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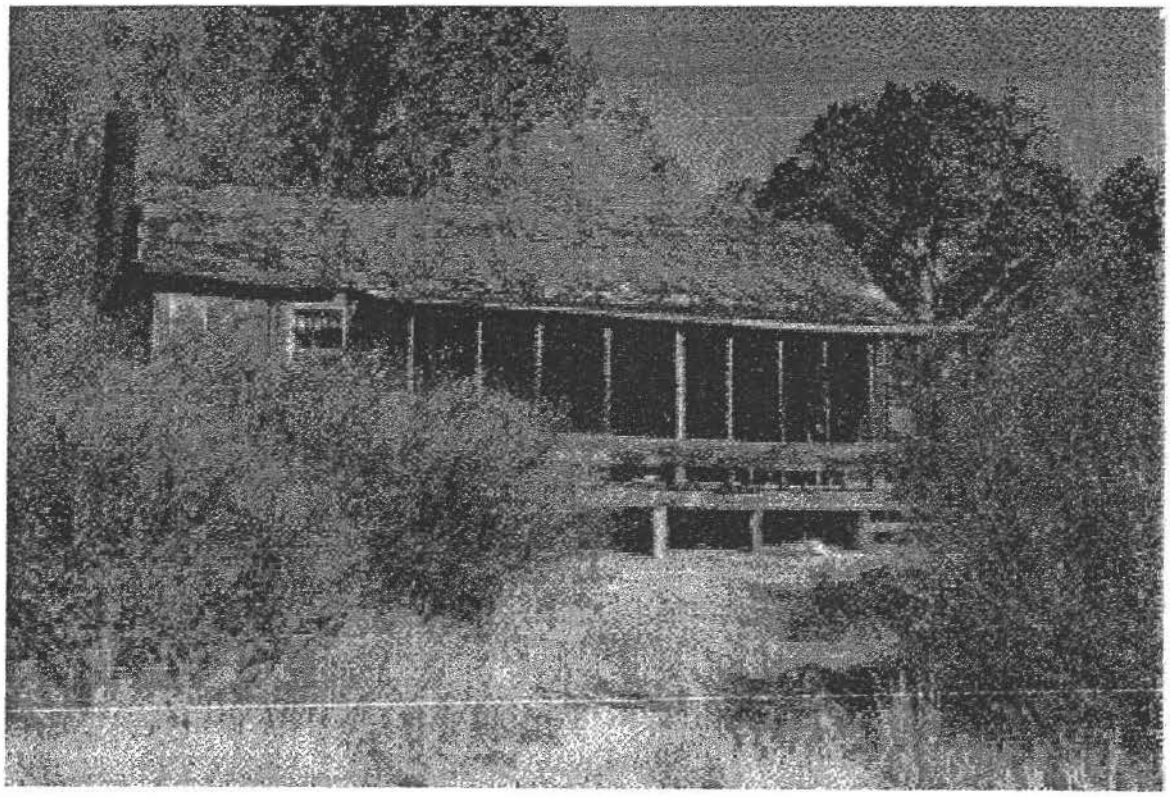
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Lake Mead NRA

October 17, 1997

Parashant Interdisciplinary Management Plan

Arizona Strip Field Office
Lake Mead National Recreation Area



Bureau of Land Management, National Park Service, Arizona Game and Fish Department, Natural Resource Conservation Service, University of Arizona Mohave County Extension and representatives from the Ranching Community and General Public

PARASHANT INTERDISCIPLINARY MANAGEMENT PLAN

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PARASHANT INTERDISCIPLINARY MANAGEMENT PLAN

I. INTRODUCTION

A. PURPOSE

The purpose of the interagency and interdisciplinary Parashant Management planning effort is to create a management strategy for the long-term use and conservation of the Parashant area. The goal is that the plan is ecologically sound, economically feasible and socially acceptable. This plan is comprehensive, issue driven and focuses on the resources. Valid existing management from other plans, such as Allotment Management Plans and Habitat Management Plans are incorporated. No other plans should be necessary for this geographic area.

Abbreviations and acronyms used in this document:

AGFD	Arizona Game and Fish Department
AMP	Allotment Management Plan
BLM	Bureau of Land Management
DPC	Desired Plant Community
GMP	General Management Plan (NPS)
HMP	Habitat Management Plan
LAME	Lake Mead National Recreation Area
MOU	Memorandum of Understanding
NPS	National Park Service
NRCS	Natural Resource Conservation Service
RCA	Resource Conservation Area
RMP	Resource Management Plan (BLM)
TCP	Traditional Cultural Property

B. VISION AND GOAL

The Vision

"Under the legislative mandate of the administering agencies, and by consensus, define future conditions for the Parashant area. Collectively develop the management actions necessary to achieve those conditions. Desired future conditions and management actions should provide for present and long-term human needs while maintaining sound ecosystems. Manage the resource values of the Parashant Area and determine desired future conditions to conserve and enhance healthy ecosystems and traditional lifestyles."

- Parashant Planning Team (5/24/94)

The Goal of this planning effort:

▸ Establish and maintain healthy, sustainable ecosystems for the benefit of all public land resources and resource users. This, in turn, will support local economies and maintain or enhance opportunities for sustainable livestock operations throughout the planning area, where authorized.

C. INTERDISCIPLINARY RESOURCE MANAGEMENT PROCESS

The Parashant Management Plan will be developed through an interdisciplinary team approach according to the Bureau's six-step interdisciplinary resource management process (Figure 1). Instead of a linear, one-time procedure, these six steps are considered a circular, ongoing program. The plan will be reviewed according to a set schedule and the process started again (Section VII).

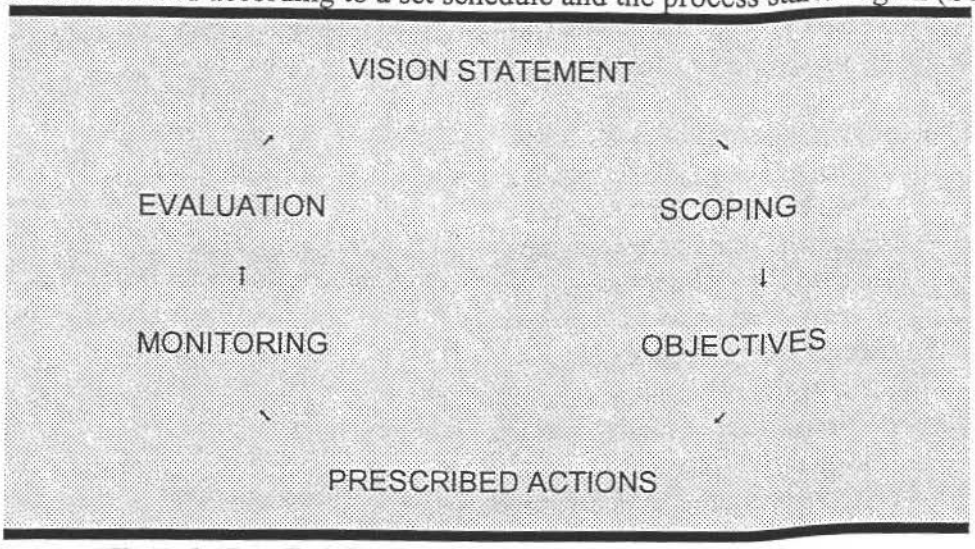


Figure 1. Interdisciplinary Planning Process

In addition to the interdisciplinary team, consultation and coordination with other entities will occur throughout the planning process.

D. RELATIONSHIP TO EXISTING PLANNING, RMP CONSTRAINTS, OTHER AGENCY CONSTRAINTS

General Laws and Policies

All actions prescribed in this document will comply and conform with existing laws and policies of the U.S. Government and the individual agencies involved.

Arizona Strip District Resource Management Plan

The Parashant Management Area is managed under the Arizona Strip District Resource Management Plan (RMP), approved in January, 1992. The RMP designated the Parashant Resource Conservation Area (RCA) and required a plan to be developed (decision RR10 and RR11). Although the Parashant Management Area is considerably larger than the RCA, this Interdisciplinary Management Plan is in conformance with the RMP.

The RMP recognizes the Parashant RCA as having special resource values including wildlife habitat, livestock grazing, recreation opportunities and important watersheds.

Management constraints imposed on the RCA by the RMP (decision #RR10) include:

Lands - Where feasible, linear rights-of-way (e.g., pipelines, utility lines) will be placed underground.

Minerals - Allow locatable mineral exploration and development subject to special stipulations attached to plans of operation to maintain and restore unique features and remoteness. These stipulations would be developed to address site-specific needs.

Recreation/Cultural - Provide a broad spectrum of backcountry opportunities with low managerial oversight and regulation. Protect remote character by limiting number or types of commercial recreation permits if necessary. Protect and interpret historic features. Conduct a Class II cultural resource inventory.

Parashant Allotment - No new permanent grazing authorizations on Parashant (former Gubler-Frei) allotment. Grazing will be at BLM discretion to provide rest on other allotments due to fire damage, vegetation treatments, or to establish an AMP grazing system. Ensure range improvement maintenance.

Roads and Access - No new permanent roads or improved access. Maintain existing roads.

Forest and Woodland Management - Manage for enhancement of other resource values.

Off-Highway Vehicles (OHV) - Limit to designated roads and trails.

Other - Investigate possibility of introducing the Kaibab squirrel.
- Manage fire for pre-planned enhancement of resource values.
- Write a coordinated plan integrating management of resource programs.
- Complete coordinated resource plans for riparian areas.
- Construct fire and visitor administrative site.

Existing plans for this area include Allotment Management Plans and the Parashant Habitat Management Plan. AMPs will be reviewed for valid existing management and incorporated into the Management Plan. The Habitat Management Plan is included by reference.

Lake Mead General Management Plan

Lake Mead National Recreation Area (LAME) is managed under the LAME General Management Plan (GMP) approved in November 1986. The GMP prescribes the following for the Shivwits Plateau portion of LAME:

The General Management Plan for Lake Mead National Recreation Area recognizes the Shivwits Plateau as a unique recreational opportunity compared to the water-oriented recreation that attracts millions of visitors each year. The area's remote location on the northern edge of the Grand Canyon and its landscape character, including magnificent cliffs and a mosaic of pinyon-juniper and Ponderosa pine communities, are factors contributing to its uniqueness. The forested landscape with abundant wildlife and magnificent views of the Grand Canyon provides a spectacular recreation destination.

The general management plan maintains the remote and primitive character of the area. This is illustrated by the inclusion of the Shivwits Plateau in the "Natural Zone" of the recreation area. This zone is managed for the "maintenance of isolation and natural resources." The existing primitive road network will be maintained only on an emergency basis and a few primitive campsites will be developed in the vicinity of the Mt. Dellenbaugh Fire Camp. No additional development is identified it the general management plan as the area's remote character will continue to represent the management theme.

Wildlife Strategic Management Plan
Developed by the Arizona Game and Fish Department, this document describes strategy for the management of wildlife populations in the area.

E. PLANNING TEAM

The Parashant Planning Team was formed through a general invitation to all who might have an interest in the Parashant area. It is an interdisciplinary group composed of members with an interest in long-term management of the Parashant area. They represent Federal and State agencies, the ranching community and the general public.

Planning Team Leaders:

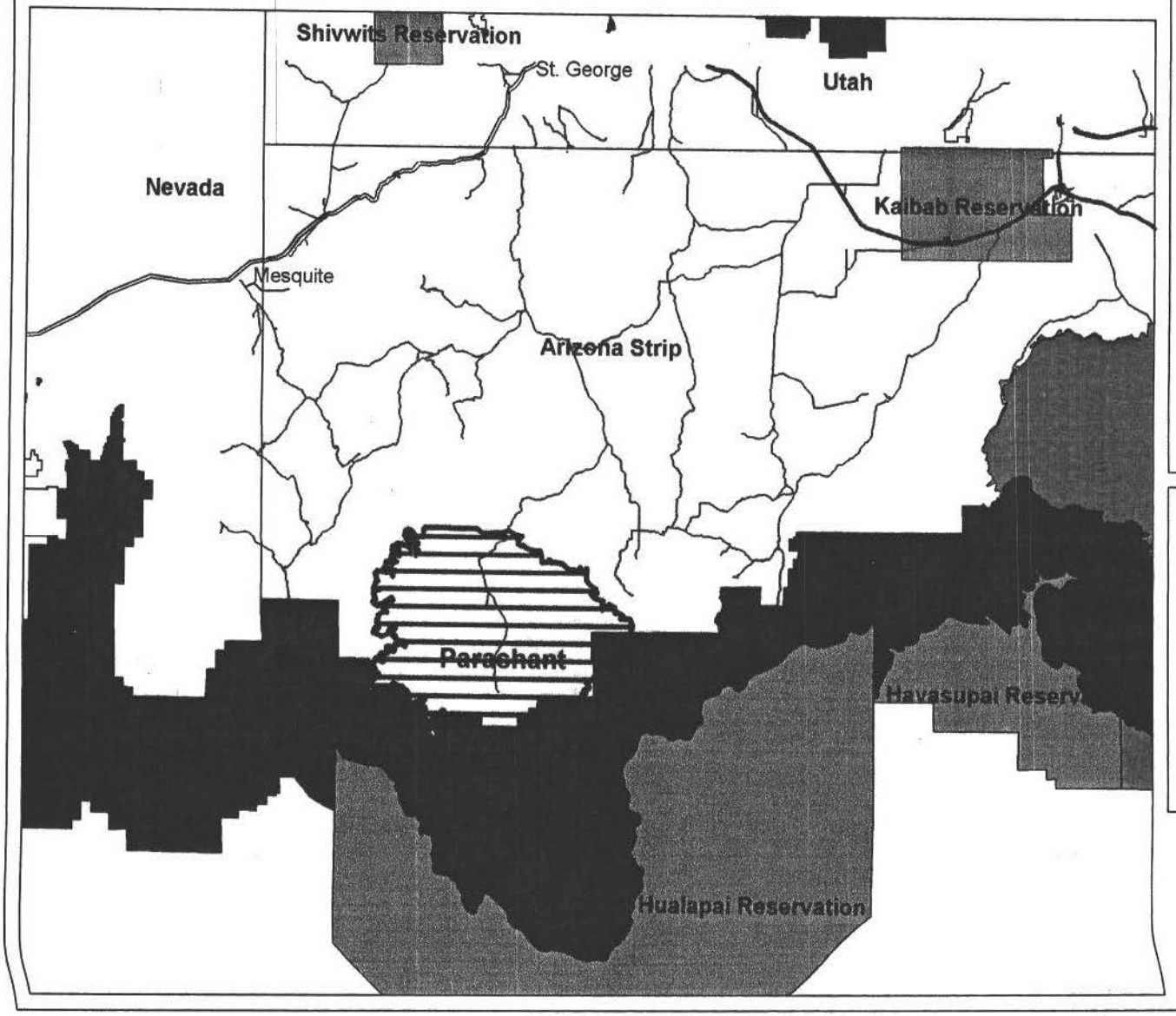
Whit Bunting and Matthew Safford, Bureau of Land Management; Jennifer Haley and Jim Holland, National Park Service

Responsibilities: Develop planning schedule, solicit public review and comments, develop draft and final plan based on input from Team.

Team Members:
Clayton Atkin, Rancher
Steve Cassady, NRCS
John Cook, NPS
George Cropper, BLM
Kim Crumbo, Grand Canyon N. P.
Bob Davis, BLM
Cleve Esplin, Rancher
Buster & Lola Esplin, Ranchers
Terry Esplin, Rancher
Rob Grumbles, U. of A. (Mohave County Extension)
Mike Herder, BLM
John Herron, BLM
Arlin Hughes, Rancher
Denice Hughes, Rancher
Hans Koenig, AGFD
Reed Mathis, Private Land Owner
Bob Price, AGFD
Gina Ramos, BLM (Arizona State Office)
Bob Smith, BLM
Randy Smith, AGFD
John Snyder, Rancher
Doug Syphus, General Public (Recreation)
L.D. Walker, BLM

Parashant Planning Area

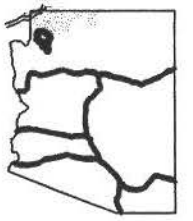
Area Map



Legend

- BLM Lands
- US Forest Service
- Indian Reservation
- National Park Service
- Planning Area

Location Map



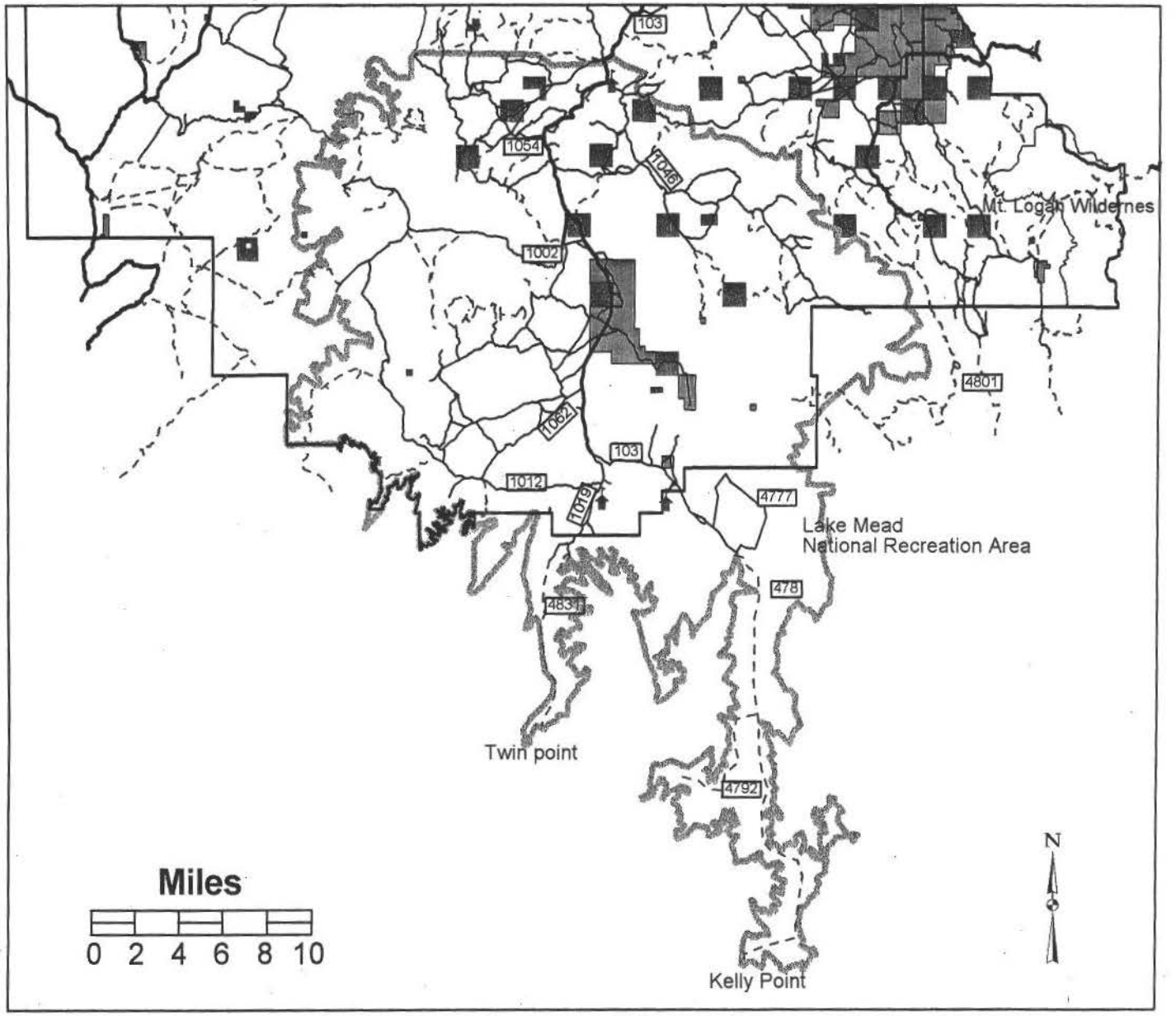
Arizona

Miles

0 10 20 30

Parashant Planning Area

Arizona Strip BLM and Lake Mead N.R.A.



Legend

- Arizona State Lands
- Private Lands
- Wilderness Areas
- Planning Area
- Jeep Trails
- Primary Unpaved Roads
- Secondary Unpaved Roads
- Administrative Site
- 1019 Road No.

Map created by:
Matthew Safford
Outdoor Recreation Planner

Responsibilities: Attend meetings, be active participants in planning process, review and approve plan drafts.

