

MA

39-87

Becky Springs

DR/FONSI

Resource Activity Plans for the  
Antelope Coordinated Management Plan Area  
Environmental Assessment  
EA-NV-040-4-40

Decision: I have reviewed the Environmental Assessment for the individual activity plans considered within the Antelope Coordinated Management Plan Area. This document is technically adequate and consideration has been given to all appropriate resource values. I concur with my staff's assessment that one habitat management plan, one herd management area plan, and six allotment management plans through the selective management approach be implemented within the Antelope Coordinated Management Plan Area. I approve of the action as proposed. No mitigation is required. Site specific environmental analyses will be required prior to construction or development of any projects/improvements undertaken as a result of the activity plans.

Rationale: Because of the high degree of problems in this area and of interaction between foraging animal conflicts and resolutions, a coordinated approach to management planning was undertaken so that common problems and solutions could be resolved in a manner that would best facilitate improvement of the forage resource. Many combinations of various non-selected alternatives, including no action, were considered throughout the entire process of coordinating the activity plans. The decision to implement these activity plans will allow for effective multiple-use management in a coordinated manner within this area. Better resource management will be implemented through the activity plans and will ultimately result in better distribution of the foraging animals, improved habitat conditions, more uniform utilization of the forage resource, and optimize wildlife, wild horse, and livestock use based on sustained yield of the forage resource.

FONSI: There will not be a significant impact to the quality of the human environment from approval of this environmental assessment. Therefore, an environmental impact statement is not required.

Kenneth G. Walker  
Kenneth G. Walker  
District Manager

3-9-87  
Date

Resource Activity Plans for the  
Antelope Coordinated Management Plan  
EA-NV-040-4-40

January 27, 1987  
Ely District BLM

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## INTRODUCTION

This EA analyzes the individual activity plans considered within the draft Antelope Range Coordinated Management Plan (ARCMP), and the level of specificity of analysis is in between the Schell Grazing EIS and the site-specific project environmental analysis yet to be done. The environmental impacts of each specific project (fences, guzzlers, water developments, etc.) will be evaluated through appropriate site-specific environmental analyses prior to construction or development. In the draft ARCMP, management objectives and management actions are tied to management areas. The management areas are simply a means to integrate the various objectives and actions of the different activity plans and are not used for analysis purposes in this EA. All reference to the "plan area" in this EA refers to the core area as defined in the draft ARCMP. See Appendix II for maps of the area.

Because the use of forage by livestock, wildlife, and wild horses is so interrelated, the draft ARCMP integrated, and tried to balance, the needs and utilization problems among these foraging animals to resolve conflicts. This environmental analysis reflects this "aggregate" approach with one High Intensity Environmental Assessment being done to analyze the impacts of the proposed action. The diverse actions proposed in the various activity plans are all parts of the larger project and are thus appropriate for analysis in one environmental document. Use of aggregation more clearly shows the interrelationships of the various proposed actions, and the cumulative impacts are more easily identified and evaluated.

To clearly demonstrate impacts of each grazing system, these are discussed by allotment. Impacts from proposed grazing systems are also mentioned under discussions of other resources.

An environmental analysis must be completed for all activity plans (BLM Manual 1619-Activity Plan Coordination .23). For the Habitat Management Plan, "The habitat management objectives and planned actions identified in the HMP are the items to be addressed in an environmental analysis" (BLM Manual 6780-Habitat Management Plans R-2). The Wild Horse Herd Management Area Plan "must be subject to environmental analysis prior to approval and implementation" (WO Inst. Memo 83-289, January 1983). Items to be addressed in the EA were specified in a telephone conversation by Milt Frei on August 23, 1984. The proposed actions to be addressed in the Allotment Management Plans are the grazing systems (Brad Hines, September 6, 1984).

## CHAPTER 1

### Background

See section A "Reasons for Preparation" of the draft ARCMP for an overview of the recent history of concerns about forage resource utilization problems in the plan area. All agencies and most individuals with interest in the forage resource in the plan area have recognized that some type of coordinated management is necessary to resolve foraging animal conflicts. Needs of all of the foraging animals (livestock, wild horses, wildlife) were considered to result in a coordinated plan. Specific areas of concern which were addressed to meet agreed upon objectives and resolve utilization problems included such items as water distribution and dependability, seasons of use, livestock management facilities, use areas and habitat manipulation. The proper "mix" of objectives and management actions was developed through an interdisciplinary process. It is this mix of the coordinated AMP's, the HMAP, and the HMP which is analyzed in this EA.

### Relationship to Planning

The Schell Grazing Environmental Impact Statement was completed in 1983. It identified five major objectives for the Schell Resource Area.

The Schell RA Management Framework Plan and associated Decision Summary and R.O.D. were completed in 1983. The decisions pertinent to the draft ARCMP are listed in appendix F of the General Section and under "Coordination with other Specialists." The individual activity plans do not conflict with any of these planning decisions, and proposes to accomplish some of them. The proposed actions as specified in the activity plans do not conflict with any county or State land use or zoning decisions or recommendations. The magnitude of the actions proposed in the activity plans are consistent with the Schell Grazing EIS. Other actions identified in the activity plans will be made consistent with current planning prior to implementation through an amendment to the Schell Grazing EIS.

### Purpose and Need for the Proposed Action

In 1982, the Schell Grazing EIS outlined five objectives for the resource area. The major Antelope Range Coordinated Management Plan (ARCMP) area is subject to those objectives which are as follows:

1. Manage vegetation resource and its uses to attain utilization rates not to exceed those recommended by the Nevada Rangeland Monitoring Task Force for sustained yield (45 percent for shrubs, 55 percent for grasses and forbs).

2. Attain and maintain habitat for reasonable numbers of wildlife, reestablish bighorn, pronghorn antelope, and elk on historic ranges, and protect crucial wildlife habitat.
3. Upgrade and maintain all riparian and wetland areas in good or better condition.
4. Maximize livestock based on sustained yield of the forage resource.
6. Maximize wild horse numbers based on sustained yield of the forage resource.

In the 1983 Schell Resource Area Record of Decision, the Antelope Horse Herd area was designated as the priority area for a management plan (BLM, 1983). It was chosen because of the potential multiple use conflicts. Also in this year, a conflict analysis was done for allotment categorization. Three allotments, Chin Creek, Tippett and Sampson Creek, were placed in the "I" or improve category. Chin Creek and Tippett are the two largest allotments. The other allotments form the Horse Herd area and were a natural addition for the plan area.

Mr. Reed Robison, a permittee in the plan area, requested planning and development be done in this area before 1980. This could not be done until now as the Grazing EIS had not been completed. Mr. Robison has taken non-use in some areas because it was felt there was not enough forage left when livestock were ready to come into the area.

In 1983, Nevada Department of Wildlife (NDOW) expressed concern with the poor water distribution within the Antelope Range Coordinated Management Plan Area. NDOW felt pronghorn antelope numbers were not expanding like these animals could if water was more plentiful and stable (Barngrover, 1984). NDOW felt mule deer numbers were low partially due to grazing conflicts. In 1978, NDOW expressed concern with riparian areas on Chin Creek, Sharp Creek and Middle Creek. NDOW felt these important sage grouse brooding areas were being severely damaged by foraging animals.

Because of the high degree of problems in this area and of interaction between foraging animal conflicts and resolutions, a coordinated approach to management planning was undertaken so that common problems and solutions could be resolved in a manner that would best facilitate improvement of the forage resource.



## Description of Proposed Action and Alternatives

### Proposed Action

The proposed action consists of implementing six allotment management plans through the selective management approach, one habitat management plan and one wild horse herd management area plan. These are thoroughly described in the Activity Plans. These plans cover the same core area and have been integrated through the General Management Objectives as listed on page 19 of the draft ARCMP. Maps and descriptions are contained in the various plans. Management objectives are applied to key use areas and the entire study area as displayed on pages 21 through 42 of the draft ARCMP. Specific management actions by key use area on pages 44 through 50 of the draft ARCMP specify the means to accomplish the objectives. These management actions will be done according to development priority and funding availability.

Site specific environmental analyses will be done prior to construction or development of any projects/improvements. Certain standard operating procedures are applicable to the proposal. These are listed below and are considered part of the proposed action for the analysis of impacts from the activity plans.

#### Standard Operating Procedures

1. Environmental assessment will be conducted before project development so that, depending on impact, modification or abandonment of the proposed project may be considered.
2. Threatened or endangered plant or animal species clearance is required before implementation of any project. Consultation with the Fish and Wildlife Service per Section 7 of the Endangered Species Act is necessary if a threatened or endangered species or their habitat may be impacted. If there is deemed to be an adverse impact, either special design relocation or abandonment of the project will follow.
3. Cultural resource protection requires compliance with Section 106 of the National Historic Preservation Act of 1966, Section 2(b) of Executive Order 11593, and Section 101(b)(4) of the National Environmental Policy Act (NEPA) of 1969. Prior to project approval, potentially impacted sites will be identified as required, intensive field (Class III) inventories will be conducted to identify sites. If cultural or paleontological sites are found, every effort will be made to avoid impacts. Data recovery plans will be

developed and BLM will consult with the State Historic Preservation Officer and the Advisory Council on Historic Preservation, in accordance with the Programmatic Memorandum of Agreement by and between the BLM and the Council dated January 14, 1980. This agreement sets forth a procedure for developing appropriate mitigative measures to lessen the impact of adverse effects.

