as access would be totally restricted.

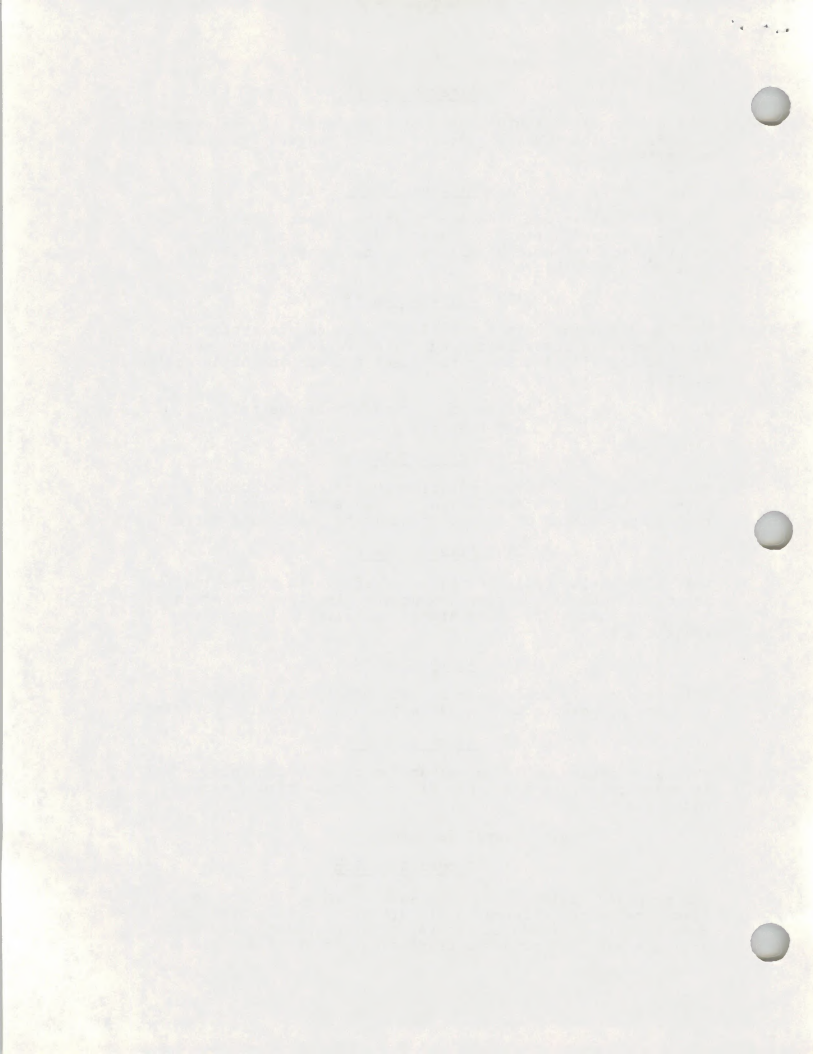
4) Alternative #3

This alternative would perpetuate an already declining state in resource values and would offer no protection for any potential ACEC.

e. Visual Resource

1) Proposed Action

The proposed action would have some positive impacts to visual resources related to closure of vehicle routes and rehabilitation of vehicle scars. The numerous scars on the hillside near the proposed group site are quite visible



from any part of the recreational area; if the proposed rehabilitation plans work, it would greatly enhance visual resources. Rehabilitating other roads would also serve to reduce contrasts.

The proposed kiosks will be designed in harmony with the surroundings, reducing potential visual impacts.

The key viewing point in the recreation area is the campground. The proposed horse corral would not be visible from the campground nor will the proposed sanitation facilities for the group site. It is anticipated that contrasts will be low for these facilities.

The post and cable barriers are proposed for construction from railroad ties which repeat the dominant cultural theme of the area today - the railroad. The proposed barriers are only partially visible from the campground (they are screened by vegetation in many places) and produce a low contrast rating.

2) Alternative #1

The addition of regulatory signs would have a negligible or no impact on visual resources. The lack of physical controls to manage vehicle use may have a negative impact on visual resources by allowing easy access by vehicle into closed sensitive areas where they may cause visible damage.

3) Alternative #2

Impacts for this alternative would be similar to the proposed action with the following exception: (1) removing the campground from the Mojave River floodplain would be an enhancing measure, and (2) any new camping facility would cause some negative visual impact unless carefully designed by a landscape architect.

4) Alternative #3

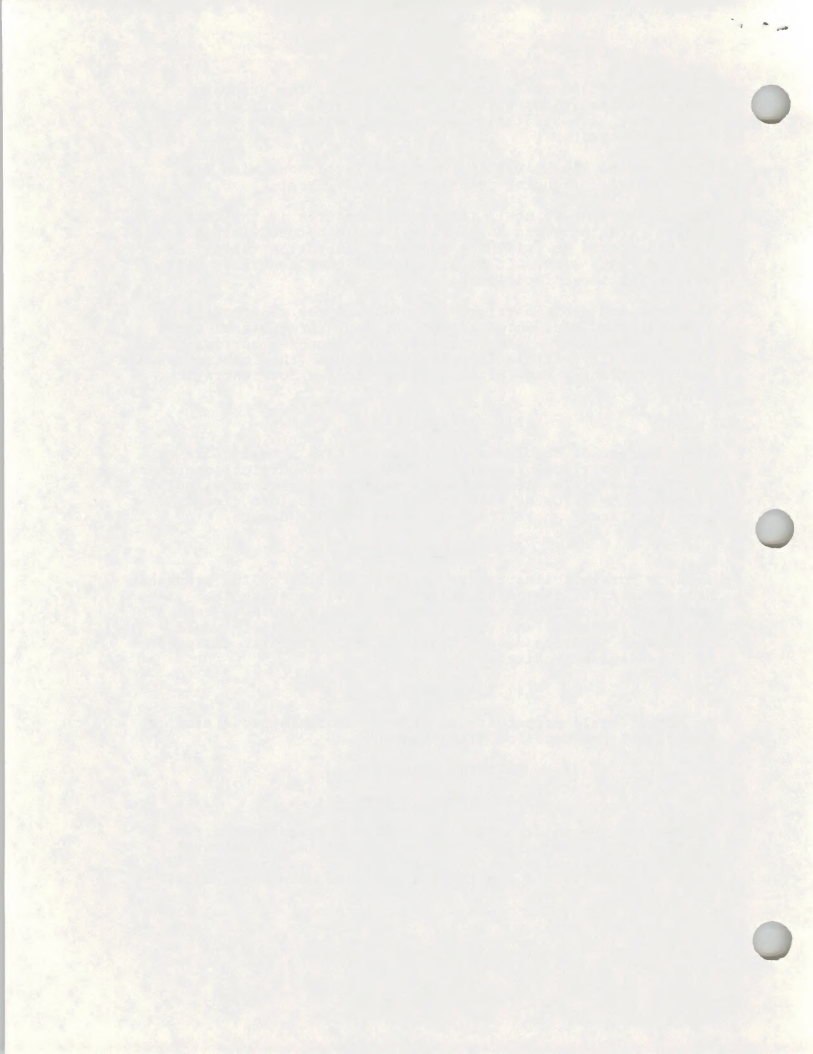
No action would perpetuate an already declining condition in the visual resources of Afton Canyon.

f. Cultural Resources

1) Proposed Action

Presently, the major impacts to cultural resources in the project area are caused by illicit collecting of cultural remains, the displacement and breakage of artifacts by off-road vehicle traffic and the gradual wear upon the remains





caused by the natural forces of erosion. Usually the process of natural erosion cannot be halted; however, the provisions included in the management plan for personnel to manage visitor use and the restrictions placed upon vehicular traffic and camping in the project area will stem some of the present destruction of cultural resources. The implementation of the proposed action then will, in effect, benefit and stabilize the cultural resources.

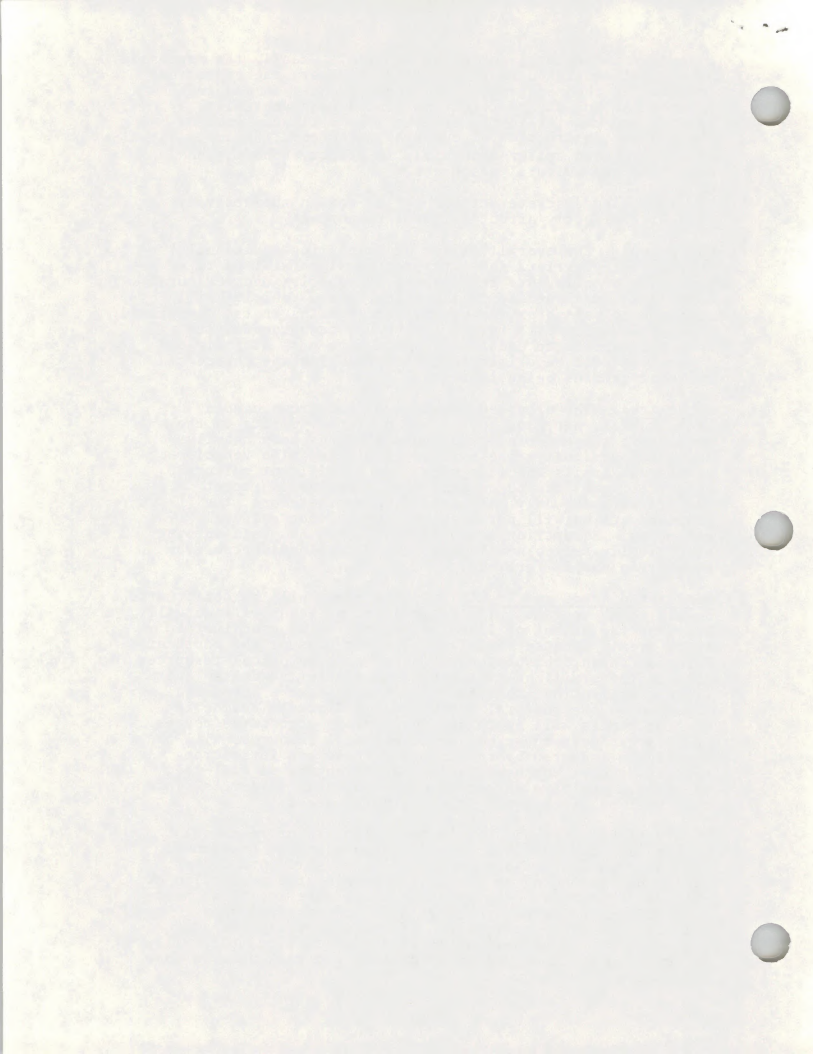
The following discrete actions called for in the activity plan will directly affect cultural resources:

Campground: The overall effect of installing additional posts, cable barriers and interpretive signs will be to eliminate or alleviate the impacts of vehicles upon cultural materials found outside of the campground. Vehicles will continue to pass over the prehistoric remains in the campground. By creating fire pits in the individual campgrounds, the need for campers to construct random fire pits at their own discretion will be eliminated, thus reducing the chance of cultural remains being impacted.

Group Area: The proposed location of the group camping area, corral, hitching posts, and portable toilets on the mesa above the existing campground site has been heavily impacted previously--the surface is riddled with vehicle tracks and trails and fire pits. No significant cultural resources were located on this mesa (remains of recent campers were the only materials found); therefore, the proposed action will not have any impact upon cultural resources. Equestrian use of Afton Canyon has been ongoing historically and no new impacts to cultural resources from equestrian use is foreseen.

Designated Roads and Trails: No new roads will be constructed or old roads upgraded; the designation of roads will actually decrease the number of linear miles now being used in the study area. Because the plan calls for closing the mouth of Pyramid Canyon, the concentration of archaeological resources located there will be protected from further vandalism and illicit collecting, thus the action will have a beneficial impact upon the cultural resources. A discrete action in closing routes will be to put up barriers across the routes. These areas were surveyed and no cultural resources will be negatively impacted by constructing these barriers across routes; however, by barricading undesiroutes, we will see an overall positive effect upon the cultural resources since they will be blocked off from vehicular access.

Informational Kiosks: The installation of informational kiosks with maps and brochure dispensers at the campground and on Afton Canyon Road near I-15 may result in a better public understanding of the laws governing the protection of cultural resources. The proposed kiosk site locations near I-15 and in the campground have not been surveyed by a cultural resource specialist. If cultural resources are located at the to be designated construction site, they will be impacted by construction of a kiosk and parking area (see mitigation measures).



2) Alternative #1

This alternative would allow for greater protection of the cultural resources than the present situation provides; however, this alternative does not provide the concrete management prescriptions which have been formulated in the proposed action (i.e., barrier around the campground, interpretive and information kiosks, increased range patrols, etc.) which, if implemented, would help to stem the destruction of cultural resources in the project area.

3) Alternative #2

Closing the roads to the south of the canyon will deter illicit collecting, vandalism, and disturbance of cultural resource sites. Closing the campground will not really preserve the cultural remains found there since these have already been impacted to the point of being of little use for scientific purposes. Revoking the right of people to travel on the Old Mojave Road is viewed negatively by historians and others who would like to explore and visit traditional historical areas. This act could be viewed as an infringement upon the inherent right of the American public to visit an historical monument. To limit vehicle access to this area to railroad personnel only and not to the Native Americans who traditionally occupied this area could be construed as a breach of the "American Indian Religious Freedom Act" (P.L. 95-341).