II. PLANNING AREA

A. BASE MAP OF AREA

Base Maps preceding this page.

B. DESCRIPTION OF AREA

The Parashant Management Area lies in the southern end of the Arizona Strip, north of Grand Canyon National Park. The lands involved are managed by the Arizona Strip Field Office, BLM, and Lake Mead National Recreation Area, NPS. The approximate boundaries of the core area are: South from Hidden Canyon, from the tops of lower Grand Wash Cliffs east to Parashant Canyon. All Lake Mead lands on the Shivwits Plateau above the rim of the Grand Canyon are included (Andrus Point, Twin Point, Suicide Point, Kelly Point, Burnt Canyon). Boundaries for wildlife management concerns also include the lands east to the resource area boundary (Hurricane Cliffs, Mt. Logan). Remaining lands on the Shivwits Plateau portion of LAME outside this plan's boundaries may be covered by the Mt. Trumbull RCA Plan.

AGENCY	UNIT	APPROXIMATE ACRES[1]
BLM	Arizona Strip Field Office	246,243
NPS	Lake Mead National Recreation Area	87,000
State of Arizona	School Trust Lands	6,524
Private	Private lands	6,170
Private	Subsurface Mineral Rights held by Pacific Santa Fe Railroad under LAME lands	(66,360[2])
	TOTAL	345,937

[1] Core Area [2] Not affected by this plan.

Resources

1. **Soils**

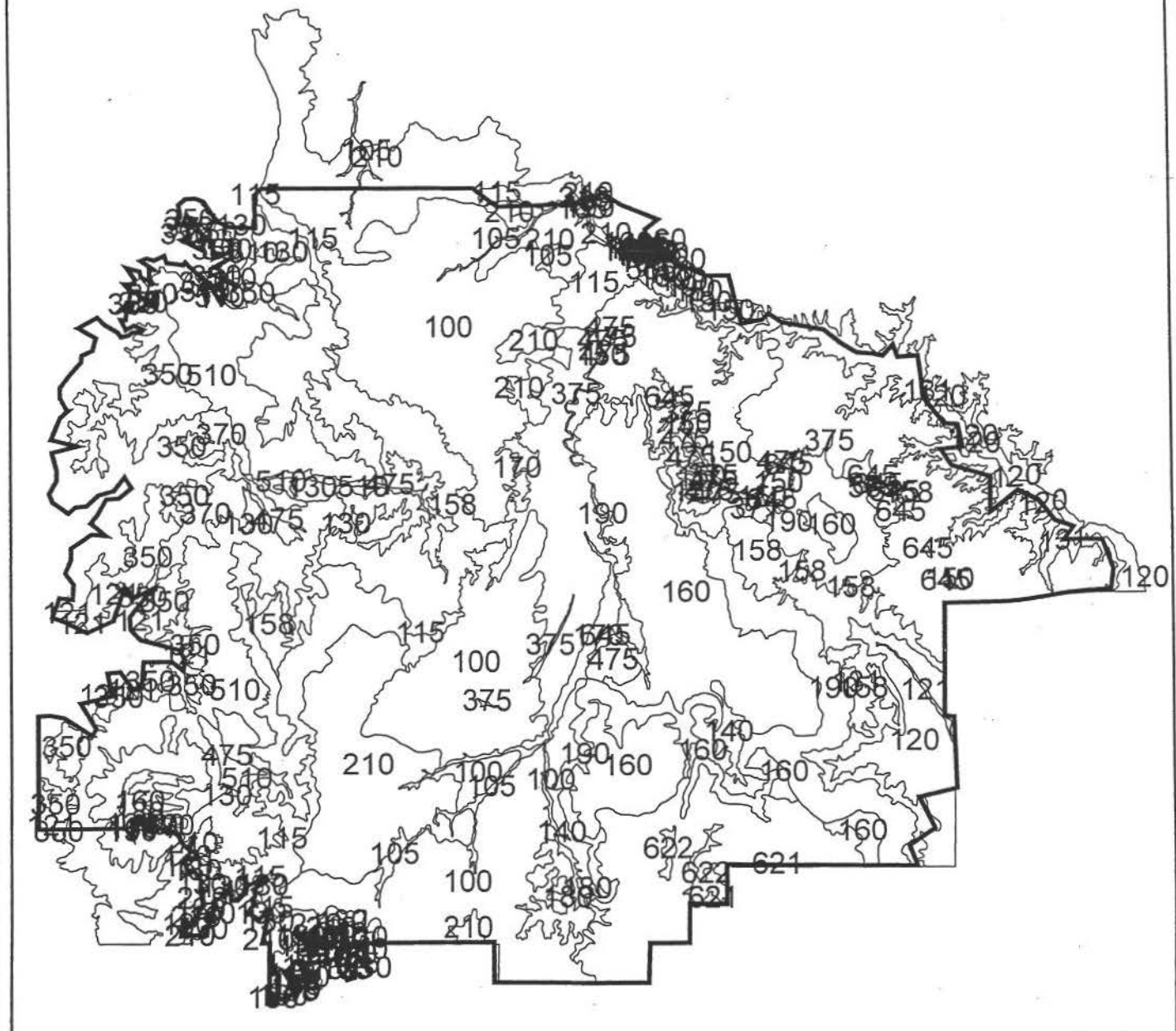
The following soil map units and range site types are found within the planning area (symbols correspond to attached map):

Symbol	Rangesite	Precip. Zone	Veg. Community
100	Clay Loam Upland (GR) Limestone Slopes	13 to 17 pz 13 to 17	P-J
105	Loamy Upland (GR)	13 to 17	P-J

115	Limestone Slopes	13 to 17	P-J
	Loamy Upland (GR)	13 to 17	
120	Breaks	7 to 11	Desert Shrub
	Breaks (Gypsiferous)	7 to 11	
121	Limestone Hills	6 to 9	Desert Shrub
	Gypsum Hills	6 to 9	
130	Breaks (Cal.)	9 to 13	Sagebrush
	Loamy Upland (Cal.)	9 to 13	
131	Breaks	9 to 13	Sagebrush/Juniper
	Loamy Upland	9 to 13	
140	Clay Upland	13 to 17	
150	Shallow Loamy	9 to 13	Sagebrush
	Loamy Upland	9 to 13	
158	Shallow Loamy	9 to 13	Sagebrush/Juniper
	Breaks	9 to 13	
160	Clay Loam Upland (GR)	13 to 17	P-J
170	Clay Loam Upland	9 to 13	
180	Loamy Terrace	17 to 20	Ponderosa Pine
190	Basalt Slopes	13 to 17	P-J
210	Limestone Slopes	13 to 17	P-J/sagebrush
	Clay Loam Upland (GR)	13 to 17	
221	Sandy Wash	9 to 12	
350	Shallow Upland (Cal.)	9 to 13	Blackbrush
	Shallow Sandy Loam	9 to 13	
370	Shallow Sandy Loam	9 to 13	Blackbrush
371	Limy Upland	9 to 13	
	Gypsum Hills	9 to 13	
375	Loamy Bottom	9 to 13	Sagebrush
475	Loamy Upland	9 to 13	Sagebrush

Soils/Range Sites

Parashant Planning Area - BLM portion



Legend

- Range Sites
- BLM Portion

See Plan for Range Site symbol definition

Miles

0 1 2 3 4

510	Shallow Upland (Cal.) Shallow Sandy Loam	9 to 13 9 to 13	Blackbrush
560	Gypsum Upland	7 to 11	
585	Basalt Upland Loamy Upland	9 to 13 9 to 13	P-J/sagebrush
621	Basalt Upland	17 to 20	Ponderosa Pine
622	Clayey Upland	17 to 20	Mtn.Meadow
645	Loamy Upland	9 to 13	Sagebrush/Juniper

2. **Water**

There is no perennial surface water in the Parashant. Parashant Wash and other washes will run briefly after heavy precipitation. Water for livestock and wildlife is captured from precipitation in catchments or from surface runoff in earth tanks and reservoirs. If functioning, Kelly Dam will hold water long enough to attract transient waterfowl. Many natural springs exist (30-40). Most of these have been developed for livestock waters. Water wells have been dug or drilled at Lake Flat, Pine Ranch, Oak Grove and the Mokiac Well

The Shivwits Plateau is the ultimate source of several drainages subdivided into approximately 25 smaller watersheds that flow into the Colorado River System (watershed map follows page 24).

3. **Air**

Air quality in the Parashant is considered good. There is no source of air pollution in the region. Dust from vehicles and smoke from fire temporarily degrade air quality in localized areas. Grand Canyon, a Class I airshed, is nearby. Some pollutants are generated in southern California and/or Clark County, Nevada and transported by prevailing winds.

4. **Vegetation**

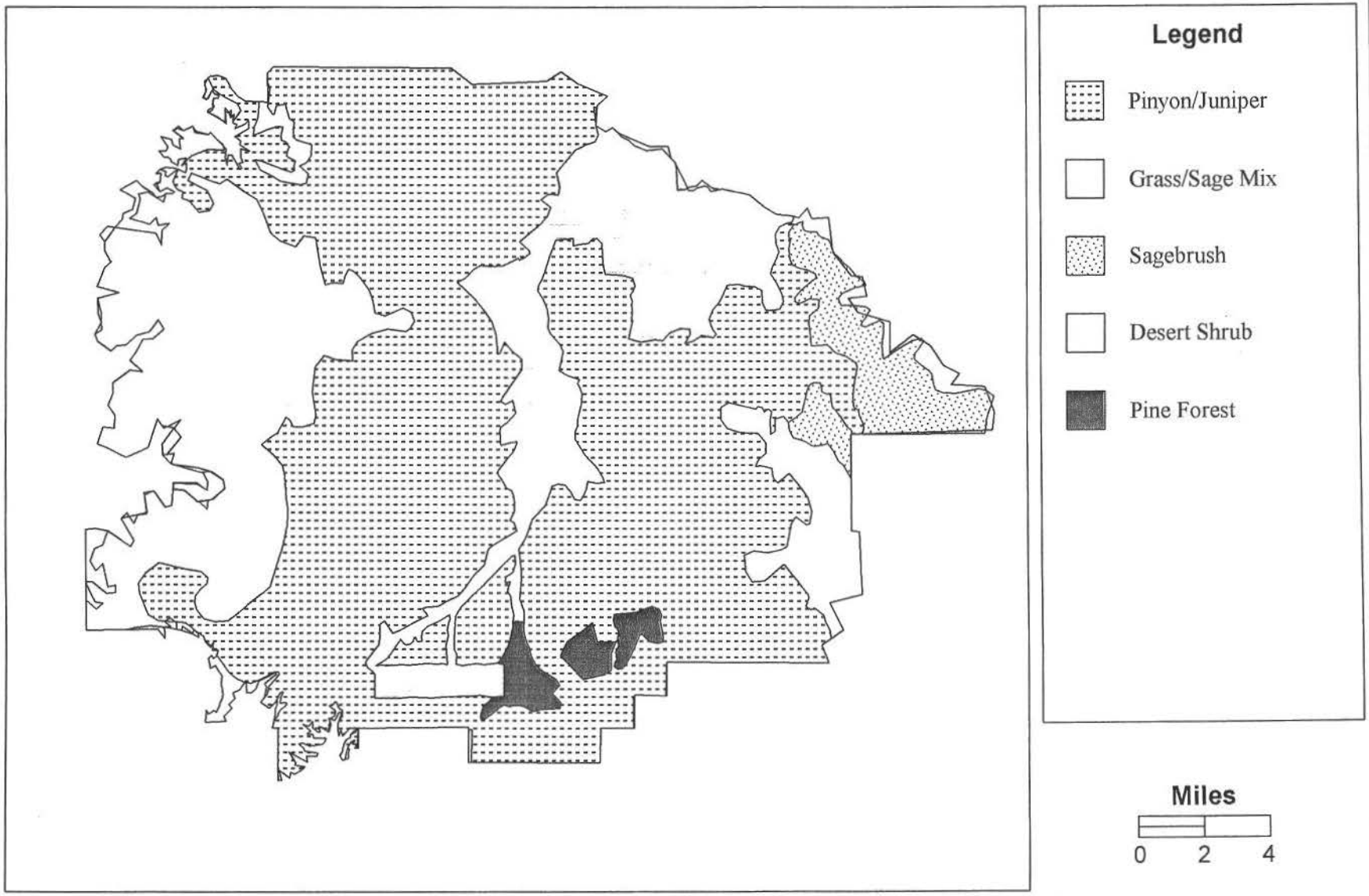
The Parashant Planning Area can be divided into the following vegetative types:

Desert Shrub (64,922 ac)
Occurring in the bottoms of Andrus and Parashant canyons and lower elevations along the western side, this ecotype is characterized by sparse, xeric vegetation.

Grassland/Sagebrush Mix (33,100 ac)
Natural grassy clearings occur among the Ponderosa and pinyon/juniper forests. Other areas of this ecotype differ as a result of recent vegetative manipulation. For example, treating sagebrush to create grasslands. Natural succession will normally revert artificial grasslands to another type of vegetation.

Vegetation Types

Parashant Management Area - BLM Portion



Sagebrush Flats (38,400 ac)
This vegetation type is found in the Wildcat allotment, on the eastern side of the planning area, Whitmore Point and Andrus Point. Biodiversity is typically quite low in most sagebrush areas due to the dominant monoculture (no understory). Vegetative conversions such as P/J removal and chemical application have been conducted in the past to increase diversity, improve soil protection and provide forage for livestock and wildlife. These conversions tend to revert back to sagebrush.

Pinyon and Juniper Woodland (153,530 ac. on BLM plus 70,000 ac. on LAME)
This is the most prevalent vegetation type. Much of the P/J woodland is a closed stand with little understory vegetation so biodiversity is low. The lack of grasses and shrubs beneath the trees has increased soil erosion. Vegetative manipulations such as chaining have been conducted in the past to increase forage for livestock and wildlife. Older chainings are reverting to sagebrush with encroaching pinyon and juniper.

Ponderosa Pine Community (Ponderosa are found on 3,850 ac., while 2,855 of these acres are considered to be a true forest ecosystem. 1,500 acres on Lake Mead)
The forest areas are composed primarily of 80 to 90-year-old Ponderosa pine with a few old growth trees. There is fairly good recruitment of young trees. Timber harvesting occurred in the early settlement period and as late as the 1950's. In some areas, nearly all the trees were removed. In other areas, pole-sized trees were left and have since grown into well-configured stands. Fire suppression and other land use activities occurring since settlement of the area have resulted in even-aged stands and stringers with the potential for dense "dog-hair" thickets and dangerous accumulations of forest floor litter to occur.

Noxious Weeds
Since the arrival of European settlers, noxious weeds have become established on public and private rangelands, woodlands and farmlands of the west. If left uncontrolled, some species of noxious weeds have the potential to rapidly infest and displace native plants and plant communities that provide valuable forage and habitat for wildlife and livestock. Recreation opportunities can also be degraded by noxious weed infestations.

Noxious weeds are spread through many different ways. Some of these means of spread include goephysical equipment, recreational vehicles, campers, hunters, livestock as well as big game and non-game wildlife species.

At present, the Parashant area has no large or rapidly spreading infestations of noxious weeds. There are however isolated spots on public land where two known noxious weed species occur. The two species presently known to occur are Field bindweed (Convolvulus arvensis) and Scotch thistle (Onopordum acanthium). Efforts to control and eradicate the Scotch thistle are already taking place. Control efforts on Field bindweed have not yet taken place due to its site specific limitations and potential to spread. Future management, treatment and monitoring of these weed species and others in the Parashant area will be addressed and covered in the Integrated Weed Management Plan (IWMP). It is the intent of this plan along with the IWMP to keep and maintain the Parashant area as free of noxious weeds as possible. However, this effort of noxious weed management cannot be adequately accomplished unless federal, state, county and private interests work together in controlling weeds using effective and efficient means.

5. **Wildlife**

Animal species that inhabit the Parashant area are as diverse as the plant communities in which they live. The ecotypes described above support the following wildlife species in the planning area: mule deer, desert bighorn sheep, Merriam's turkey, mountain lion, coyote, bobcat, a variety of small mammals, nineteen species of bats, numerous reptiles, and over 200 species of birds including raptors and neotropical migrants.

At least four federal and/or state listed wildlife species are known or may occur in the planning area. These include American peregrine falcon and bald eagles. An additional twenty are species of concern.

Mule deer use the area above the canyon rims as summer habitat, typically browsing within and along the margins of chainings and other land treatment areas. The Parashant area likely has a distinct population of year round resident mule deer, with minimal interchange with adjacent populations. Deer were plentiful in the Parashant area throughout the 1960s and 1970s. A decline in the population led AGFD to place the area on a permit-only hunt system in the early 1970s. Populations have slowly increased through the mid 1990s. Numerous predators, lack of early seral stage habitat and the scarcity of water may be limiting deer herd expansion. The area is currently managed as a trophy buck hunt unit.

Bighorn sheep have been introduced in the Grand Wash Cliffs beginning in the early 1980s. Populations have slowly increased. Water availability is thought to be limiting population expansion. Some interchange with bighorn populations around Lake Mead is thought to occur, though the extent of this movement has not been documented.

Merriam's turkey were introduced into the area in the 1980s. Populations appear to be stable, though severe winters reduce survival of individuals.

A well ordered pattern of food and community relationships occurs in the various habitat types found in the planning area. Mule deer rely upon understory browse and forbs in more open areas and use the dense stands and ponderosa woodlands. for cover. Mountain lions, coyotes, and other predators prey on mule deer, bighorn sheep, and a variety of small mammals. Pinyon pine seeds, juniper berries, and acorns are a primary component of the diet of Merriam's turkey and provide food for rodents. Many rodent species fall prey to raptors. Turkeys require a forest mosaic including grass for polt cover and insect habitat, dense trees with perches for breeding cover, older age class trees with low limbs for roosts, and wet areas with green vegetation for polts. Cavity nesting birds rely on ponderosa pine and pinyon-juniper woodlands for live and dead standing trees for perching, nesting, and food storage. Cavity nesters which rely upon these habitats include screech owls, various species of woodpeckers, flycatchers, titmice, wrens, and bluebirds.

6. **Visual Resources**

The Parashant can be described visually as an area of rolling hills with occasional taller mountains. Two steep-walled canyons (Andrus and Parashant) break up the terrain on the eastern side and Snap Canyon on the west. Vegetation ranges in height and color from gray-green sagebrush to dark green pinyon/juniper woodland and tall pine forests. Grassy meadows vary in color from green to brown depending on time of year.

The Parashant contains Visual Resource Management Class II and Class IV areas. Class II areas have a high level of scenic quality where people may be highly sensitive to changes in the scenery. The management objectives for Class II are to retain the existing character of the natural landscape. Level of change to the landscape should be low. Human activities may be apparent, but should not attract the attention of the casual observer. Any changes caused by management activities (e.g., surface disturbance, vegetation treatments) must repeat the basic elements (line, form, color and texture) found in the predominate natural features of the landscape.

Class IV areas are fairly mundane in comparison to other lands in the region. People are generally less sensitive to changes in these areas. Management objectives allow for human activities to create a contrast to the natural landscape, but mitigation is still required to reduce any unnecessary degradation of scenic quality.

Viewsheds from the points on LAME overlooking the Grand Canyon are of exceptionally high quality and visitors are highly sensitive to changes in the scenery or clarity of the air.

One concern is the visual impact caused by chaining of pinyon and juniper trees. In the past, this had been done along straight lines such as a road or fence usually along property lines. From the air, this activity has created a sharply defined, straight edge which has a high visual impact. Since then, the property has become public land administered by BLM. Through maintenance, the chainings and other vegetative manipulation activities could be transformed into an indistinct shape with irregular, curving edges to appear more like a natural grassy meadow. The increased edge effect (ecotone) may also benefit wildlife.

7. **Prehistoric/Historic landscapes and sites.**

The potential for cultural properties within the Parashant Planning Area is high based on the indications of a few preliminary studies. There have been some limited inventories.

Archaeological resources could cover the span of human occupation in the new world from around 10,000 years ago up to and including the ranch operators of today. Within this span we might expect to find evidence of the PaleoIndian, Archaic, Ceramic, Protohistoric, and Historic human cultures that are known to have occurred throughout the Great Basin and Colorado Plateau areas. These cultures would include the American Indians and the European emigrants of the last two hundred years or so. Resource types range from minor artifact scatters to pueblos to historic ranches. Our specific knowledge of the cultural property makeup is limited due to our lack of scientific investigation of the area. Without archaeological studies, project evaluations and the ability to make reasonable recommendations are severely hampered.

