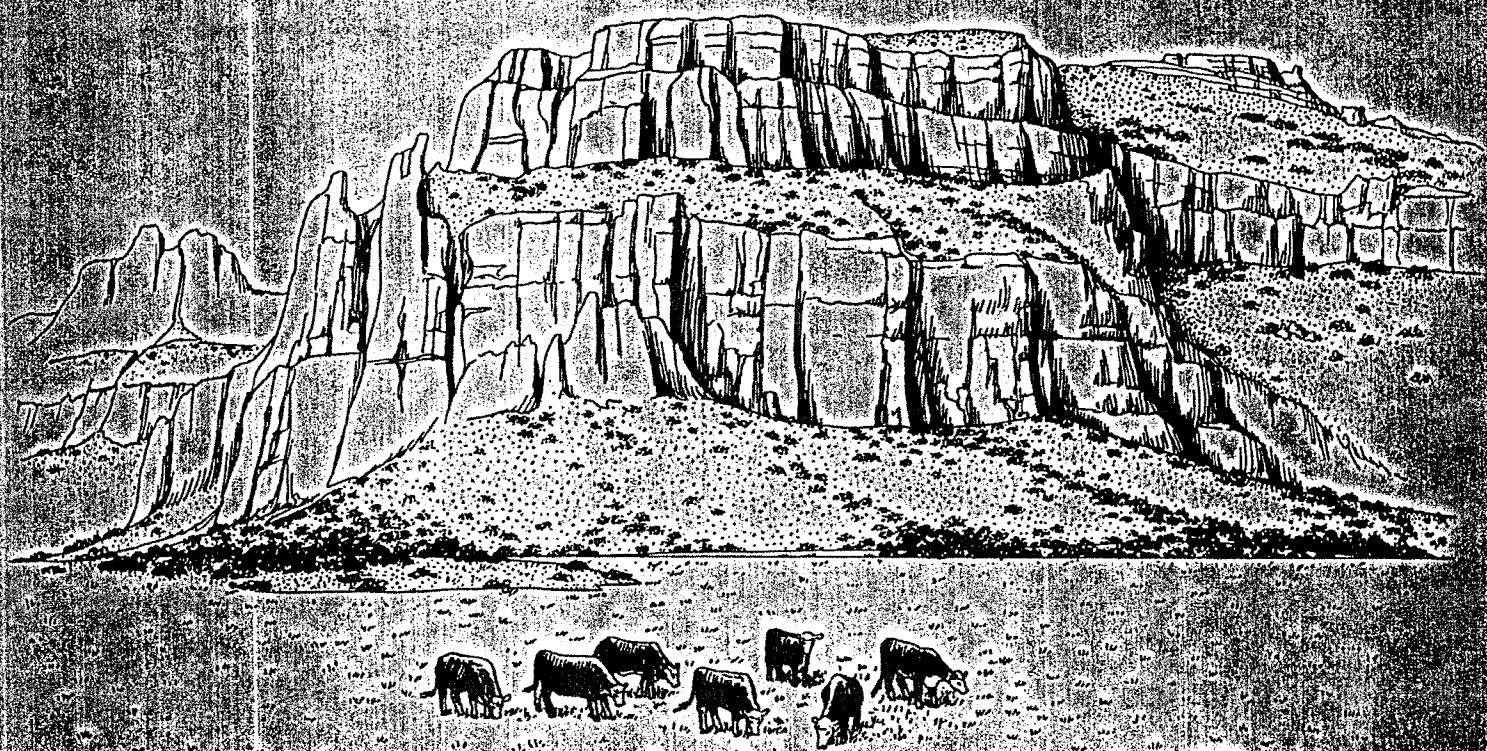
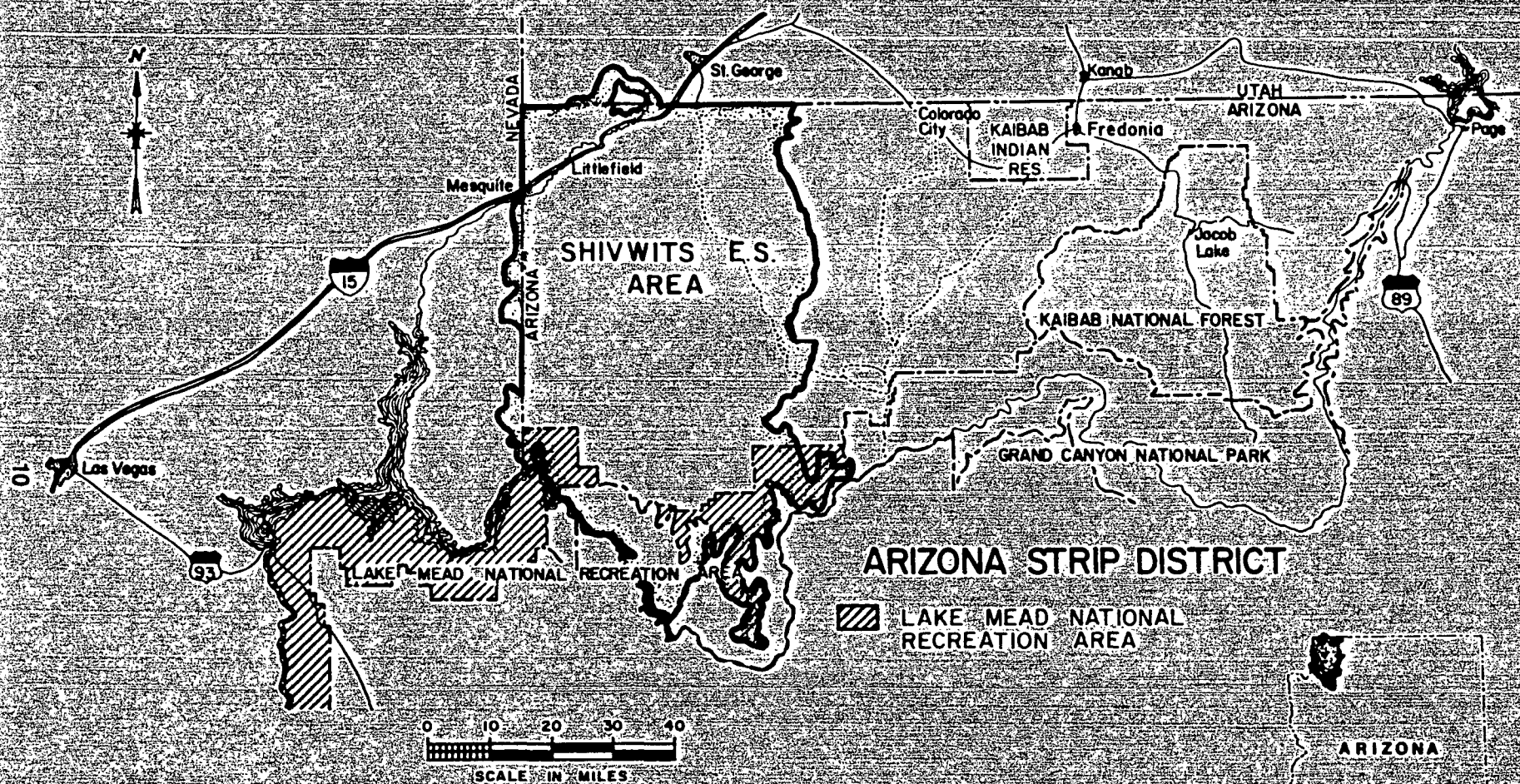