4) Alternative #3

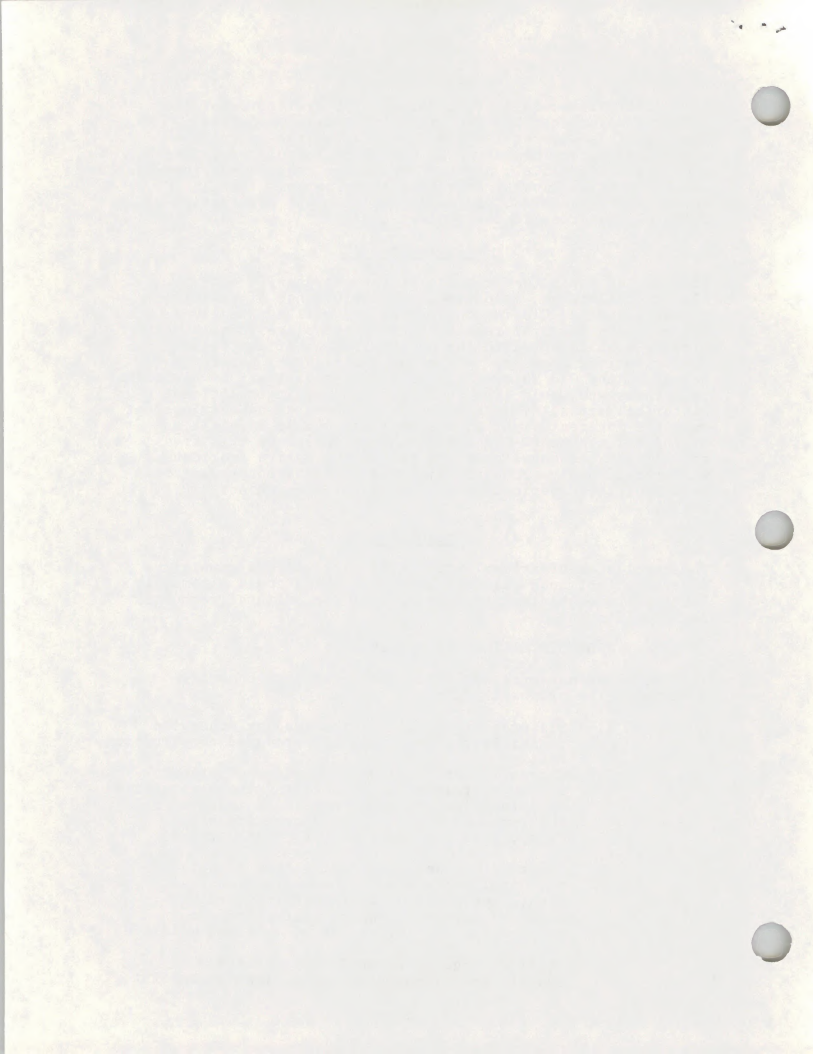
Uncontrolled recreational activities will yield a cumulative adverse effect upon cultural resources which could ultimately destroy the character and integrity of the cultural resources in Afton Canyon.

B. PROPOSED MITIGATING MEASURES

The following measures would mitigate most environmental impacts of the proposed action:

1. Disturbed soil will be replaced or otherwise rehabilitated following all proposed construction.
2. Recreationists will be made aware of other nearby recreation sites offering those recreation opportunities which may have been impaired by the implementation of the recreation plan (e.g., show locations of ORV "open" areas).
3. Construction and other activities associated with implementation of the Recreation Plan should avoid spring months (March through June) to mitigate against disturbance to spring breeding activities of resident wildlife.
4. Utilize ranger personnel to prevent any equestrian-related grazing in riparian habitat.





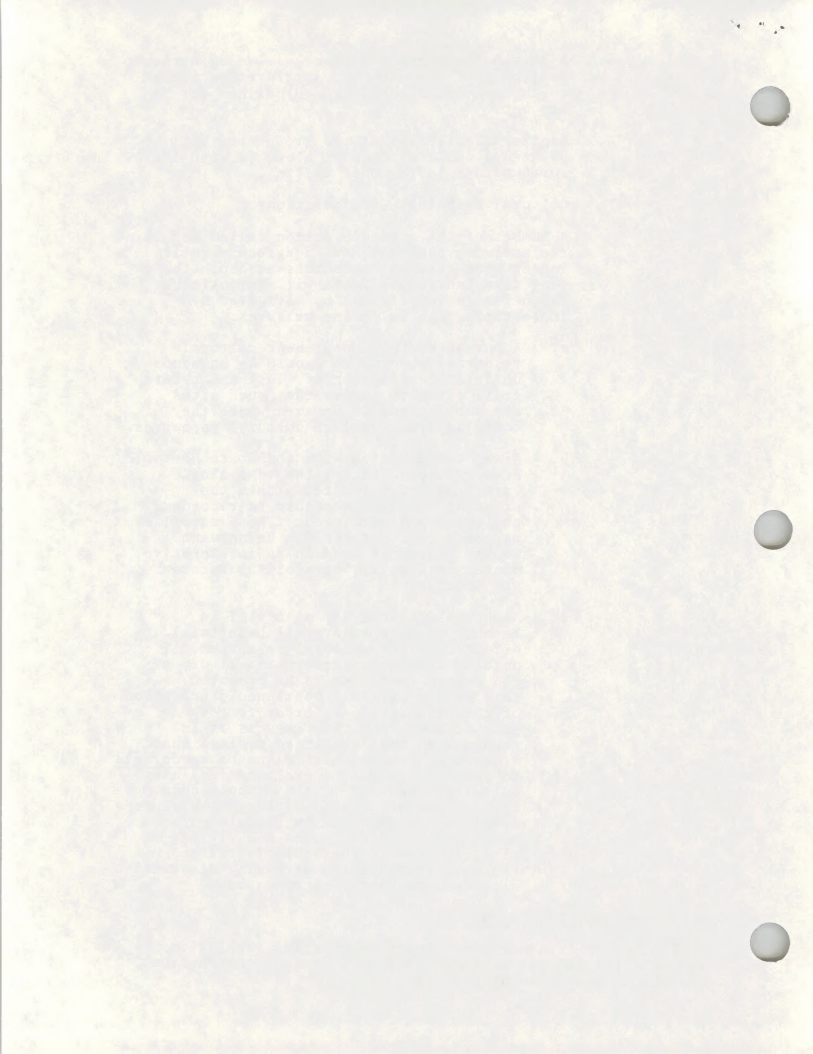
5. A Bureau landscape architect will aid in the designing of the proposed interpretive kiosks to insure that established guidelines for VRM are met.
6. Sanitary facilities at the group area will be painted a color which will blend in with the surroundings (e.g., buff or tan).
7. Cultural Resources Considerations

A number of the discrete action called for in the activity plan may have a direct negative impact upon cultural resources although the long term indirect effects will be positive. The negative impacts can be mitigated by implementing the following measures:

- a. A Bureau of Land Management cultural resources specialist should be on hand during the selection of kiosk and nature trail sites to insure that such sites are not located in an area where they could adversely affect cultural resources.
- b. After coordination with the State Historic Preservation Officer, the remaining lithic material located within the existing campground should be recorded, collected and cataloged. These materials may be curated at the San Bernardino County Museum or used in an interpretive center or display, possibly at Barstow Way Station.
- c. Although the activity plan will in essence produce an overall beneficial effect upon the cultural resources, if ongoing camping and recreational use of the canyon continues to be promoted, then we may expect a continued degradation of the resources. In order to retard some of these negative impacts it is recommended that qualified professional archaeologists and historians be encouraged to record, study, and evaluate remaining cultural resources in the Afton Canyon. This action may include salvaging resources remaining in the heavily vandalized prehistoric shelter caves and village sites located in the project area and the excavation of the partially disturbed site near the existing campground.

#### VI. RESIDUAL ADVERSE IMPACTS

A mild, short-term negative impact on existing vegetation and wildlife habitat will result from proposed construction operations to implement the plan.



VII. RELATIONSHIP BETWEEN SHORT-TERM USE AND LONG-TERM PRODUCTIVITY

The proposed action is intended to improve the existing condition. If the current condition is improved, long-term productivity will be improved.

VIII. IRREVERSIBLE AND IRRETRIEVABLE IMPACTS AND COMMITMENT OF RESOURCES

Nothing proposed by this action will produce an irreversible or irretrievable impact or commitment of resources.

IX. RECORDATION OF PERSONS, GROUPS, AND GOVERNMENTAL AGENCIES CONSULTED

Lt. Glenn W. Moore, California Department of Fish and Game  
Bill Barnes, Whittier Gem & Mineral Society  
Mary F. Strong  
Eugene Cardiff, San Bernardino County Museum  
U.S. Corps of Engineers, Floodplain Section, Los Angeles, CA  
Dee Simpson, San Bernardino County Museum  
San Bernardino Flood Control District  
BLM Desert Planning Staff  
Numerous onsite and telephone interviews.

X. INTENSITY OF PUBLIC INTEREST

The intensity of public interest was moderate. Most comments came from those groups and individuals interested in the protection and conservation of the wildlife and the unusual natural environment and those interested in outdoor recreation (especially off-road vehicle-related recreation) in the Afton area.

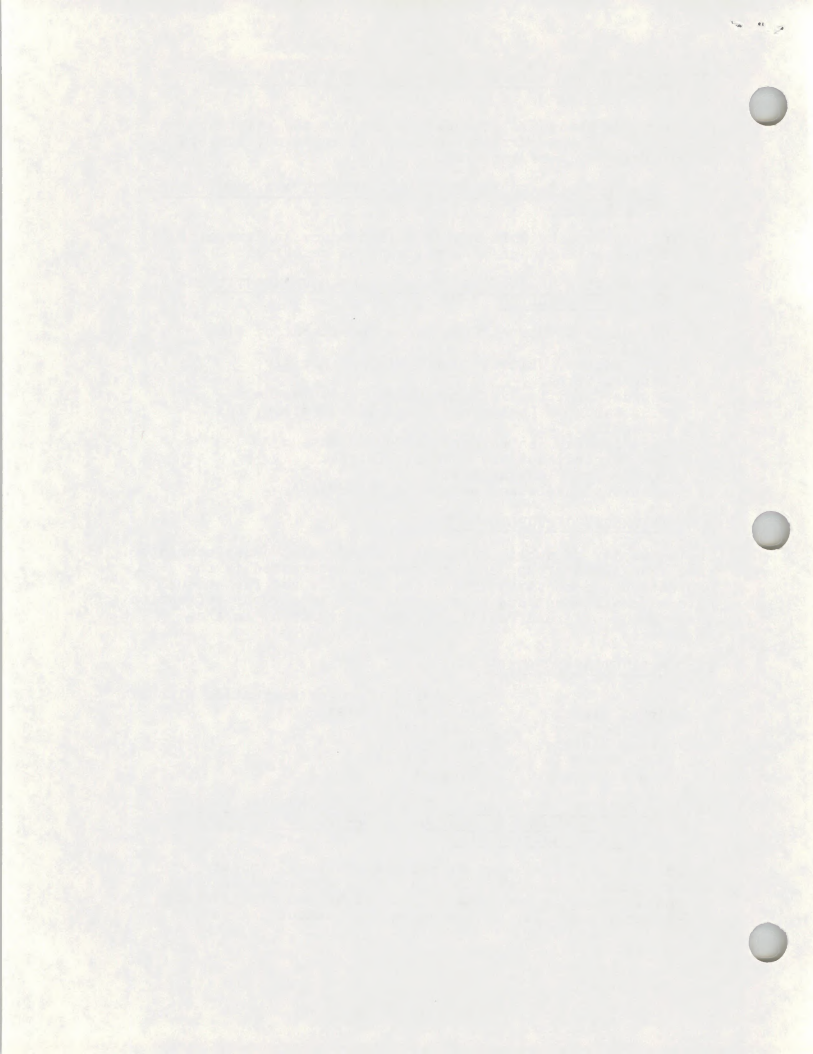
XI. PARTICIPATING STAFF

Joel Mur	- Team Leader, Outdoor Recreation Planner
James Bicket	- Wildlife Biologist
Ruth Musser	- Archaeologist
Duane Winters	- Hydrologist
John Adams	- Soil Scientist
Roger Haskins	- Geologist

XII. RECOMMENDATION AS TO WHETHER AN ENVIRONMENTAL IMPACT STATEMENT SHOULD BE MADE ON THE PROPOSED AFTON CANYON INTERIM MANAGEMENT PLAN

Based upon the assessment of the environmental impacts associated with the above action, it is concluded that the proposed action is not a major Federal action significantly affecting the quality of the human environment and an

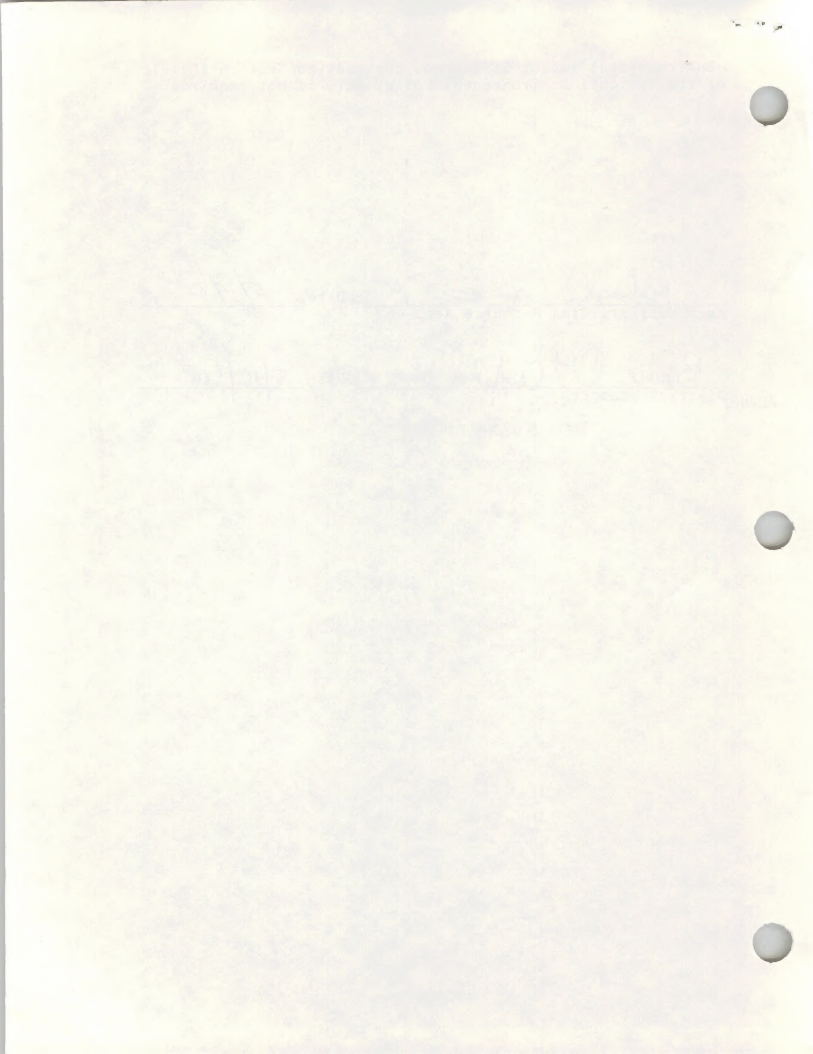




Environmental Impact Statement, pursuant to Section 102(2)c  
of the National Environmental Policy Act, is not required.