4. Visual resource management requires all actions to be in compliance with BLM Visual Resource Management Design Procedures in BLM Manual 8400. On any project which has a visual contrast rating that exceeds the recommended maximum for the visual class zone in which it is proposed, the visual contrasts will be considered significant and mitigating measures must be examined. The ultimate decision as to whether mitigating measures must be implemented or not rests with the District Manager and will be made on a project-by-project basis.
5. Deferral of livestock use will be in effect for a minimum of two growing seasons following vegetation conversion projects so vegetation may be reestablished. This may require a temporary nonuse agreement with the rancher involved to reduce part of the use in the allotment until the vegetation can be properly managed for grazing.
6. Only the minimal clearing of vegetation will be allowed on project sites requiring excavation.
7. Vegetation conversion that would negatively alter the potential natural plant composition will not be allowed in riparian areas.
8. Alteration of sagebrush areas will be in accordance with procedures specified in the Western States Sage Grouse Guidelines. Notification of this type of project will be done according to the MOU between the Nevada Department of Wildlife and the Bureau of Land Management.
9. Active raptor nests adjacent to areas proposed for vegetation conversion will be protected. On-the-ground work will be confined to the period preceding nesting activity or after the young have fledged (left the nest). Areas containing suitable nesting habitat will be inventoried for active raptor nests prior to initiation of any project.
10. Soils inventories will be completed prior to planning vegetation conversions to determine land treatment feasibility.

11. Burn plans will be developed before any prescribed burning occurs.
12. Project area cleanup will be accomplished by removing all refuse to a sanitary landfill.
13. Fence construction will comply with Nevada State Office fence engineering specifications (Drawing No. NV02833 (53)). Lay-down fences will be constructed in wildlife and wild horse areas if necessary and feasible. Fences in wild horse areas will contrast enough with surroundings so as to be visible to horses and will have gates installed at least once every mile and at all corners. Fences in wild horse herd use areas will be located to minimize interference with the normal distribution and movement of wild horses. Selected portions of new fences constructed in these areas will be flagged or otherwise marked for one year after construction to make them more visible to horses.
14. Some spring developments may be fenced to prevent overgrazing and trampling of adjacent vegetation and to provide escape areas for wildlife. Water at all spring developments will be maintained at the source. If fenced, water will be provided for wild horse use outside of the fence.
15. Physiological requirements for the management of different vegetation types will be determined by BLM based on the best available scientific information. Methods of management to meet these requirements will be determined through consultation with and recommendations from the ARCMP group.
16. Water for wildlife and wild horses is to be made available in allotments and rested pastures, whenever feasible.
17. All current and future livestock water improvement sites will have wildlife escape devices (bird ramps) in the watering troughs.
18. When required, excess wild horses will be removed from public lands and put in custody of individuals, organizations, or other government agencies. Field destruction of wild horses or burros, including cases of sick or lame animals, will be done only as necessary and with appropriate authorization.
19. Water availability will be ascertained by well site investigation before water well development. The investigation will involve a detailed hydrogeological study of the site to determine ground water availability.

20. Applications for commercial or competitive special recreation permits will be analyzed through the environmental assessment process to determine what impacts may occur. These potential impacts will then be weighed against resource values to determine whether or not the special recreation permits will be authorized.
21. Time of day and/or time of year restrictions will be utilized in those areas where construction activities associated with transmission and utility facilities are in the immediate vicinity or would cross sage grouse strutting nesting and wintering grounds; critical mule deer and pronghorn antelope winter range; or antelope kidding areas. The restrictions are listed below.

Restrictions -

- a. Sage grouse strutting grounds: From March 1 to May 15 -- 2 hours before dawn until 10 a.m.
  - b. Sage grouse nesting grounds: Late May to mid-June.
  - c. Sage grouse wintering grounds: November 1 to March 31.
  - d. Critical mule deer and antelope winter range: November 1 to March 31.
  - e. Critical pronghorn antelope kidding areas: May 1 to June 30.
22. Any activity planned within a quarter-mile on either side of the Pony Express Trail must undergo a visual assessment in conjunction with environmental review to determine whether or not the activity will adversely affect the visual integrity of the trail. Appropriate mitigation will take place as necessary to keep the management corridor in as natural a condition as possible for users to relive the conditions of the 1860's. Nondiscretionary activity (e.g., mineral exploration) will also be mitigated to preserve the visual integrity of the trail.
  23. Prior to the approval of a project which may harm or destroy any known Native American religious or cultural sites, the affected Native American tribes or organizations will be contacted for further consultation.

24. Precede any vegetation conversion in pinyon-juniper areas with commercial firewood and post sales. Any material not sold would be available for free use by individuals up until the conversion.
25. All lands not specifically designated closed or limited to off-road vehicles will be designated open to such use. This action is mandated by Executive Orders 11644 and 11989 and will be carried out in conformance with regulations published in 43 CFR 8340, and with BLM Manual Sections 8340, 8341 and 8342.
26. All woodland product harvest permits and contracts will include a stipulation to prohibit the cutting of rare or unique trees and vegetation. Cutting of limber pine, white fir, and bristlecone pine will be prohibited.
27. Maintenance of livestock management structures (fences, water developments) will be accomplished by operator(s) through cooperative agreements with the BLM.
28. Areas which are disturbed by development of facilities will be seeded to prevent erosion and replace ground cover. The species seeded will be indigenous to the area.
29. Simple gate opening mechanisms will be installed as needed at main access points as specified in recreation decision 1. (Schell Grazing EIS Record of Decision.)
30. The BLM will protest all water right filings on reserved waters and established BLM projects as appropriate.
31. Projects will meet Corps of Engineer Section 404 specifications where applicable and permits will be obtained if needed.
32. Established wild horse capture techniques will be used as specified in wild horse program guidance.

#### Alternatives

Many combinations of various alternatives were considered throughout the entire process of coordinating the activity plans with various entities including the general public, the District Advisory Council and Grazing Advisory Board, the affected permittees, National Mustang Association, NDOW, other agencies and among Ely District and NSO resource specialists and managers.

The resultant proposed action was developed through an evolutionary process of constant reevaluation of solutions to resource utilization problems, and interface among the resource specialists on the ARCMP Team. Therefore, no specific other alternative proposals were developed. It was concluded by the ARCMP Team that the proposed action represented the best "mix" of objectives and management actions (with respect to relevant constraints) to coordinate forage utilization needs among wild horses, wildlife and livestock.

Additional proposals (other than the no action alternative) are not necessary to evaluate the impacts which could result from implementation of the proposed activity plans. Consideration of 100 percent implementation of the proposed action and nonimplementation of the plans (no action) will allow consideration of the full range of impacts. It is recognized, however, that synergistic impacts from various combinations of portions of the plans could occur without full implementation of the ARCMP.

Different alternatives will be considered on a project and site specific basis in subsequent environmental analysis.

#### No Action

The BLM would not approve or implement the individual activity plans considered in the ARCMP. Management of the area would continue unchanged and without guidance of the proposed activity plans. Also see the Standard Operating Procedures which would still apply under the No Action Alternative.

## CHAPTER 2

### Description of the Affected Environment

See the draft ARCMP Section I. "Ecosystem Description" for descriptions of plan boundaries, land status, topography, climate, soils, minerals, water, plant communities, T & E plants, fauna and T & E animals. Also see the Antelope Range HMP Section G.2 - "Ecosystem Description" for a detailed description of fauna and riparian areas, and see the individual species discussions for a current problem overview; the Antelope Range Wild Horse Herd Management Area Plan Section A, "Location and Setting," and Section B "Resources Information" for more detailed description as relates to wild horses; and the six AMP writeups sections on "General Information," "Physical Data" and "Existing Improvements" for detailed information of the affected rangeland environment. Resources not discussed within these sections are as follows.

#### Recreation

The majority of recreation within the ARCMP area is dispersed, backcountry and occurs in undeveloped sites. There are no recreation developments nor any major recreation attractions or recreation use areas within the ARCMP area. Activities include hunting, trapping, fishing, sightseeing, ORV use, rock hounding and pine nut gathering. According to the 1977 Nevada State Comprehensive Outdoor Recreation Plan, the majority of recreationists in the reporting region which includes White Pine, Lincoln and Nye Counties are Nevada residents with only an estimated 2 percent from out of state.

#### Cultural Resources

The areas covered by the activity plans are among the least inventoried on the Ely District. Based on the environmental variables present, limited field surveys and miscellaneous site records, and comparable environmental settings in areas of higher inventory coverage, this region exhibits a very high potential for archaeological site occurrence. A continuous occupation record covering 12,000 years is probable ending with the Numic-speaking Shoshoni-Goshute groups. Site types reported include petroglyphs and pictographs (Tunnel Canyon), open campsites, rockshelters, hunting blinds and lithic scatters. The areas most sensitive are those associated with permanent water sources such as springs, former lake terraces and features, pinyon-juniper zones, sand dunes and ecotonal edges between vegetative communities.

Beginning in the 1860's, sites resulting from transportation, mining and settlement activities mark the first significant historic use of the area. The Pony Express-Overland Trail and Stations cross the southern edge of the area. Several mining districts including Kinsley and Kern Mountain are also found.

### Visual Resources

The visual resource of the study area is typical of the Great Basin. Higher visual values are located in a series of long, narrow mountain ranges that run parallel in a north-south direction. Forest cover, streams, and rock outcrops provide contrasting colors and textures that enhance the scenery. The valley areas contain comparatively low scenic value due to the absence of topographic relief and visually significant vegetative variety.

Nearly all of the study area is rural in character and appears to be in a natural condition. Exceptions exist in the form of cultural modifications such as dirt roads, fences, and seedings. None of these seriously detract from the general impression of naturalness that the area imparts.

Most of the study area has been designated as a visual resource Class IV, which allows for high levels of change to the landscape. Several portions have also been given a visual resource Class III, which aims to partially retain the existing character of the landscape, but allows for moderate levels of change to the landscape. Such change should not dominate the landscape. These Class III areas include the Kern and Antelope Mountains, Schellbourne Pass, and an area north of Becky Peak.

There are no Class II areas in the study area.

The Blue Mass Scenic Area, located in the Kern Mountains, is the only Class I area in the study area. The visual resource class here imposes significant constraints on any activity that might alter the landscape. The goal is to provide a setting that appears unaltered by man, and any change to the landscape should be of an extremely low level.