Rangeland Management Program



SHIVWITS PLANNING AREA

Summary Report



SHIVWITS ES AREA

RANGELAND MANAGEMENT PROGRAM DOCUMENT
Shivwits EIS Area, Arizona Strip District

Mohave County, Arizona
Washington County, Utah
Clark County, Nevada

INTRODUCTION

I. Background and History

- A. The Bureau of Land Management recently completed an environmental impact statement (EIS) for a proposed livestock grazing program on public lands in the Shivwits Resource Area of the Arizona Strip District in northwest Arizona. This comprehensive environmental impact statement covers the probable environmental impacts and the social and economic impacts of the proposed program. In addition, six alternatives are discussed.

With the EIS completed, BLM has now prepared this Program Document to describe the chosen course of action for livestock grazing in the EIS area. This program will be the most significant step ever taken towards managing public rangelands in the Shivwits area.

Livestock have grazed the EIS area for approximately 100 years. Rangeland use peaked at the turn of the century and has continued in varying degrees to the present. Passage of the Taylor Grazing Act in 1934 was the first concerted effort by the Federal government to manage and improve the nation's rangelands. This legislation eventually led to the establishment of allotments and

construction of some rangeland improvements in the EIS area. Livestock grazing has continued on a yearlong basis on most allotments, with continued construction of rangeland improvements by allottees and BLM.

The following summary presents existing rangeland condition and trend, and emphasizes the importance of implementing a livestock grazing program.