Richard E. Crowe Date 5/2/80  
Area Manager, Cima Resource Area

Bruce O. Hupfeld Date 5/15/80  
ACTING District Manager



## Appendix B

The initial period for public comment was from October 21, 1979 to November 21, 1979. In response to a request for an extension of the comment period and a field meeting, the comment period was extended to January 2, 1980, and a field meeting was held at Afton Canyon Campground on December 10, 1979.

Many comments expressed a general disapproval of designating vehicle routes, but included no suggestion for alternative ways of dealing with the area except to say "Leave Afton alone." Other comments stated that another route in addition to the railroad right-of-way should be allowed through the canyon. Allowing vehicle travel only on designated routes in the Mojave River Canyon is necessary to protect resource values there; some routes will be closed to protect sensitive habitat. Many comments expressed concern that access to the Maverick Brothers Mountains would be closed. Access into the Maverick Brothers Mountains remains open from Afton Siding and from Basin Siding on existing vehicle routes. A master plan for the designation of vehicle routes in the Backcountry Zone will be developed as suggested.

Numerous comments suggested moving the campground out of its present site to a nearby bluff. Some of these also suggested the current campground site be converted into a picnic area with a nature trail. Rather than move the campground, vehicle barriers will be installed. A nature trail is planned nearby.

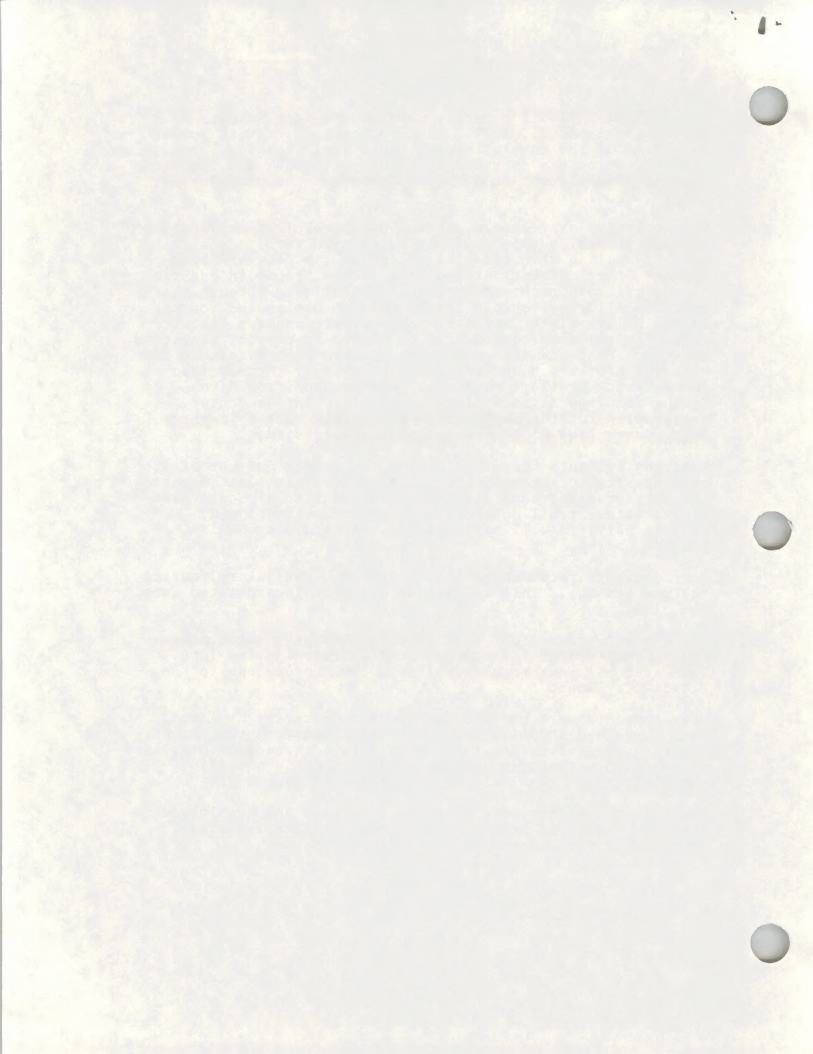
Many comments recommended a full-time BLM caretaker, (during the use season). This suggestion has been incorporated into the plan.

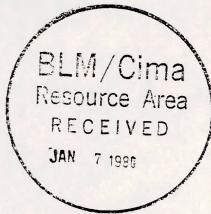
One comment pointed out that dispersed camping takes place in the east end of the canyon, outside the riparian zone. This area has been transferred from the Canyon Zone to the Backcountry Zone.

Many comments were received on shooting activity at Afton. Some suggested shooting be totally excluded from the canyon. Others suggested safety zones of varying distances. Others recommended a shooting area be established. A one mile shooting safety zone has been incorporated in the plan.

Many other comments were received, reviewed and considered than are described here. A few representative letters are included in this appear on the following pages.







December 28, 1979

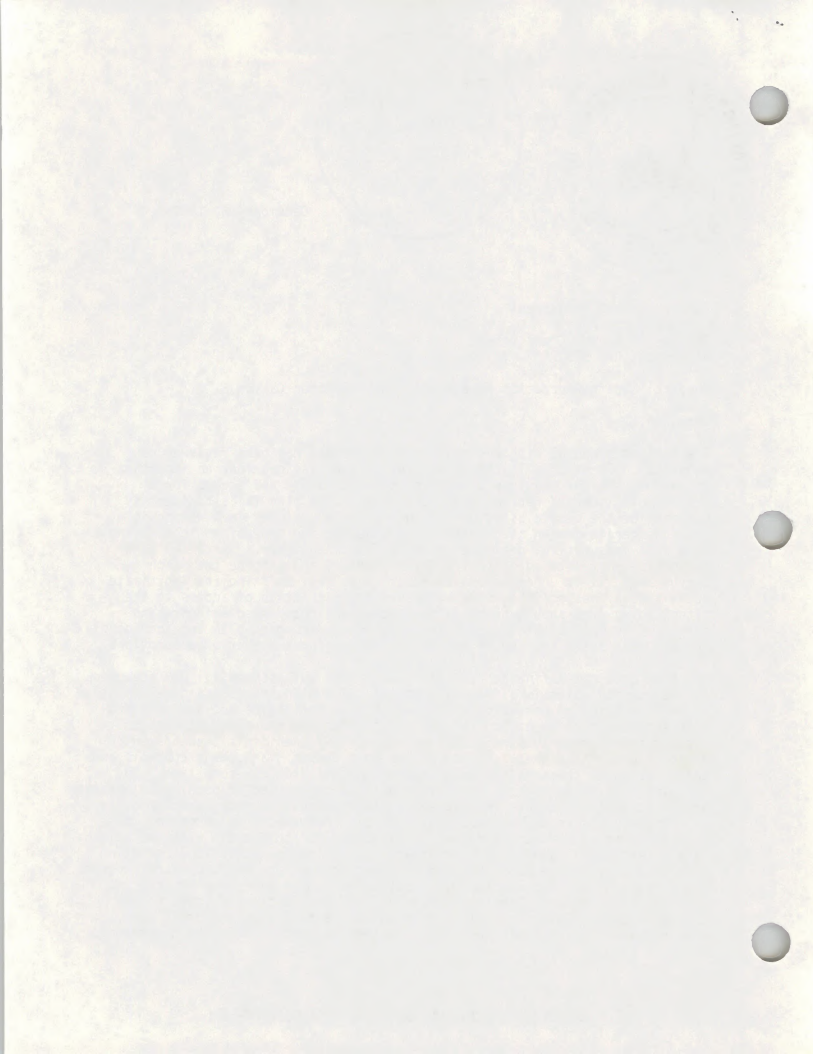
Bureau of Land Management  
Cima Resource Area  
3623 H-101 Canyon Crest Drive  
Riverside, CA 92507

Subject: Draft Recreation Management Plan for Afton Canyon

Dear Sir,

The subject proposal with environmental assessment has been reviewed as requested. First of all, the objectives of the plan overlook an important issue that the ORV provides a means of transportation and access for a variety of dispersed recreational activities. The plan fails to identify how many of the people using ORV are using their vehicles in a responsible and considerate manner as compared to the number and type of vehicles being used in a consumptive, destructive or conflicting manner. Since the BLM has not attempted to adequately maintain, patrol and enforce the Afton Canyon area, it is unreasonable to restrict or deny existing and legitimate activities by responsible users. Closure or restriction of access to the Afton Canyon area should be based on factual and documented evidence and surveys. We fail to find such statistics in the proposed plan and accordingly believe that there are few if any valid grounds for a number of assumptions.

The plan does not define recreational use of ORV but assumes all ORV are used for recreation which is a false assumption. The plan addresses development and construction of horseback riding and hiking facilities but does not propose similar improvement for vehicle users. Instead the plan attempts to discourage and restrict the access and use of ORV when it is the apparent dominant use of the area. It is obvious that proper management controls and enforcements of the area has been lacking in this area for some time. No existing legitimate uses in the area should be restricted or prohibited because of the foregoing reason. Instead every effort should be made to accommodate all current uses in an acceptable plan to all concerned. We recommend that a master plan of ORV access routes be developed for this area with the help of the responsible users. The necessary facilities, construction, rerouting with an access bridge could be funded through the State ORV Fund Grant program. The members of our Association will assist the BLM in every way in order to develop the necessary planning, surveying and construction of these routes and facilities. This proposal is offered in the fact that the draft plan does not identify any existing trails in the area except near the campground.

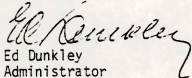


We concur with the proposed actions on page one, Section III, Alternative #1, of the EAR, except as explained in the preceding paragraphs.

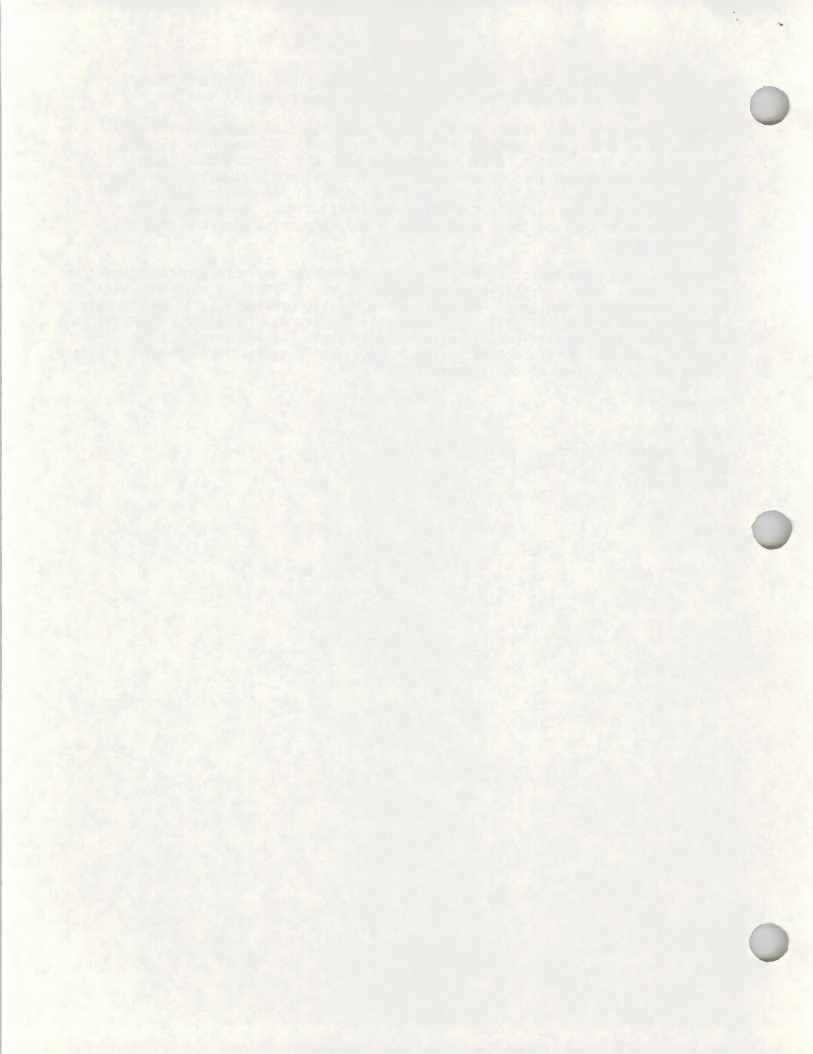
We also agree that many roads, trails and areas subject to damage by ORV playing should be closed and rehabilitated. Absolutely no ORV should be allowed to play in the high density areas, especially near the campgrounds. Speed zones should be established in all areas of potential conflict with other users. Riparian values, water quality and wildlife protection and enhancement must be provided sensible and adequate consideration at all times. Segregation of various types of ORV and their uses may be a solution to some of the problems being experienced.