### Wilderness

The entire study area has been released from consideration for wilderness designation. However, one wilderness study area - NV-010-033, Goshute Peak - lies just to the north of the wild horse management area in Elko County. Another - UT-020-060/050-020, Deep Creek Mountains - lies adjacent to the Goshute Indian Reservation on its east side, in Utah.



### Social and Economic

The area of the activity plans is sparsely settled. It is rural in character and the primary source of income is from ranching operations. There has been recent interest in mineral exploration activities within this area as well as throughout the Ely District. There are no towns or industries within the activity plans area. The ranchers have strong historical and family ties to the area. Most use by outsiders in the area is for recreational purposes.

## CHAPTER 3

### Analysis of Environmental Impacts of Proposed Action

There would be no impacts from the proposed action to wilderness values, areas of critical environmental concern, wild and scenic rivers, flood plains and wetlands, prime or unique farm lands, paleontological resources, mineral resources, or threatened or endangered plant species. The short-term is defined as 10 years (the full implementation period of the activity plans). The long term is defined as greater than 10 years.

#### Assumptions for Impact Analysis

- 1). There will be adequate funding to fully implement the proposed action, including the monitoring program.
- 2). The rangeland monitoring program will adequately record forage use by foraging animal and allow for establishment of proper stocking levels.
- 3). Livestock operators and horse and wildlife interest groups will be able to reach a consensus on the priority of uses for specific areas.
- 4). The "reasonable numbers" of wildlife as established by NDOW is the appropriate goal for wildlife in the ARCMP area.
- 5). The appropriate management level of wild horses for this wild horse herd management area is 303.
- 6). Current record high antelope populations in the plan area are a result of the recent wet climatic conditions.

#### Anticipated Impacts

The standard operating procedures would mitigate many of the potential adverse impacts which could result from projects listed under the proposed actions. During the survey and design phase, when exact locations of each project or action are determined, site specific environmental analysis will be done covering exact impacts, mitigation and stipulations required.

#### Water Resources

Water resources would be enhanced over the long- and short-terms in several ways. Water is proposed to be redistributed, and dependable sources of water are to be developed. Guzzlers are proposed to be installed and springheads are proposed to be

protected. These actions would result in a greater quantity and quality of water resources in the activity plan areas. Springheads would thus not be trampled by livestock and wild horses. More intensive management of the utilization of the forage through monitoring, constructing management facilities and water developments, and implementing grazing systems could likely result in a lessening of erosion and improvements in water quality.

#### Soils

In parts of the ARCMP area the effective ground cover would be improved over both the long- and short-terms. This would be accomplished through fencing, seeding, reseeding, and proper distribution of grazing. Effective ground cover would decrease soil erosion. Vegetation conversions could result in conditions where erosion would be accelerated, particularly in the steeper terrains.

Where livestock and wild horses are excluded from certain springheads and riparian areas, soil erosion would decrease. New "sacrifice areas" would likely develop adjacent to fences and at available water sources, where soil erosion would be accelerated. Installation of projects would disturb soils and cause some increase in displacement and erosion.

#### Air Quality

Minor temporary increase in air pollution from dust and exhaust fumes associated with construction or project development activities would occur. Local air quality would be impacted from a prescribed fire. Impacts would be temporary and would dissipate quickly. Any increase in effective ground cover from vegetation protection and proper distribution of grazing would lessen air pollution from wind borne soil.

#### Forestry

Impacts to forestry would be minimal. A small percent of the manageable forested acreage is proposed to be converted. Conversion is proposed to be done with allowance for private and commercial use of the woodland products.

#### Vegetation

The implementation of grazing systems and management facilities would allow most plants to complete growth cycles and increase carbohydrate reserves, thereby increasing vigor, reproduction and favorable species composition in the community. Improved range condition and/or carrying capacity are expected to be achieved from the grazing systems. Better distribution of livestock and wild horses from use of water and fencing is expected to result in more uniform utilization of the forage and thus reduce areas

of overutilization. Limiting and controlling livestock and wild horse use on riparian areas and springheads could result in a marked improvement of condition in the protected areas and could even allow enlargement of the riparian areas.

Utilization of the proposed fire confinement areas would set back areas of vegetation communities to an earlier successional stage. This would result in production of more forbs and annuals, plus resprouting of fire-resistant species and, in the longer term, establishment of shrub communities.

The proposed action would result in improved forage condition and apparent trend throughout much of the ARCMP area, especially in the areas which have been identified as being in a downward trend.

#### Wildlife

Wildlife would be benefited in both the long- and short-terms through a variety of the proposals. Implementation of the activity plans would provide protection for crucial wildlife habitats, would allocate a share of the forage to wildlife and expand and enhance suitable habitats.

It is anticipated that through implementation of the activity plans in the ARCMP area there would be an overall net improvement in quantity and quality of forage. This would result in a beneficial impact to most species of wildlife. The direct effects of the different grazing systems on wildlife are unknown, but to the extent that they would control livestock and wild horse use to result in better distribution, and appropriate levels of use on vegetation impacts would be beneficial. The rested pastures would provide food and cover for wildlife. Big game fawning, kidding, and wintering areas would be enhanced.

Vegetation manipulation would result in a more diverse mosaic of vegetation thus providing a variety of habitats for wildlife species. Fire confinement areas in P.J. or sagebrush areas would provide more early and mid-successional stages of vegetation. This would enhance forage for grazing and browsing animals. Maintenance and protection of seedings would help relieve pressure of domestic livestock on native ranges and result in less competition between livestock and wildlife. The seedings, whether new, rehabilitated, or just fenced would continue to be managed to provide for multiple benefits - including wildlife.

The distribution of water through pipelines and guzzlers would allow wildlife populations to expand and utilize more of the suitable habitat in the ARCMP area. This is especially important for summer range utilization by deer, antelope and chukars. It is projected that one guzzler in a suitable habitat but waterless area will add 70± antelope to the population (Mike Wickersham). Development of more dependable sources of water through guzzlers,

piping, and spring rehabilitation, as described in the HMP will insure yearlong provision for wildlife. This would help maintain some of the higher wildlife numbers which have developed over a three year wet cycle. Some wildlife drownings may occur at developments. This would be partially mitigated by providing escape ramps for wildlife.

Fencing would indirectly benefit wildlife through better distribution of livestock and reduction of overgrazed areas; however, the fences, even though they would be built to deer and antelope specifications, may result in some deer and antelope mortalities. Fencing would also benefit wildlife through exclusion of livestock and wild horses in key habitats such as springheads and riparian areas.

The impact to wildlife from any of the projects would greatly depend upon their placement. Placement of the facilities and improvements has been keyed to particular wildlife utilization problems and thus may have significant benefit. Actual construction or developments of the various projects would result in some temporary displacement and/or stress of resident wildlife.

Key habitats include winter range for antelope, and conversion of P-J would expand this range. Moving sheep off key winter areas and limiting combined use to 45 percent of the bitterbrush and cliffrose on selected winter range would insure viable communities of plants for wintering deer and antelope. Interseeding forbs on chainings used by wintering ungulates would provide more nutrition for the stressed animals resulting in greater winter survival, and maintenance of the condition of pregnant does and fetuses. Burning in P.J. areas would enhance year-round range for deer and if the burns are limited to 100 acres would provide for maximum use by deer.

Fencing, protection and enhancement of springheads and riparian areas would benefit mule deer since these areas serve as fawning areas and provide much needed nutrition for lactating does. The enhanced riparian areas and meadows would also serve as kidding areas for antelope. Known kidding areas would also be protected from overuse by livestock or direct conflict such as location of sheep camps in the spring. Selective seeding of forbs on antelope kidding areas would enhance desirability of the areas for antelope.

Riparian and wetland area protection and expansion would greatly benefit sage grouse since they use riparian areas for brooding. Using livestock to manage vegetation in selected areas for proper heights and densities for sage grouse would also be of benefit. Some disturbance to sage grouse is expected from sagebrush conversions but the SOP of limiting disturbance on active strutting grounds would negate some of the potential impacts.

Continued protection of key wildlife habitats such as conifer areas, mountain mahogany areas and raptor nesting areas through SOP's will benefit wildlife. To the extent that grazing systems maintain areas of white sage, raptors would be benefited.

#### Threatened and Endangered Animals

The Steptoe Dace in Lookout Spring would benefit from appropriate maintenance of the spring as described in the HMP. The ferruginous hawk would benefit from maintenance of areas of white sage.

#### Wild Horses

The proposed reduction down to 303 wild horses within the HMAP area represents 33 percent of the current inventoried population of 451 (1985). This is a substantial percentage but it will put the horse herd within the management range for the area of 273 to 333 horses; with 303 being the appropriate management level. Removal of the wild horses would have immediate benefit to those remaining with less competition for available feed and water. Periodic roundups to maintain the population within these figures would result in some harassment of the horses and is expected to result in an anticipated 1-2 percent mortality. An environmental analysis would evaluate specific impacts of any proposed roundups.

The herd management plan would provide a framework for control and positive management of the Antelope Range Wild Horse Herd. Proper management would provide for a healthy, viable herd.

Wild horses would benefit from new and more dependable sources of water, and from earlier successional stages of vegetation, whether caused by fire or land treatments. Exclusion of wild horses from some of the seedings would eliminate a current source of food. However, the seeding would redistribute livestock grazing pressure and thus lessen competition between wild horses and domestic livestock on native range. Competition could increase between wildlife and wild horses on native ranges near seedings where horses are excluded.

All waters which are developed will be available to wild horses. Those springheads and wetlands which are protected from wild horses will still provide water outside of the exclosures for wild horses and other purposes. Water developments, in general, will enhance wild horse distribution within the ARCMP area, and ensure continuance of a viable herd after the current wet year cycle has passed. Water developments will also result in more even utilization of the available habitat and forage by wild horses. Competition for existing forage at water sources between livestock and wild horses is expected to remain high because of the intensity of use in these areas. Competition in valley bottoms during severe winters is also expected to continue but to a lesser degree, with fewer total animals.