Current Rangeland Condition

<u>Good</u>	<u>Fair</u>	<u>Poor</u>
263,802 acres	538,745 acres	1,046,348 acres
14%	29%	57%

Current Rangeland Trend

<u>Up</u>	<u>Down</u>	<u>Static</u>
110,571 acres	199,672 acres	1,538,652 acres
6%	11%	83%

Current Mule Deer Habitat Condition

<u>Good</u>	<u>Fair</u>	<u>Poor</u>
162,453 acres	188,307 acres	343,899 acres
23%	27%	50%

The proposed action and the six alternatives described in the EIS provide various options to the manager for achieving multiple-use objectives. They differ, however, in the specific degree to which some practices are used, in implementation schedule and costs, coordination, and the overall feasibility of each effort.

The proposed action was selected because it is the most feasible method of accomplishing objectives for BLM, the livestock permittees, and interests of the public.

B. Environmentally Preferred Alternatives

The proposed action, alternative 2 (stocking level by condition class), and alternative 6 (less intensive management or reduced grazing pressure) have been selected as the environmentally preferred alternatives (see Comparison Table, page 5 of the Shivwits Proposed Grazing Management Final EIS). Of the seven alternatives including the proposed action these three more nearly accomplish the following BLM objectives:

1. Improve and maintain the condition of rangeland vegetation at desired levels of quality, quantity, and diversity.
2. Reduce erosion, minimize sedimentation and siltation, promote infiltration, and ensure the stability and productivity of rangeland soils.
3. Ensure availability of sufficient water quantity and quality to provide for basic needs of the vegetation, protect ground water recharge, meet Federal and State water quality standards, and provide for recognized uses.
4. Through cooperative management minimize short-term disruption and ensure the long-term stability of the western livestock industry and the economies of many western communities that depend upon the rangelands.

5. Improve the rangeland ecosystem by increasing forage for livestock and wildlife.
6. Ensure the protection of threatened or endangered plant and animal species and their habitat.
7. Provide and protect fish and wildlife habitat to ensure stability and natural diversity; enhance streamside, shoreline, emergent, and submergent vegetation; and provide water of a quantity and quality necessary for fish, other aquatic organisms, and waterfowl.
8. Regulate and manage flood plains and wetlands to ensure protection of people and property, and improve and conserve riparian systems.
9. Protect areas of special natural, scenic, historical, cultural, and scientific value and safeguard the public from natural hazard areas.

The proposed action and alternative 6 are desirable because they minimize short-term economic impacts to the livestock industry and still provide the same desired long-term ecosystem and socio-economic benefits as alternative 2. Alternative 2 is rejected because of the high short-term economic impact to the livestock operator.

C. Limiting Factors

The number of existing water sources are insufficient for good grazing distribution.

Livestock operators travel long distances on poor roads from population centers to reach their allotments. This inconvenience causes loss of time and additional expense.

D. Summary

This document summarizes the rangeland management program recommended by BLM for the Shivwits Resource Area. The summary is based on multiple-use planning and the grazing environmental impact statement. This summary also conforms to the record of decision requirement of 40 CFR Part 1505-NEPA and Agency Decisionmaking.

THE PROGRAM

II. What It Is

The proposed action and alternative 6 have been selected as the livestock grazing program for the Shivwits EIS area. These two actions provide the most realistic and workable methods to achieve the stated multiple-use objectives. The following table shows the effect of livestock adjustments on specific allotments.

Summary Table

Allotment	Active Privileges AUMs	Average 5-year License AUMs	Estimated Livestock Carrying Capacity AUMs
<u>Intensive Management</u>			
Beaver Dam Slope	903	802	802
Black Rock	2,866	1,192	1,224
Blake Pond	1,700	1,488	1,264
Clay Spring	960	1,142	1,207
Cottonwood	2,303	1,791	1,831
Diamond Butte	408	346	349
Duncan Tank	583	442	630
Grassie Mountain	10,174	5,704	4,593
Hidden and Sullivan	3,270	1,782	1,910
Ivanpah	1,089	827	806
Jackson Tank	981	737	857
Jump Canyon	2,286	2,177	1,351
Last Chance	2,734	2,170	1,235
Littlefield Community	4,311	3,501	1,821
Little Tank	623	662	691
Little Wolf	640	305	427
Lizard	178	168	210
Lower Hurricane	5,193	4,815	3,398
Mainstreet	11,744	8,627	8,185
Mesquite Community	2,809	2,568	2,153
Mormon Well	434	326	554
Mosby-Nay	1,202	1,155	648
Mt. Trumbull	1,894	1,114	1,553
Mud and Cane Spring	5,130	4,883	3,779
Mule Canyon	1,811	1,023	585
Pakoon Spring	1,261	1,126	1,102
Parashaunt	3,708	3,292	4,988