The chaining and burning of privately owned sections in the past (which are now in Federal stewardship) may have damaged or even destroyed cultural resources on those lands. The degree of impact on archaeological resources should be studied to determine if any knowledge is retrievable before we initiate new ground disturbing projects in these same areas as well as in new areas. The loss of study potential for this nonrenewable resource increases the significance of the remaining cultural properties.

Historic sites include homesteads with extant structures at Oak Grove and Pine Well on BLM lands. On NPS lands, extant historic structures and ruins consist of: Horse Valley Ranch, Pine Valley Ranch, Shanely Cabin and tanks, Dinner Pockets cabin, Spencer tank and cabin, Nutter's Cross fence and corral, Penn's Pocket/Ambush water pocket, Green Springs sawmill and Dame sawmill.

People

1. **Recreational use and zones.**

Recreationists in the Parashant are known to engage in the following activities: Driving for pleasure, sightseeing, hunting, car camping, mountain biking, backpacking, trapping and horse pack trips. Many visitors also travel back and forth between BLM and adjacent Lake Mead lands such as Twin Point and Kelly Point for their activities. The history associated with the Powell Expedition at Separation Canyon and Mount Dellenbaugh may draw some visitors. Twin Point receives the most use, probably due to the ruggedness of Kelly Point road

Illegal uses occurring in the Parashant include vandalism, pothunting, drug running and poaching. This type of use is expected to increase along with the total number of persons visiting the Parashant.

The area is very remote and excellent opportunities for solitude exist during much of the year because of low visitation levels. This feeling of solitude is somewhat reduced during high-use periods such as deer hunting season and summer holiday weekends. The primary access road is County Road 103. This road is generally accessible three seasons out of the year. Winter precipitation often causes the road to become impassable.

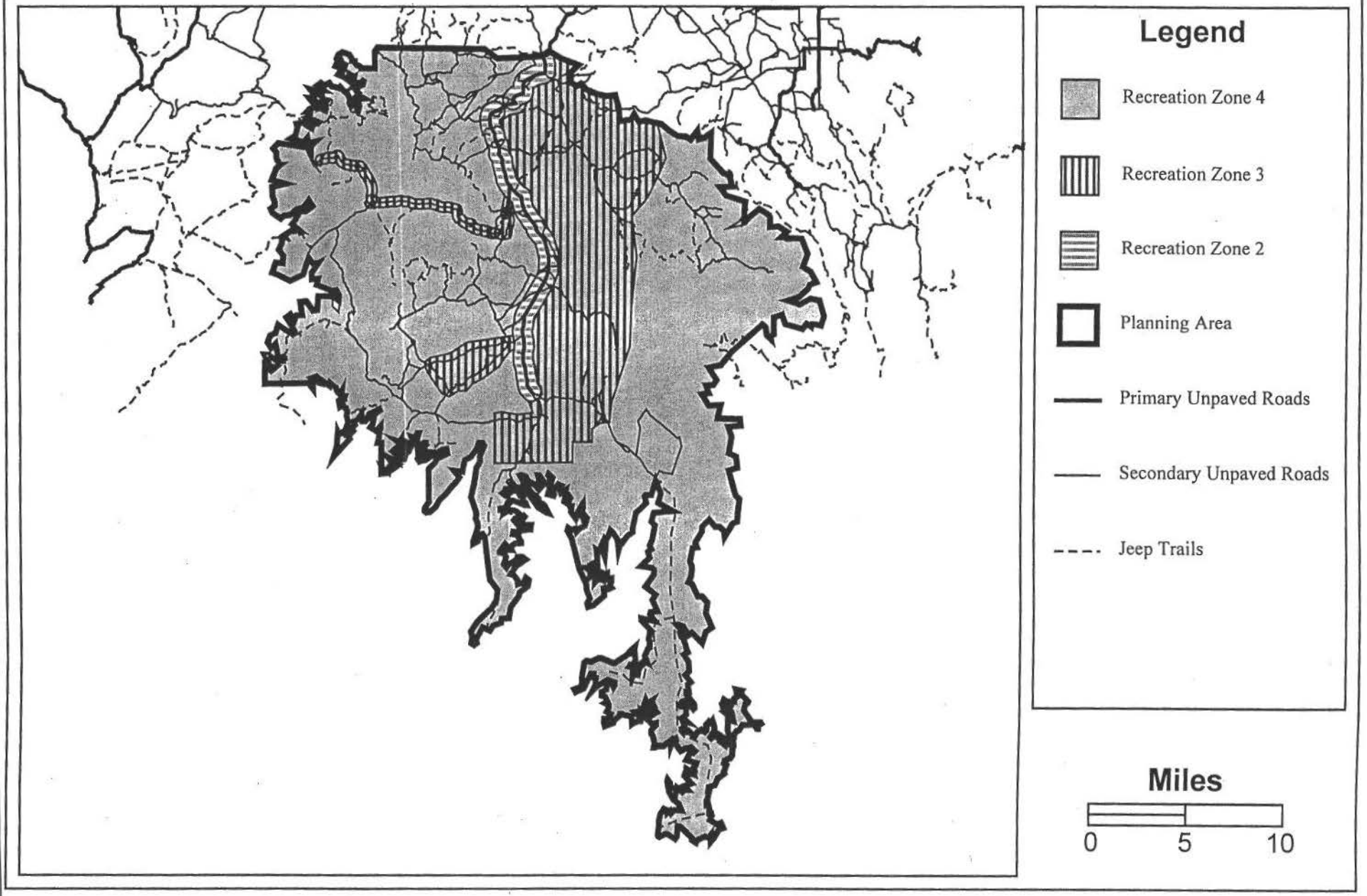
Most public use is concentrated along the primary access roads (roads 103 and 1019) within the Ponderosa forests. Impacts associated with recreational use along these roads include loss of vegetation at campsites due to trampling and firewood gathering, construction of fire rings and pits, litter and creation of new roads and trails. Visitor amenities on BLM lands include directional signs, road markers and a picnic table. Lake Mead has allowed primitive campsites near their administrative site.

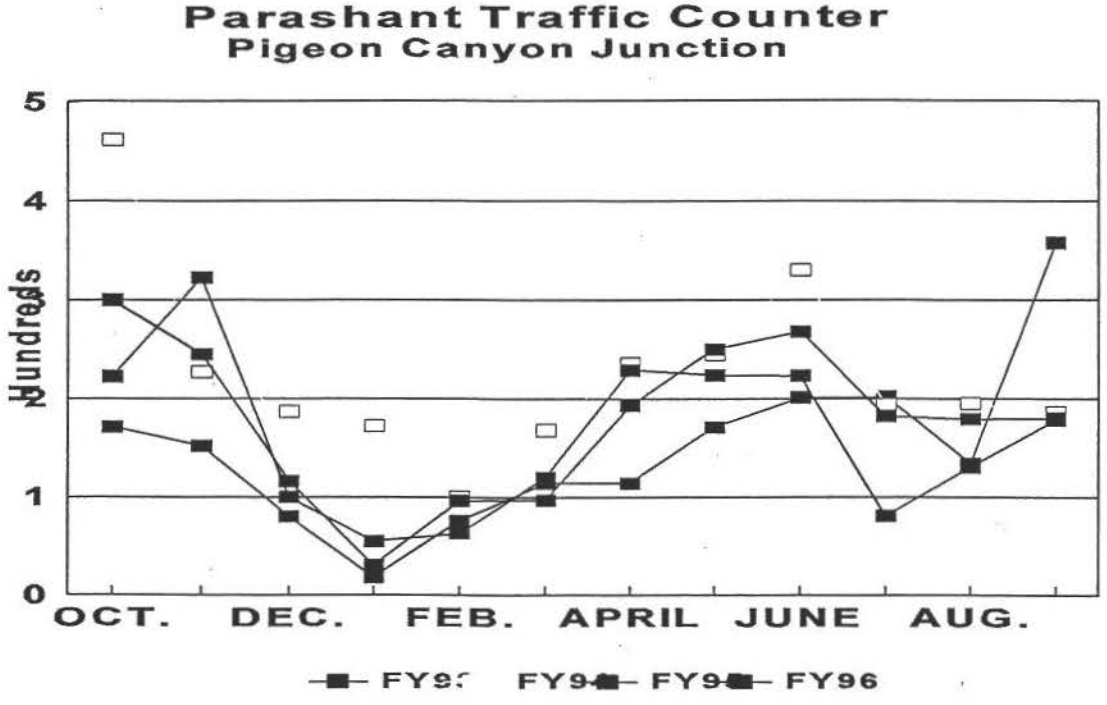
Areas within the BLM portion of the Parashant have been placed into proposed Recreation Zones 2, 3 and 4. Recreation Zone 2 allows the greatest amount of visitor amenities and managerial activity. Zone 2 would be composed of the corridors along the most traveled and better maintained roads. Directional and information/interpretive signs and sites are allowed here. Zone 3 would be areas of backcountry with less maintained roads, fewer signs and no facilities. Zone 4 would be the most primitive with only unmaintained roads and small road markers or trail signs allowed. The Shivwits Plateau portion of Lake Mead NRA fits within the description of Zone 4.

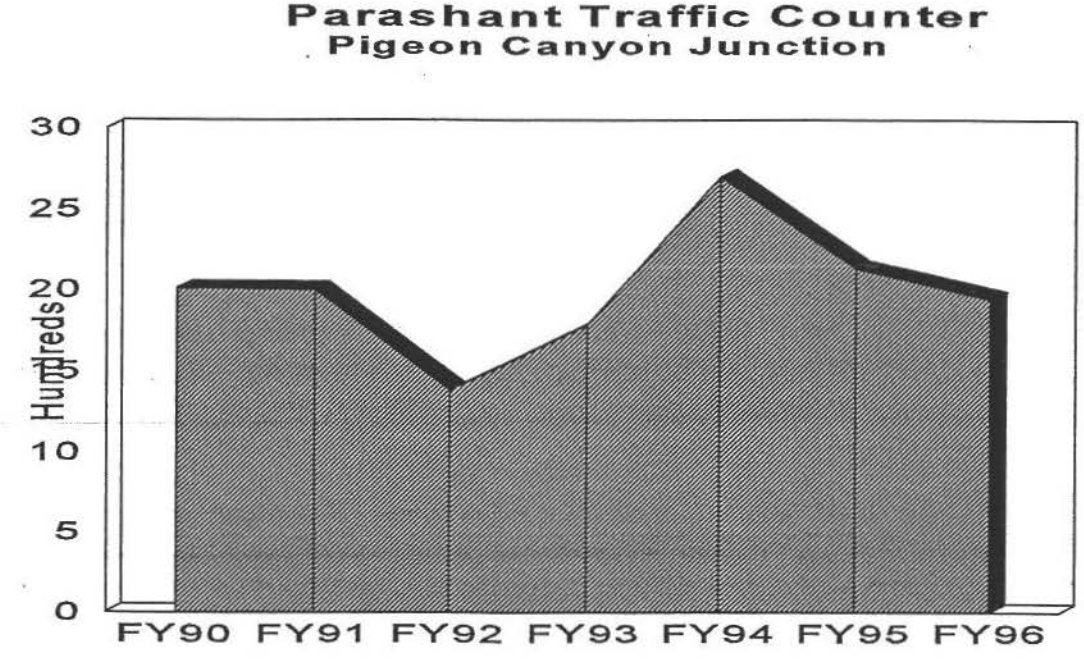
Data from the Pigeon Junction traffic counter indicates an average daily total of 5.85 vehicles per day on the Parashant Road. This figure is not indicative of the actual amount of traffic on any given day because of the wide seasonal variation in use.

Recreation Zones

Parashant Management Area




Parashant Traffic Counter
Pigeon Canyon Junction
Hundreds
5
4
3
2
1
0
OCT.
DEC.
FEB.
APRIL
JUNE
AUG.
FY96


Parashant Traffic Counter
Pigeon Canyon Junction
Hundreds
30
25
20
15
10
5
0
FY90
FY91
FY92
FY93
FY94
FY95
FY96

Most visits are in spring and early summer with the low occurring in January. In Fiscal Year 1995, the Pigeon counter total was 2,136 vehicles. Surveys have shown that about 20% of the traffic on this road is recreation-oriented. From this, it can be calculated that about 214 vehicles were recreation-oriented (½ of 20% because each vehicle passes over the counter on the way in and again on the way out). Multiplied by an average of 2.6 persons per vehicle (based on BLM vehicle surveys), this means there were about 556 recreational visitors to the Parashant area in fiscal year 1995.

Until FY95, traffic over the counter was increasing (Figure 2). This decline may be temporary and due to the construction closure of Quail Hill Road, the main access portal to the western Arizona Strip. Continued improvement in Quail road will undoubtedly contribute to the increasing visitation trend.

Part of this total was use associated with hunting. Fifty permits were issued for Unit 13B in 1995. Of these, about 75% were used in the Parashant. AGFD estimates that 2 to 3 persons use the area for each permit. This calculates to 6 to 12 visitor days per permit or 228 to over 450 total visitor days spent on hunting and associated activities (driving, camping, etc.). The Parashant is known throughout the region for its high-quality, trophy-class hunting. In 1994 AGFD received 1,305 applications for 45 permits (4% draw). Of the 45 that drew permits, 76% were successful in the hunt (Arizona Game and Fish Department, Hunting Information, 1995-1996.).

As many as 12 separate car camps at have been encountered on Twin Point on a summer holiday weekend. This is probably the maximum number of encounters that would still maintain the remote character.

About 800,000 people per year (1995) experience the Parashant by aircraft. Sightseeing flights can be seen and heard over the area almost continuously from sunup to sundown every day of the year. These aircraft follow pre-determined flight corridors. The distinctly artificial lines and textures of previous chainings detract from the scenic quality for aerial visitors.

2. Social and Economic

There are no human communities within the boundaries of the planning area. Some isolated private residences are occupied on a seasonal or occasional basis. The economic base of this portion of the Arizona Strip is cattle ranching. The economies of surrounding communities in Arizona, Utah and Nevada are based on tourism, construction, light industry and agriculture.

3. History of the Area

The Parashant has been used for livestock grazing since the early 1900's and private ranches were established under the Homestead Act. Sheep were herded here until the late 1930's, then cattle operators took over. Lumber was milled and used locally for construction of cabins and other structures.

The Santa Fe Railroad was granted title to every other section of land during the period of western expansion. Several of these private parcels have been returned to the public domain and are now managed by BLM or the Park Service. However, subsurface mineral rights were retained in private ownership.

Lake Mead National Recreation Area manages the lands between the Arizona Strip District and Grand Canyon National Park even though these lands are not contiguous with the rest of Lake Mead. This was a result of NPS boundary and designation changes occurring in the 1970's.

Administration

1. **Land Uses**

Public lands within the Parashant area are currently used for recreation and livestock grazing on BLM allotments. All livestock grazing is cow-calf operations. There is no domestic sheep grazing at present. Hidden Hills and Penn's Well allotments are operating at full cattle numbers. The others are running reduced numbers due to dry years or non-implemented AMPs and grazing systems.

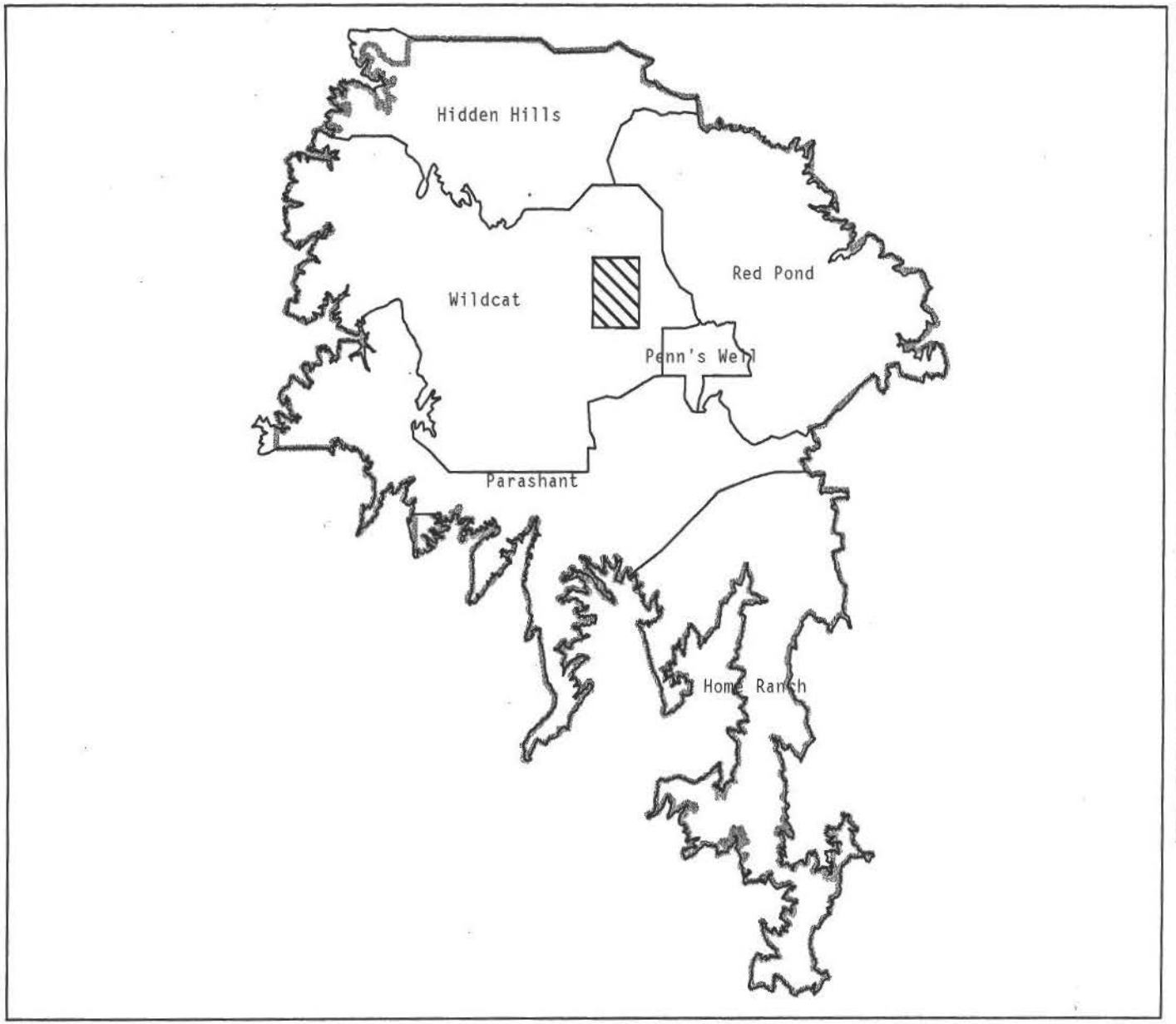
PARASHANT AREA GRAZING ALLOTMENTS	AUTHORIZED ANIMAL UNIT MONTHS
Hidden Hills	1,907
Home Ranch[1]	1,799
Parashant	2,616
Red Pond	2,793
Wildcat	4,593
Penn's Well[2]	144
TOTAL	**13,852.00**

[1] Home Ranch is entirely on Lake Mead Recreation Area, with grazing administered by BLM. This is a lifetime lease. All grazing will cease and improvements will become property of the NPS at the passing of the allottee.
[2] AUMs before chaining. This is a very conservative figure.

The Parashant Allotment (old Gubler-Frei) has no permanent authorized livestock grazing. Grazing use is temporary and at BLM's discretion to provide additional rest on other allotments due to fire damage, vegetation treatments or to establish a grazing system. Use limitations for this allotment are described in the attached Grazing Management Plan.

Grazing Allotments

Parashant Planning Area



Legend

- Planning Area
- Parashant Allotments
- Private Land

Miles

0 5 10

Existing rights-of-way within the planning area are listed in the following table.

R.O.W. NUMBER	TYPE	HOLDER
A-04432	Road Reservations (Wildcat Road)	BLM
A-09056	Administrative Site (Poverty)	BLM
A-26157	Communication Site (Hudson Point)	BLM
A-28200	Cooperative Agreement Road (Lake Flat)	Lake Mead NRA
AR-34117	Water Well (Lake Flat)	Lake Mead NRA

Future rights-of-way may include the Parashant administrative site and County Road #103, which Mohave County is claiming under Revised Statute 2477.

BLM maintains administrative sites (cabins) at Poverty Mountain and south of Oak Grove. The NPS has a field camp and administrative site south of Lake Flat that is occupied during the summer field season.

There is a commercial and private demand for fuelwood, posts and Christmas trees on the district. However, the Parashant does not receive much of this permitted use due to its remoteness.