In general, the plan is not specific enough to provide any more logical comment and of course, we believe it is up to the public to tell the BLM what they want to see developed in the area. We think there are appropriate ways to accommodate all valid uses of public lands in a reasonable and acceptable manner. That is why we offer you our services and experience in surveying and developing an acceptable network of ORV access routes for our family recreational needs. Please advise of action taken on our proposal.

Sincerely,

  
Ed Dunkley  
Administrator







## SIERRA CLUB

Southern California Regional Conservation Committee

BLM Cima  
Resource Area

3730 Higbee  
Lancaster CA 93534  
27 Dec 1979

RECEIVED

JAN 7 1980

Bureau of Land Management  
Cima Resource Area  
3623 H-101 Canyon Crest Drive  
Riverside CA 92507

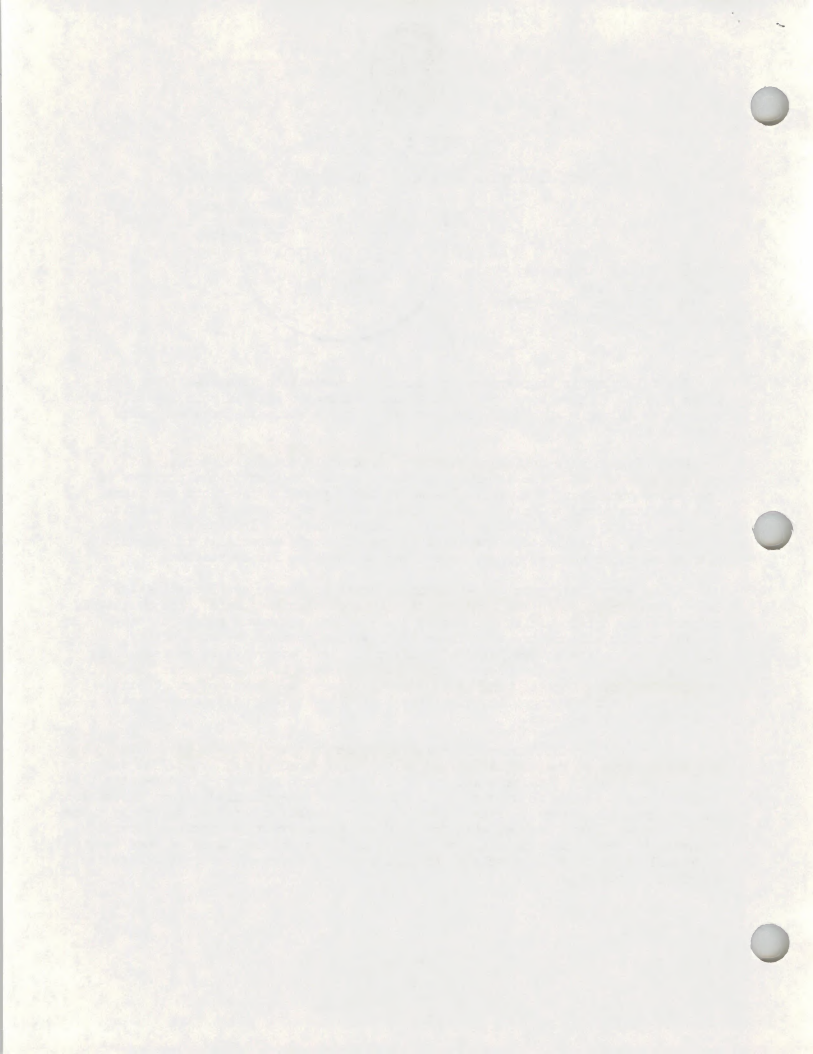
Sirs:

The following is in response to your draft Recreation Management Plan for Afton Canyon. I have some specific recommendations to make in this regard, but would like to begin with some more general comments about the area and your planning effort.

Afton Canyon is a unique combination of natural, scenic, historic, and recreational values. The determining factor in all of them is the presence of open water throughout the year. The water makes possible the flora and fauna. They are thus bound to this riparian area. Water, of course, cut the scenic cliffs. Water, and the passage it cut, brought first the Indians and then the pioneers and the railroad. The availability of water, especially in conjunction with these other values, brings modern man to the area for recreation.

Unlike many other popular recreational areas in the Mojave Desert, Afton Canyon has a real potential for enjoyment by non-motorized users. Its relatively compact area, opportunities for nature observation, and ready access to the general public all combine with these other values to make the area highly suitable for nature lovers, hikers, equestrians, and others whose recreation is not tied to an off-road vehicle. Unfortunately, here as in many other places, motorcycles, dune buggies, and other off-road users have taken over. Their noise, dust, and the physical scars they leave have largely displaced these other more passive users.

Thus my primary criticism of your draft plan is that it seems to address just the continuance of the status quo: Afton Canyon as an ORV play area. You do not look at these basic qualities and try to fit them into any sort of long-range plan. We are already seeing an upswing in the demand for non-motorized desert recreation, and the probable future increases in the cost of vehicles and fuel will only cause this to grow. Afton Canyon, with its rich values and relatively close proximity to urban Southern California, is an obvious choice to be dedicated to such use. Your failure to do so is simply a continuation of a short-sighted, unimaginative approach to planning.



The second major point I would like to make is that nothing can be done in Afton Canyon without a firm and sizable commitment of resources from BLM. Even the modest measures proposed in your draft will be impossible to achieve without a regular ranger presence and active enforcement action. To attempt to achieve the more equitable balance of recreational use we are urging will require a residential presence on a seasonal basis.

Such an action, given this commitment, is quite feasible. A far more popular ORV area with similar qualities, Redrock Canyon, north of Mojave, has made a very successful transition to a diversified use pattern under management as a California State Recreation Area. What was required was (1) a recognition of the true potential of the area, (2) a management plan responsive to that potential, and (3) a ranger in residence to give interpretive services and provide enforcement.

The two principal objections that are raised to the policy we recommend are that ORV's have a right of access too and that ORV use will be displaced to other unknown locations. I would answer these as follows.

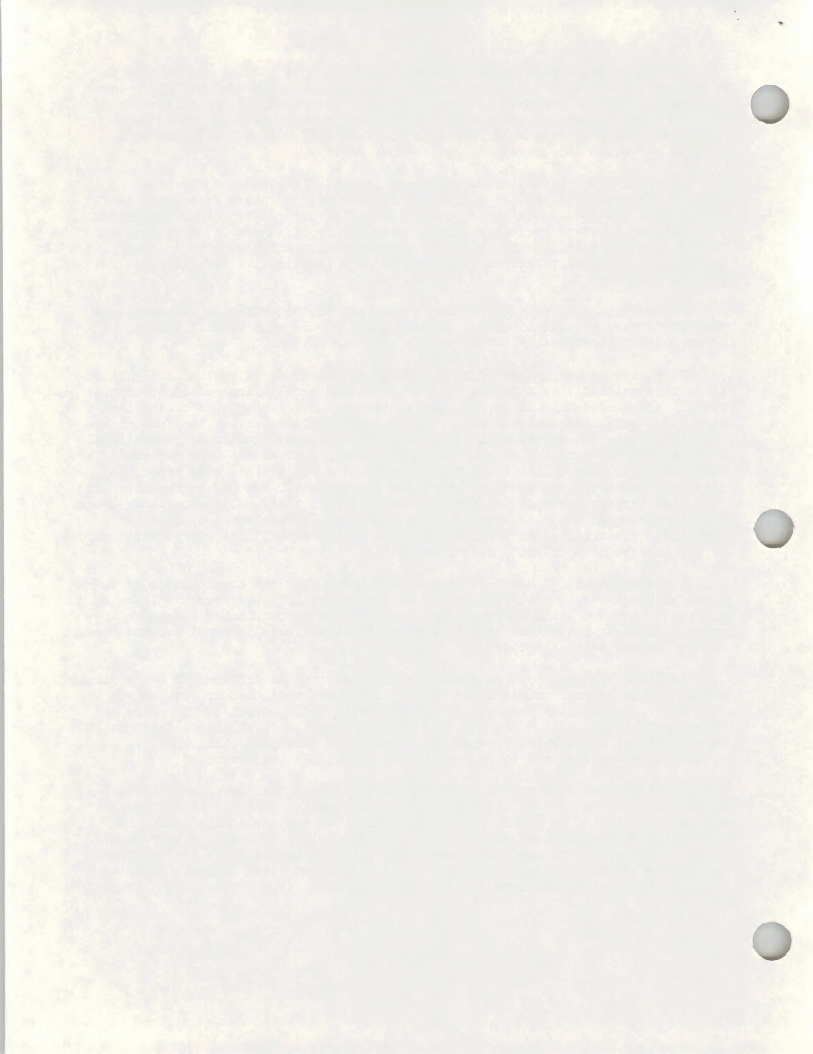
ORV's have no guaranteed right of access to all areas of public land. It is BLM's responsibility as managing agency to provide a full range of opportunities for all users of public lands, subject to the resource constraints of the land to support some categories of use. In the case of Afton Canyon, two factors are thus involved: the actual ability of the area to support continued recreational ORV use, and the conflict of such use with the right to access (and enjoyment) by other user groups. Unlike these other groups, the small size, open water, and other qualities present detailed above are not essential for ORV recreation. In fact, the very presence of ORV use is destructive of these values for other users. Under these conditions, it appears to be a reasonable management decision to permit and encourage those user groups whose needs best fit the characteristics of the area to have priority in access to it.

Displacement of ORV users obviously will occur, but the total number of such users is a relatively small proportion of the general ORV user group. I see no difficulty in them being absorbed into the much larger population elsewhere in areas where such recreation is both more suitable and being planned for and managed by the BLM and other agencies.

Finally, I have not yet commented specifically on the problems of ORV's direct impact on the natural values of the area. These are mentioned to some extent in your EAR (although Mike Weinstein's observations on the impact of ORV noise on breeding bird populations are omitted). The disruption of wildlife, destruction of vegetation, accelerated erosion, disturbance of paleontological and archeological values, and other results of current ORV use are noted.

I do not agree with your analysis of alternatives. You say that Alternative 2, with its removal of the campground from the riparian area and significantly greater restriction on vehicular access, would have same or similar effect on vegetation and wildlife as the proposed action. This just does not make sense, as this removes the two principal sources of disturbance of these values that are present in the proposed action. I will not go into this in detail here, as I expect other letters to address these discrepancies. As you note, Afton Canyon





is a very likely candidate for an Area of Critical Environmental Concern (ACEC), and these issues will doubtlessly be addressed again when that is considered.

My specific recommendations are quite similar to your Alternative 2.

1. Move the campground out of the river bottom. It could be sited on the bench above the current location where group camping now occurs. It would include some provision for equestrian use. BLM's practice of locating horse in a separate camping area is unnecessary. Simply providing a corral facility at one end of the area is quite sufficient.
2. The current campground loop would be converted into an interpretive nature walk. A vehicle barrier would be placed at the entrance.
3. Unrestricted vehicular use would be permitted as far as the railroad crossing and entrance to the current campground. A parking and picnic area would be located at this location.
4. Vehicular access beyond the parking lot would be limited to permitted vehicles. Permits would be issued by the Cima Resource Area. Those with valid existing rights would be issued permits, and consideration would be given to academics (researchers and class study groups) and other structured recreational users.

The intent would be to establish a firm, positive limitation on random recreational use of the canyon bottom, not to keep all traffic out. Also, the vehicular route from the eastern part of Section 8 across Section 17 to the canyon bottom at the west end of the gooseneck would be closed. The route across the bench would remain open for access to private land.

5. A BLM representative would be in residence on a seasonal basis during the non-summer months. Ideally, this would be a ranger. If not, frequent ranger visits would be made.


6. An active interpretive program would be available to assist recreational users to appreciate and protect the resource values present.