The wild and free roaming characteristics of the wild horse herd would be minimally affected. Fences would be the primary barrier. But the normal east-west movements and altitudinal movements of the horses would not be significantly affected. Fences would be built as SOP to provide for normal daily and seasonal movements by wild horses.

Maintaining the horse herd within the proposed appropriate management levels in conjunction with appropriate management and adjustments in use by other forage users, is expected to result in an improvement in quantity and quality of forage. This would help maintain the overall health and vigor of the wild horse herd. Total available habitat for the wild horse herd would be increased; therefore, distribution of the herd would likely expand.

Wild horse populations in the vicinity of project sites would undergo some temporary harassment and/or displacement.

Through the management plan there will be valuable knowledge gained from studies and monitoring to better understand population dynamics of this herd. The wild horse population recruitment rate should increase in response to improved habitat conditions and lessened competition.

#### Recreation

Upon full implementation of the activity plans there may be more deer and antelope tags issued for the management units in the area. This would result in more hunter days for deer and for antelope. Any more tags for deer and antelope would be of benefit to recreation since the demand for these tags far exceeds the supply. Sage grouse populations should be enhanced through the activity plans. Because game bird seasons are set on a county wide basis, it is unlikely that an increase in sage grouse just in this area would impact daily bag or possession limits. However, it would enhance the quality of hunting in this area. If hunting were increased within the area then incidental camping and ORV use would also increase. Additional fencing may inhibit cross-country ORV use.

Fewer wild horses in the area would make it more difficult for individuals to view wild horses, but there is little wild horse viewing currently within the ARCMP area, thus this impact would be slight.

#### Cultural Resources

Based on best available information including the predictive models, cultural resources would be impacted by the activity plans. Several of the proposals involve modification of springs - prime areas for cultural materials. Impacts would be evaluated and mitigation proposed on a site specific basis. No unavoidable adverse impacts from project development are anticipated because of the protecting provided by the Standard Operating Procedures.

As a benefit to cultural resources, additional sites would likely be discovered through the SOP of inventory on a site specific project basis.

Many cultural materials are situated on the ground surface or just below ground level. Because of this, they are susceptible to trampling impacts from livestock and wild horses. Better distribution of domestic livestock and control of wild horse use at water sources may decrease trampling in some areas but it may create it in other areas. If decreased erosion results from more effective ground cover then cultural resources in some areas will be held in situ. Fencing of springs will help protect cultural resources since these are high potential areas.

#### Visual Resources

No projects are proposed within the highest visual zoned area (Mgmt. Class I) - the Blue Mass Scenic Area. Projects are concentrated in the valley and benchland areas where the zoning is mostly Class IV which allows for contrasts within the landscape. Impacts and mitigation for individual projects will be done on a case-by-case basis. However, contrasts would be introduced into the landscape.

#### Social and Economics

Livestock operators could be economically benefited. A reduction in drift and trespass through fencing and more coordinated management will encourage amicable relationships among permittees and between permittees and the BLM. Positive management and maintenance of wild horse numbers at a viable herd level could bring vicarious pleasure to wild horse advocates. If it is perceived by advocates of wild horses, wildlife, and livestock that all forage users are benefiting equally or proportionately from the forage within the area, this would help public relations with the BLM plus ensure a more viable coordinated management plan. Lifestyles of residents would not be impacted. There may be a slight increase in standard of living. Installation of the projects and developments will provide minimal economic stimulation to the area. Materials will be bought for the projects and paid labor will install them. If more hunter days result from the proposal, then there would be a slight economic benefit to the Ely vicinity.

#### Grazing Systems

##### Overview

Impacts from implementation of the grazing systems are discussed below by allotment. Impacts vary by allotment but the cumulative effect would be beneficial to the forage, wildlife, wild horses, and livestock operations.



The forage resource would benefit from prescribed movements and stocking of livestock which would relieve grazing pressure on plants during the growing season, more evenly distribute the grazing pressure and minimize "sacrifice" areas.

Wildlife would benefit from protection and enhancement of key habitat areas, water developments, improved forage condition, and vegetation conversions.

Wild horses would benefit from development of the water sources and improved forage condition. Improvement of the distribution of all forage users should lessen competition for forage and available water.

More intensive husbandry of their livestock would cost the permittees some time and effort but benefits would accrue from an overall more efficient utilization of the forage. This would allow the permittees to stock closer to preference. Livestock operations would benefit from improved forage condition, from new water sources which would allow utilization of underutilized areas, and from vegetation conversions.

#### Becky Springs Allotment

Vegetation: Requiring operators to move livestock frequently after the start of the growing season would benefit vegetation in the allotment as a whole. Although some areas which were not used before would be grazed, pressure would be reduced on those areas now receiving heavy utilization (i.e., water sources). Because most livestock would be removed before the end of April, plants would be rested through the major portion of the growing season which would be beneficial for all species and grasses and forbs in particular.

Wildlife: Sage grouse would benefit from efforts to keep livestock off of strutting and nesting areas. Since use of the area by mule deer is minimal, impacts to this species should be negligible. Impacts to the few antelope using this area would be mixed. Winter use by livestock concentrates on shrub species which are important forage for antelope, but improving livestock distribution and removing them during the growing season would allow increases in grasses and forbs also used by antelope. One factor which minimizes impacts is that antelope use mainly occurs in the northwest corner of the allotment where livestock use has been and would continue to be minimal. Indirect benefits to other species of wildlife would occur as a result of enhancement of the vegetation.

Wild Horses: Because of the minimal amount of horse use in this allotment, there should be inconsequential impacts to wild horses.

Livestock and Operators: There would be adverse impacts to operators from requiring them to move livestock every two weeks after the growing season begins. However, this would allow livestock to use more area rather than remain in one spot until most forage is gone. Two of the permittees run sheep and have a herder with them anyway, so additional work would be required mainly from the cattle operator.

#### Goshute Mountain Allotment

Vegetation: Requiring the operator to herd his sheep closely, so as to make evenly distributed use throughout the allotment, and to maintain desirable utilization levels would benefit the vegetation as a whole. Even though some portions not currently used would now receive use, the overall area would receive less use and thus fewer impacts.

Wildlife: There is no documented use by sage grouse and minimal use by mule deer in this allotment, so impacts to these species should be negligible. Impacts to antelope should be minimal. Since the sheep would be better distributed, no one area should have any over utilization, thus leaving enough forage throughout the allotment for the antelope to use. The development of a catchment reservoir or other source of providing water in the allotment would benefit all wildlife users as none is presently available. Such waters would extend the antelope range of use and lessen stress from traveling longer distances to water.

Wild Horses: Due to the minimal overlap in diet between horses and sheep in the allotment, there should be no adverse impacts. However, the horses would benefit from the water development.

Livestock and Operator: The operator would have to work harder to move the sheep to accomplish more even distribution. However, the operator would have fewer hardships in caring for their watering needs with the water development planned for the allotment.

#### Deep Creek Allotment

Vegetation: By providing more water sources and thus improving distribution the vegetation throughout the allotment would receive more desirable use. The change in season of use would allow the plants a nearly complete rest during the growing season. This would benefit all grasses and forbs.

Wildlife: Since use by sage grouse is not documented and mule deer use is minimal, few impacts to these species are anticipated. Winter use by cattle should have no impacts on the

antelope. Improved distribution of the cattle and the change in seasons of use would improve and increase the amount of grasses and forbs used by the antelope. There should be indirect benefits to other species of wildlife as well.

Wild Horses: There is competition among the horses and the other range users now. This overlap of diets can be prevented from becoming a more serious problem by improving distribution of all foraging animals. The development of waters would also benefit the horses as it would other foraging animals. All the planned actions would benefit the horses.

Livestock and Operators: Impacts to these would be beneficial. The actions proposed for the allotment are compatible with all the operators. The entire allotment would be benefited, thus improving the situation for the operators and their livestock. Some of these benefits would be better distribution, improved forage resource, and better livestock control.

#### Chin Creek Allotment

Vegetation: By implementing the AMP there would be better control of the amount of use the forage resource receives, as well as when and where that use occurs. These actions would all have positive impacts on the vegetation. Some of the positive influences would come about from improved livestock distribution, establishing seasons of use and deferred grazing systems which are designed to provide some rest for forage plants during the growing season.

Wildlife: Through improved and controlled livestock distribution, more forage would be available throughout the allotment for wildlife. Also, the forage would be maintained in a more desirable form for their use. Positive benefits should be realized from the efforts to avoid wildlife key areas such as sage grouse strutting grounds and antelope kidding areas. Establishing seasons of use would also reduce conflicts between wildlife and livestock.

Wild Horses: The impacts to the horse herd as a whole would be positive. Improved forage condition from better distribution and grazing systems would allow more forage for horses. By establishing seasons of use, conflicts between horses and livestock should be minimized.

Livestock and Operator: The actions in the AMP would have very positive impacts for the operator and his livestock, when considered in total. He can run a more economical operation while at the same time improve the range condition for his use and the other foraging animals as well. This would all be done through changes in seasons of use, change in kinds of livestock, improved distribution, deferred grazing systems, and implementation of required range improvements.

## Sampson Creek Allotment

Vegetation: By restricting use to sheep in portions of the area, more efficient use of vegetation can be made on the steeper slopes, and less impact on drainages will occur than if cattle were using the area.

Rotating the area on the black sagebrush benches used for lambing each year would be beneficial to the forage by not allowing a heavy concentration of use to be made in any one area more than one year in a row. With water development elsewhere on the benches as planned, each area would receive use only once in 5 years.

The cattle use would not occur until after lambing is through and would mainly impact grasses. In areas of concentrated use, such as "sacrifice" areas around water developments, trampling of individual sagebrush plants would occur, but grazing pressure on shrubs would be low except for snowberry (Symphoricarpos spp.) and chokecherry (Prunus spp.). Some use of black sagebrush and winterfat would occur by cattle in October. One advantage of having both sheep and cattle in an area is that each has slightly different forage preference which reduces dietary overlap and competition for the same species and has less impact overall on the vegetation.