Public lands in the Parashant remain open to mineral entry. There are currently no oil or gas leases or mining claims. The Santa Fe Railroad retains 66,360 acres of subsurface mineral rights on the Kelly Point area of Lake Mead NRA. The National Park Service is planning on negotiating with the railroad to acquire these rights.

2. **Wilderness Suitability**

The Wilderness Act of 1964 directed the Secretary of Interior to review all roadless areas within units of the National Park System and to make recommendations as to the suitability of each area to the President and Congress. The suitability of lands within Lake Mead National Recreation Area is described in the General Management Plan but to date, no lands have been formally proposed for wilderness designation.

In the LAME General Management Plan, the recreation area was divided into 34 units that meet or potentially meet the criteria of the Wilderness Act. Approximately 83,890 acres are included within the Shivwits unit with the boundaries following the canyon rims, internal access roads and the Recreation Area boundary. Because there are 66,350 acres of land within this unit which are subject to mineral reservations, the unit only potentially meets the criteria of the Wilderness Act.

NPS Management Policies state, "The Park Service will take no action that would diminish the wilderness suitability of an area recommended for wilderness study or for wilderness designation until the legislative process has been completed." BLM manages a designated wilderness area, Grand Wash Cliffs, adjacent to the Parashant.

III. ISSUES

A. ISSUES ADDRESSED FURTHER IN THE PLAN

Thirty six concerns expressed by team members during the scoping sessions were consolidated into the following issue statements:

Resource Issues

- Damage and/or disruption of natural processes, productivity, natural and cultural resources and biodiversity has occurred in the past in some areas.
- Mule deer populations are at lower than desired levels.
- Development of new, and maintenance of existing, rangeland improvements has been sporadic and incomplete with no long-term planning, monitoring or evaluation.
- Lack of complete resource inventory data may hinder management decision-making.

People Issues

- Threats to traditional lifestyles and private property rights have been identified by the ranching community.
- Damage to resources, public and private property increases with additional visitors to the area.
- Remoteness and natural quiet are being impacted by aircraft overflights.
- The quality of the recreational experience may be affected by increasing numbers of visitors.

Administrative Issues

- Lack of coordination between agencies has caused management concerns.
- Visitors to the area are arriving unprepared for the conditions and becoming stranded or otherwise receiving a negative experience on public lands.
- Lack of on-site personnel to fulfill management objectives.
- Differences in Bureau and Park Service regulations are creating confusion among users.

B. ISSUES HANDLED THROUGH ADMINISTRATIVE PROCEDURES

- Improve interagency and private sector coordination.
-Increase knowledge of all existing resources by establishing base data within one year of plan approval. Implementing this objective will allow managers to make better resource-based decisions.

C. ISSUES BEYOND THE SCOPE OF THIS PLAN

- Open Grand Canyon lands below the rim to livestock grazing.
- Some Lake Mead lands are identified in the General Management Plan as meeting Wilderness criteria.

IV. OBJECTIVES AND PRESCRIBED ACTIONS

A. ISSUES-OBJECTIVES CROSSWALK TABLE

ISSUES	ASSOCIATED OBJECTIVES
Disruption of Natural Processes	A, C
Game populations	B
Improvements maintenance/development	G
Lack of resource inventory data	D
Threats to traditional lifestyles	Included in goal statement
Damage to natural and cultural resources and property from visitors	E, F
Impacts to remoteness and natural quiet from overflights	F
Quality of experience affected by increasing visitors	F
Lack of interagency coordination	H
Visitors arriving unprepared for conditions	D
Lack of on-site agency personnel	E, F
Inconsistency in agency regulations	H
Open Grand Canyon lands to grazing	J
LAME lands recommended suitable for wilderness	K

B. MANAGEMENT OBJECTIVES AND PRESCRIBED ACTIONS

The Management Objectives were set by the team after studying the issues. They are grouped by category - Resources, People or Administration Objectives. Following each Objective are the associated Prescribed Actions identified by the team.

Resource Objectives

Objective A Achieve Desired Plant Communities (DPCs follow page 23) on 75% of identified areas on Arizona Strip portion of Parashant by the year 2010. Achieve DPC on 75% of Lake Mead portion by 2020.

Rationale: Setting and achieving Desired Plant Communities addresses the primary resource issue - lack of sustainable and proper functioning ecosystems. Achieving DPC will increase forage for livestock and wildlife, increase vegetative cover component for wildlife, decrease soil erosion, improve biodiversity and improve opportunities for sustainable livestock operations.

Actions:

A1. a. Complete Ecological Site Inventory (ESI) and determine Desired Plant Communities (DPC) while emphasizing biodiversity and sustainable/proper functioning ecosystems for the Arizona Strip portion of the Parashant. Extend DPC onto Lake Mead lands where applicable.

b. Develop grazing schedules designed to achieve DPC. Incorporate existing AMPs where appropriate (Grazing Management Plans attached).

c. Determine management actions to achieve DPC and ecosystem restoration, including monitoring and evaluation. Conduct vegetation treatments where DPC or restoration cannot be achieved simply by livestock management. Some land treatments may be attempted where DPC has not been set following Adaptive Management Strategy. Watershed boundaries will be considered when prioritizing site-specific treatments to acheive DPC. Projects will be prioritized in relation to other actions within the same watershed.

Treatment Type	Hidden Hills	Parashant Allotment	Penn's Well	Red Pond	Wildcat	Total Units
P-J removal & seed	140 ac.		500 ac.	920 ac.	2,000 ac	3,560 acres
Tebuthiuron				1,100 ac		1,100 acres
Burning *	400 ac.	10,000 ac.				10,400 acres
Pipelines						1 mile
Fencing	5.5 mi.			6.5 mi.	11.5 mi.	23.5 miles
Catchments				1		1
Reservoirs	1			1		2

* 10,000 acres of this total is proposed prescribed maintenance burns of existing land treatments, the remaining 400 acres would be a new burn. This figure does not include acreage which may be allowed to burn under Prescribed Natural Fire (PNF) conditions (Objective C).

d. Prepare map illustrating vegetation management prescriptions.

e. Expand existing data base for better management decision-making for all resources in the management area within one year of plan approval and update it on a continuous basis.

g. Conduct inventories for Threatened and Endangered plants and animals.

h. Complete soil surveys on Lake Mead lands by FY 2000. (Soil surveys have been completed for BLM lands and mapped by soil type)

i. Identify areas of relic plant communities.

j. Remove infestations of noxious weeds.

k. Determine compatibility and share resource data (GIS, databases, etc.) between agencies.

Rationale: The prescribed actions will allow us to establish baseline information and renew health, diversity and productivity to natural ecosystems. This will increase forage and other habitat components and reduce the potential for soil erosion.

Objective B Maintain or increase game populations to 80% of carrying capacity in the Parashant Area by 2010.

Rationale: Implementing this objective will address the issue of low game populations due to habitat quality or other causes. Setting the goal below carrying capacity helps to ensure a healthy population and opportunities for quality hunting.

Actions:

B1. a. Determine carrying capacity for game species.

b. Monitor impact of habitat improvement projects on game carrying capacity.

c. Conduct habitat enhancement projects in conjunction with DPC and existing Habitat Management Plan objectives (incorporate the number of AUMs in each allotment allocated for wildlife).

Rationale: Game populations will be enhanced or maintained through habitat improvement following, in part, the Parashant Habitat Management Plan.

Objective C Restore fire regimes to highest priority designated areas (based on ESI and other planning) within the Parashant Area by the year 2000. Restore to other areas on an ongoing basis.

Rationale: Past and present fire suppression activities have resulted in unnatural ecosystem diversity and fuel build-up. Implementing this objective will restore the role of fire in the ecosystems.

Actions:

C1. a. Prepare and implement Prescribed Fire Plans within one year of plan approval.

Rationale: This action will provide methodology to restore the natural role of fire and use it as a tool to meet resource management objectives.

People Objectives

Objective D Increase level of public contacts for purposes of protection of cultural and natural resources and safety awareness from current levels to 90% of Parashant visitors within one year of plan approval.

Rationale: Informing and educating the public about the resources and property rights will instill appreciation and respect, which leads to a decrease in current damage to resources, remoteness and public and private property, and will increase safety awareness.

Actions:

D1. a. Establish a public information program for natural and cultural resources.

b. Install signs and distribute brochures describing motor vehicle regulations and protection of natural and cultural resources, respect to public and private property and public safety awareness.

c. Provide interpretation of natural and cultural features to meet public interest and demand.

d. Sign private property as requested.

Rationale: The public will be encouraged to respect and help protect natural resources, cultural resources and public and private property, and to provide for their own safety.

Objective E Reduce or stop additional destruction or disturbance of all known significant cultural resources in the Parashant Area from current levels to 2 or less incidents per year throughout the life of the plan.

Rationale: BLM and the NPS are mandated to protect cultural resources on their lands.

Actions:

E1. a. Increase cultural resource inventory of the Parashant Ecosystem to identify sites for entry into a database. Increase knowledge of the cultural resources through scientific study: consisting of a testing strategy, comparative artifact collection (primarily ceramics, but could include chipped stone for sourcing, material type variation studies, flotation, pollen, etc.), feature excavation and analysis, and regional synthesis and interpretation. Share data between agencies.

b. Conduct cultural inventory and clearance for proposed projects.

c. Accurately map significant cultural resources for future resource monitoring and data upgrading.

d. Record oral interviews with all willing traditional lifestyle users (Ranchers, Native Americans, etc.) about their life within the Parashant area specifically and the Arizona Strip in general.

Rationale: Knowledge of cultural resources and traditional lifestyles must be gained in order to preserve them.

E2. a. Have law enforcement group (BLM, NPS, AGFD, Sheriff) meet and discuss patrol methods and schedules and develop interagency Memorandum of Understanding for Archeological Resources Protection Act and other law enforcement activities.

b. Continue monitoring flights and Site Steward program. Use monitoring flights by NPS aircraft.

Rationale: Provides protection for natural and cultural resources by utilizing a variety of methods and programs.

Objective F Maintain settings and opportunities for high quality undeveloped/backcountry recreation experiences in the Parashant by not allowing more than 1% shift (in acres) to higher Recreation Opportunity Spectrum class per year for the life of the plan.

Rationale: This objective recognizes the importance of providing settings for high-quality, undeveloped recreation. It conforms with the "Remoteness" mandate in BLM's Resource Management Plan and maintaining wilderness values on applicable Lake Mead lands. This objective will be implemented based on the Parashant's social and environmental carrying capacity and accomplished while keeping the public's perception of managerial presence to a minimum.

Actions:

F1. a. Using Recreation Zone System, maintain 255,300 acres of Zone 4, 74,510 acres of Zone 3 and 15,140 acres of Zone 2. On Lake Mead, maintain 83,980 acres of wilderness-suitable lands.

b. Conduct visitor surveys to establish a social science baseline.

c. Develop and implement Limits of Acceptable Change (LAC): Use visitor survey, monitor impacts (environmental and social) from recreational use on key areas such as popular campsites, and initiate management actions (below) when desired conditions are threatened.

d. Manage public use as necessary to maintain desired conditions according to LAC using, but not limited to, the following methods (in order of preference):
- Public information and education
- Selective road maintenance
- Designated campsites
- Closed areas

e. Develop Memorandum of Understanding between Arizona Strip and Lake Mead on commercial recreation permits to limit type, number or locations.

f. Work with Grand Canyon N.P. and Federal Aviation Administration to mitigate impact from aircraft overflights.

Rationale: Limits of Acceptable Change methodology enables us to monitor the remote and undeveloped nature of the area. A variety of methods will be utilized to maintain those qualities when conditions approach unacceptable limits.

Administrative Objectives

Objective G Increase maintenance of rangeland and wildlife improvements in the Parashant from current level to 90% of all projects functioning within 5 years of plan approval.

Rationale: Implementing this objective will ensure that investments made by the Government will not fall into neglectful disrepair.

Actions:

G1. a. Maintain all rangeland and wildlife improvements in the Parashant Area according to schedule in Appendix.

b. Inspect all projects according to schedule in Range Improvement Project System.

Rationale: A set schedule will ensure that long-term maintenance is provided.

G2. Develop cooperative maintenance agreement between BLM, NPS and Mohave County for roads, signs, etc.

Rationale: Provides for improved and more cost-effective maintenance efforts.

C. OBJECTIVES HANDLED THROUGH ADMINISTRATIVE PROCEDURES

Objective H Improve interagency and private sector coordination. The development and implementation of this interdisciplinary plan and continuing cooperative management of the Parashant will improve coordination and communication between agencies and with the public.

Actions:

H1. Review Memorandum of Understanding between Arizona Strip and Lake Mead on livestock management and update if necessary.

Rationale: This MOU provides coordinated interagency management of similar resources and land uses.

Objective I Increasing knowledge of all existing resources by establishing a data base within one year of plan approval will be accomplished by implementing other plan objectives and actions.

D. OBJECTIVES BEYOND THE SCOPE OF THIS PLAN

Objective J Livestock grazing on Grand Canyon National Park. To allow livestock grazing privileges on a National Park would require legislative action.

Objective K Possible designation of 83,980 acres of Lake Mead as wilderness. This depends on a congressional decision to designate these lands as a wilderness area or release them. Existing roads would be "cherry-stemmed" and excluded from wilderness. If released by congress, the lands would return to use as prescribed in the GMP.

E. EFFECTS ANALYSIS

An analysis of the anticipated effects of the prescribed actions is in the environmental analysis that will accompany the final plan.

V. PLAN IMPLEMENTATION

Day-to-day management will continue as it is now until implementation of this plan or adjusted according to the objectives of this plan using Adaptive Management Strategy. All completion targets are dependant on available funding.

A. IMPLEMENTATION TABLE

COMPLETION TARGET	ACTION	DATE COMPLETED
AZSTRIP: 1 year from plan approval LAME: FY 2000	A1. a. Complete Ecological Site Inventory (ESI) and determine Desired Plant Communities (DPC) while emphasizing biodiversity and sustainable/proper functioning ecosystems for the Arizona Strip portion. b. Develop grazing schedules according to DPC. c. Determine schedule of management actions to achieve DPC, including monitoring and evaluation. d. Prepare map illustrating vegetation management prescriptions. e. Expand existing data base for better management decision-making for all resources in the management area and update it on a continuous basis.	BLM Portion: 9/18/95
1 year from plan approval	f. Conduct inventories for Threatened and Endangered plants and animals. g. Identify areas of relic plant communities.	1/26/96
FY 2000	h. Complete soil surveys on Lake Mead lands by FY2000. (Soil surveys have been completed and mapped for BLM lands)	
Ongoing	i. Determine compatibility and share resource data (GIS, databases, etc.) between agencies.	

A. IMPLEMENTATION TABLE		
COMPLETION TARGET	**ACTION**	**DATE COMPLETED**
FY 2010 Ongoing	B1. a. Determine carrying capacity for game species. b. Evaluate the impact of habitat improvement projects on game carrying capacity. c. Conduct habitat enhancement projects in conjunction with DPC and HMP objectives (include # AUMs allocated for wildlife).	Ongoing
One year of plan approval	C1. Prepare and implement Prescribed Natural Fire Plan(s) within one year of plan approval.	
1 year from plan approval	D1. a. Establish a public information program for natural and cultural resources. b. Install signs and distribute brochures on protection of natural and cultural resources, respect for public and private property and public safety awareness. c. Provide interpretation of natural and cultural features to meet public needs. d. Sign private property as requested.	Begun 5/95 and ongoing Ongoing Ongoing
1 Year of Plan Approval Ongoing through life of plan	E1. a. Increase knowledge of the cultural resources through scientific study - consisting of a testing strategy, comparative artifact collection (primarily ceramics, but could include chipped stone for sourcing, material type variation studies, flotation, pollen, etc.), feature excavation and analysis, and regional synthesis and interpretation. Share data between agencies. b. Conduct cultural clearance and inventory for proposed projects. c. Accurately map significant cultural resources for future resource monitoring and data upgrading. d. Record oral interviews with all willing traditional lifestyle users (Ranchers, Native Americans, etc.) about their life within the Parashant area specifically and the Arizona Strip/Shivwits Plateau in general.	Ongoing, as needed Ongoing
Ongoing through life of plan	E2. a. Have law enforcement group meet and discuss patrol methods and schedules, develop interagency Memorandum of Understanding for ARPA and other law enforcement. b. Continue Civil Air Patrol flights and Site Steward program. Share monitoring flights by NPS aircraft.	

A. IMPLEMENTATION TABLE		
COMPLETION TARGET	**ACTION**	**DATE COMPLETED**
Ongoing 1 year from plan approval 2 years from plan approval/Ongoing 1 year from plan approval Ongoing, or until resolved	F1. a. Using Recreation Zone System, maintain existing Zones within 1% per year. b. Establish a social science baseline utilizing visitor surveys. c. Develop and implement Limits of Acceptable Change: d. Manage public use as necessary to maintain desired conditions. e. Develop Memorandum of Understanding between Arizona Strip and Lake Mead on commercial recreation permits to limit type, number or locations. f. Work with Grand Canyon N.P. and Federal Aviation Administration to mitigate impact from aircraft overflights.	
5 years from plan approval Ongoing	G1. a. Maintain all rangeland and wildlife improvements in the Parashant Area according to schedule in Appendix. b. Inspect all projects according to schedule in Range Improvement Project System.	
1 year from plan approval	G2. Develop cooperative maintenance agreement between BLM, NPS for roads, signs, etc.	
1 year from plan approval	H1. Review Memorandum of Understanding between Arizona Strip and Lake Mead on livestock management and update if necessary.	

B. DESIRED PLANT COMMUNITIES

At the Parashant Planning Team meeting on September 18, 1995, the team set the desired plant communities (DPC) for four prevalent vegetation/soil locations: Pinyon-Juniper Woodland, Sagebrush and Sagebrush Bottoms, Ponderosa Pine and Mountain Meadows (treated and untreated sites).

The DPC process involved using the Ecological Site Index for a given combination of soil, precipitation and vegetation to show the Potential Natural Community. This gives an idea of what vegetation the site will support. Next, the team decided what composition of vegetation was desired in the future on these sites - the Desired Plant Community.

PARASHANT PLANNING AREA
Desired Plant Community List

Ecological site data from BLM studies. Potential Natural Communities and site descriptions are from the Natural Resources Conservation Service. Acreages shown are for that particular Ecological Site only.