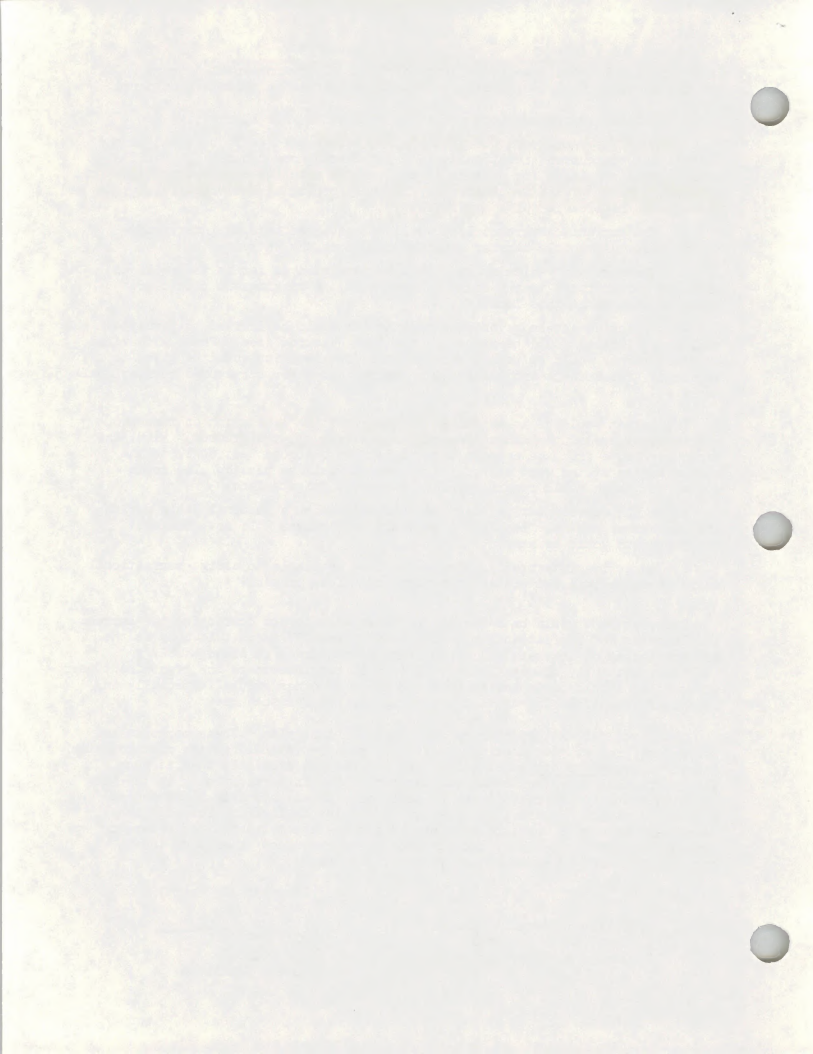
These actions would be a strong, positive step toward correcting the current imbalance in BLM recreational planning that favors ORV users. As long as the primary thrust of interest and expenditure of resources is aimed at ORV's (whether positively or negatively), ORV's will continue to be the predominant user group. BLM should begin now to meet the needs of other groups, especially in locations like Afton Canyon that are highly suited for such use.

Thank you for the opportunity to comment on this plan. These comments and those I offered at your meeting at Afton Canyon are intended in the most positive manner to be constructive criticism, and I trust you will take them as such. The Sierra Club takes seriously its responsibility in participating in the BLM planning process, and hopes to be of assistance in any specific implementing actions required. We are fully prepared to assist in lobbying for additional management resources when they are needed for the accomplishment of necessary management actions to either protect endangered resources or enhance the opportunities for non-consumptive recreational use.

Respectfully yours,

CY TO: G. Hillier, District Manager  
J. Ruch, State Director  
F. Gregg, BLM Director

  
JIM DODSON  
Desert Committee



December 26, 1979

BLM/Cima  
Resource Area  
RECEIVED

BLM  
Cima Resource Area  
3623 H-101 Canyon Crest Drive  
Riverside, Calif. 92507

Gentlemen,

I am writing in reference to the Recreation Management Plan for Afton Canyon Area. I have reviewed the Draft Afton Canyon Recreation Management Plan and E.A.R. I have been involved in resource management during my college years and with my background in Biology and Veterinary Medicine I feel I should comment on the proposed plan and alternatives.

I feel the proposed action fulfills the need for protecting the purpose of conservation of the particular resources in this area. Alternative 1 would do this also and lessen the governmental involvement and costs which probably need considered. Alternative #2 would be too restrictive and would discourage use by families or individuals as access would be for those of strength and conditioning to hike into the scenic canyon area. The area has experienced heavy impact from campers at the campground, from mining, from railway, right of way and traffic, and off road vehicles. Thusly, it cannot be described as a pristine area and resorting to such restrictive measures as in Alternative #2 is not justified. I think it desirable to preserve the riparian area to the west of the railway and around the campground to the east. I believe at the eastern entrance of the Mojave River Gorge off road vehicle use of the river bed and existing roads would not be harmful as the water surfaces and then disappears and traces of use are of minimal impact to the environment.

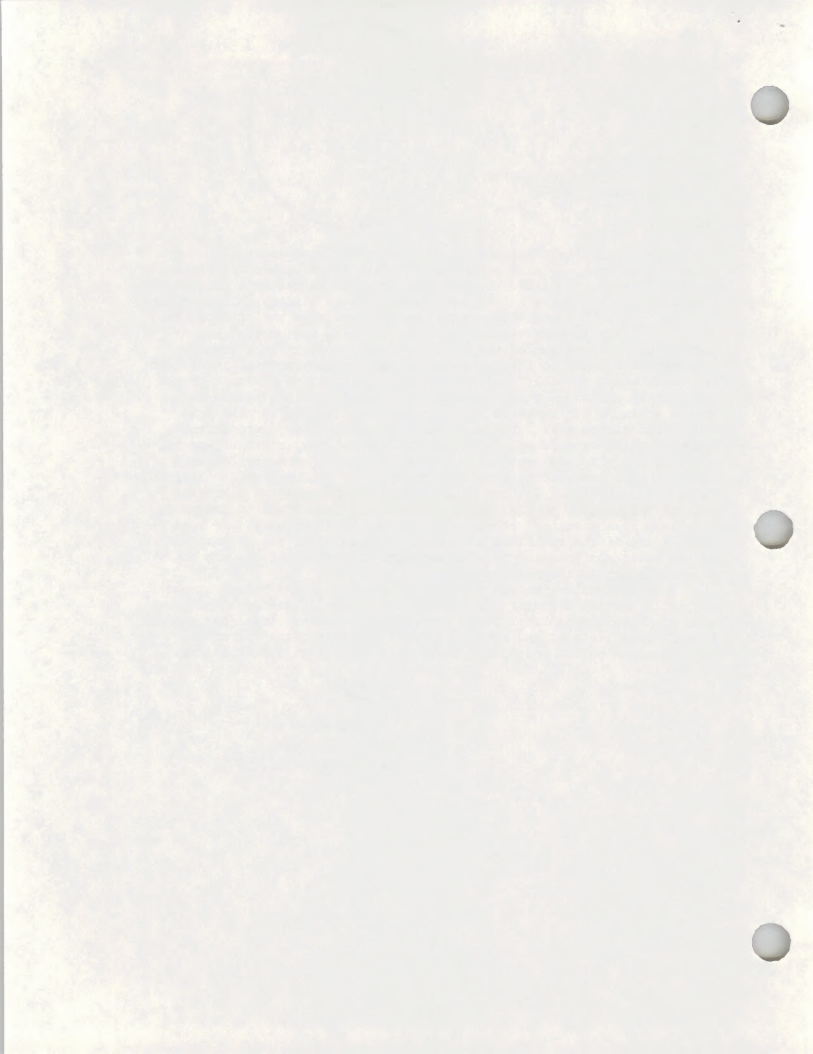
I believe this area can still be preserved for the values it has and still provide a proper mix for use by the public whether their mode of travel be on foot, horse or off road vehicle. Trail designation for off road vehicles and access restrictions around the riparian habitat areas should accomplish the proper objectives for this area.

Sincerely,

*Sharon A. Hays D.V.M.*

9885 Colony Grove  
Villa park, Calif. 92667





BLM/Cima  
Resource Area  
RECEIVED

JAN 7 1980

533 S. Harvard, #203  
Los Angeles, CA 90020  
December 26, 1979

BLM, Cima Resource Area  
3623 H-101 Canyon Crest Drive  
Riverside, CA 92507

Dear Mr. Hillier:

After visiting Afton Canyon last month for the first time, I sent a letter in favor of closing the campground. Now that I have read the Management Plan, I believe that the "Proposed Action" plan would adequately protect the natural resources. The first and third alternatives will not provide this protection, and the second seems unnecessarily strict.

Additional comments:

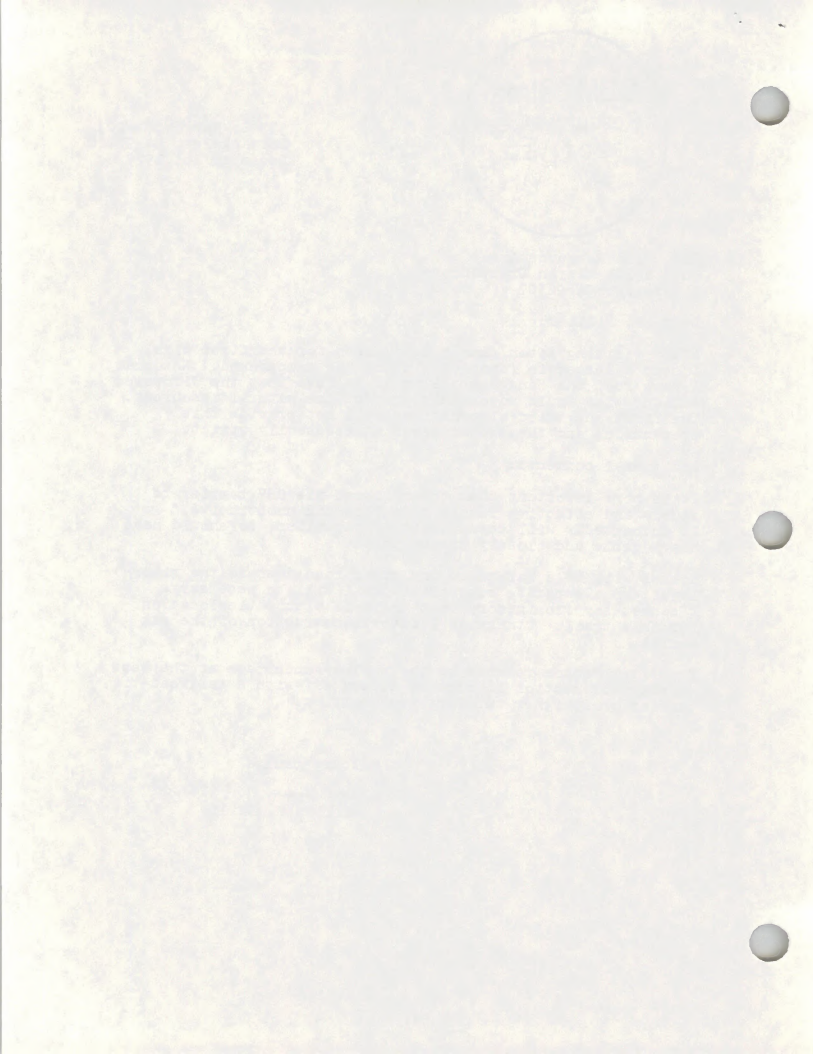
It is more important that the railroad-tie ORV barrier be sturdy and effective rather than "low and unobtrusive." It undoubtedly will be a target of vandalism, so should have heavy cable and closely spaced posts.

Horses will be a hazard on the steep road down to the river level, so a separate equestrian trail will be necessary. I cannot say from memory that there is a suitable location for this trail. Otherwise I favor construction of the ~~xxx~~ corral.

The river bottom reached by the railway underpass at the west boundary of section 18 must be closed off with a railroad-tie barrier or a higher tubular steel barrier.