Impacts created by delaying use on the high mountain areas until July 1 and only allowing use for one month would be beneficial to the vegetation. This season of use would allow vegetation time for growth before sheep are turned out and regrowth after they are removed. The practice of grazing treated areas of pinyon/juniper in the summer or early fall once the new vegetation is established would impact forage species but this impact would be reduced by providing rest during portions of the growing season.

Wildlife: Each area used for lambing would be located to avoid impact to sage grouse strutting grounds. There are potential conflicts with sage grouse brooding on these high elevation meadows, but planned water developments would spread use out and sources and meadows would be fenced which should alleviate some of the problem. Conflicts between livestock and mule deer, antelope, and wild horses is expected to be nonexistent because these species seldom, if ever, use the area.

Impacts to antelope would be mixed because they make yearlong use of the area. Since antelope rely heavily on black sagebrush for forage, this arrangement which limits livestock use of shrubs is beneficial. However, this use by livestock would impact forbs creating a negative impact on antelope in the spring. Impacts should be lessened by: 1.) achieving proper distribution through herding, water and salt placement because

this area of use is large enough to provide sufficient forage if properly used, 2.) converting presently unproductive areas of pinyon and juniper to more productive areas which will relieve pressure on the benches, and 3.) interseeding forbs in selected areas.

If range improvements such as conversion of P-J attracts mule deer into the areas, fall grazing by cattle would create direct competition for available forage. Livestock are expected to be removed early enough in the fall to minimize this competition.

Wild Horses: Conflicts between livestock and wild horses would be minimized because horse use is concentrated on the bottom during the winter months and livestock will be kept off of the bottom and removed by the end of October.

Livestock and Operators: Impacts to livestock and operators should be beneficial. The use proposed for the allotment is compatible with the remainder of each operation. Vegetation on the black sagebrush benches provides cover for ewes and lambs but does not restrict visibility. This helps reduce losses to exposure and predation. Creating a common use area provides more area for each permittee to use and provides for authorized use without the cost of building and maintaining a fence or the work days necessary for moving animals to avoid unauthorized use if no fence was built. Because seasons of use would not overlap, there should be no conflict between kinds of livestock. On the higher elevations, sheep are easier to manage and would adapt better than cattle.

Other: By incorporating portions of both allotments in one use area: 1.) more total acreage is available to spread out use so that no area supports livestock through the entire growing season, 2.) the cost of building a division fence is avoided, and 3.) adverse impacts of a fence on horse movement will be avoided.

#### Tippett Allotment

Vegetation: By establishing a grazing system in the allotment all vegetation would benefit. Areas and seasons of use have been established which would provide a full year of rest for some areas every other year, others every third year, and still others every fifth year. The only area not receiving complete rest would be under a deferred rotation system.

The grazing system would entail using some areas to a greater extent than they have been used in the past, but the use would be monitored to ensure that it does not exceed allowable use in any area.

The improvement of livestock distribution would allow areas that have historically been overused to be used at levels which would ensure proper regeneration.

Antelope Valley receives the heaviest use, and the grazing system would allow a 20 percent to 35 percent reduction in AUM's through the full cycle.

Wildlife: Sage grouse will benefit by the rotation of use along the west bench of Spring Valley. Also, the key antelope kidding ground south of Antelope Spring would not be used during kidding season and would receive total rest 2 out of 5 years.

With the grazing system implemented the grazing pressure on other native ranges would be somewhat lessened because of the controlled use on the seedings.

Wild Horses: The wild horses would benefit too from better livestock distribution and improved forage condition overall.

Livestock and Operators: There would be a beneficial impact on the livestock because forage would always be readily available and the distance to water reduced. This would help to make greater gains which will be of a beneficial impact to the livestock operator.

The grazing system would require the operator to move their livestock more often which would impact them by taking more of their time.

#### Residual Impacts

- 1) Some wildlife species may drown in water developments in spite of the escape ramps.
- 2) Wildlife and/or wild horses may get tangled in new fences in spite of their being built to deer and/or antelope specifications, and flagging them for greater visibility by horses and wildlife.
- 3) Wild horses may be injured or killed during the roundups as a result of fighting, trampling, and trying to escape.
- 4) Livestock "sacrifice areas" may develop along new projects such as fences and water facilities.
- 5) Visual contrasts will be introduced into the landscape.

#### Recommended Mitigating Measures

- 1) Enough of a reduction in the horse population should be made during each roundup to bring the population to the lower end of the 273 to 333 management range. This would

insure a minimum number of roundups and would thus minimize stress to the wild horses and inadvertent injury and death caused by capture and holding.

- 2) The edges of any vegetation conversion should be "feathered" so that they visually blend into the landscape and to increase the "edge effect" for wildlife. The visual resource specialist should be involved in the planning and design phase.
- 3) Efforts should be made to avoid any significant cultural resource sites. There is some leeway in exactly where projects/improvements are placed. The archaeologist should be involved in the planning and design phase.
- 4) Gates should be left open when cattle are not being confined or controlled, except on areas which are being protected. This will allow for freedom of movement of wild horses and other large ungulates.
- 5) Within vegetation conversion projects, islands of cover should be left as escape cover for wildlife.
- 6) No shutoff valves should be installed on water overflow pipes which provide water for wildlife.

#### Irreversible and/or Irretrievable Commitment of Resources

None, except for the expenditure of energy during project development.

#### Analysis of Environmental Impacts of the No Action Alternative

Under the no action alternative, the activity plans considered in the Antelope Range Coordinated Management Plan would not be implemented.

There would be no impacts from the no action alternative to paleontological resources, wilderness values, areas of critical environmental concern, wild and scenic rivers, flood plains and wetlands, prime or unique farm lands, mineral resources, or threatened or endangered plant species. The short-term is defined as 10 years (the full implementation period of the activity plans). The long-term is defined as greater than 10 years.

#### Assumptions for Impact Analysis

- 1) Livestock, wildlife and wild horse use and use patterns will remain the same as at the present time for both the short and long-term.

## Anticipated Impacts

### Water Resources

No significant changes (either positive or negative) would be expected. However, the positive benefits described under the proposed action would not be realized throughout the Plan Area and within the short-term. It is likely that some of the same modifications would be used to resolve important problems within the Plan Area. However, these would only be done in response to specific land use problems and would occur over the long-term. Difference in impact between this alternative and the proposed action may be quite marked during dry years especially in regard to water distribution and dependability.

### Soils

Effective ground cover would likely improve or stabilize in the portion of the Plan Area which is in an upward trend, and continue to degrade in those portions which are in a downward trend. Effective ground cover is directly related to protection of the soil from erosion. The benefits to the larger area as described under the proposed action alternative would not occur in the short-term. Activity plan projects would not be built, thus those soil disturbing activities would not occur.

### Air Quality

Less effective total ground cover would occur under this alternative. Total wind borne particulates would be greater under this alternative. Activity plan project related temporary negative impacts to air quality would not occur.

### Forestry

Impacts to forestry would be minimal. Proposed vegetation conversions would not occur.

### Vegetation

The portion of the Plan Area in an upward trend is expected to continue to improve, or at least stabilize. The portion of the Plan Area in a downward trend is not expected to improve. Positive benefits to vegetation as described in the proposed action would be realized except on a quite limited basis. Early and mid level stages of vegetational succession would not be encouraged in this alternative.

### Wildlife

Wildlife populations are expected to remain near recent historic numbers for both the short- and long-terms. Normal fluctuations in wildlife populations are expected in response to climatic



conditions. However antelope populations have increased in response to the recent wet cycle. These populations are expected to decline in the short-term if conditions become drier.

Benefits to the wildlife as described in the proposed action would not occur, other than through the standard operating procedures. Benefits not realized would include enhancement of crucial wildlife habitats such as fawning and kidding areas, riparian areas and deer and antelope winter range; and expansion of wildlife populations through enhanced water distribution and dependability and vegetation manipulation.

Use of standard operating procedures would continue to protect certain key wildlife habitats to some degree. These consist of conifer areas, mahogany areas, and raptor nesting areas. Other SOP will continue to limit harassment on wildlife when they are using certain key habitats including strutting grounds, kidding areas, and winter range.

Wildlife would not be harassed by project development, drown in water facilities or get tangled in fences to the extent that would occur under the proposed action.

#### Threatened and Endangered Animals

Benefits to the Steptoe Dace and the Ferruginous hawk as described under the proposed action alternative would not be realized.

#### Wild Horses

The present numbers of wild horses would be maintained under this alternative. The benefits to wild horses from water distribution and dependability and from improvements in quantity and quality of forage as described in the proposed action would not occur. Periodic roundups would still occur with the impacts as described under the proposed action. Herd viability and health would not change measurably under this alternative. Wild horses would continue to overuse certain portions of their range and be unable to exploit other portions. Additional fences as proposed in the activity plans would not be built in the short-term, thus would not inhibit horse movement.

#### Recreation

Benefits as described in the proposed action alternative would not be realized. Quality and quantity of hunting opportunities would not be improved. Fewer fences would be built, thereby not inhibiting cross-country ORV use. Wild horse viewing may be easier with a higher number of animals concentrated at the existing water sources.

## Cultural Resources

Impacts to cultural resources would not occur from project developments, since these would not be developed. Protecting for cultural resources as described under the proposed action would not occur. Additional sites would not be discovered over the short-term from the S.O.P. of inventory on a site specific basis.

## Visual Resources

Visual contrasts from activity plan related projects would not be introduced into the landscape.

## Social and Economics

Benefits as described under the proposed action would not occur. Various interest groups will continue to vie for larger shares of the available forage in the area. Economic benefits would not result from an increase in livestock numbers nor from increases in numbers of game animals.