Vegetation Type: **Pinyon-Juniper Woodland**
Range Site/Ecological Site: Clay Loam Upland Gravelly 13-17" p.z.
Approximate acres to be treated: 3,500
Total approximate acres of site: 59,275

Plant species	Present Composition %	Potential Natural Community(PNC)	Desired Plant Community (DPC)
Trees (P-J)	**32%**	**<10%**	**2-10%**
Shrubs sagebrush cliffrose gambel oak	**51%** 47% 3% 1%	**12-65%** <10% <5% <5%	**12-65%** 2-10% 2-10% 1-5%
Grasses Cool Season	**10%**	**27-80%**	**20-60%**
Warm Season	**3%**	**5-49%**	**5-30%**
Forbs	**4%**	**<10%**	**2-10%**

Vegetation Type: **Sagebrush**
Range Site/Ecological Site: Shallow Loamy 9-13" p.z.
Approximate acres to be treated: 2,800 (1,700 acres presently treated)
Total approximate acres of site: 39,334

Plant species	Present Composition %	Potential Natural Community(PNC)	Desired Plant Community (DPC)
Trees/Shrubs	**79%**	**20-35%**	**10-65%**
P-J	3%		0-2%
Sagebrush	52%		2-50%
Cliffrose*	10%		5-15%
Other	14%		
Grasses Cool Season	**9%**	**40-60%**	**10-40%**
Warm Season	**4%**	**19-40%**	**5-40%**
Forbs/Annuals	**8%**	**1-5%**	**1-5%**

* Only found on very shallow parts of this site

Vegetation Type: **Sagebrush Bottoms**
Rangesite/Ecological Site: Loamy Upland 9-13" p.z.
Approximate acres to be treated: 750
Total approximate acres of site: 2,954

Plant species	Present Composition %	Potential Natural Community(PNC)	Desired Plant Community (DPC)
Trees/Shrubs	**77%**	**15-20%**	**15-20%**
P-J	13%		0-5%
Sagebrush	60%		0-20%
Four-wing	0%		0-2%
Other	4%		
Grasses Cool Season	**8%**	**40-80%**	**40-80%**
Warm Season	**12%**	**21-53%**	**21-53%**
Forbs	**3%**	**5-10%**	**5-10%**

Vegetation Type: **Mountain Meadow** (Treated)
Rangesite/Ecological Site: Mountain Meadow 18-30" p.z.
Approximate Acres: 700

Plant species	Present Composition %	Potential Natural Community(PNC)	Desired Plant Community (DPC)
Shrubs Sagebrush Rabbitbrush	**10%** 7% 3%	**3-5%**	**3-5%**
Grass & Grasslikes Seeded grass	**88%** 88%	**80-90%**	**70-90%**
Forbs	**2%**	**5-10%**	**5-10%**

Vegetation Type: **Mountain Meadow** (Untreated)
Rangesite/Ecological Site: Mountain Meadow 18-30" p.z.
Approximate Acres: 200

Plant species	Present Composition %	Potential Natural Community(PNC)	Desired Plant Community (DPC)
Trees/Shrubs Ponderosa Pine Juniper Sagebrush Other	**72%** 3% 9% 44% 16%	**3-5%**	**3-5%**
Grass & Grasslikes	**21%**	**80-90%**	**70-90%**
Forbs	**8%**	**5-10%**	**5-10%**

Vegetation Type: **Ponderosa Pine**
Rangesite/Ecological Site: Loamy Terrace 17-20" p.z.
Approximate Acres: 1,451

Plant species	Present Composition % below <4.5'	Potential Natural Community(PNC)	Desired Plant Community (DPC)
Trees/Shrubs	**40%**	**8-58%**	**8-58%**
Ponderosa	19%	<5%	
P-J	6%	<5%	
Gambel Oak	4%	<5%	
Sagebrush	5%	up to 25%	2-25%
Sumac	1%	<5%	
Snakeweed	5%	<5%	
Locust	T	<10%	
Other	T	<20%	
Grasses			
Cool Season	**13%**	**6-55%**	**6-55%**
Needle&thread	4%	<5%	
Squirreltail	3%	up to 25%	
Threeawn	2%	<5%	
Muttongrass	4%	<5%	
Warm Season	**30%**	**25-57%**	**25-57%**
Blue grama	29%	25-49%	
Mtn. muhly	T	<5%	
Sand dropseed	1%	<5%	
Forbs	**17%**	**1-12%**	**1-12%**

In most cases, the DPCs reflect healthier and more productive ecosystems than the current vegetation. The DPCs we arrived at are displayed in tables on the preceding pages. Acreages shown are for that particular Ecological Site only.

Vegetation types can be converted backwards along natural succession only by applying some form of energy to a system. This energy can be fire, chemical treatment or mechanical (chaining, pushing). It is not feasible, or desired, to convert all the acreage of a vegetation type to DPC. Sites identified by the team will be converted on a priority basis with remaining sites being converted in later phases.

VI. GENERAL MANAGEMENT STRATEGIES

A. BEST MANAGEMENT PRACTICES

Nonpoint sources of pollution result from natural causes, human actions, and the interactions between natural events and conditions associated with human use of the land and its resources. Nonpoint source pollution is cased by diffuse sources rather than from a discharge at a specific, single location. Such pollution results in alteration of the chemical, physical, and biological integrity of water. Surface erosion from a road is an example of a nonpoint source.

Best management practices are defined as methods, measures or practices selected on the basis of site-specific conditions to ensure that water quality will be maintained at its highest practicable level. Best management practices include, but are not limited to, structural and nonstructural controls, operations, and maintenance procedures. Best management practices can be applied before, during, and after pollution-producing activities to reduce or eliminate the introduction of pollutants into receiving waters.

The planned management actions of this plan constitute the best management practices for this area and are designed to achieve the objectives of maintaining or improving water quality and soil productivity. These best management practices are considered the primary mechanism to achieve Arizona's water quality standards. Because the control of nonpoint sources of pollution is an ongoing process, continual refinement of best management practices design is necessary. This process is called Adaptive Management and is described in the following section.

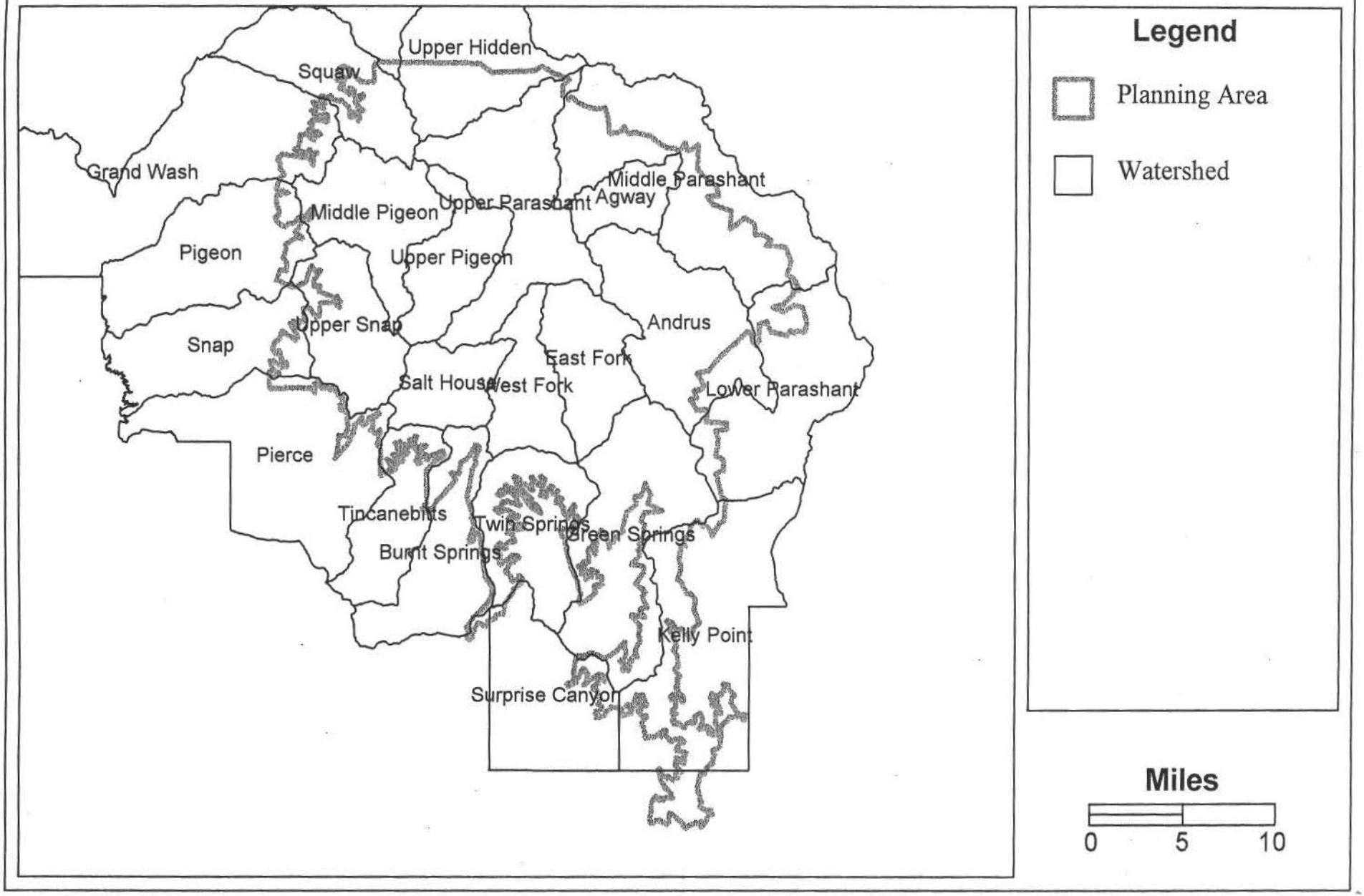
Best Management Practices are designed to ensure compliance with the Clean Water Act of 1972, as amended (1977 and 1987). Section 319 of the Clean Water Act Amendments of 1987 (Water Quality Act) requires that the states determine those waters that will not meet the goals to the Act, to determine those nonpoint source activities that are contributing pollution, and to develop a process of determining best management practices to reduce such pollution to the "maximum extent practicable."

B. WATERSHEDS

In order to provide a common vision and logical planning framework, the management area has been mapped according to watershed boundaries. The Shivwits Plateau is the ultimate source of several drainages subdivided into approximately 25 watersheds that flow into the Colorado River System (map follows this page).

Watershed Boundaries

Parashant Management Area



This structuring recognizes that the upper reaches of each watershed influence downstream soils, flora and fauna and will help to prioritize treatments. This broad-based management scheme will encourage cooperative watershed research and management. In addition, it may facilitate acquiring National Science Foundation grants.

C. OLD GROWTH TREES

The team recognizes the importance of preserving pinyon, juniper and ponderosa pine trees that may be from pre-settlement times (prior to 1890). Wherever possible these individual trees will be identified before any vegetative treatment project is begun and excluded from such treatment. It is recommended that the old trees be marked and the treatment operator (BLM or contractor) be notified and made aware of the process so that the identified trees be left undisturbed.

D. STANDARDS AND GUIDELINES

This plan, including all associated management actions, will comply with the Arizona Standards for Rangeland Health and Guidelines for Grazing Administration. Three Standards and 12 Guidelines were developed by a Resource Advisory Council with BLM and cover all BLM lands in Arizona. Standard 1 describes soil conditions relating to infiltration, permeability and erosion rates. Standard 2 pertains to obtaining properly functioning condition of riparian areas. Standard 3 directs development of plant communities to support the desired values to be provided on the landscape. The Guidelines give direction for livestock management practices to assure attainment of the Standards.

E. ADAPTIVE MANAGEMENT

This interagency and interdisciplinary plan is intended to be dynamic and adaptable. Natural forces, agency emphasis and political situations are not static, so it is assumed that situations and conditions in and about the Parashant will change from those existing when this plan was developed. In addition, management may wish to implement some identified actions before final plan approval. To accommodate this and maintain viability of this plan, an Adaptive Management Strategy is being included. Continuing the Interdisciplinary Team approach, actions that are immediately implementable or previously unidentified, or proposed plan changes will be presented to the team. By consensus, the team will determine if the proposal is in conformance with the vision and objectives stated in the plan. During implementation, some actions prescribed in this plan may cease to be feasible or desirable as new information or conditions ensue. With team consensus any part of, or the entire plan, may be refined or re-written to adapt to changing conditions. Controlled experimentation with new management techniques is encouraged and these techniques may be applied to broader areas as the team dictates.

VII. PLAN MONITORING MATRIX

PRESCRIBED ACTION	MONITORING METHOD	ESTIMATED ANNUAL COSTS[1]	RESPONSIBILITY
A1	DPC will be measured and monitored through regular range studies (trend, etc.).	3 WMs	Range Management Specialists
B1	Monitoring game populations and carrying capacity will be conducted by BLM and AGFD personnel using animal censuses, hunting success, browse utilization, etc.	2 WMs	Wildlife Biologists / AGFD
C1	Measuring effectiveness of PNF will be done through range and forest stand studies. Records will be maintained of the size and location of fires each year.	1 WM	Range Management Specialists, Forester and Fire Management Officers
D1	Effectiveness of this action will be measured through the amount of vandalism occurring to natural and cultural resources and the number of visitors becoming stranded or lost.	<1 WM	All Personnel
E1	Measured by the number of acres or sites recorded.	2 WM	Archaeologists
E2	Measured by the number of successful cases.	1 WM	Law Enforcement Officers
F1	Opportunities and settings will be monitored through the Limits of Acceptable Change process. Number of visitors and use trends will e recorded.	1 WM	Outdoor Recreation Planner
G1	Measured by the number of functioning rangeland and wildlife improvements.	<1 WM	Range Management Specialists and Force Account Crew
G2	Measured through the maintenance agreement.	<1 WM	Force Account Crew/LAME R&T?

[1] WM = workmonth for all personnel involved. A workmonth is a measure of work time by a Federal employee equal to 173 hours. In Fiscal Year 1995 the average workmonth cost for the BLM was about $3700. Workmonths are covered by annual agency budgets and are not separate costs.

VIII. PLAN EVALUATION PROCESS AND SCHEDULE

In addition to meetings held under the Adaptive Management Strategy, the planning team will be called upon to review the final plan every 2 years, more often if deemed necessary. At each review, the team will receive progress reports on the planned actions and review monitoring data to see if planned actions are having the desired results. Monitoring results or new information may prompt the team to recommend changes in management actions that appear necessary to achieve the objectives. The team should also review the vision statement, objectives and implementation schedule to determine if they are still valid. If not, the six-step planning process will be restarted.

IX. PLAN RECOMMENDATION AND APPROVAL

The Parashant Management Plan is recommended by the Planning Team leaders:

Matthew Safford
Jennifer Haley
Jim Holland
Whitney Bentley

The Parashant Management Plan is approved by the Planning Team members:

Lee A. Brown
Clayton Allgire
Robert Davey
Celeve Esplin
Michael T. Hender
Robert S. Price
Doyle B. Esplin
L. Wayne Esplin
Jeanne Esplin
Kathy Edwards
Gina Seymour
Dennis Hughes

Arlene Taylor

The Parashant Management Plan is authorized by:

Roger D. Taylor — 10/17/97
FIELD MANAGER — DATE
ARIZONA STRIP DISTRICT

Alan O'Neill — 10/17/97
SUPERINTENDENT — DATE
LAKE MEAD NATIONAL RECREATION AREA

T. L. Britt — 10-17-97
REGIONAL DIRECTOR, REGION III — DATE
ARIZONA GAME AND FISH DEPARTMENT

ATTACHMENTS

Allotment Grazing Management for 5 allotments
BLM Transportation and Access Plan
Range and Wildlife Improvement Maintenance Schedule (to be developed)
Memorandums of Understanding (to be developed)

BLM PARASHANT TRANSPORTATION AND ACCESS PLAN

Attachment to the Parashant Interdisciplinary Management Plan

The Arizona Strip RMP declared a portion of the Parashant area as Limited to Designated Roads and Trails (LDRT). The RMP requires an implementation plan to be prepared for all LDRT areas that describes the roads that will be designated open. As an attachment to the Parashant Management Plan, this document and the attached map will serve that purpose.

In a Limited to Designated Roads and Trails area, only those roads that are designated will remain open. Non-designated roads will be closed and allowed to rehabilitate.

Within the boundaries of the Parashant, there are 13 roads on agency or County transportation plans - 8 on BLM, 4 on Lake Mead (NPS) and Road #103 maintained by Mohave County (see map and table). Roads with four digit numbers beginning with 10-- are BLM roads maintained according to the schedule in the table and the remaining are Lake Mead's. The numerous un-numbered resource and project roads do not receive any regular maintenance from the agencies but may be used by permittees (ranch operators, etc.) and occasionally by the public.

Designated Roads and Trails

The following roads and trails will remain open (Transportation Map attached):

1. All BLM roads on the Arizona Strip District's Transportation Plan at the time of Parashant Plan approval.

2. Other existing roads and vehicle trails that are deemed necessary for the activities or convenience of permittees or the public, where such use does not conflict with other public land users or have undue impact on the environment. In general, all existing roads will remain open except those within the boundaries of the original LDRT area that are causing a demonstrable impact.

Closed Roads and Trails

Roads and trails that do not meet the criteria listed above will be closed. Occasional emergency and administrative use will still be allowed on closed roads. "Closed Road" signs will be posted and barriers constructed as needed to prevent continued vehicle use. In most cases, closed roads would be allowed to rehabilitate naturally or converted to trails for non-motorized use. Motorized equipment may be used to construct barriers or prevent continued soil erosion on closed roads. Environmental Assessments may be needed for ground-disturbing actions.

Access

Managing the level and degree of Visitor Access will follow guidelines for the Recreation Management Zones described in the Parashant Management Plan. Visitor Accessibility is defined as the level of difficulty in traversing and navigating the roads. In summary, Zone 2 will be most accessible and Zone 4 least accessible (Recreation Zones map attached).

Recreation Zone 2 is the corridors along the most traveled and better maintained roads. This Zone allows the most signs - directional and interpretive - and facilities (administrative sites, occasional picnic tables and undeveloped campsites). In the Parashant, Zone 2 is a corridor along Wildcat Road (County Rd. #103) as far south as the Oak Grove junction.

Zone 3 is composed of areas of backcountry with less maintained roads, fewer signs and no facilities. The majority of this Zone lies to the east of Road 103. Other portions are along the Pigeon Canyon Road (#1002) and the Snap Canyon/Salt House loop (Roads 1062 and 1012).

The remaining public lands are in Zone 4. In this Zone, the roads are not regularly maintained and not frequently traveled. There are very few signs and no facilities. The Lake Mead portion of the Parashant can also be described as Zone 4.

Road conditions can be used to manage the number of visitors to an area (i.e. The worse the road, the fewer the visitors). An exception to this is Twin Point and Kelly Point. The roads to these Grand Canyon overlooks are very rough, but despite this, the goal of the overlooks is incentive enough to draw visitors out to these points. If monitoring shows that visitor use is approaching or exceeding acceptable limits in a certain area, maintenance schedules (see table) of the access roads for that area can be adjusted to reduce the level of Visitor Accessibility.

PARASHANT ROADS

Road Name	Road #	Maintenance Responsibility	Length	Maintenance Level		Maintenance Frequency		Road Type	Comments
				Existing	Proposed	Existing	Proposed		
KELLY POINT	478	NPS							
WILDCAT	103	COUNTY		1-2				L	Main access road
SNAP POINT	1012	BLM	14.6	3		3		R	
TWIN POINT	1019	BLM	4.3	3		3		R	For Parashant Admin. site and Twin Point
GRASSY POINT	1046	BLM	16.8	3		3		R	
RATTLESNAKE	1054	BLM	14.6	3		3		R	
SALT HOUSE	1062	BLM	6.4	3		3		R	
LAST CHANCE	1071	BLM	10.8	3		3		R	
(PINE VALLEY)	4777	NPS							
(KELLY POINT #2)	4792	NPS							
TWIN POINT	4831	NPS							

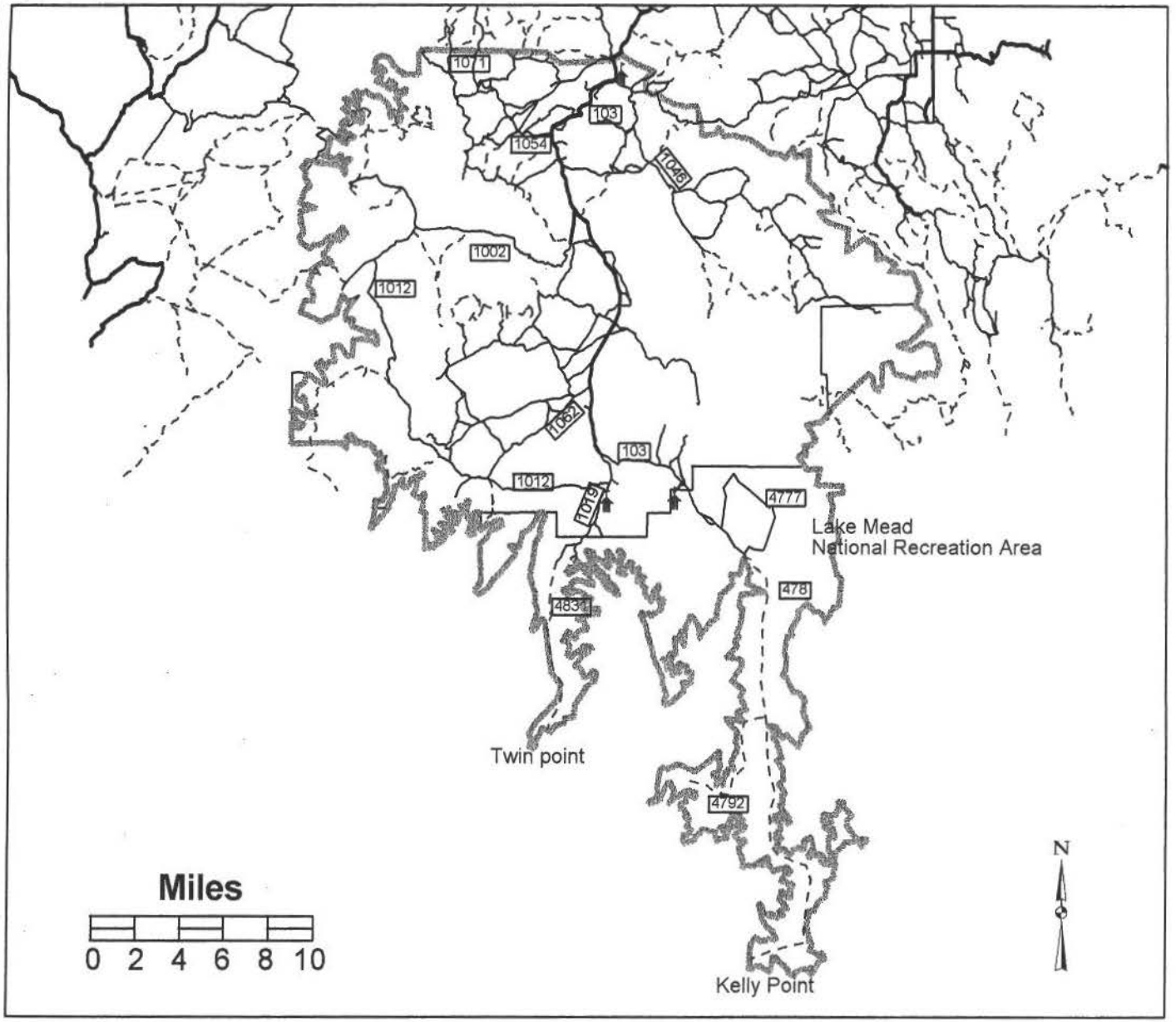
Maintenance Level
- 1 = High level of regular Maintenance, to highest agency standards
- 2 = Moderate level
- 3 = Low level of Maintenance, to minimum standards

Maintenance Frequency
- 1 = Maintained every year
- 2 = Maintained every 2 years
- 3 = Maintained every 3 years
- 4... (etc.)