Yours truly,

*William M. Neill*  
William M. Neill



MR. JOEL MUR  
CIMA RESOURCE AREA, BLM  
3623 H 101 CANYON CREST DRIVE  
RIVERSIDE, CA 92507

JAN 11 1988



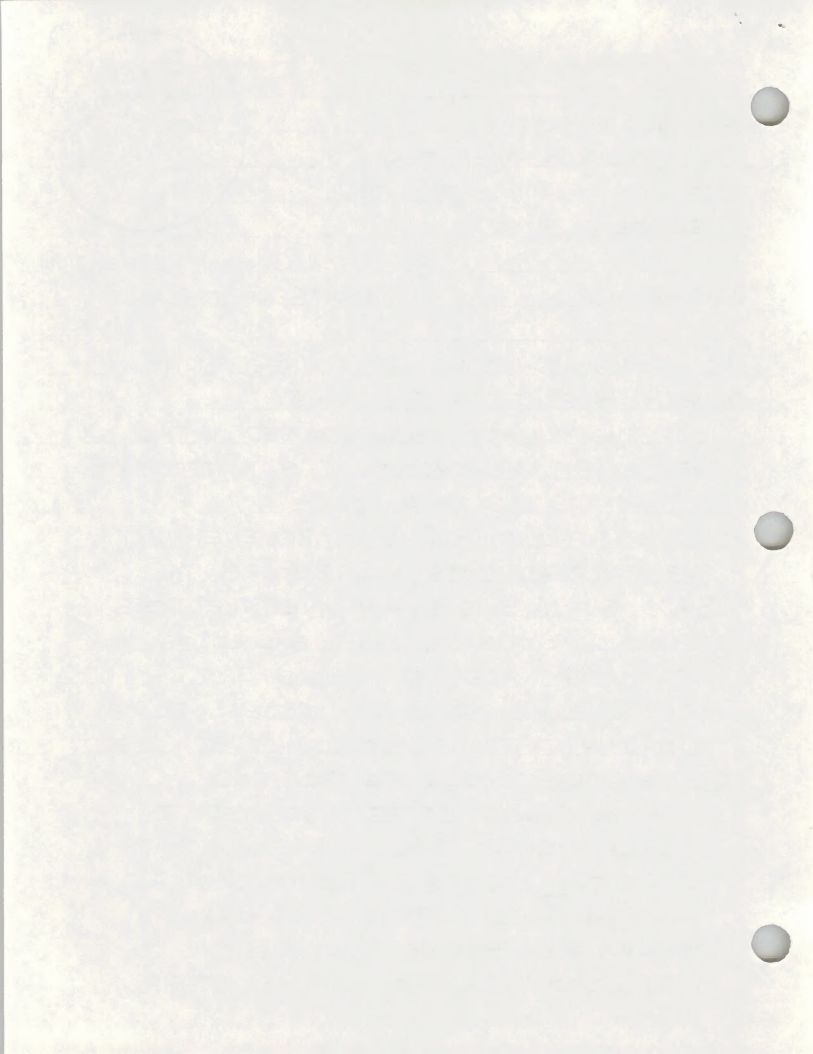
RE: AFTON CANYON RECREATION  
MANAGEMENT PLAN

DEAR MR. MUR:

AS A CONCERNED USER AND 4 WHEEL DRIVE  
OWNER I SUBMIT THE FOLLOWING:

1. IF THE PRIMARY ABUSE CAUSED IN THIS  
AREA IS BY MOTORCYCLES IT IS INAPPROPRIATE  
TO CLOSE THE AREA TO ALL ORV'S.
2. IT IS DIFFICULT FOR ME TO BELIEVE THAT  
THE RAILROAD DOES NOT DISTURB THE  
BIRDS BUT A SINGLE 4WD VEHICLE DOES.
3. EXISTING ROUTES OF TRAVEL SHOULD BE  
OPEN AS THIS AREA IS A GOOD SPOT  
FOR 4 WHEELING. SOUTHERN ACCESS ROUTES  
TO THE 4WD TRAILS SHOULD NOT BE CLOSED  
OR NEW ONES SHOULD BE PROVIDED.
4. CAMPING SHOULD NOT BE RESTRICTED TO  
BLM CAMPGROUNDS. SOME USERS (AND THAT'S  
OK FOR THEM) MAY ENJOY PULLING UP ON A  
PAVED PARKING LOT IN THEIR MOTOR HOMES,  
BLASTING THEIR STEREOS, (WHAT DOES THIS DO  
FOR THE BIRDS?) OR WATCHING TV FROM THEIR





VIDEO TAPE MACHINES AND THEN GO HOME AND FEEL LIKE THEY HAVE BEEN CAMPING. PEOPLE THAT TRULY ENJOY THE OUTDOORS SHOULD BE ALLOWED TO CAMP IN DESIGNATED PRIMITIVE CAMPING AREAS AWAY FROM WHAT I CALL THE "CAMPING JET SET."

5. DEVELOPMENT OF A GROUP CAMPSITE ABOVE THE EXISTING CAMPSITE DESIGNATED FOR EQUESTRIAN USE IS DESIREABLE. AN INFORMATION FLYER WOULD ALSO BE HELPFUL.

6. THE SIERRA CLUB'S PROPOSAL TO TOTALLY CLOSE THE CANYON BUT TO ALLOW THE RAILROAD TO CONTINUE TO USE THE EXISTING ROUTE IS RIDICULOUS. (SEE ITEM 2).

I WOULD APPRECIATE YOUR CAREFUL CONSIDERATION OF THESE COMMENTS PRIOR TO MAKING A DECISION REGARDING FURTHER CLOSURES AND RESTRICTIONS IN THIS AREA. PLEASE SEND ME A COPY OF THE TOTAL PLAN FOR THIS AREA.

SINCERELY,

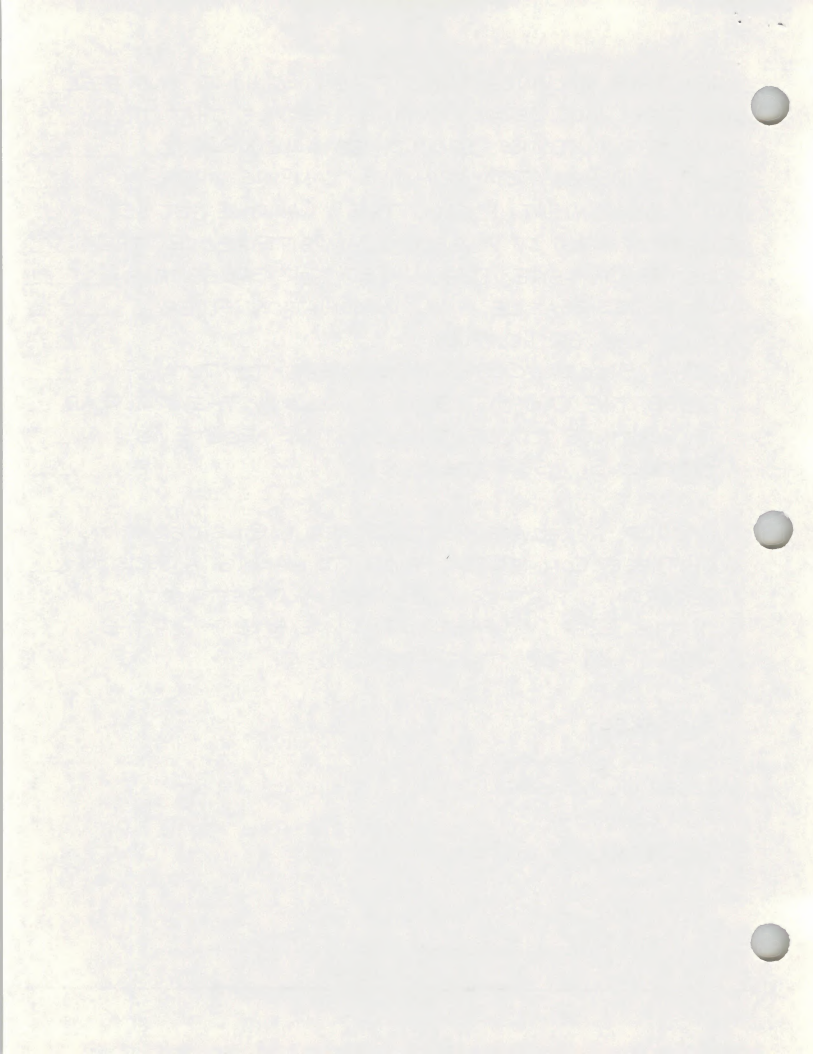
*Joseph C. Sasgen*  
JOSEPH C. SASGEN

P.O. BOX 7194

BURBANK, CA 91510

CC: SENATOR S. HAYAKAWA

U.S. CONGRESSMAN JAMES C. CORMAN



828 James Pl.  
Pomona, Calif. 91767

January 13, 1980

BLM/Cima  
Resource Area  
RECEIVED

JAN 13 1980  
JAN 16 1980

Joel Mur  
Cima Resource Area  
BLM  
3623 H 101  
Canyon Crest Dr.  
Riverside, Calif. 92507

Dear Mr. Mur:

The proposal to drive along the railroad access would be very hazardous and I would prefer to keep the existing access roads to the canyon open for vehicle traffic.

Also, additional access to the south canyon wall at the east end of the corridor should be allowed. Namely, the road leading up the alluvial plain west of the last railroad trestle which would allow for a scenic loop continuation of an excellent 4-wheel drive trail. I recently enjoyed driving on this trail which begins at the railroad station, continues along the south rim of the canyon, and ends just west of the last railroad trestle and I would not like to see the road closed.

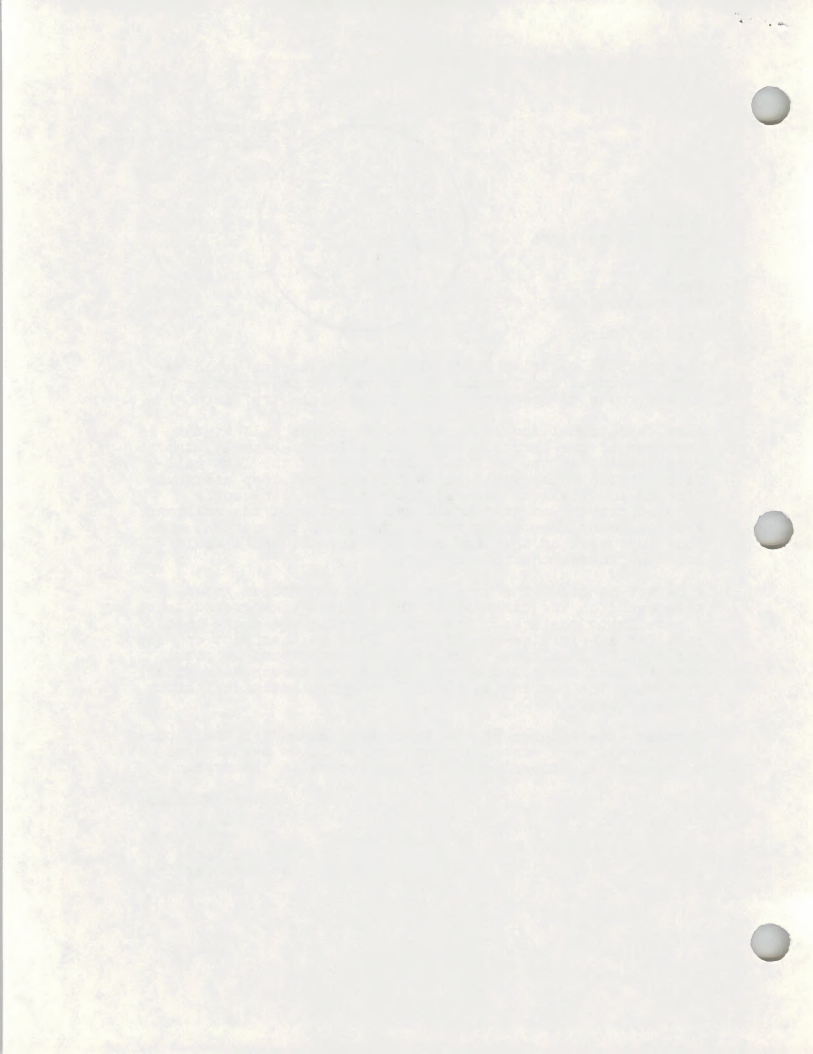
I do not consider the proposal for an equestrian group campground on the rim west of the existing campground to be a benefit to the area. Presently, groups are using that area for a primitive campground. They neither want or need additional facilities. The existing campground is not heavily used and could be reorganized to accommodate groups by moving the barricades and allowing for additional group parking areas.

Further expenditures of the taxpayers' money for these purposes would be a waste of funds and could be better used to acquire additional property and access in the area.

Sincerely yours,

*Ron Watkins*  
*Roberta Watkins*  
Ron Watkins  
Roberta Watkins





## Appendix C

### Land Status

There are approximately 17,520 acres of land in the Afton Canyon Recreation Area. Approximately 9,840 acres are public land and 7,680 acres are private. Approximately 6,200 acres of the private holdings belong to the Southern Pacific Land Company and approximately 1,480 acres belong to other private owners.

#### 1. Existing Leases

A grazing allotment lessee holds a lease on 1,213.61 acres of public land in the Afton Canyon Recreation Area. The lease includes the following lands:

T. 11 N., R. 6 E., SBM,

Sec. 18, S $\frac{1}{2}$ SW $\frac{1}{4}$ ;

T. 11 N., R. 5 E., SBM,

Sec. 14, S $\frac{1}{2}$ , NE $\frac{1}{4}$

Sec. 24, all.

Southern Pacific Land Company leases the following land in the Afton Canyon Recreation Area to the same lessee.

T. 11 N., R. 5 E., SBM,

Sec. 15, all.