## Grazing Systems

### Overview

Impacts from the no action alternative are discussed below by allotment. Impacts vary by allotment but the cumulative effect would be adverse to forage, wildlife, wild horses and livestock operations. Current trends such as ineffective or improper use of forage, degradation of key wildlife habitats, competition for water and forage, and decline of desirable forage species would continue. Also, the benefits from implementing the proposed action, as described earlier, would not be realized.

### Becky Springs Allotment

Vegetation: Adverse impacts to those areas now heavily utilized would occur because this heavy use would continue. Desirable forage species could be replaced by undesirable invaders, such as halogeton or Russian thistle. Vegetation elsewhere would not be impacted.

Wildlife: Adverse impacts to sage grouse would occur from livestock use and trampling on strutting grounds and nesting areas. An additional adverse impact to wildlife to be expected is that grazing animals would have to travel further from existing water to obtain forage and avoid livestock.

Wild Horses: No impacts other than continued competition for forage.

Livestock and Operators: No additional work on the part of each operator would be needed. Adverse impacts would be long-term as vegetation in areas now heavily used is replaced by undesirable species. Livestock would have to travel further to obtain forage and some loss of animals to halogeton may occur.

#### Goshute Mountain Allotment

Vegetation: There could be adverse impacts if currently used areas continue to be heavily used. This could cause desirable species to be replaced by undesirables such as halogeton or Russian thistle. Vegetation elsewhere may not be impacted.

Wildlife: There could be adverse impacts on antelope if portions of the allotment get overused due to improper distribution of sheep.

Wild Horses: No impacts other than continued competition for forage.

Livestock and Operators: No additional effort than as at present would be required of the operator. However, in the long-term, impacts to the vegetation may be adverse in areas of heavy use. This may cause more stress on the sheep searching for forage and also may cause an increase in losses due to poisonous plants to occur.

#### Deep Creek Allotment

Vegetation: Adverse impacts to those portions of the allotment now heavily utilized would continue. Areas of severe disturbance would eventually be replaced by undesirable vegetation. Proper use would be exceeded in many areas for key species.

Wildlife: Adverse impacts to wildlife would be expected when species such as antelope have to travel further from existing waters for forage.

Wild Horses: They would have further to go to search for water and there would be continued competition for forage.

Livestock and Operators: They would have to work harder and spend more to control stock. The livestock would continue to overuse some areas. There would be more stress due to continued lack of sufficient water and management facilities. Desirable species would decline and noxious plants would spread (i.e., halogeton and Russian thistle). Eventually livestock use may have to be reduced or prohibited to protect the resource.

### Chin Creek Allotment

Vegetation: Without the planned actions control would continue to be lacking in attaining proper use of the key forage vegetation in much of the allotment. This result would lead to decreases in desirable and increases in undesirable vegetation such as Russian thistle, cheatgrass, mustards, and halogeton. The overall effect would be negative impacts to the vegetation for many reasons, but mainly from lack of control. The operator plans to increase his use in the allotment and that would add to negative impacts on vegetation there, without implementation of the proposed planned actions.

Wildlife: Without the planned facilities and actions being implemented as stated in the AMP, impacts would stay the same in some areas or get worse in others. The habitat would continue to degrade from the standpoint of being suitable for wildlife. Wildlife reasonable numbers may not be achieved or sustained. There would be more stress on all the major wildlife populations from declining forage and habitat conditions.

Wild Horses: There is considerable conflict for available forage amongst the horses and the other foraging animals in the allotment under the present situation. Thus without the AMP being fully implemented this situation will only worsen.

Livestock and Operator: Impacts would be adverse to both the livestock and the operator if the AMP is not fully implemented. The operator can not run the livestock economically and properly without them. The operator would lose money, the range would worsen limiting his livestock's use. Overall a significant hardship would be the result of no action.

### Sampson Creek Allotment

Vegetation: Without implementation of the proposed grazing treatments, lambing would likely occur in the same location year after year creating an area of disturbance in which palatable species would be removed and/or replaced by undesirable species. Since no facilities would be constructed, the Chin Creek permittee would run sheep instead of cattle. This would cause more pressure to be placed on those species preferred by sheep. If no treatment is established for the mountains, vegetation would be adversely impacted particularly in the areas where overuse is now occurring around existing waters and in the only drainage providing access. Without any management to protect the winterfat bottoms, proper utilization levels would be exceeded drastically and winterfat would continue to be replaced by halogeton and big sagebrush.

Wildlife: Sage grouse strutting grounds could be negatively impacted since location of lambing areas would not be regulated. This is a particular problem if the common use area is not approved since all lambing would occur in the Sampson Creek Allotment on the west bench of North Spring Valley which is where the main concentration of strutting grounds is located. Antelope would be more negatively impacted by running sheep exclusively instead of dual use because antelope forage preference is more similar to forage preference for sheep than for cattle resulting in more dietary overlap. If vegetation around mountain springs continues to receive heavy utilization, brooding sage grouse would be negatively impacted.

Wild Horses: Wild horses would be negatively impacted if livestock use on the winterfat was not controlled because of their heavy reliance of this species in the winter. Horses would not be gathered which would first be a positive impact on them, but numbers could increase until wild horses, livestock, wildlife, and vegetation would all be negatively impacted.

Livestock and Operators: If a common use area is not designated, more work would be required by the permittees to keep livestock on the proper side of the allotment boundary, probably through herding and water hauling. If both operators ran in common, there would be direct competition for forage and the sheep entering the area last would be at a disadvantage.

#### Tippett Allotment

Vegetation: Without implementing the grazing system the overuse and lack of control that is occurring now would continue. Over the long-term there would be a decrease of desirable forage species. A gradual encroachment of P-J would continue to displace species that can be used by all current foraging animals. An increase in the density of P-J also partially displaces all foraging animals.

Wildlife: Sage grouse nesting along the Spring Gulch Bench could be impacted by livestock every year during about half of the nesting period if the system is not implemented. There would continue to be competition between sheep and antelope during kidding in the area south of Antelope Spring.

Wild Horses: Competition for forage between horses and livestock would continue.

Livestock and Operators: The livestock would not be moved as often under the no action alternative, but forage and water would not be as readily available. Less operator time would be required under this alternative.

## Chapter 4

### Intensity of Public Interest

The issue of wild horses and their management has been one of high public interest for many years. Prior to the passage of the first protective regulations in the 1950's, local area residents captured horses on a regular basis, generally to be sold for slaughter. As laws were passed and more publicity was attached to the issue, public concern became greater, both for and against protection of these animals. In recent years, groups have become very vocal for the total protection of wild horses with reduction in grazing pressure to be absorbed by livestock interests in the areas where horses were found. Present public interest continues but has included groups and individuals interested in wildlife and game resources.

Interest in the issue of forage allocation among advocates for wildlife, wild horses and livestock exists on the national level through organized wild horse interest groups, humane societies and organized wildlife and livestock interests. On the local level, there is a high degree of interest from affected permittees and from sportsman's clubs concerned with allocating a portion of the forage resource to wildlife.

### Record of Public Participation

On February 2, 1984, a meeting was held for permittees and interest groups (NDOW and NMA) involved in the Antelope area. Management objectives were established and agreed upon. In attendance were:

Richard Sewing - National Mustang Association  
Metta Richins - permittee  
Reed Robison - permittee  
Jay Henriod - County Commissioner  
Warren Robison - permittee  
Larry Gilbertson - NDOW  
Mike Wickersham - NDOW  
Rao Bateman - permittee  
BLM Personnel

On July 9-10, a tour was held of the Antelope area for members of the District Advisory Council and Grazing Advisory Board and interested others. In attendance were:

Larry Gilbertson - NDOW  
John Polish - Council Member  
Van Gardner - Board Member  
Richard Sewing - National Mustang Association  
Jay Henriod - County Commissioner  
George Swallow - permittee  
Bill Rosevear - permittee  
Reed Robison - permittee  
Bill Davidson - Board Member  
BLM Personnel

On August 14-15, a tour of the Antelope area was held for NDOW and NSO personnel. In attendance were:

Larry Barngrover - NDOW  
Swede Erickson - NDOW  
Mike Wickersham - NDOW  
Larry Gilbertson - NDOW  
BLM Personnel (Ely District and NSO)

#### Document Review

External

#### Livestock Permittees:

Mr. Rao Bateman  
Mrs. Mabel Bates  
Mr. Dan Halstead  
Mr. Reed Robison  
Mr. Scott Moore  
Mr. Warren Robison  
Ms. Metta Richins  
Mr. Kay Lear  
Mr. Bill Rosevear  
Mr. Melvin Gardner  
Intermountain Ranches, LTD.  
c/o Mr. George Swallow  
Mr. Ray Staley  
Mr. John Phillips  
Mr. Hank Vogler  
Mr. Gail Parker

Nevada Department of Wildlife:

Mr. Duane Erickson  
Mr. Larry Barngrover  
Mr. Larry Gilbertson  
Mr. Mike Wickersham

Wild Horse Interest Groups:

American Horse Protection Association  
American Mustang and Burro Registry  
Animal Protection Institute  
Center for Wild Horse and Burro Research  
International Society for the Protection  
of Mustangs and Burros  
National Mustang Association  
Wild Horse Organized Assistance

Other Interest Groups:

Mr. John Walker, Office of Community Services,  
State Clearinghouse  
Sierra Club, c/o Rose Strickland, Public Lands  
Committee of the Toiyabe Chapter  
U.S. Fish and Wildlife Service  
c/o Mr. Bob Hallock

Bureau of Land Management:

Mr. Charlie Boyer, Wells Resource Area Manager

Internal

Jake Rajala - Environmental Coordinator  
Wayne Howle - Wilderness/Recreation/Visual Resources  
Shela McFarlin - Cultural Resources/Native American Interests  
Kathy Lindsey - Rangeland Resources and T&E Plants  
Mark Barber - T&E Animals  
Rita Suminski - Wildlife  
Harry Rhea - Forestry  
Chris Ann Bybee - Soil/Water/Air  
Bob Brown - Wild Horses  
Bill Robison - Paleontological  
Fred Fisher - Rangeland Resources  
Loran Robison - Rangeland Resources  
Hal Bybee - Operations

Nevada State Office Resource Specialists



Signatures

Prepared by:

Jake Rajala  
Jake Rajala, Environmental Coordinator

Feb. 26, 1987  
Date

Reviewed by:

Robert E. Brown  
Robert E. Brown, Wild Horse Specialist

Feb. 26, 1987  
Date

Fred E. Fisher  
Fred E. Fisher, Range Conservationist

3/2/87  
Date

Kathy Lindsey  
Kathy Lindsey, Range Conservationist

2/27/87  
Date

Loran A. Robison  
Loran Robison, Range Conservationist

3/2/87  
Date

Rita R. Suminski  
Rita Suminski, Wildlife Biologist

3-2-87  
Date

Wayne M. Lowman  
Wayne M. Lowman, ADM Resources

3/2/87  
Date

Gerald M. Smith  
Gerald M. Smith, Schell Area Manager

3/3/87  
Date

APPENDIX I  
Glossary

ARCMP - Antelope Range Coordinated Management Plan.