Road Type
- C = Collector
- L = Local
- R = Resource

Parashant Transportation Plan

Arizona Strip District and Lake Mead N.R.A.



Legend

- Planning Area
- Jeep Trails
- Primary Unpaved Roads
- Secondary Unpaved Roads
- 1019 Road No.
- Administrative Site

Not all roads shown on this map

PARASHANT INTERDISCIPLINARY MANAGEMENT PLAN

GRAZING MANAGEMENT PLANS

FOR

Hidden Hills Allotment

Parashant Allotment

Penn's Well Allotment

Red Pond Allotment

Wildcat Allotment

Hidden Hills Allotment Grazing Management

I. Allotment Information

Allotment: Hidden Hills

Land Status	Acres
Public	45,999
State	3,428
TOTAL	49,426

Permittee: Cleve Esplin & Sons
Animal Unit Months (AUM's): 1,907
Percent Federal Range: 91%
Season of Use: 6.5 months

Grazing Authorization:

Allotment	Livestock Numbers	Grazing Begin	Grazing End	AUM's
Hidden Hills	281 Cattle	05/16	12/30	1,904
	3 Cattle	05/16	06/16	3

Guidance From the Land Use Plan:

The Arizona Strip Resource Management Plan (RMP, 1992) outlines the following goals for grazing administration and rangeland management on the Arizona Strip District.

- Administer livestock grazing on public lands to balance use and sustain productivity and appropriately mesh livestock production and associated management practices with other multiple use needs and objectives.

- Manage, maintain, protect and improve rangeland resources within the framework of multiple-use needs and objectives so that they are productive for all rangeland values.

- Maintain close monitoring of the utilization, condition and trend of rangeland resources.

- Ensure that rangeland improvement projects provide multiple-use benefits, where appropriate.

II. Allotment Goal and Objectives

Goal: Establish and maintain healthy, diverse vegetation communities on the Hidden Hills allotment that will benefit all land resources.

Objectives:

1. Reduce the amount of sagebrush from 60% to 0-20% and increase the composition of grasses and forbs from 21% to 60-85% in Hidden Lake Draw on the Hidden Hills allotment within 10 years of plan approval. (Objective reflects the Desired Plant Community (DPC) for the sagebrush bottoms identified in the Parashant Management Plan.)

2. Reduce the combined amount of Pinyon-Juniper and sagebrush from 83% to 2-35% and increase the composition of grasses, forbs and browse from 21% to 32-90% in the identified treatment area of the Gulch Point pasture by year 2002. (Objective reflects the DPC for Pinyon/Juniper vegetation type identified in the Parashant Management Plan)

3. On an on-going basis, maintain and enhance the vegetation diversity of the Hidden Hills chaining that will reflect the DPC for Pinyon/Juniper areas and produce future multiple-use benefits. (See DPC list for P/J woodland sites)

III. Management Actions

A. The management actions have been identified to achieve allotment objectives, DPC objectives and contribute to better livestock management on the Hidden Hills allotment. All actions will be accomplished under a cooperative effort between the permittee, BLM and other state and federal agencies.

1. Manage the impacts of livestock so that the goals for grazing management are achieved. This will be done by providing the necessary improvements to implement a planned grazing system and then implement the grazing system within 5 years of plan approval.

On BLM administered lands that require reseeding native species are prefered, however if native seed is not economically feasible introduced grass species will be used in the seed mix to establish herbaceous biomass and provide soil stability. Seeded areas will be rested from livestock grazing for two years to allow seed germination and seedling establishment.

The grazing schedule during land treatment installation will be adjusted to allow conditions for the following:

1. Seeded areas will receive two growing seasons rest to allow seed germination and seedling establishment.
2. Burn areas will be rested two growing seasons or until treated area can be utilized without harmful effects.

Management Action	Location	Units	Priority
Rim P-J Removal	T34N,R13W,Sec.9	140 ac.	3
Hidden Division Fence	T34N,R13W,Sec.2,9,10,11 T35N,R13W,Sec.15,35,36	5.5 miles	1
Andrus Sprg Pipeline Ext.	T34N,R12W,Sec 8,.9,16,18,21 22,23,24	12 miles	2
Poverty Sprg.Pipeline Extension and Trough	T35N,R12W,Sec.32,33	1 mile	1
Hidden Draw Burn	T35N,R12W,Sec.29,31,32, 36	400 ac.	4

* Priority 1 projects are critical to implement allotment objectives

B. Grazing System

1. Present Operation

The Hidden Hills allotment is managed as a cow-calf operation. The permittee is currently operating at full numbers (280 head). Hidden Hills is a six and one-half month summer/fall allotment operated in conjunction with the Pakoon allotment as the winter/spring range. Cattle are moved to the Pakoon approximately January 1 and stay there until May 15. At this time, cattle are allowed to drift into the Bench pasture and make use of it for two to three weeks as they move toward summer pastures. Cattle are generally in the Gulch Point pasture by June 1-15 and remain there until July 1. The Overnight pasture is the main summer pasture which is used from July through October. As late fall approaches cattle are rotated through the Gulch Point and Bench pastures back to the Pakoon.

2. Proposed Operation

The proposed system is very similar to the current operation. The proposed system calls for a 4-pasture rotation with season- of-use remaining the same. The Overnight pasture would be split creating two summer pastures (Overnight and North Tank). This would allow for summer rotation and deferment which is presently lacking. The grazing regime for Gulch Point and the Bench would remain relatively unchanged. The allotment will continue being grazed with full numbers (280 head) for 7.5 months.

3. Winter Pastures

Winter grazing for livestock tied to Hidden Hills will occur on the Pakoon allotment, which is a separate allotment and operates under its own management plan.

4. Transition Pastures

The Bench pasture will be grazed approximately 15 days in the spring and 30 days in late fall as cattle move to winter and summer pastures. Gulch Point will be used in transition to a small extent however, its main use will occur in late spring and/or late fall.

5. Summer Unit

Upon completion of the Hidden division fence the summer unit will consist of two pastures (North Tank and Overnight). These pastures will be grazed on a flip-flop system, and will provide for growing season deferment every other year.

6. Planned Grazing Use

Use Period	Schedule
A	05/16-05/31 & 12/01-12/31
B	06/01-06/30 & 11/16-11/30
C*	06/01-06/14 & 11/01-11/30
D	07/01-09/15
E*	06/15-08/31
F	09/16-11/15
G*	09/01-10/31
H	01/01-05/15

* Grazing treatment would occur every third year

Hidden Hills Grazing Scedule								
Pasture	Yr 1	Yr 2	Yr 3	Yr 4	Yr 5	Yr 6	Yr 7	Yr 8
Bench #1	A	A	A	A	A	A	A	A
North Tank #2	F	D	G	D	F	E	F	D
Gulch Point #3	B	B	C	B	B	C	B	B
Overnight #4	D	F	E	F	D	G	D	F
Pakoon Allot.	H	H	H	H	H	H	H	H

7. Flexibility/Adaptive Management

This grazing management plan is intended to be flexible, dynamic, and adaptable. Natural forces, agency emphasis and political situations are not static, so it is assumed that situations and conditions of the Hidden Hills allotment will change from those existing when this plan was written. On those years when the scheduled grazing rotation cannot be achieved due to resource conditions or other events, the Esplins' and BLM will meet prior to livestock turn out to select the pasture(s) to be used. These decisions will be based on potential resource impacts,

vegetation vigor and water availability. At this time the Esplins and BLM will also select the pasture(s) to be deferred or rested. The BLM may require specific pastures to be deferred at anytime. Livestock will be allowed to move into or out of a pasture up to 7 calendar days before or after scheduled move dates. Further deviance from the scheduled dates must be approved in advance by the authorized officer. (Refer to Parashant Management Plan, Section VI.(C) for more on Adaptive Management)

IV. Monitoring and Evaluation

A. Studies

1. Trend: Trend plots will be established in selected key areas of each pasture. The pace-frequency monitoring method will be used to determine trend. The Dry-Weight Rank method will also be used to determine vegetation composition. Trend will be read on a four year cycle.

Trend Studies Schedule		
Key Area	Month	Frequency
North Tank #1	September	96,00,04
North Tank #2	September	96,00,04
Overnight #6	September	96,00,04
Gulch Point #7	October	96,00,04
Bench #8	October	96,00,04
Seeding (W) #10	September	96,00,04
Seeding (E) #11	October	96,00,04

2. Utilization: Utilization studies will be read in designated key areas of each pasture following each grazing period using the grazed class method. Utilization will be maintained at or below 50 percent use on key species. If possible, utilization studies will be conducted 2 weeks before livestock leave the pasture.

3. Actual Use: The permittee will furnish BLM with actual use records on the allotment by December 21 annually, including number of livestock over six months of age and periods of use by pasture.

4. Precipitation: Precipitation data for the Hidden Hills allotment will be collected quarterly by a rangeland management specialist from gauges at Poverty Mountain, Pigeon Flat and Savanic on the middle bench.

HIDDEN HILLS PROJECTS
COST MATRIX

Project	Location	Units	Cost/ Unit	Total Cost	Maint.	Prio.
P-J Removal	T34N,R13W,Sec.9	140 ac.	$80/ac	$11,200	Perm/BLM	2
Hidden Fence	T34N,R13W,Sec.2,9,10 11 T35N,R13W,Sec.15,35	5.5 miles	$3,300/mi	$18,150	Permittee.	1
Andrus Sprg Pipeline Ext	T34N,R12W,Sec.8,9,16,18,21 22,23,24	12 miles	$2,000	$24,000	Permittee	3
Pov.Sprg. Pipeline	T35N,R12W,Sec.32,33	1 mile	$1,925	$1,925	Permittee	1
Hidden Draw Burn	T35N,R12W,Sec.29,31 32,36	400 ac	$6/ac	$2,400	Perm/BLM	4

* Prices are bases on 1996 estimated costs

V. Agreement to Plan

Concurrence: Cleve Esplin — 10/17/97
Cleve Esplin (Permittee) — Date

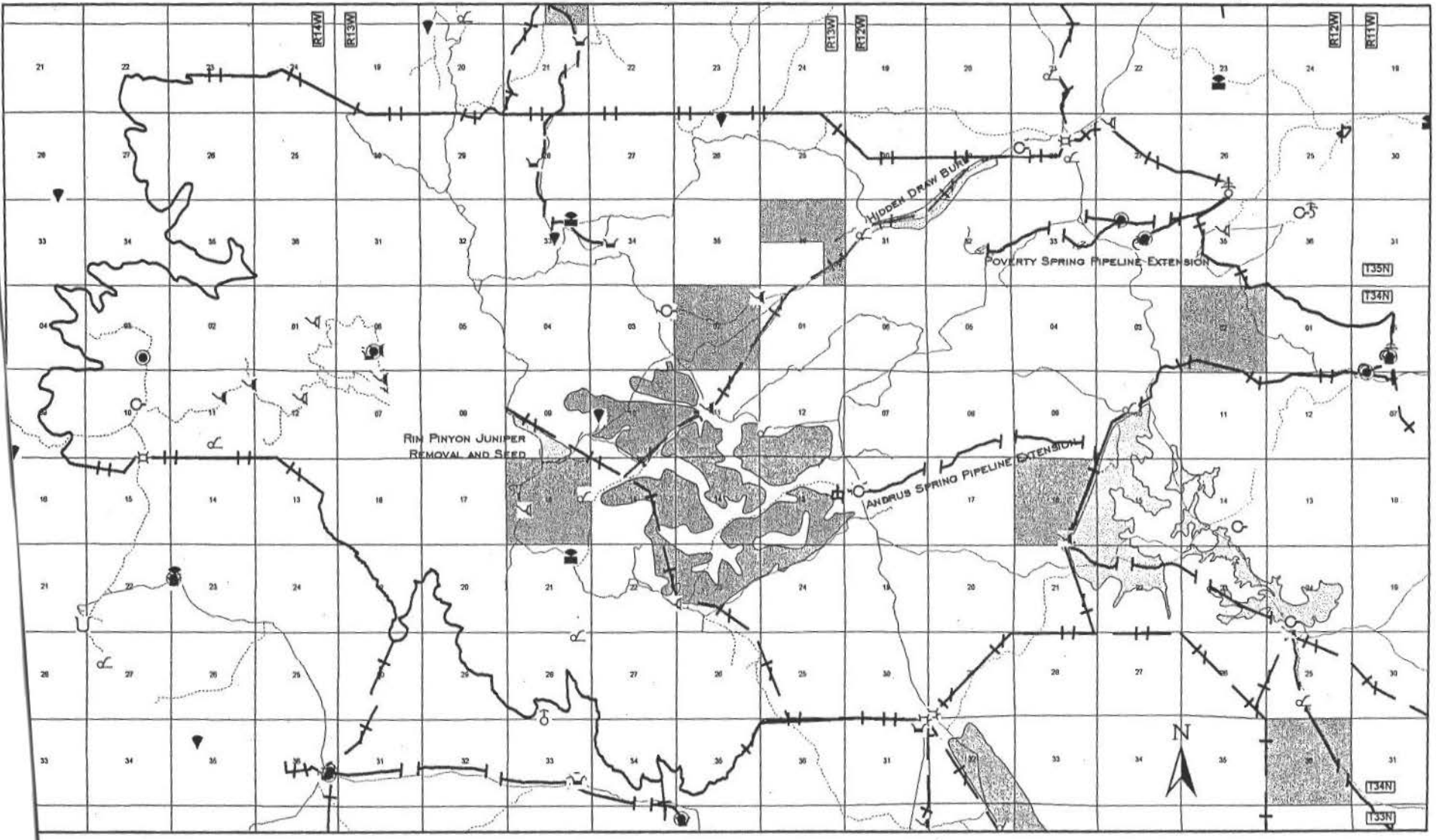
Approved by: Roger D Taylor — 10/17/97
Roger Taylor (Field Office Mger.) — Date

Allotment Management Plan

Proposed Projects

- Cattleguard
- Corral
- Detention Dam
- Developed Spring
- Fence
- Fenced Reservoir
- Key Area
- Livestock Catchment
- Livestock Trough
- Pipeline
- Proposed fences
- Proposed pipelines
- Proposed storage tank
- Proposed trough
- Prop. vegetative treatments
- Storage Bin
- Storage Tank
- Undeveloped Spring
- Unfenced Reservoir
- Vegetative Treatment
- Well
- Wildlife Catchment
- Wildlife Drinker
- Windmill

Miles: 0 .5 1



Parashant Allotment Grazing Management

I. Allotment Information

Allotment: Parashant

Land Status	Acres
Public (BLM)	51,000
State	0
Private	0
TOTAL	51,000

Animal Unit Months (AUM's): 2,616
Percent Federal Range: 100%
Maximum Carrying Capacity:

Parashant Allotment	Livestock Numbers	Grazing Begin	Grazing End	AUM's
Summer Unit	300 Cattle	06/01	11/30	1,866
Winter Unit	125 Cattle	12/01	05/31	750

Guidance From the Land Use Plan:

The Arizona Strip Resource Management Plan (RMP, 1992) outlines the following goals for grazing administration and rangeland management on the Parashant allotment and Arizona Strip District.

- No new permanent grazing authorizations for the Parashant allotment.

- Grazing on the Parashant will be at BLM discretion to provide additional rest on other allotments needing rest due to fire damage, vegetation treatments, or to establish an Allotment Management Plan (AMP) grazing system.

- Administer livestock grazing on public lands to balance use and sustain productivity and appropriately mesh livestock production and associated management practices with other multiple use needs and objectives.

- Manage, maintain, protect and improve rangeland resources within the framework of multiple-use needs and objectives so that they are productive for all rangeland values.

- Maintain close monitoring of the utilization, condition and trend of rangeland resources.

- Ensure that rangeland improvement projects provide multiple-use benefits, where appropriate and ensure range improvement maintenance.

II. Allotment Goal and Objectives

Goal: Manage livestock grazing to maintain or enhance vegetation diversity, wildlife habitat, recreation opportunities and soil stability on the Parashant allotment.

Objectives:

1. On an on-going basis, maintain or enhance the vegetation diversity of the Parashant land treatments to reflect Desired Plant Community (DPC) objectives and produce future multiple-use benefits. (See DPC list for P/J woodland, Mountain meadow and Ponderosa pine sites)

III. Management Actions

A. For the life of the plan, maintain or enhance existing improvement projects (i.e. water, vegetation, fences and facilities) to provide present and future multiple-use benefits. The management actions have been identified to achieve allotment objectives, DPC objectives and contribute to better livestock management on the Parashant allotment. Project maintenance will be accomplished under a cooperative effort between BLM, Arizona Game and Fish Dept. and the authorized operator.

Management Action	Location	Units	Maint.Type
Chaining Maintenance Treatments	T32N,R12W,Sec.3,5,31,33 T32N,R13W,Sec. 25,27,29 33,35	10,000 ac	Burn/Chem. Treatment
Catchment Maintenance	T32N,R13W, Secs. 25,29	3	Routine
Gov't Pond Dike Repair	T32N,R12W,Sec.24	1	Inlet Dike Repair
Mociac Pasture Fence & Waterlot	T32N,R12W,Sec.20	.5 mile	Routine
Pine Ranch Well Development	T32N,R12W,Sec.24	1	Install Pump
Snap Spring Pipeline	T32N,R14W,Sec.2,12,13	3 miles	Routine
Mociac and Lake Flat Corral Maintenance	T32N,R12W.Sec.28 T32N,R12W,Sec.25	2	Routine

B. Grazing Management Guidelines

1. Grazing on the winter unit of the Parashant allotment will be limited to numbers not to exceed 125 head of livestock.

2. Mociac north and Mociac south pastures will only be used as transition and holding pastures for livestock herds exceeding 60 head. Cattle herds of 60 head or fewer may use these pastures for more extended grazing periods as long as utilization levels are kept to 50% or below.

3. Pastures may not be grazed more than one spring growing season (June 1-July 15) during a 3 year period.

4. Any given pasture may not be grazed more than two summer growing periods (July 15-September 1) during a 3 year period.

5. Critical brooding areas for the Merriam's turkey will be identified. All or parts of the brooding sites will be deferred from grazing until July 15 of that grazing year.

6. A seasonal pasture rotation schedule will be developed for each operator authorized to graze livestock on the Parashant allotment. This grazing schedule will be coordinated with the operator, BLM specialists, Arizona Game & Fish and the Lake Mead Recreation Area prior to turnout.

C. Grazing Units

1. Winter/Fall Unit

The Snap pasture, below Snap Point will be used as the winter unit for cattle wintering on the Parashant. Cattle numbers will be limited to 125 head for 6 months December 1-May 31. Grazing rest on the winter unit would occur at least one year out of five. During years when the production of "annual" vegetation is high, temporary grazing extensions may be granted.

2. Transition Pastures

Mociac north and south pastures will be used as transition and holding pastures for livestock moving to other pastures on the allotment. Livestock herds with 60 or fewer numbers may use these pastures for more extended grazing periods given utilization levels are kept to 50% or below.