Pa's Pocket	1,361	1,034	760
Penns Well	1,110	719	589
Poverty Mountain	5,851	5,298	5,325
Sullivan Canyon	2,203	1,232	962
Sullivan Tank	974	452	324
Sunshine	1,218	996	1,379
Tassi	1,188	1,087	2,292
Toquer Tank	1,576	1,073	1,375
Whiterock-Soapstone	1,120	1,259	1,320
Wildcat	9,653	8,052	6,317
Wolfhole Canyon	4,479	2,980	2,851
Wolfhole Lake	798	723	928
Wolfhole Mountain	2,500	2,279	1,869
<u>Less Intensive Management</u>			
Iverson	36	36	47
Littlefield Free Use	160	129	120
Mustang Spring	566	553	511
Pakoon	1,536	987	1,099
Pat's Pond	69	61	60
Purgatory	466	453	275
Quail Canyon	311	307	431
Rosenberry	172	172	190
Shelly	106	86	65
Snyder	91	80	73

The proposal consists of the following action:

A. Livestock Grazing Management

1. Intensive grazing management is proposed on 40 allotments and approximately 1,623,334 acres of Federal land. The initial stocking rate under intensive management will be 64,305 animal unit months (AUMs), a net reduction of 19,635 AUMs from the past 5-year average or 44,434 AUMs from grazing preference. The initial stocking rate is 41 percent below preference and 24 percent below the 5-year average use.
2. In addition to the 16 implemented allotment management plans (AMPs), 24 AMPs will be written over a 5-year period beginning in fiscal year 1981. These AMPs will include rest rotation,

deferred rotation, seasonal deferrmant or reduced grazing pressure without a sequence of pasture rotation. These AMPs will be developed in close cooperation with the permittees, the Arizona Strip Grazing Advisory Board, the State Land Department; and, as appropriate, the Soil Conservation Service, the State Game and Fish Department, and other concerned individuals and agencies. These grazing systems and impacts were discussed in the EIS, but if further significant impacts appear an environmental assessment will be written to discuss the impacts before an AMP is implemented. The AMPs may be revised as necessary to achieve management objectives. Where changes are determined necessary in the AMP to assure achieving resource objectives and an agreement cannot be reached after reasonable consultation and coordination, the changes may be implemented by decision.

3. The alternative of reduced grazing pressure (alternative 6) instead of a grazing system with a specific pasture rotation system will be selected where size, configuration, economic considerations and user preference do not justify the expense and efforts of a more complex system.
4. Less intensive grazing management is proposed on 10 allotments and 77,696 acres of Federal land for non-AMP allotments. The initial stocking rate for the EIS area under less intensive management will be 2,498 AUMs, a net reduction of 1,015 AUMs

from the present active preference. At least one or more of the following criteria was used to identify these allotments.

- The allotment provides less than 120 AUMs of forage.
- Conflicts with other resources were not identified in the inventory and planning process.
- Sixty percent or more of the area is not in Federal ownership or is in Federal ownership where other uses have priority over grazing.
- Range condition is good.
- Range management practices are satisfactory.
- Benefit/cost limitations exist, including cost of needed improvements, allotment sizes, and low carrying capacity and potential.

This form of less intensive management, unlike alternative 6, does not require a written AMP. Alternative 6 is a totally different concept of management which does include a written AMP. In addition alternative 6 includes monitoring studies, and reduced grazing pressure to a light to moderate range.

5. Rangeland improvements will be constructed in line with the specific management requirements identified for each allotment. The following table shows projects determined to be biologically feasible and desirable from a range management standpoint. Cost/benefit analysis in connection with

allotment planning may lead to some changes in tabulated projects and to the total cost of the program.

Summary of Proposed Improvements		
Improvements	Number	Unit
Water Developments	67	No.
Fences	130	Miles
Total	197	
Land Treatments		
Chaining	85,800	Acres
Burning	17,600	Acres
Disc or Plow	25,100	Acres
Seeding	128,500	Acres
Total	257,000	
Two Track Road	27	Miles
Total		

To implement the grazing systems, water developments will be first priority followed by fences and then by land treatment.

Some range improvements may be constructed on private and State-controlled lands when the improvements are essential to the success of grazing systems, when resources on public lands will benefit, and when necessary easements and cooperative agreements can be obtained. Construction will start immediately and continue to completion as funds become available.

6. Systematic grazing in accordance with an AMP will begin as soon as the necessary improvements for grazing management are installed. All identified projects, however, may not be required to begin operation of a grazing system.