#### 2. Withdrawals

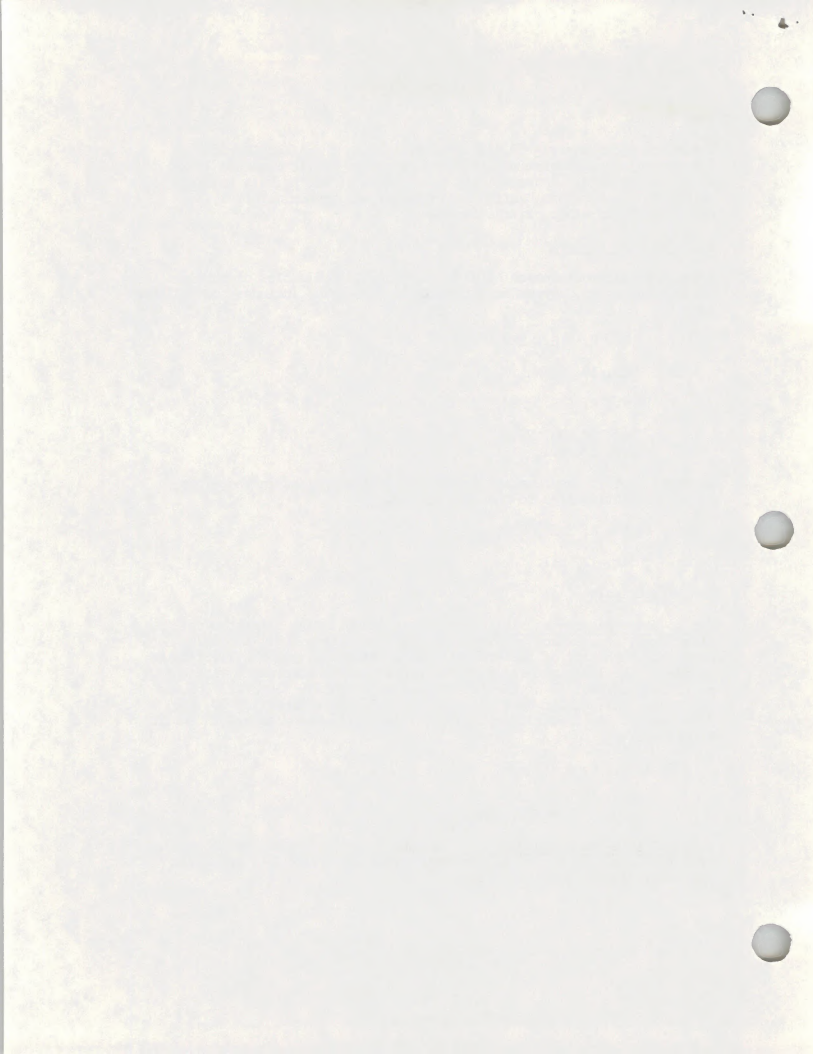
Public Water Reserve No. 107: PWR 107 is a continuing blanket type withdrawal; it was made by Executive Order effective April 17, 1926 under the authority of the Pickett Act (36 Stat. 847, 43 USC 141-143) as amended. The lands are reserved for public use in accordance with the provisions of Sec. 10 of the Act of December 29, 1916 (39 Stat. 865, 43 USC 300). This Public Water Reserve No. 107, (Interpretation No. 136) dated August 28, 1930, identified the lands noted below as within Public Water Reserve.

T. 11 N., R. 6 E., SBM,

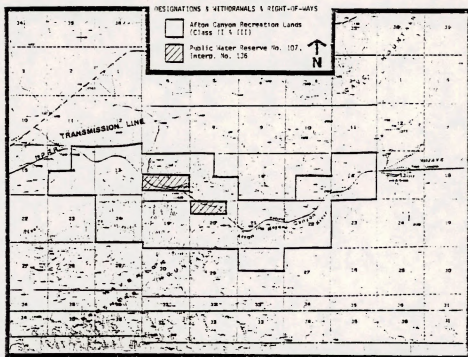
Sec. 18, N $\frac{1}{2}$ S $\frac{1}{2}$

Sec. 20, NW $\frac{1}{2}$ NE $\frac{1}{4}$ , N $\frac{1}{2}$ NW $\frac{1}{4}$

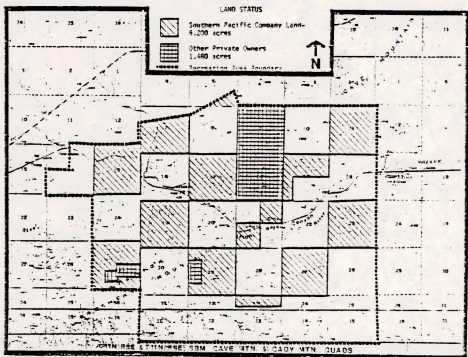
3. Multiple-Use Management Act: Pursuant to the Act of September 19, 1964 (43 USC 1411-18) and to the regulations in 43 CFR 2410 and 2411, the public lands described below



### LEGEND



### LEGEND







are classified for multiple-use management. The described lands were segregated from appropriation under the agricultural land laws and from public sale on July 22, 1968 (serial number R1217):

T. 11 N., R. 5 E., SEM, all

T. 11 N., R. 6 E., SEM, all

The following lands were also segregated from appropriation under the mining laws (30 USC Ch. 2) (serial number R1217):

T. 11 N., R. 6 E., SEM,

Sec. 14, lots 1 to 9, inclusive, NW $\frac{1}{4}$ NE $\frac{1}{4}$ , N $\frac{1}{2}$ NW $\frac{1}{4}$ , SE $\frac{1}{4}$ ;

Sec. 15, E $\frac{1}{2}$ SW $\frac{1}{4}$ , SE $\frac{1}{4}$ ;

Sec. 18, lots 1 to 4, inclusive, NE $\frac{1}{4}$ , E $\frac{1}{2}$ W $\frac{1}{2}$ , SE $\frac{1}{4}$ ;

Sec. 20;

Sec. 21, NW $\frac{1}{4}$ , N $\frac{1}{2}$ SE $\frac{1}{4}$ ;

Sec. 22.

4. Public Land Order 5224: Land totaling 320 acres was withdrawn for the protection of recreation and public values under authority of Executive Order No. 10355 of May 26, 1952. Subject to valid existing rights the following described public lands were withdrawn from all forms of appropriation under the public land laws, including the mining laws (30 USC Ch. 2):

T. 11 N., R. 6 E., SEM,

Sec. 18, Lots 3 and 4, E $\frac{1}{2}$ SW $\frac{1}{4}$ , and SE $\frac{1}{4}$ .

5. Existing Designations

Afton Canyon Recreation Lands: Under the authority of 43 CFR 2070, 6,653 acres by public land were designated as Afton Canyon Recreation Lands by the Secretary of the Interior on July 1, 1972:

Class II - General Outdoor Recreation Area

T. 11 N., R. 6 E., SEM

Sec. 17, W $\frac{1}{2}$ , SE $\frac{1}{4}$

Secs. 18, 20, 21

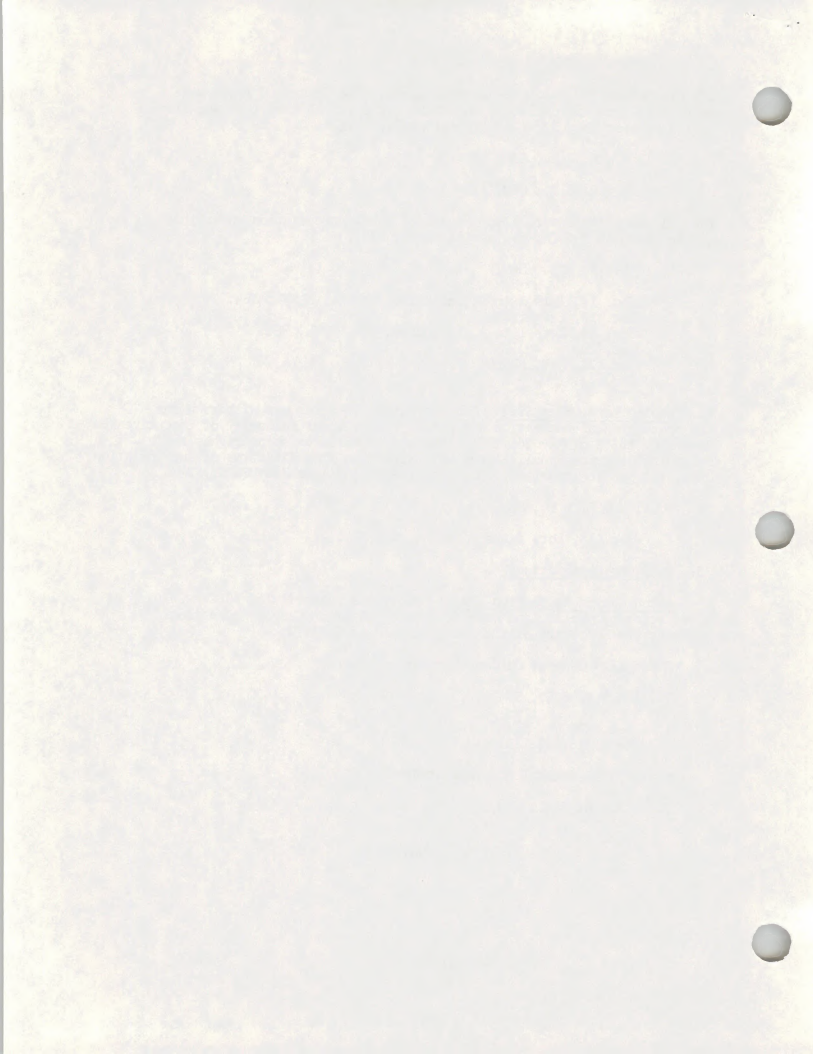
Class III - Natural Environment Area

T. 11 N., R. 5 E., SEM,

Sec. 13

Sec. 14, Lots 1, 2, 3, 4, NE $\frac{1}{4}$ , N $\frac{1}{2}$ S $\frac{1}{2}$

Sec. 24



T. 11 N., R. 6 E., SBM

Sec. 14

Sec. 15, E $\frac{1}{2}$ SW $\frac{1}{4}$ , SW $\frac{1}{4}$

Secs. 19, 22

Sec. 28, N $\frac{1}{2}$

6. Federal Land Policy and Management Act: By this act of the Congress on October 21, 1976, the following lands were included in the California Desert Conservation Area:

T. 11 N., R. 5 E., SBM

T. 11 N., R. 6 E., SBM

7. Existing Rights of Way or Encumbrances

Union Pacific Railroad (LA 019191 & R 01531) 100 feet from either side of the centerline, Secs. 13 & 14, T. 11 N., R. 5 E., & Sec. 13, 14, 15, 18, 20, 21, & 22, T. 11 N., R. 6 E.

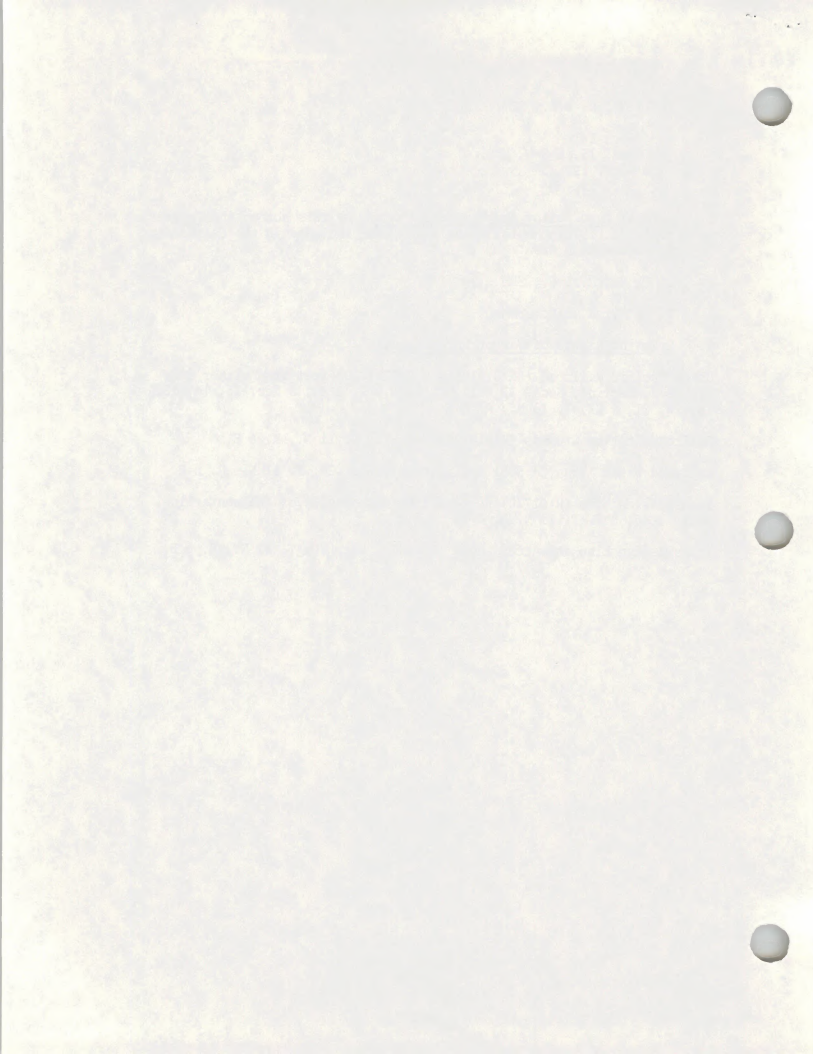
Railroad Station Grounds (R 01529), Sec. 17, T. 11 N., R. 6 E.

Railroad Waste Area (CA 5061 application), Sec. 20, T. 11 N., R. 6 E.

Transmission Line (R 01730) 50 feet from either side of the centerline, Secs. 5, 6, & 7, T. 11 N. R. 6 E.

Transmission Line and Access Road (R 2441), Sec. 20, T. 11 N., R. 6 E.





Appendix D

Letters - The following are three letters received by the BLM on Afton Canyon prior to the preparation of the interim plan.

Letter dated March 11, 1979, found in fee collection envelope:

Sir:

Throughout our thousands of miles traveling about our country, I have yet to encounter anything like this campground. Between the constant noise of off-road vehicles (bikes, Hondas, dune buggies, etc.) in and around the camp; the chemical toilet is so bad one needs a gas mask to get within 100 yards of it.

Due to the disappointments, we are signing out much earlier than planned.

Letter dated November 9, 1978, found in fee collection envelope:

In the 20 years we've been camping, we've never run across such an inconsiderate group of people as came in today with 6 cycles, 2 dune buggies and 1 jeep. They chase (sic) the campgrounds as a race track instead of going out of camp. They were asked nicely to slow down and ignored the request.