Ecological Site - a kind of land with a specific potential community and specific physical characteristics, differing from other kinds of land in its ability to produce vegetation in response to management.

Ecological Status - The present state of vegetation and soil protection of an ecological site in relation to the potential natural community for the site. Vegetation status is the expression relative to the degree to which the kinds, proportions and amounts of plants in a community resemble that of the potential natural community. If classes are used, they should be described in ecological rather than in terms of resource value. Soil status is a measure of vegetation and litter cover relative to the amount of cover on the site to prevent accelerated erosion. Ecological status is often described in terms of seral stages.

Fire Confinement - an action that uses natural and/or preconstructed barriers or environmental conditions to confine a fire to a predetermined area.

Fire Control - an immediate suppression action with enough forces to suppress a fire within the first burning period.

Interim Numbers - the number of livestock on the range from which monitoring data will be taken. The number has been agreed on by the permittee and the BLM.

Key Use Areas - areas chosen through the monitoring process to measure changes in range forage and ecological condition.

Management Actions - statements which explain specific methods for meeting or accomplishing the management objectives.

Management Objectives - statements which describe a desired situation or condition. Some objectives are very specifically described so these can be measured to see if the desired result is being obtained.

Management Objective Areas - areas outlined in the ARCMP where specific problems and solutions have been identified.

Potential Natural Community (PNC) - the biotic community that would become established if all successional sequences were completed without interferences by man under the present environmental conditions.

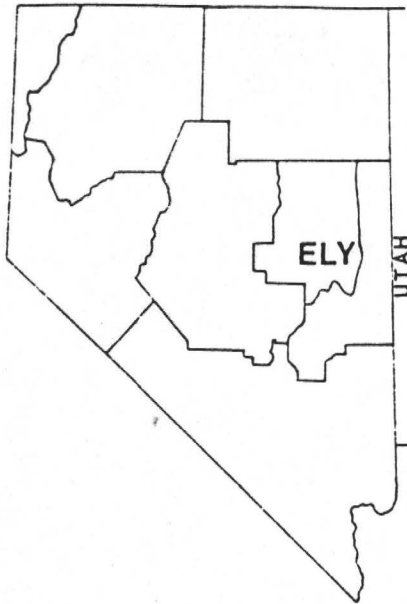
Reasonable Numbers - population numbers of a species which are estimated to currently exist in a specific geographic area or are projected at a certain population level based on a long-term average.

Riparian Vegetation - vegetation associated with wet areas or streambanks.

Seral Stage - a particular vegetative community within the spectrum of plant association which can possibly occupy a given ecological site, measured in comparison to the potential natural community (PNC) as follows:

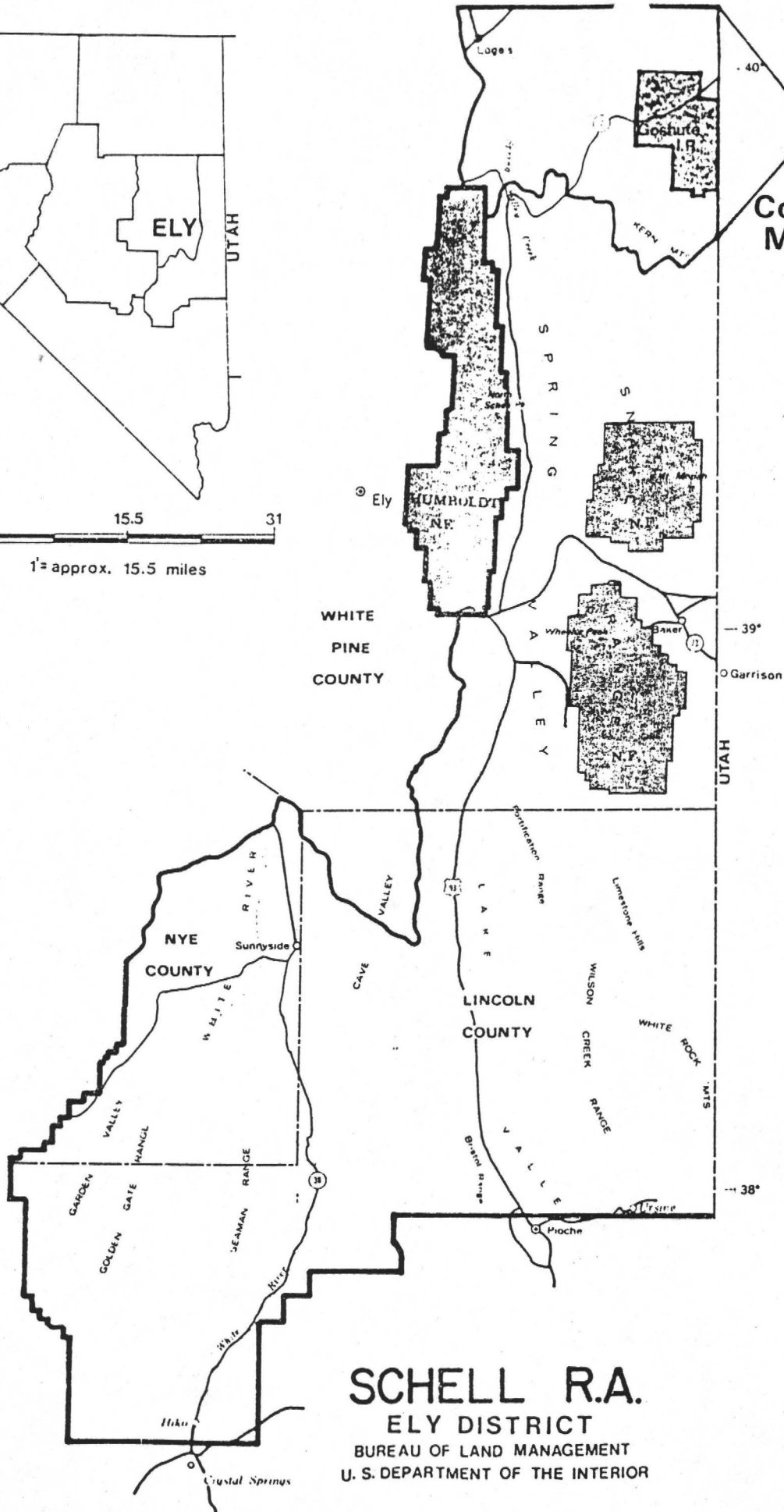
- 0 - 25% of PNC = Early Seral Stage
- 26 - 50% of PNC = Mid Seral Stage
- 51 - 75% of PNC = Late Seral Stage
- 76 - 100% of PNC = Climax or PNC