B. Monitoring, Evaluation, and Revision

Rangeland and habitat studies will be conducted according to BLM manual guidelines. Periodic inspections will be conducted to insure compliance with terms of the AMPs. Monitoring studies will include actual use, utilization, climate analysis, rangeland condition and trend, herbage production, and plant phenology. To evaluate effects of the AMPs on total resources, further studies will monitor wildlife and riparian habitat, threatened and endangered species, cultural resources, wilderness, and competition between livestock and wildlife (bighorn sheep, antelope, and mule deer). Based upon these studies allowable livestock use will be determined and AMPs may be revised. Utilization of key species will be limited to 45 percent on allotments under alternative 6 and not under a pasture rotation system or 50 percent on allotments under a pasture rotation system. The 10 allotments under less intensive management will be stocked at the level determined by the initial inventory. Monitoring studies will not be used.

Total vegetative consumption whether by livestock or wildlife is considered in the utilization estimate.

Non-allotment management plan areas will be inspected for compliance and rangeland conditions. General rangeland studies will not be initiated unless a need is identified, based on rangeland conditions.

C. Wildlife

Forage allocated to wildlife will be as follows:

Mule Deer	- 13,305 AUMs
Antelope	- 960 AUMs

Bighorn Sheep	-	840 AUMs
Desert Tortoise	-	432 AUMs
Total		15,537

D. Burros

Six hundred AUMs of forage will be allocated to maintain the 90 animal burro population and allow for an approximately 10 percent increase in the Shivwits Area. A Tassi HMAP will be developed in FY 1981 outlining more specific objectives in this area.

E. Committed Mitigation

Areas proposed for rangeland improvements will be surveyed before any construction begins. This survey will to determine the extent of wilderness values, cultural or paleontological resources, and threatened and endangered plants or animals. If cultural or paleontological resources are discovered, the project will be modified to avoid destroying the values of the site. If the improvement cannot be successfully modified, or constructed after the site has been scientifically salvaged, the project will be abandoned. Moreover, if threatened and endangered plants or animals are found, the project will be abandoned or relocated if the improvements will diminish habitat value for the given species.

Stock waters will be developed for safe wildlife use. Ladders or ramps will be constructed for small animals and birds. In important wildlife areas, separate wildlife waters will be

developed adjacent to livestock waters. Each facility will be constructed at ground level and fenced to exclude livestock.

Spring developments for livestock will use water that is surplus to riparian vegetation and wildlife needs wherever practical.

All fences will be designed for wildlife access around watering facilities and in bighorn sheep and pronghorn antelope ranges.

Any improvements identified in the AMPs will be analyzed to determine if the environmental impacts are similar to those identified in the EIS. Where they are not similar, a site specific environmental assessment will be written to identify and assess the impacts.

Studies will be initiated in 1981 to determine competition between bighorn sheep and cattle and the significance of such competition on allotments encompassing bighorn sheep habitat.

Where livestock grazing is found to be detrimental to bighorn sheep the cattle use will be restricted on those specific habitat areas.

Impact to the permittees operation may be mitigated in part through timing of or phasing the use adjustments. Also permittees will be encouraged to improve herd productivity through animal husbandry and management practices.

F. Related Actions

Implementation of this program will be accompanied by the following related actions:

1. Continue the wilderness study and inventory on the Wilderness Study Areas.
2. Complete the Wilderness EIS on the Paiute Primitive Area, Paria Canyon Primitive Area, and the Vermillion Cliffs Natural Area instant study areas.

Before implementing any action that could impair suitability for wilderness, the areas will be inventoried to assess impacts on potential or existing wilderness values. Expanded existing uses or new uses of the area will be allowed if the impacts will not impair suitability of the area for wilderness designation.

New uses or actions (rangeland improvement projects) that would adversely affect wilderness suitability will not be initiated until Congress acts on an area that has been designated for wilderness study.

3. Continue to study and implement the Clayhole and Black Rock Habitat Management Plans (HMP). Complete inventory and write the Parashaunt HMP, then begin implementation.
4. Construct and maintain fences around springs that have significant wet meadow vegetation.

5. Continue the desert tortoise study in the Beaver Dam Slope area. Determine population densities and trends in the Pakoon area.
6. Continue to identify and correct fences around reservoirs that prevent big-game access, particularly deer and antelope.
7. Prepare and implement the Tassi Burro Herd Management Area Plan.

III. What It Does

Implementation of this program will bring livestock stocking rates in line with the grazing capacity of the range and will promote more effective management through distribution of livestock. Rangeland conditions will improve and forage will increase. The existing 16 AMPs have already improved range conditions on those allotments through voluntary reductions of livestock numbers, improved distribution and utilization of livestock.

This program enables BLM to meet the multiple-use mandates of the Federal Land Policy and Management Act (FLPMA, 1976), the Public Rangelands Improvement Act (PRIA, 1978), and the President's Environmental Message of August 2, 1979.

A. Beneficial Consequences

1. Vegetation

The proposed action and alternative 6 will lead to increased vigor in forage plants and establishment of new forage plants.