We came away from the city to enjoy the fresh air, peace and quiet; it was worse here than at home.

We donated our \$2.00, as we cannot bear the attitude of the people. We've been here twice before; however, we may never come back.

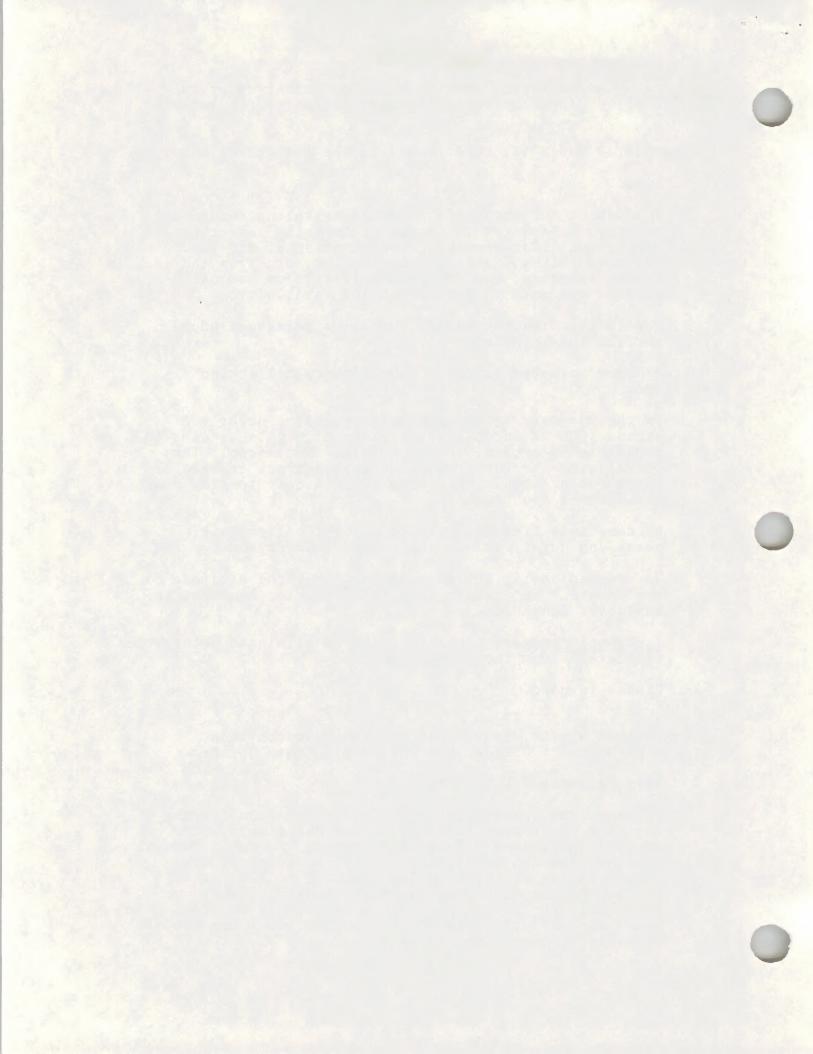
I strongly suggest a posted speed or eliminate motorcycles completely from the campgrounds!

Please respond.

Letter dated May 10, 1979, sent to Cima Resource Area, Riverside District Office, and California State Office:

Where are the B.L.M. Rangers?

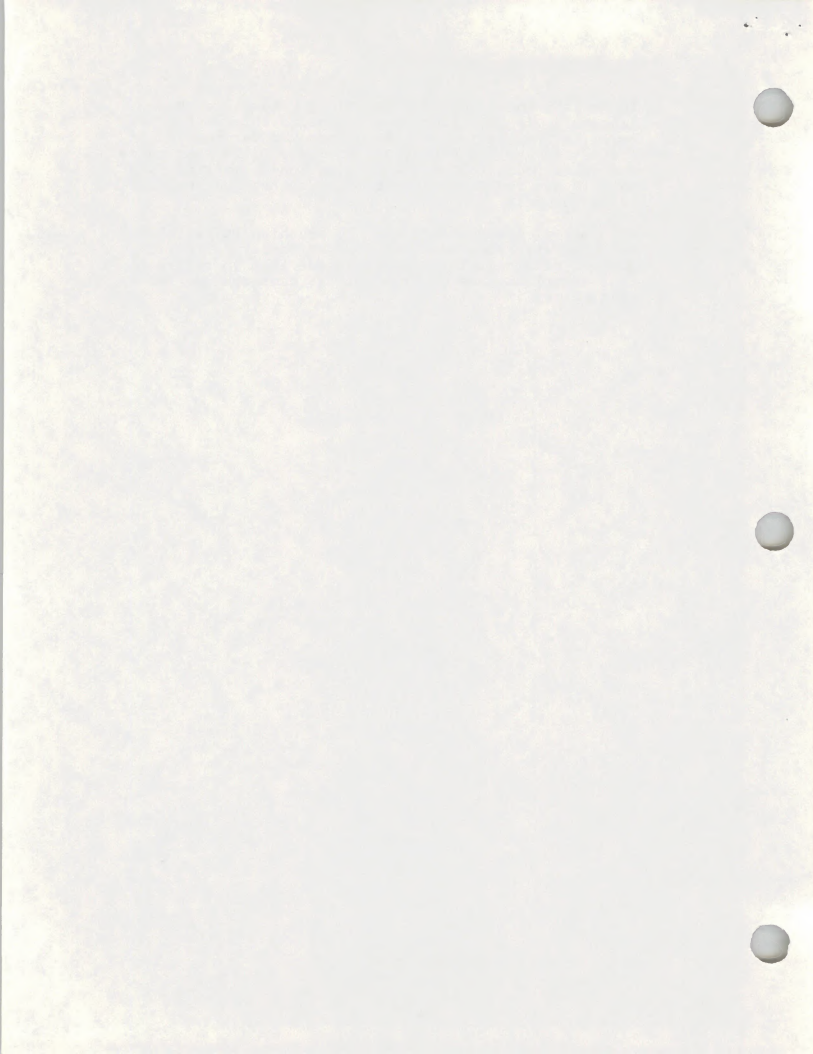
We spent the weekend of April 28, 29 at Afton Canyon, arriving about noon Saturday. From the time of our arrival until past 8:30 in the evening and again Sunday, dune buggies and motorcycles raced in and about the camp creating excessive noise and dust. Then, as we sat around the fire ring Saturday evening, a shot was fired with the bullet passing so close that we all heard the whiz and breaking brush just above our heads and on the other side of the fire.



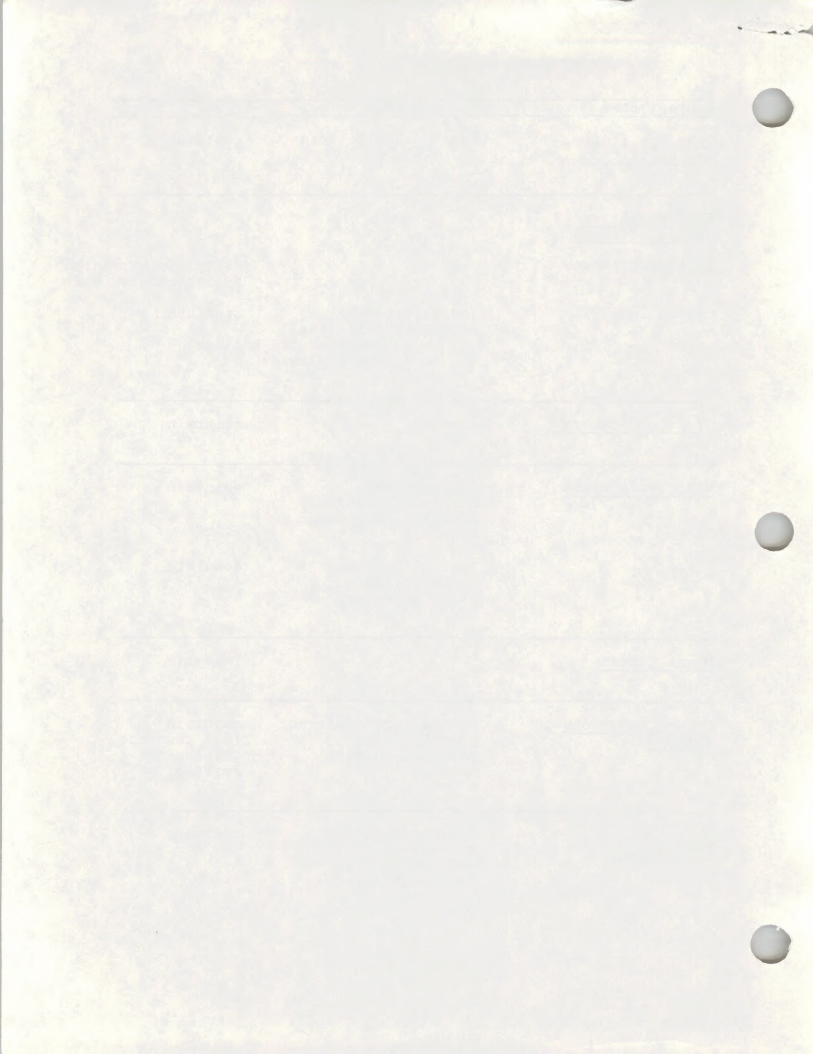
The reason for my opening question, "Where are the Rangers?" is that there was no one to enforce the rules and regulations of the campground during our entire stay at Afton Canyon. The only B.L.M. person we saw was a young fellow cleaning up Sunday morning, and he said his radio was inoperative, so he could make no calls for help.

The lack of enforcement, and the crashing bullet close overhead with the resulting fear my family felt will make it difficult for me to persuade them to return to that beautiful area or other B.L.M. campgrounds, for that matter.





<u>Project Item</u>	FY 80	FY 81
<u>Road and Trail Rehabilitation</u>	Begin rehabilitation	continue
<hr/>		
<u>Enforcement and Use Supervision</u>		
Backcountry Zone		Patrol as warranted by Backcountry use
Canyon Zone	Increase patrol, establish full-time (weekend and holiday) BLM caretaker	continue
<hr/>		
<u>Traffic Counters</u>	Install	maintain
<hr/>		
<u>Vehicle Barriers</u>	Increase the number of posts defining campground boundary	maintain
	Install post and cable barriers where necessary	complete
<hr/>		
<u>Horse Corral</u>		Install
<hr/>		
<u>Group Campground Toilets</u>	Contract or construct portable type chemical toilets	maintain (via contract with septic service)
<hr/>		
<u>Water Resource Monitoring</u>	Begin monitoring of water quality and stream flow of Mojave River	continue

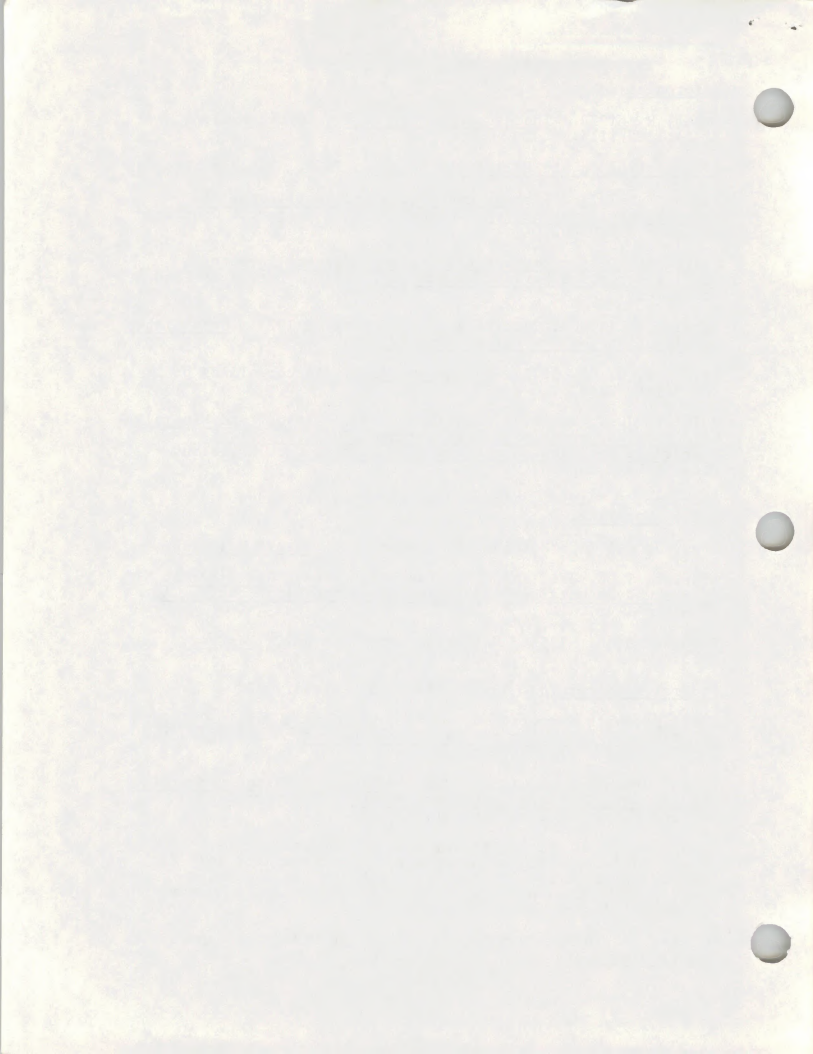


## Appendix H

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