3. Summer/Fall Unit

The summer unit consists of seven pastures (Yellow-John, Lake Flat, Kelly, Twin Point, Salt House(E), Salt House(W) and Tincanebitts). These pastures will be grazed on a best pasture

rest-rotation system. This will provide each pasture with adequate growing season rest following its use period. Because there are multiple pastures, it is common to rest three or four pastures during a grazing year. Cattle numbers on the summer unit will be limited to under 300 head for 6 months June 1-November 30.

The RMP recognizes wildlife as one of the important resources of the Parashant allotment. Among these wildlife species is the Merriam's turkey. Special consideration will be given to critical nesting and brooding areas when the annual grazing schedule is prepared. All or parts of these sensitive brooding areas will be deferred from grazing until after July 15 in an effort to maintain suitable ground cover for the young turkey poults.

D. Flexibility/Adaptive Management

The permittee will be allowed to move into or out of a pasture up to 7 calendar days before or after scheduled move dates. Further deviance from the scheduled dates must be approved in advance by the authorized officer. (Refer to Parashant Management Plan Section VI.(C) for more on Adaptive Management)

IV. Monitoring and Evaluation

A. Studies

1. Trend: Trend plots have been established in selected key areas of each pasture. The pace-frequency and dry-weight rank monitoring methods will be used to determine composition and trend. Trend will be read on a six year cycle.

Trend Studies Schedule		
Key Area	Month	Frequency
Lake Flat #1	September	97,03,09
Kelly #4	September	96,02,08
Twin Point #6	September	97,03,09
Salt House(E) #7	September	97,03,09
Upper Snap #11	September	96,02,08
Yellow-John #18	September	96,02,08
Salt House(W) #20	September	97,03,09
Snap #21	September	96,02,08
Tincanebitts #23	September	97,02,08

2. Utilization: Utilization studies will be read indesignated key areas of each pasture following each grazing period using the grazed class method. Utilization will be maintained at or below 50 percent use on key species. If possible, utilization studies will be conducted 2 weeks before livestock leave the pasture.

3. Actual Use: The permittee will furnish BLM with actual use records on the allotment annually, including number of livestock over six months of age and periods of use by pasture. BLM may require the permittee to ear tag his cattle using the Parashant for record keeping and identification purposes. The size and handling ability of the herd will dictate the need for tagging.

4. Precipitation: Precipitation data for the Parashant allotment will be collected quarterly from the Salt House and Yellow-John gauges by a rangeland management specialist.

PARASHANT MAINTENANCE COST MATRIX

Mgmt. Action	Location	Units	Cost/ Unit	Total Cost	Maint.	Maint. Cycle
Chaining Maint.	T32N,R12W,Sec.3,5,31 T32N,R13W,Sec.25,27 29,33,35	10,000 ac @ 1,000 ac/yr	$2/ac	$2,000/yr	BLM	15 yr
Catchment Maint.	T32N,R13W,Sec.25,29 T32N,R14W,Sec.8	3	$50 /yr	$150/yr	BLM	1-5 yr
Dike Repair	T32N,R12W,Sec.24	1	$700	$700	BLM	15 yr
Mociac Fence	T32N,R12W,Sec.20	.5 miles	$1,800/mi	$900	BLM/ Operator	10 yr
Pine Well Dvlpmnt	T32N,R12W,Sec.24	1	$5,000	$5,000	BLM	5 yr
Snap Spg. Pipeline.	T32N,R14W,Sec.2,12,13	3 miles	$25/yr	$25/yr	BLM	3 yr
Corral Maint.	T32N,R12W,Sec.28 T32N,R12W,Sec.25	2	$250 ea	$500	BLM/ Operator	5 yr

* Prices are bases on 1996 estimated costs

Penn's Well Allotment Grazing Management

I. Allotment Information

Allotment: Penn's Well/Dripping Spring

Land Status			
Penn's Well		Dripping Spring	
BLM	4,225 acres	BLM	1,290 acres
LMNRA (Park)	0 acres	LMNRA (Park)	9,774 acres
State	640 acres	State	0 acres
Private	620 acres	Private	0 acres
TOTAL	5,785 acres	TOTAL	11,084 acres

Permittee: Afton N.& John A. Snyder
Animal Unit Months (AUM's): 591
Percent Federal Range: Penn's Well 93%
Dripping Spring 100%
Season of Use: Year-long

Grazing Authorization:

Allotment	Livestock Numbers	Grazing Begin	Grazing End	AUM's
Penn's Well	31 Cattle	06/01	10/31	145
Dripping Srg.	62 Cattle	11/01	05/31	432
	2 Horses	11/01	05/31	14

Guidance From the Land Use Plan:

The Arizona Strip Resource Management Plan (RMP, 1992) outlines the following goals for grazing administration and rangeland management on the Arizona Strip District.

- Administer livestock grazing on public lands to balance use and sustain productivity and appropriately mesh livestock production and associated management practices with other multiple use needs and objectives.

- Manage, maintain, protect and improve rangeland resources within the framework of

multiple-use needs and objectives so that they are productive for all rangeland values.

- Maintain close monitoring of the utilization, condition and trend of rangeland resources.

- Ensure that rangeland improvement projects provide multiple-use benefits, where appropriate.

II. Allotment Goal and Objectives

Goal: Establish and maintain healthy, diverse vegetation communities on the Penn's Well and Dripping Spring allotments that will benefit all land resources.

Objectives:

1. Reduce the composition of Pinyon-Juniper from 83% to 2-35% in and increase the composition of grasses, forbs and browse from 21% to 32-90% in the identified treatment area of Penn's Well allotment within 15 years of plan approval. (Reflects the Desired Plant Community (DPC) for Pinyon-Juniper identified in the Parashant Management Plan)

III. Management Actions

A. The management actions have been identified to achieve allotment objectives, DPC objectives and contribute to better livestock management on the Penn's Well allotment. All action projects will be accomplished under a cooperative effort between the permittee, BLM and other state and federal agencies.

1. On an on-going basis, maintain and enhance the vegetation diversity of the Penn's Well chaining to produce future multiple-use benefits and reflect the DPC for Pinyon/Juniper ecological site. (See DPC list for P/J woodland sites)

2. Increase the water storage capacity of Penn's catchment from 42,000 to 80,000 gallons within 10 years of plan approval.

On BLM administered lands that require reseeding native species are prefered, however if native seed is not economically feasible introduced grass species will be used in the seed mix to establish herbaceous biomass and provide soil stability. Seeded areas will be rested from livestock grazing for two years to allow seed germination and seedling establishment

Management Action	Location	Units	Priority
Catchment Storage Tank	T33N R11W Secs. 29	40,000 gal.	1
Penn's Well P-J Removal	T33N R11W Secs. 30,31 T33N R12W Secs. 25	500 acres	2

B. Grazing System

1. Present Operation

Penn's Well/Dripping Spring allotments are operating under the Penn's Well Allotment Management Plan (AMP, 1982). Penn's Well is the summer/fall unit (June 1-October 31). This system was developed and implemented following the Penn's Well chaining project. The chained area was divided into four separate units or pastures and is managed under a 4-pasture rest-rotation grazing system. Each pasture is rested a full season every fourth year. Each scheduled unit receives approximately 60 days of grazing use depending on water availability at the Penn's Catchment. When water is absent in the chaining pastures cattle are moved to State and private land within the allotment boundaries. These State and private lands are not directly incorporated into the AMP or grazing system of this allotment.

Dripping Spring is the winter/spring unit and is grazed under a 2-pasture deferred schedule. Cattle are generally on the Dripping Spring allotment by November 1 and stay until mid to end May.

2. Proposed Operation

The proposed operation is to retain the current system identified in the Penn's Well AMP. Penn's Well will be managed under a 4-pasture rest-rotation system. Dripping Spring will also retain its existing 2-pasture deferred system. Both units will grazed with full authorized numbers.

3. Winter/Spring Unit - Dripping Spring

The winter unit is split into 2 large pastures (North & South) and will be used for November 1 to May 31. These pastures are managed to defer early spring use every other year. This system will provide each pasture rest during early green-up and the spring growing season every other year.

4. Summer/Fall Unit - Penn's Well

This summer unit consists of 4 pastures and will be used from June 1 to October 31.

Management of these pastures will be under a 4-pasture rest-rotation grazing system. Each pasture will be rested a full season every fourth year. Scheduled use within the pastures will be approximately 45-60 days.

This rotation system will provide periodic rest for vegetation during the critical growing season when pastures are in use and routine yearlong rest every fourth year. Under this system no pasture is continuously grazed at the same time yearly during the growing season.

5. State and Private pastures

Pastures on State and private lands will not be directly incorporated into the Penn's Well grazing system. These pastures will be transition, weaning and holding pastures and be used at the permittees own discretion.

6. Planned Grazing Use

Use Period	Schedule
A	06/01-07/15
B	07/16-08/31
C	09/01-10/31
D	"Rest Period"

Penn's Well Grazing Schedule									
Pasture	96	97	98	99	Pasture	00	01	02	03
Northwest #1	A	D	C	B	Northwest #1	A	D	C	B
Northeast #2	B	A	D	C	Northeast #2	B	A	D	C
Southeast #3	C	B	A	D	Southeast #3	C	B	A	D
Southwest #4	D	C	B	A	Southwest #4	D	C	B	A

7. Flexibility/Adaptive Management

This grazing management plan is intended to be flexible, dynamic, and adaptable. Natural forces, agency emphasis and political situations are not static, so it is assumed that situations and conditions of the Penn's Well allotment will change from those existing when this plan was written. On those years when the scheduled grazing rotation cannot be achieved due to resource conditions or other events, the Snyders' and BLM will meet prior to livestock turn out to select the pasture(s) to be used. These decisions will be based on potential resource impacts, vegetation vigor and water availability. At this time the Snyders' and BLM will also select the pasture(s) to be deferred or rested. The BLM may require specific pastures to be deferred at anytime. Livestock will be allowed to move into or out of a pasture up to 7 calendar days before or after scheduled move dates. Further deviance from the scheduled dates must be

approved in advance by the authorized officer. (Refer to Parashant Management Plan Section VI.(C) for more on Adaptive Management)

V. Monitoring and Evaluation

A. Studies

1. Trend: Trend plots will be established in selected key areas of each pasture. The pace-frequency and dry-weight rank monitoring methods will be used to determine composition and trend. Trend will be read on a four year cycle.

Trend Studies Schedule		
Key Area	Month	Frequency
PENN'S WELL		
North #1	October	96,00,04
South #2	October	96,00,04
DRIPPING SPRING		
South #1	May	96,00,04
North #2	May	96,00,04

2. Utilization: Utilization studies will be read in designated key areas of each pasture following each grazing period using the grazed class method. Utilization will be maintained at or below 50 percent use on key species. If possible, utilization studies will be conducted 2 weeks before livestock leave the pasture.

3. Actual Use: The permittee will furnish BLM with actual use records on the allotment by December 15 annually, including number of livestock over six months of age and periods of use by pasture.

4. Precipitation: Precipitation data will be collected quarterly by a rangeland management specialist from gauges at Salt House and Pa's Pocket for the Penn's Well allotment. In addition, the Pigeon Flat recording gauge will be used.

PENN'S WELL PROJECTS
COST MATRIX

Mgmt. Action	Location	Units	Cost/ Unit	Total Cost	Maint.	Prio.
Storage Tank	T33N,R11W,Sec.29	40,000.	$3,500	$3,500	Permittee	1
P-J Removal	T33N,R11W,Sec.30,31 T33N,R12W,Sec.25	500 ac	$80	$40,000	Perm/BLM.	2

* Prices are bases on 1996 estimated costs

V. Agreement to Plan

Concurrence: John A Snyder 1-28-98
Afton & John Snyder (Permittee) Date

Approved by: Roger D Taylor 1-28-98
Roger Taylor (Field Office Mgr.) Date

Penn's Well Allotment

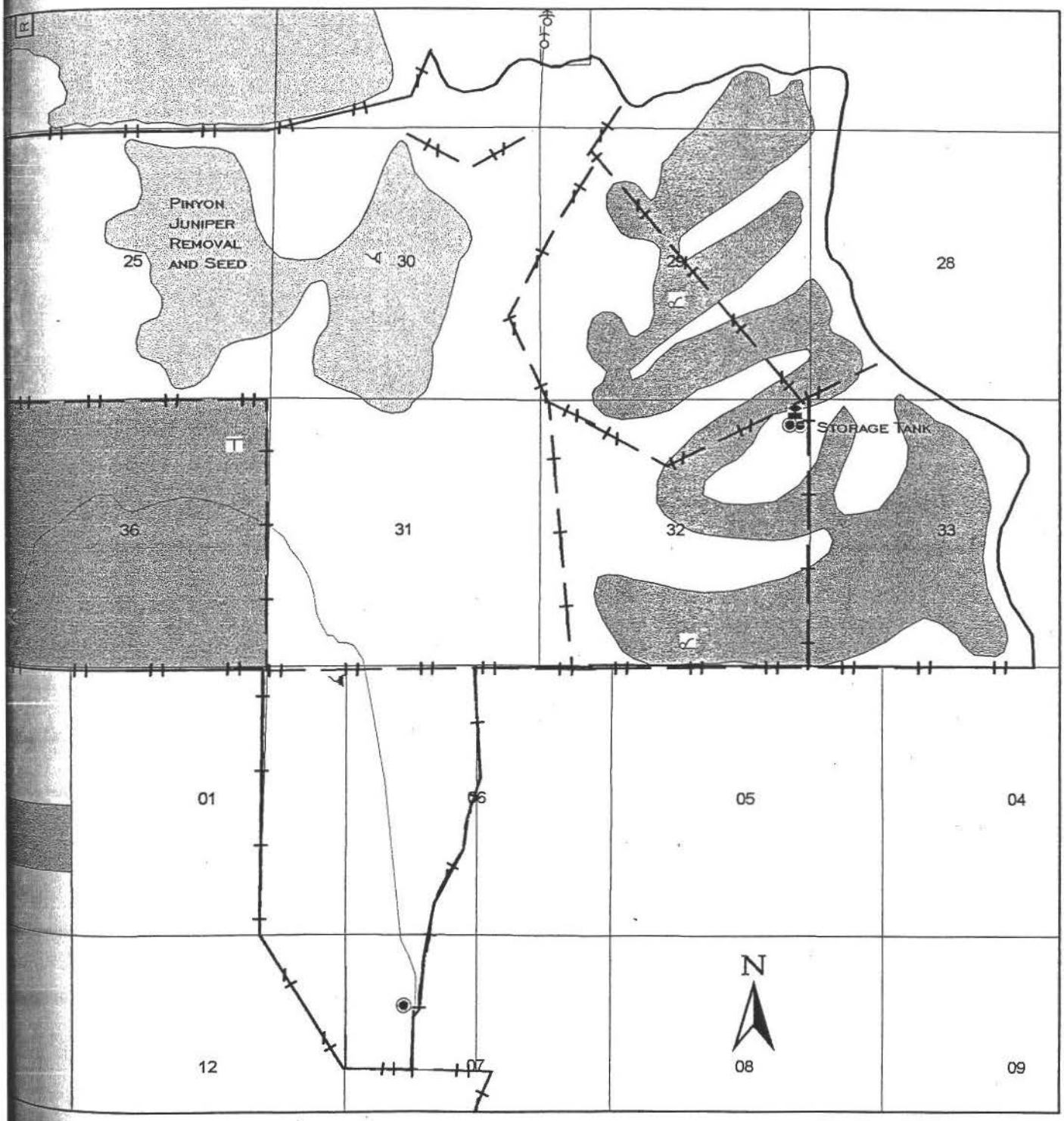
Allotment Management Plan

Proposed Projects

Legend

- Allotment Boundary
- Cattleguard
- Detention Dam
- Developed Spring
- Fence
- Fenced Reservoir
- Key Area
- Livestock Catchment
- Proposed Storage Tank
- Proposed Vegetative Treatments
- Storage Tank
- Undeveloped Spring
- Unfenced Reservoir
- Vegetation Treatment

Miles 0 .2 .4



Red Pond Allotment Grazing Management

I. Allotment Information

Allotment: Red Pond

Land Status	Acres
Public (BLM) Lake Mead R.A.	51,461 11,302
State	1,670
Private	80
TOTAL	64,513

Permittee: Arlin & Denice Hughes
Animal Unit Months (AUM's): 2,793
Percent Federal Range: 96%
Season of Use: Year-long

Grazing Authorization:

Allotment	Livestock Numbers	Grazing Begin	Grazing End	AUM's
Red Pond	242 Cattle	03/01	02/28	2,787
	1 Cattle	05/01	11/05	6

Guidance From the Land Use Plan:

The Arizona Strip Resource Management Plan (RMP, 1992) outlines the following goals for grazing administration and rangeland management on the Arizona Strip District.

- Administer livestock grazing on public lands to balance use and sustain productivity and appropriately mesh livestock production and associated management practices with other multiple use needs and objectives.

- Manage, maintain, protect and improve rangeland resources within the framework of multiple-use needs and objectives so that they are productive for all rangeland values.

- Maintain close monitoring of the utilization, condition and trend of rangeland resources.

- Ensure that rangeland improvement projects provide multiple-use benefits, where appropriate.

II. Allotment Goal and Objectives

Goal: Establish and maintain healthy, diverse vegetation communities on the Red Pond allotment that will benefit all land resources.

Objectives:

1. Reduce the amount of sagebrush from 60% to 0-20% and increase the composition of grasses and forbs from 21% to 60-85% in the identified sagebrush bottom areas on the Red Pond allotment within 10 years of plan approval. (Objective reflects the Desired Plant Community (DPC) for the sagebrush bottoms identified in the Parashant Management Plan.)

2. Reduce the combined amount of Pinyon-Juniper and sagebrush from 83% to 2-35% and increase grass, forb and browse composition from 21% to 32-90% in the identified treatment areas around Grassy Mountain by 2002. (Objective reflects the DPC for Pinyon/Juniper vegetation type identified in the Parashant Management Plan)

3. Increase or maintain the key species frequency by the following amounts in the following areas.

Pasture	Species	From	To	Time
Grassy Point	Galleta Indian Rice Grass	10% 0%	10% 2%	2004
Pymn	Squirrel Tail Indian Rice Grass Needle & Thread	6% 0.5% 0.5%	10% 2% 2%	2004

III. Management Actions

A. The management actions have been identified to achieve allotment objectives, DPC objectives and contribute to better livestock management on the Red Pond allotment. All action projects will be accomplished under a cooperative effort between the permittee, BLM and other state and federal agencies.

1. Manage the impacts of livestock so that the goals for grazing management are achieved. This will be done by providing the necessary improvements to implement a planned grazing system and then implement the grazing system within 5 years of plan approval.

On BLM administered lands that require reseeding native species are prefered, however if native seed is not economically feasible introduced grass species will be used in the seed mix to establish herbaceous biomass and provide soil stability. Seeded areas will be rested from livestock grazing for two years to allow seed germination and seedling establishment.

Management Action	Location	Units	Priority
Grassy Mtn. P-J Removal	T33N,R11W,Sec.1,2 T34N,R11W,Sec.34,35	970 ac.	1
Broken Pond Fence	T34N,R11W,Sec.22,27,28, 32,33	2 miles	1
Pymn Water Catchment	T34N,R11W,Sec.25	80,000	1
Grassy Point Fence	T33N,R11W,Sec.12,13 T33N,R10W,Sec.18,19	2.5 miles	2
Red Pond Sagebrush Treatment	T34N,R12W,Sec.10,14,15 21,22,23,24	1,100 ac.	3
Red Pond Fence	T34N,R11W,Sec.18,19 T34N,R12W,Sec.24	2 miles	3
Dry Canyon Reservoir	T33N,R10W,Sec.18	one	4

* Priority 1 projects are critical to implement allotment objectives

B. Grazing System

1. Present Operation

This is as a cow-calf operation. The permittee is currently operating at reduced numbers voluntarily. Red Pond is a year-long allotment however, it is used in conjunction with the Pakoon allotment and only part of the total herd remains on the allotment year around. Approximately 120 head spend from December 1 to May 15 on the Pakoon allotment which operates under a separate allotment management plan. The remaining 50 head winter in the Grassy Point and Andrus pastures. Around May 15 the total herd returns to Red Pond for summer and fall grazing, and remains until November 30. The lack of pasture fences make it difficult to provide summer growing season deferment during the summer grazing period.

The allotment will initially be operating with reduced cattle numbers (170-200 head). This number may be adjusted upward toward full numbers or downward based on monitoring data and evaluation of progress toward meeting identified goals and objectives.

2. Proposed Operation

Under the proposed system, Red Pond will continue to be used in conjunction with the Pakoon allotment and its management plan. On the Red Pond allotment a 6-pasture deferred rotation system which includes winter, transition and summer pastures will be implemented.