Rangeland condition over will change in a 15-year period as follows:

	<u>31% Good</u>	<u>22% Fair</u>	<u>47% Poor</u>
	567,656 acres	414,565 acres	866,674 acres
Change over Current:	up 17%	down 7%	down 10%

Usable forage production in 15 years would increase from 84 million pounds (105,000 AUMs) to an estimated 100 million pounds (125,000 AUMs), an increase of 16 percent.

2. Soils and Watershed

Watershed conditions are expected to improve. Annual sediment yield in the EIS area will decrease from approximately 881 acre-feet per year to 815 acre-feet per year or 7.5 percent. Acreage in critical or severe erosion condition will decrease from 55,831 acres to 17,786 acres or 68.1 percent.

Surface water quality and quantity will improve.

Increased vegetative ground cover will decrease surface flow and increase water infiltration.

3. Wildlife

The proposal will directly benefit the diversity and productivity of wildlife habitat. Livestock-wildlife competition will continue to decline. 15,327 AUMs of forage have been allocated to wildlife. This positive impact on vegetation will promote higher fawn and kid survival rates for mule deer and pronghorn antelope; and increase protective

cover and forage (grass, seeds, and succulent forbs) for birds and small mammals. Deferred and rest-rotation grazing will increase production of key species for the desert tortoise. The effect of light to moderate grazing is known to improve range condition, however, the effect on the tortoise and other desert wildlife is unknown. Lighter grazing pressure will increase the ungrazed area and create an effect of rested or ungrazed habitat.

4. Riparian and Wet Meadow Habitat

Mitigating measures committed to reduce adverse impacts state that significant wet meadow areas in a deteriorated condition will be fenced.

5. Livestock

New water developments will require livestock to travel less distance from feed to water.

Vegetation manipulation and improved management will increase quantity and quality of forage and improve livestock performance.

Calf weights are expected to increase by 10-35 percent as a result of improved forage quality and supply.

Calf crops are expected to increase by 15 percent as a result of improved animal nutrition from improved forage, better control of breeding herd afforded from pasture grazing.

Death loss is expected to decrease by 25 percent resulting from improved range conditions and opportunity for better animal care.

A Burro herd management plan will be developed to benefit these animals in FY 1981.

6. Recreation

Recreation in the EIS area is generally primitive and dispersed. Overall, the long-term effects of the proposed action would benefit recreation quality, opportunity, and visitor use.

7. Economics

Following implementation, annual income will increase from the increased AUMs and improved livestock performance.

B. Adverse Consequences

All practical efforts would be taken to avoid or minimize environmental harm for each adverse consequence.

1. Vegetation

A short-term loss (up to 2 years) in vegetation productivity would occur on 128,510 acres proposed for vegetation manipulation, however, long-term productivity will improve significantly. A permanent loss of vegetation would occur around 86 new water developments.

2. Soils and Watershed

Livestock use at the 86 proposed water developments would destroy approximately 44 acres of vegetation. Sediment losses

of 1.0 to 1.5 acre-feet per year would be somewhat offset by a reduction in sediment losses around existing waters. Land treatment would cause an estimated loss of 47 acre-feet per year for 2 or 3 years. After ground cover is stabilized, however, sediment loss would decline.

3. Wildlife

Construction of water developments would temporarily disrupt wildlife.

Construction of 137 miles of new fence in the EIS area may restrict big-game movement and increase their potential to become entangled in fences and die.

Land treatment on 128,510 acres would decrease the diversity of nongame populations because climax wildlife species would be permanently removed from treated areas. Wildlife potentially could return, however, if treated areas are allowed to revert to native habitat.

Less intensive grazing would average 50 percent utilization but provide no rest to protect key wildlife forage species during their critical growing period. The vigor of browse would decrease on 105,338 acres of habitat.

A 2-pasture deferred system may have a negative impact on browse species. The reduced grazing pressure is not a substitute for rested habitat even though it will have the effect of allowing for habitat improvement and for areas of ungrazed habitat.

4. Riparian and Wet Meadow Habitat

Where riparian areas are not fenced and not under a pasture rotation system the condition of perennial grasses, forbs, and sedges may not improve. Moreover, woody riparian vegetation may not improve.

The density of cottonwood, willow, and other woody phreatophytes (except salt cedar) would continue to decline because of inadequate seedling survival.

5. Livestock

No adverse livestock impacts have been identified.

6. Recreation

Intrusions within view of archaeological sites would lower the quality of archaeological sightseeing.

Roads, fences, water sources, land treatments, and other man-caused alterations of the natural environment would unavoidably degrade primitive values.

7. Economics

Ranch income would decline an estimated \$184,400 in the term before the grazing program begins to show increased forage production because of an initial decrease in forage available to livestock. Fifteen years after implementation income is estimated to increase to \$300,000 annually.

In order to obtain the multiple-use objectives, a close and cooperative working relationship must be maintained by BLM and all affected parties, as emphasized by Section 8 of the Public

Rangeland Improvement Act of 1978. The proposal provides the best supportable position.

IV. ALTERNATIVES

The EIS addressed the following five alternatives to the proposed action:

Alternative 1: Full Stocking with Management

Alternative 1 would allow stocking at the estimated livestock carrying capacity for each allotment and permit livestock to use 77,012 AUMs of forage, which is 12,707 AUMs more than under the proposed action. This alternative differs from the proposed action in that it does not propose a reduction for the rest pasture in rest-rotation grazing systems.

This alternative was not chosen because a rest-rotation grazing system must have the AUMs subtracted when the system is implemented. High utilization is avoided when one pasture is rested and the other pastures are used.

Alternative 2: Stocking Level by Condition Class

The stocking level by condition class alternative would set the stocking level in relation to the average condition and apparent trend of the allotments. This alternative would allow ranges in poor or fair condition to recover faster than they would under the proposed action, since maximum use would not exceed 30,361 AUMs for the EIS area.

The following criteria would be used for setting the initial stocking levels:

- A. Condition good, apparent trend stable or up--the initial stocking rate would be the same as under the proposed action. Utilization of key forage species would average 50 percent.
- B. Condition fair, apparent trend up, or condition good and apparent trend down--the initial stocking rate would be 80 percent of that under the proposed action. Expected utilization of key forage species would average 40 percent.
- C. Condition poor, apparent trend up, or condition fair and apparent trend stable or down--the initial stocking rate would be 60 percent of that under the proposed action. Expected utilization of key forage species would average 30 percent.
- D. Condition poor, apparent trend stable or down--grazing would be deferred for at least 5 years.

This alternative would result in favorable environmental impacts as in the proposed action and would allow more rapid vegetation improvement, reduced soil erosion, and wildlife habitat improvement.

The large reduction in stocking levels would, however, cause immediate adverse economic impacts to the ranching community. This alternative was not selected because the same long-term objectives could be achieved with less economic impact by implementing the proposed action.

Alternative 3: No Vegetation Manipulation

The no vegetation manipulation alternative would implement all provisions of the proposed action except land treatment. The proposed AMPs would be developed with no additional forage anticipated from land

treatment. All increases in carrying capacity would come from natural potential.

Subtypes such as pinyon-juniper, blackbrush, and much sagebrush are classified as being in poor range condition. Even through management these species would not increase significantly in condition, whereas they could increase to good condition through vegetation manipulation. For this reason alternative 3 was not chosen.

Alternative 4: No Action

The no action alternative proposes no change in grazing. Livestock stocking rates would be limited to the recognized active privileges of 108,739 AUMs and the 16 AMPs already implemented would continue in operation. Allotments under AMPs would be monitored and modified as needed to reach management objectives.

No new range improvements would be authorized except as needed for the orderly use of the range or to replace or maintain existing AMPs. Other resource programs would be managed to meet MFP objectives.

Under this alternative opportunity would be lacking to improve rangeland condition and forage production on most allotments. High negative impacts would result in the long term on wildlife, soils, vegetation, water resources, and the ranching community. For that reason this alternative was not selected.

Alternative 5: Elimination of Grazing on Federal lands

Alternative 5 would eliminate livestock grazing on the Federal lands in the EIS area. Grazing trespass would be controlled by range use supervision and extensive fencing to separate public land from

private and State lands. Arizona State law would require BLM to survey and fence approximately 423 miles of State and private land boundaries to prevent livestock trespass on public land. Existing improvements on Federal rangeland that benefitted only livestock use and management would be removed and the surface disturbance would be rehabilitated.

This alternative was not selected because of the extreme adverse economic impact on livestock operators and ranch values. The alternative is also impractical in view of the need to fence 423 miles of land boundaries.

Alternative 6: Less Intensive Management (Reduced Grazing Pressure)

This additional alternative was discussed in the Final EIS after comments on the draft were analyzed. Alternative 6 would adjust grazing to maintain utilization of the key species at 45 percent. This would provide for 67,461 AUM's, grazing use. With the exception of implemented AMPs, alternative 6 would not employ intensive grazing management systems. BLM would implement allotment studies to evaluate the effectiveness of the program and change management if necessary. The range improvements needed for pasture rotation would not be needed. Only those improvements needed to distribute use would be constructed. These improvements would be lower in priority than the projects planned for pasture rotation.

This alternative has been selected as part of the livestock grazing program.