3. Winter Pastures

The Grassy Point and Andrus pastures will be used as winter pastures for the cattle wintering on Red Pond allotment. The winter pastures will be managed under a two-pasture flip-flop system. This will provide one pasture with rest during the spring growing season every other year. These pastures will not be grazed during the summer growing season under this grazing system

4. Transition Pastures

The Tungston and Spring pastures will be grazed approximately 30 days by cattle moving to winter and summer pastures. The Agway Holding pasture will be used for gathering, weaning and emergency purposes (sick or lame cows, horses). Use should not exceed 132 AUM's.

5. Summer Unit

The summer unit will consist of two pastures (Parashant Wash and Pymn). These pastures will be grazed on a flip-flop system, similar to the winter pastures. This will provide for deferment from grazing by livestock during the majority and average peak of the summer growing season every other year.

6. Planned Grazing Use

Use Period	Schedule	Use Period	Schedule
A	01/01-02/28	E	08/16-10/15
B	03/01-05/15	F	10/16-11/30
C	05/16-06/15	G	12/01-12/30
D	06/16-08/15		

Red Pond Grazing Schedule									
Pasture	Yr 1	Yr 2	Yr 3	Yr 4	Pasture	Yr 1	Yr 2	Yr 3	Yr 4
Parashant Wash	D	E	D	E	Grassy Point	A	B	A	B
Pymn	E	D	E	D	Andrus	B	A	B	A
Spring	C	G	C	G	Agway	F	F	F	F
Tungston	G	C	G	C					

C. Flexibility/Adaptive Management

This grazing management plan is intended to be flexible, dynamic, and adaptable. Natural forces, agency emphasis and political situations are not static, so it is assumed that situations and conditions of the Red Pond allotment will change from those existing when this plan was written. On those years when the scheduled grazing rotation cannot be achieved due to resource conditions or other events, the Hughes and BLM will meet prior to livestock turn out to select the pasture(s) to be used. These decisions will be based on potential resource impacts, vegetation vigor and water availability. At this time the Hughes and BLM will also select the pasture(s) to be deferred or rested. The BLM may require specific pastures to be deferred at anytime. Livestock will be allowed to move into or out of a pasture up to 7 calendar days before or after scheduled move dates. Further deviance from the scheduled dates must be approved in advance by the authorized officer. (Refer to Parashant Management Plan Section VI.(C) for more on Adaptive Management)

IV. Monitoring and Evaluation

A. Studies

1. Trend: Trend plots will be established in selected key areas of each pasture. The pace-frequency monitoring method will be used to determine trend. The dry-weight rank method will also be used to determine vegetation composition. Trend will be read on a four year cycle.

Trend Studies Schedule		
Key Area	Month	Frequency
Parashant Wash #1	October	97,01,05
Grassy Point* #3	October	97,01,05
Pymn* #4	October	96,00,04
Agway Seeding* #5	September	96,00,04
Agway Seeding* #9	September	96,00,04

* Established Trend Plots

2. Utilization: Utilization studies will be read in designated key areas of each pasture following each grazing period using the grazed class method. Utilization will be maintained at or below 50 percent use on key species. If possible, utilization studies will be conducted 2 weeks before livestock leave the pasture.

3. Actual Use: The permittee will furnish BLM with actual use records on the allotment annually, including number of livestock over six months of age and periods of use by pasture. Since the Pakoon is not adjacent to the Red Pond allotment, cattle will be trailed to the Pakoon in the winter and back to Red Pond in the spring. This period will include 2-3 days each way. The route will follow Hidden Canyon. The trailing period will be shown on the actual use records for billing puposes.

4. Precipitation: Precipitation data for the Red Pond allotment will be collected quarterly by a rangeland management specialist from gauges at Poverty Mountain, Pigeon Flat and Savanic located on the middle bench.

RED POND PROJECTS
COST MATRIX

Mgmt. Action	Location	Units	Cost/ Unit	Total Cost	Maint.	Prio.
Grassy Mt P-J Removal	T33N,R11W,Sec.1,2 T34N,R11W,Sec.34,35	920 ac.	$77/ac	$70,840	Perm/BLM	1
Brkn.Pond Fence	T34N,R11W,Sec.22,27 28,32,33	2 miles	$3,300/mi	$6,600	Permittee.	1
Pymn Catchmnt	T34N,R11W,Sec.25	80,000	$45,000	$45,000	Perm/BLM	1
Grassy Pt Fence	T33N,R11W,Sec.12,13 T33N,R10W,Sec.18,19	2.5 miles	$3,300/mi	$8,250	Permittee	2
Red Pond Fence	T34N,R11W,Sec.18,19 T34N,R12W,Sec.24	2 miles	$3,300/mi	$6,600	Permittee	3
Sagebrush Treatment	T34N,R12W,Sec.10,14 15,21,22,23,24	1,100 ac	$14.90/ac	$16,390	Perm/BLM	3
Dry Cny. Reservoir	T33N,R10W,Sec.18	one	$10,000	$10,000	Permittee	4

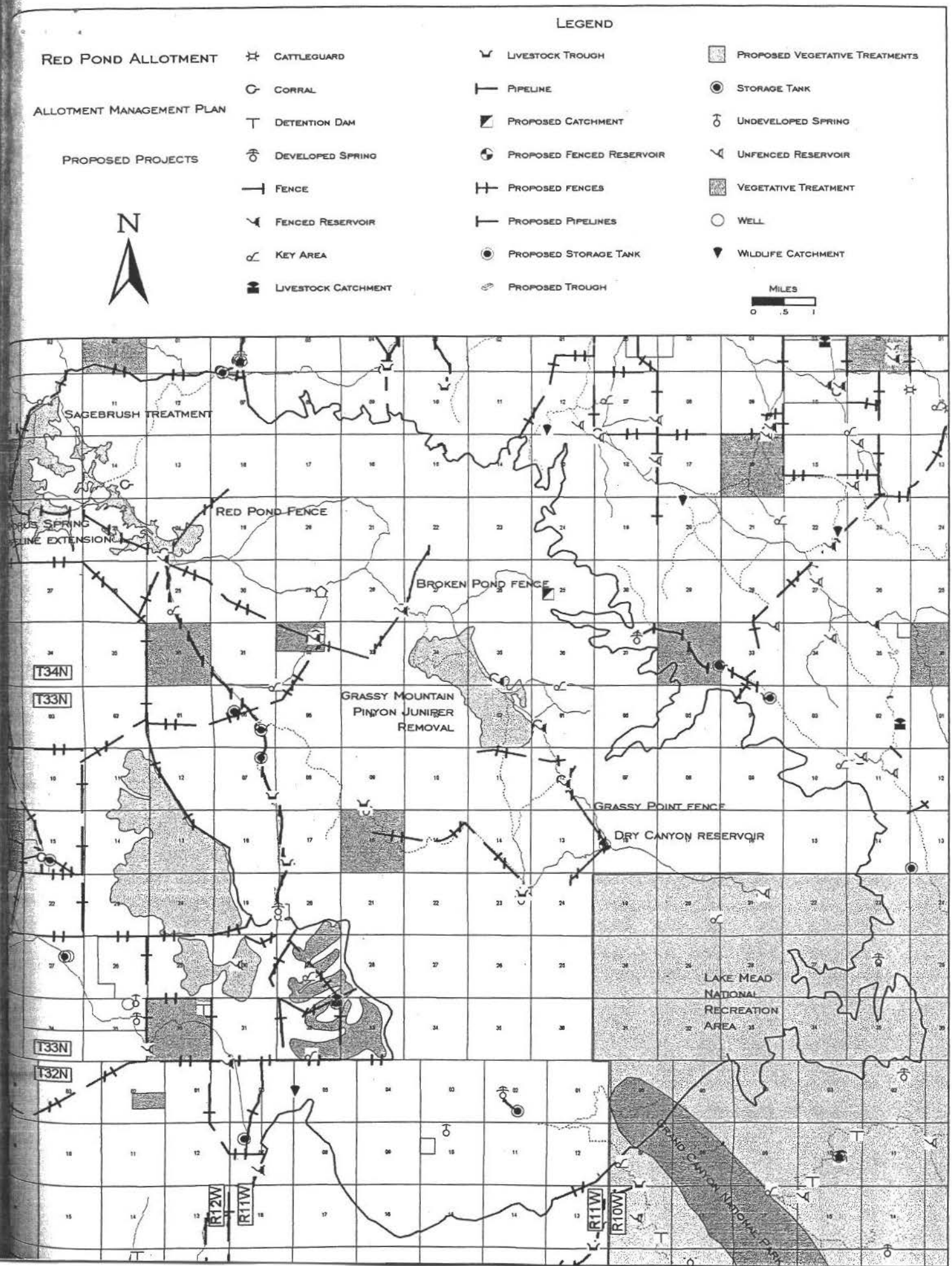
* Prices are bases on 1996 estimated costs

V. Agreement to Plan

Concurrence: Arlin Hughes 1-20-99
Arlin Hughes (Permittee) Date

Concurrence: Denice Hughes 1-20-99
Denice Hughes (Permittee) Date

Approved by: Roger Taylor 1-20-99
Roger Taylor (Field Office Mgr.) Date


RED POND ALLOTMENT
ALLOTMENT MANAGEMENT PLAN
PROPOSED PROJECTS
N
LEGEND
CATTLEGUARD
CORRAL
DETENTION DAM
DEVELOPED SPRING
FENCE
FENCED RESERVOIR
KEY AREA
LIVESTOCK CATCHMENT
LIVESTOCK TROUGH
PIPELINE
PROPOSED CATCHMENT
PROPOSED FENCED RESERVOIR
PROPOSED FENCES
PROPOSED PIPELINES
PROPOSED STORAGE TANK
PROPOSED TROUGH
PROPOSED VEGETATIVE TREATMENTS
STORAGE TANK
UNDEVELOPED SPRING
UNFENCED RESERVOIR
VEGETATIVE TREATMENT
WELL
WILDLIFE CATCHMENT
MILES
0 .5 1
SAGEBRUSH TREATMENT
RED POND FENCE
BROKEN POND FENCE
GRASSY MOUNTAIN PINYON JUNIPER REMOVAL
GRASSY POINT FENCE
DRY CANYON RESERVOIR
LAKE MEAD NATIONAL RECREATION AREA
T34N
T33N
T33N
T32N
R12W
R11W
R11W
R10W

Wildcat Allotment Grazing Management

I. Allotment Information

Allotment: Wildcat

Land Status	Acres
Public	87,159
State	2,562
Private	5,341
TOTAL	95,062

Permittee: Bridlebit Three Cattle Co.
Lamoyne "Buster" & Terry Esplin
Animal Unit Months (AUM's): 4,593
Percent Federal Range: 84%
Season of Use: Year-long
Grazing Authorization:

Allotment	Livestock Numbers	Grazing Begin	Grazing End	AUM's
Wildcat	447 Cattle	11/01	10/31	4,506
	8 Horses	11/01	10/31	81
	1 Cattle	11/01	05/31	6

Guidance From the Land Use Plan:

The Arizona Strip Resource Management Plan (RMP, 1992) outlines the following goals for grazing administration and rangeland management on the Arizona Strip District.

- Administer livestock grazing on public lands to balance use and sustain productivity and appropriately mesh livestock production and associated management practices with other multiple use needs and objectives.

- Manage, maintain, protect and improve rangeland resources within the framework of multiple-use needs and objectives so that they are productive for all rangeland values.

- Maintain close monitoring of the utilization, condition and trend of rangeland resources.

- Ensure that rangeland improvement projects provide multiple-use benefits, where appropriate.

II. Allotment Goal and Objectives

Goal: Establish and maintain healthy, diverse vegetation communities on the Wildcat allotment that will benefit all land resources.

Objectives:

1. Reduce the amount of sagebrush from 52% to 0-30% and increase the composition of grasses and forbs from 21% to 60-85% in the identified treatment area of the Upper Pigeon pasture by 1998.(Objective reflects the Desired Plant Community (DPC) for the sagebrush vegetation type identified in the Parashant Management Plan.)

2. Reduce the combined amount of Pinyon-Juniper and sagebrush from 83% to 2-35% and increase the composition of grasses, forbs and browse from 21% to 32-90% in the identified treatment areas of the Salt House and House pastures by 2010. (Objective reflects the DPC for Pinyon/Juniper vegetation type identified in the Parashant Management Plan)

3. Increase or maintain the key species frequency by the following amounts in the following areas.

Pasture	Species	From	To	Time
North	Squirrel tail Indian rice grass	64% 6%	64% 10%	2004
Salthouse	Squirrel tail Mutton grass Western wheatgrass	20% 9% 0.5%	20% 14% 3%	2004
Bench	Squirrel tail Indian rice grass	6% 4%	10% 8%	2004

III. Management Actions

A. The management actions have been identified to achieve allotment objectives, DPC objectives and contribute to better livestock management on the Wildcat allotment. All action projects will be accomplished under a cooperative effort between the permittee, BLM and other state and federal agencies.

1. Decrease grazing use from 90 days to 60-45 days annually in the Salthouse and Upper Pigeon pastures by 1997.

2. Manage the impacts of livestock so that the goals for grazing management are achieved. This will be done by providing the necessary improvements to implement a planned grazing system and then implement the grazing system by year 2000.

On BLM administered lands that require reseeding native species are prefered, however if native seed is not economically feasible introduced grass species will be used in the seed mix to establish herbaceous biomass and provide soil stability. Seeded areas will be rested from livestock grazing for two years to allow seed germination and seedling establishment.

Project	Location	Units	Priority
Salthouse Pasture Fence	T33N R13W Secs. 27,34 T32N R13W Secs. 1,11,12,14,22	5.5 miles	1
Gardner Canyon Fence	T33N R12W Secs. 6,7,18 T33N R13W Secs. 13,23,24,26	6 miles	2
Salthouse Chain/Seed	T32N R13W Secs. 3,4,5,8,9 T33N R13W Sec. 32,33,34	1,000 acres	3
Andrus Rim P-J Removal	T33N R11W Secs. 18,19 T33N R12W Secs. 12,13,23,24	1,000 acres	4

* Priority 1 projects are critical to implement allotment objectives

B. Grazing System

1. Present Operation

This is a cow-calf operation. Cattle are moved to the winter country (Bench, Savanic and Lower Pigeon pastures) around the middle of December and stay there until the middle of May. At this time, cattle are allowed to drift into the Pigeon breaks and make use of it for approximately three to four weeks as they move toward summer pastures. Cattle are generally in the summer pastures by June 1-15 (mainly Salt House). During late summer and fall livestock are rotated through the McDonald Flat, House and North pastures.

Initially the allotment will be grazed with a maximum of 250-300 head of cattle. This number may be adjusted upward or downward based on monitoring data and evaluation of progress toward meeting the stated goals and objectives.

2. Proposed Operation

The proposed operation is very similar to the current operation in relation to season-of-use on the winter and summer range. The proposed operation calls for a 3-pasture deferred rotation on the winter range and a 6-pasture deferred rotation on the summer range.

3. Winter Unit-Grand Wash Bench

The winter unit will be split into three pastures (Savanic, Bench and Pigeon). The winter unit will be managed under a 3-pasture deferred rotation system. This system will provide complete growing season deferment every third year.

4. Spring and Fall Unit-Upper Pigeon Breaks

This unit will be used every spring and fall (May and December)for approximately 15 days as livestock drift to and from the winter unit. In years of high ephemeral production, the length of time livestock spend on this unit could be increased to provide additional rest for the winter and summer units.

5. Summer Unit

The summer unit consists of five pastures (Upper Pigeon, Salt House, McDonald Flat, House and North) which will be operated under a 5-pasture deferred rotation system for the interim. Grazing use on the Salt House and Upper Pigeon pastures will be alternated every year to provide for early or late growing season deferment. Upon completion of the Salt House pasture fence the 5-pasture system would become a 6-pasture deferred rotation system. The grazing treatment would be revised at that time to reflect the new schedule.

6. Planned Grazing Use

Use Period	Schedule	Use Period	Schedule
A	06/01-07/31	E	11/16-12/15
B	08/01-09/15	F	12/16-02/28
C	09/16-10/15	G	12/16-05/31
D	10/16-11/15		

Wildcat Grazing Schedule									
Pasture	96	97	98	99	Pasture	96	97	98	99
Upper Pigeon	B	A	B	A	North	E	E	E	E
Salt House	A	B	A	B	Savanic	G	G	F	G
McDonald Flat	C	C	C	C	Bench	F	G	G	F
House	D	D	D	D	Pigeon	G	F	G	G

7. Flexibility/Adaptive Management

This grazing management plan is intended to be flexible, dynamic, and adaptable. Natural forces, agency emphasis and political situations are not static, so it is assumed that situations and conditions of the Wildcat allotment will change from those existing when this plan was written. On those years when the scheduled grazing rotation cannot be achieved due to resource conditions or other events, the Esplins' and BLM will meet prior to livestock turn out to select the pasture(s) to be used. These decisions will be based on potential resource impacts, vegetation vigor and water availability. At this time the Esplins' and BLM will also select the pasture(s) to be deferred or rested. The BLM may require specific pastures to be deferred at anytime. Livestock will be allowed to move into or out of a pasture up to 7 calendar days before or after scheduled move dates. Further deviance from the scheduled dates must be approved in advance by the authorized officer. (Refer to Parashant Management Plan Section VI.(C) for more on Adaptive Management)

IV. Monitoring and Evaluation

A. Studies

1. Trend: Trend plots will be established in selected key areas of each pasture. The pace-frequency and dry weight rank monitoring methods will be used to determine composition and trend. Trend will be read on a four year cycle.

Trend Studies Schedule		
Key Area	Month	Frequency
Savanic* #1	October	97,01,05
Pigeon	October	97,01,05
Bench* #2	October	96,00,04
Upper Pigeon* #1	October	96,00,04
Salt House* #1	June	96,00,04
McDonald Flat* #1	June	95,99,03
House	June	97,01,05
North* #1	October	95,99,03

* Established Trend Plots

2. Utilization: Utilization studies will be read in designated key areas of each pasture following each grazing period using the grazed class method. Utilization will be maintained at or below 50 percent use on key species. If possible, utilization studies will be conducted 2 weeks before livestock leave the pasture.

3. Actual Use: The permittee will furnish BLM with actual use records on the allotment by November 30 annually, including number of livestock over six months of age and periods of use by pasture. The grazing year will be from December 1 to November 30.

4. Precipitation: Precipitation data will be collected quarterly by a rangeland management specialist from gauges at Poverty Mountain and Salt House for the Wildcat allotment. In addition, the Pigeon Flat and Savanic recording gauges will be used.

WILDCAT PROJECTS
COST MATRIX

Mgmt. Action	Location	Units	Cost/ Unit	Total Cost	Maint.	Prio.
Salthouse Fence	T33N,R13W,Sec.27,34 T32N,R13W,Sec.1,11,12 14,22	5.5 mi	$3,300/mi	$18,150	Permittee	1
Gardner Cyn Fence	T33N,R12W,Sec.6,7,18 T33N,R13W,Sec.13,23 24,26	6 mi	$3,300/mi	$19,800	Permittee.	2
Salthouse Chain/ Seed	T32N,R13W,Sec,3,4,5,8 9 T33N,R13W,Sec.32,33	1,000 ac.	$88/ac	$80,000	Perm/BLM	3
Andrus Rim P-J Removal	T33N,R11W,Sec.18,19 T33N,R12W,Sec.11,12,13,14 23,24	1,000 ac.	$80/ac	$80,000	Perm/BLM	4

* Prices are bases on 1996 estimated costs

V. Agreement to Plan

Concurrence: LaMoyne Esplin (Permittee) — 11-6-97 Date

Concurrence: Terry Esplin (Permittee) — 11-6-97 Date

Approved by: Roger Taylor (Field Office Mgr.) — 11-14-97 Date

WILDCAT ALLOTMENT

ALLOTMENT MANAGEMENT PLAN

PROPOSED PROJECTS

LEGEND

- CATTLEGUARD
- CORRAL
- DEVELOPED SPRING
- FENCE
- FENCED RESERVOIR
- KEY AREA
- LIVESTOCK CATCHMENT
- LIVESTOCK TROUGH
- PIPELINE
- PROPOSED FENCES
- PROPOSED PIPELINES
- PROPOSED VEGETATIVE TREATMENT
- STORAGE TANK
- UNDEVELOPED SPRING
- UNFENCED RESERVOIR
- VEGETATIVE TREATMENT
- WELL
- WILDLIFE CATCHMENT
- WILDLIFE DRINKER
- WINDMILL

MILES 0 1 2