V. PUBLIC INVOLVEMENT

A. Planning

During the planning process District personnel met with representatives from seven different agencies and institutions on the local, State, and Federal levels. From February 14, 1979 to January 22, 1980 BLM conducted public meetings with ranchers, special interest groups, and individuals concerned with the Shivwits Resource Area. An open house was held to receive comments on the Grand Wash Management Framework Plan, the basis of the environmental statement. Ranchers were contacted informally throughout this period.

B. Draft EIS

February 9, 1979: Notice of intent to prepare an environmental impact statement was published in the Federal Register.

February 14 and 16, 1979: Four meetings were held with 14 ranchers of the Shivwits area to obtain economic information on typical ranch operations.

March 1, 1979: Letters to explain the purpose of the EIS and request public participation were sent to ranchers, other interested individuals and groups on local, State, and Federal levels. News releases also described the EIS and requested contributions from the public.

April 2, 1979: Economic data compiled from the February meetings was sent to each Shivwits rancher for review and approval, resulting in some changes for specific size operations.

December 10, 1979: The Draft EIS was submitted to the Environmental Protection Agency and made available to the public. BLM mailed approximately 600 copies. Comments were requested from more than 100 agencies, interest groups, and individuals.

January 4, 1980: Notice of availability of the Draft EIS and a public hearing announcement were published in the Federal Register. News releases were issued for Arizona, Nevada, and Utah newspapers.

January 30, 1980: A public hearing was held in St. George, Utah to receive comments on the Draft EIS. Six ranchers offered oral testimony and two additional ranchers indicated they would submit written statements.

February 11, 1980: The 45-day comment period ended on the Draft EIS. A total of 27 comments were received from individuals, special interest groups, and local, State and Federal agencies. As a result of public comment an additional alternative was included and analyzed in the Final EIS.

C. Final EIS

July 15, 1980: The Final Shivwits Environmental Impact Statement was filed with the Environmental Protection Agency.

July 18, 1980: Notice of availability of the Final EIS and a comment period of 30 days appeared in the Federal Register. The

BLM Arizona State Office issued a news release explaining provisions of the EIS. Thus far the District has received and answered six written comments.

July 25, 1980: The Environmental Protection Agency notice appeared in the Federal Register. The 30-day comment period was July 25 to August 25.

A copy of this Rangeland Management Program document will be sent to the current mailing list of permittees and the general public who received the Draft and Final Shivwits Environmental Impact Statements. Copies also will be available for general distribution at the Arizona Strip District Office.

VI. IMPLEMENTATION

A. Grazing Administration and Use Adjustments

A maximum of 86 decisions on grazing use adjustments will be issued by September 15, 1981. Prior to the decision issuance, each permittee will be consulted in an attempt to reach agreement on the AMP and the schedule for adjustments on each allotment. If reductions would cause a hardship on the livestock permittee, these reductions could be taken over a period of time with the scheduling of time and amount of adjustments worked out with each operator within the limits of existing regulations. When sufficient improvements have been installed to implement a grazing system, an agreed upon reduction for the rested pastures will be made. Further grazing use adjustments may be necessary to maintain the target utilization of key forage species.

Where need is identified in implemented management plans allotments will be adjusted immediately. BLM will place high priority on existing AMPs that are not fully implemented.

Beginning in FY81, 24 new AMPs will be written within a 5-year period. This project will require close coordination and cooperation between BLM and the permittees. If permittees cannot agree on a proposed AMP within a reasonable time, however, the AMP will be prepared and incorporated in the permittee grazing permit by decision.

Grazing use adjustments will begin October 1, 1981 and continue until full adjustments are completed. Allotments under rest-rotation grazing, however, will not receive reduction for the rested pasture until improvements are made to allow a grazing sequence to be followed.

Initial AMP implementation, consisting of achieving operational grazing systems, will begin in FY 1982 and will continue over a 5-year period. All identified rangeland improvements will be completed within 5 years if the district receives the necessary appropriations to complete the scheduled projects.

B. Improvements

Rangeland improvements to implement the grazing systems will be constructed as identified in the EIS. Development of waters and fences will be emphasized first, followed by land treatments, so that AMPs can be implemented as soon as possible.

The needed improvements identified in the Shivwits Grazing EIS are as follows:

Improvement	Estimated Cost	Needed dollars/yr. to implement over a 5 year period
86 water developments	\$614,900	\$122,980
137 miles of fence	301,400	60,280
32.5 miles of two-track road	(included in other improvement costs)	
128,510 acres of land treatment	4,688,880	937,776
Total	\$5,605,180	Total/yr. \$1,121,036

The estimated cost of the above rangeland improvements is \$5,605,180. Development will be based on future appropriations and cost benefit analysis.