APPENDIX II  
Maps

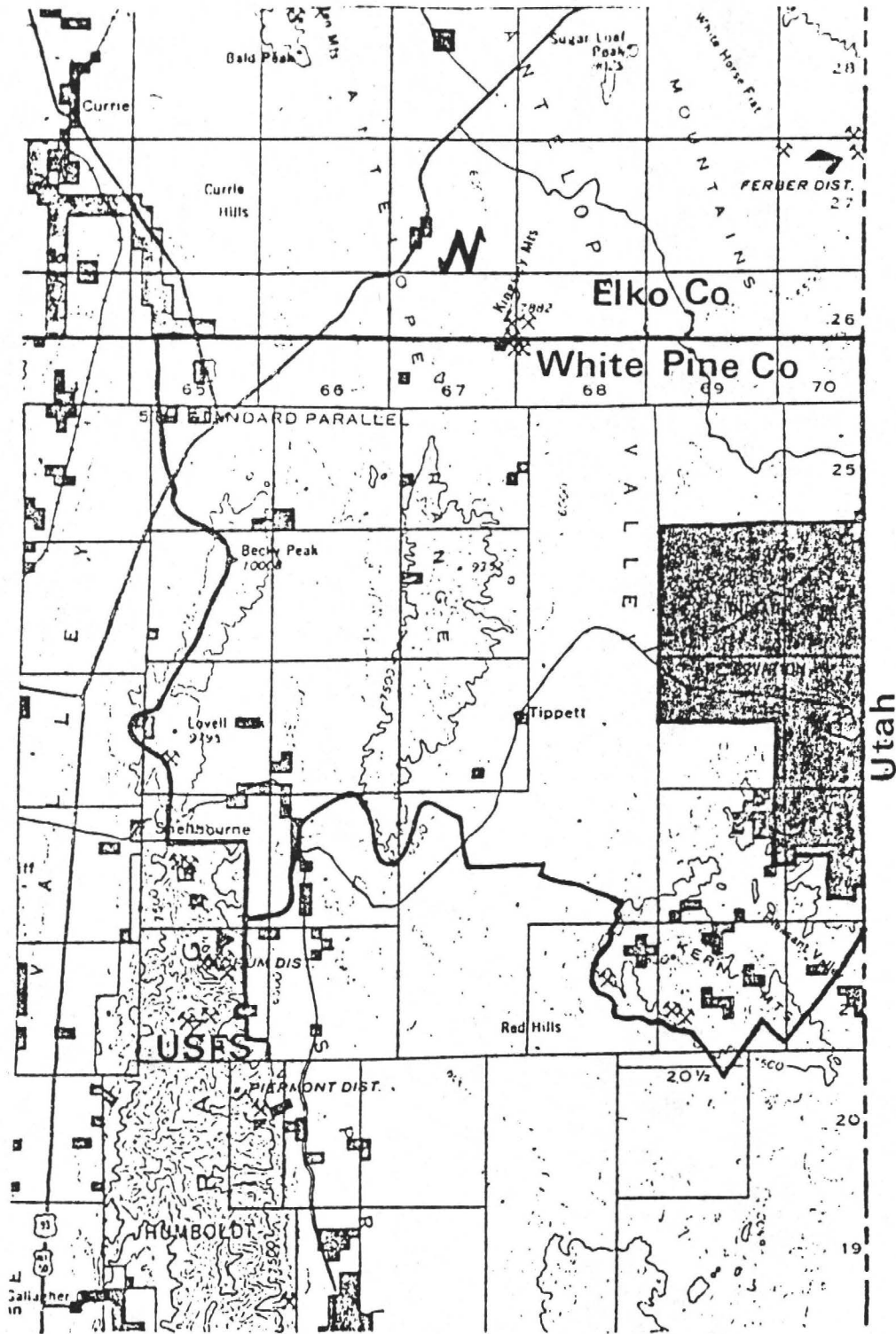


0 15.5 31  
1" = approx. 15.5 miles

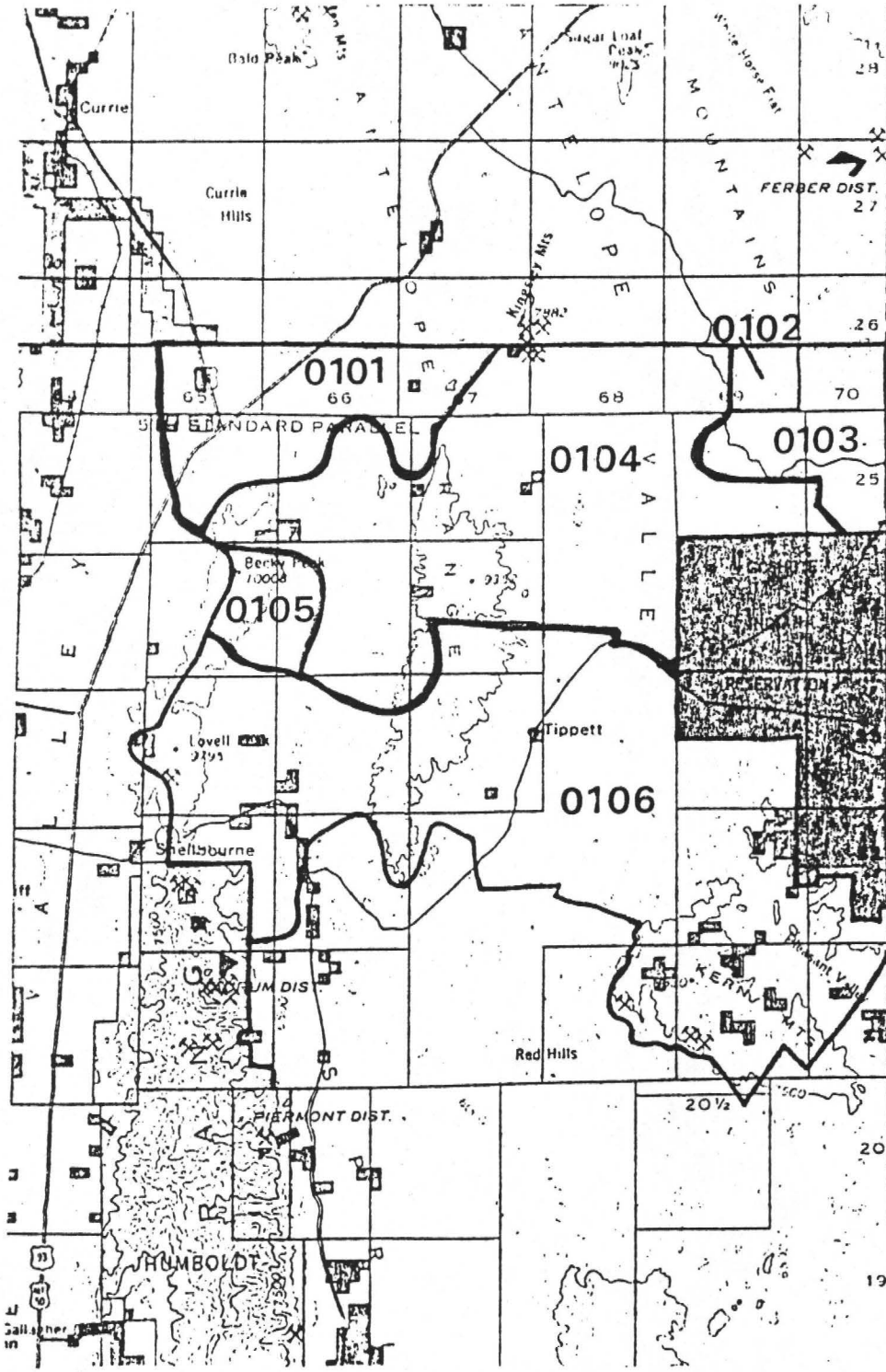
**Antelope Range  
Coordinated  
Management  
Plan  
Area**



**SHELL R.A.**  
ELY DISTRICT  
BUREAU OF LAND MANAGEMENT  
U. S. DEPARTMENT OF THE INTERIOR

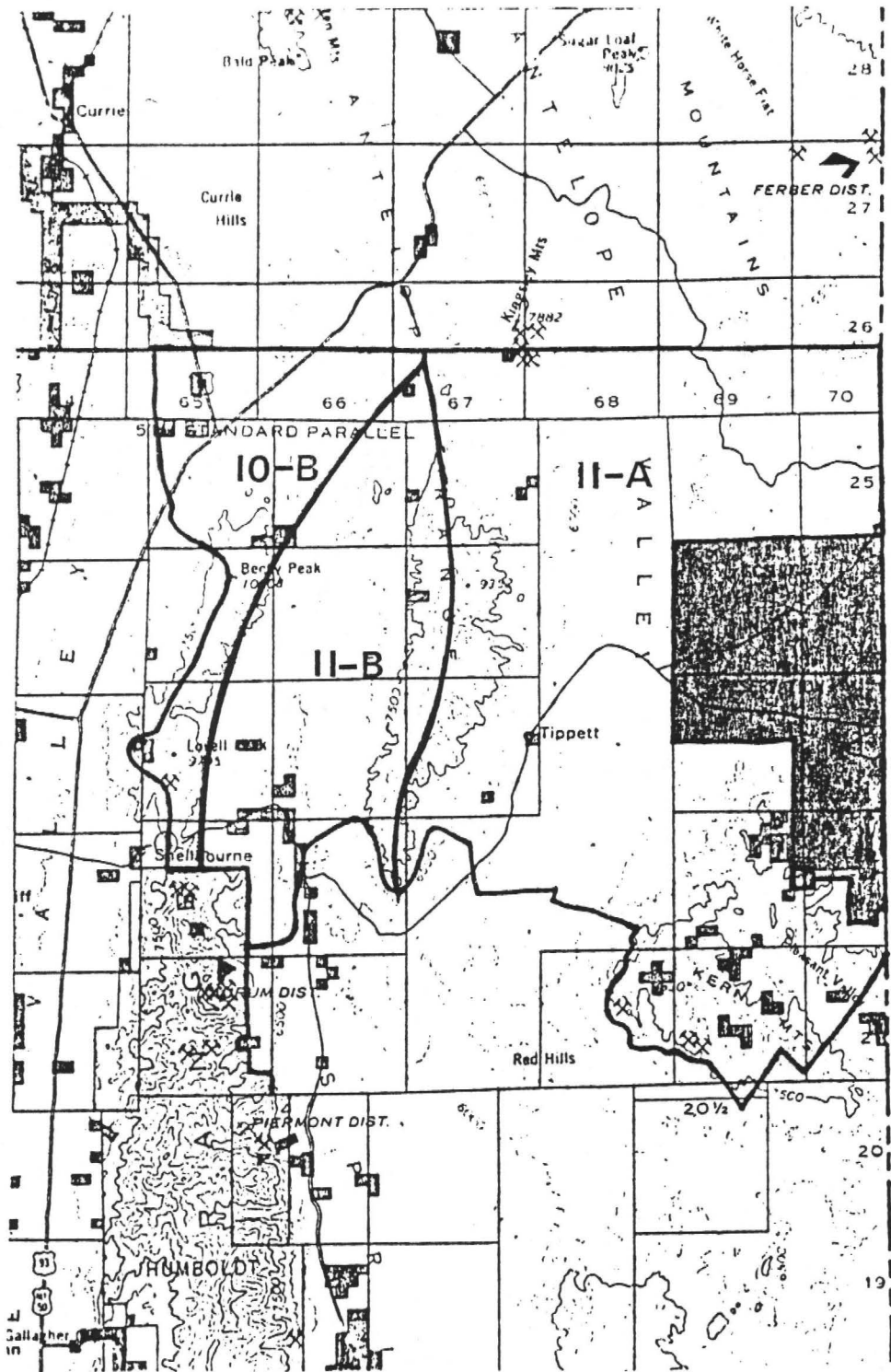


Boundary of the Antelope Range Coordinated Management Plan Area, Nevada.



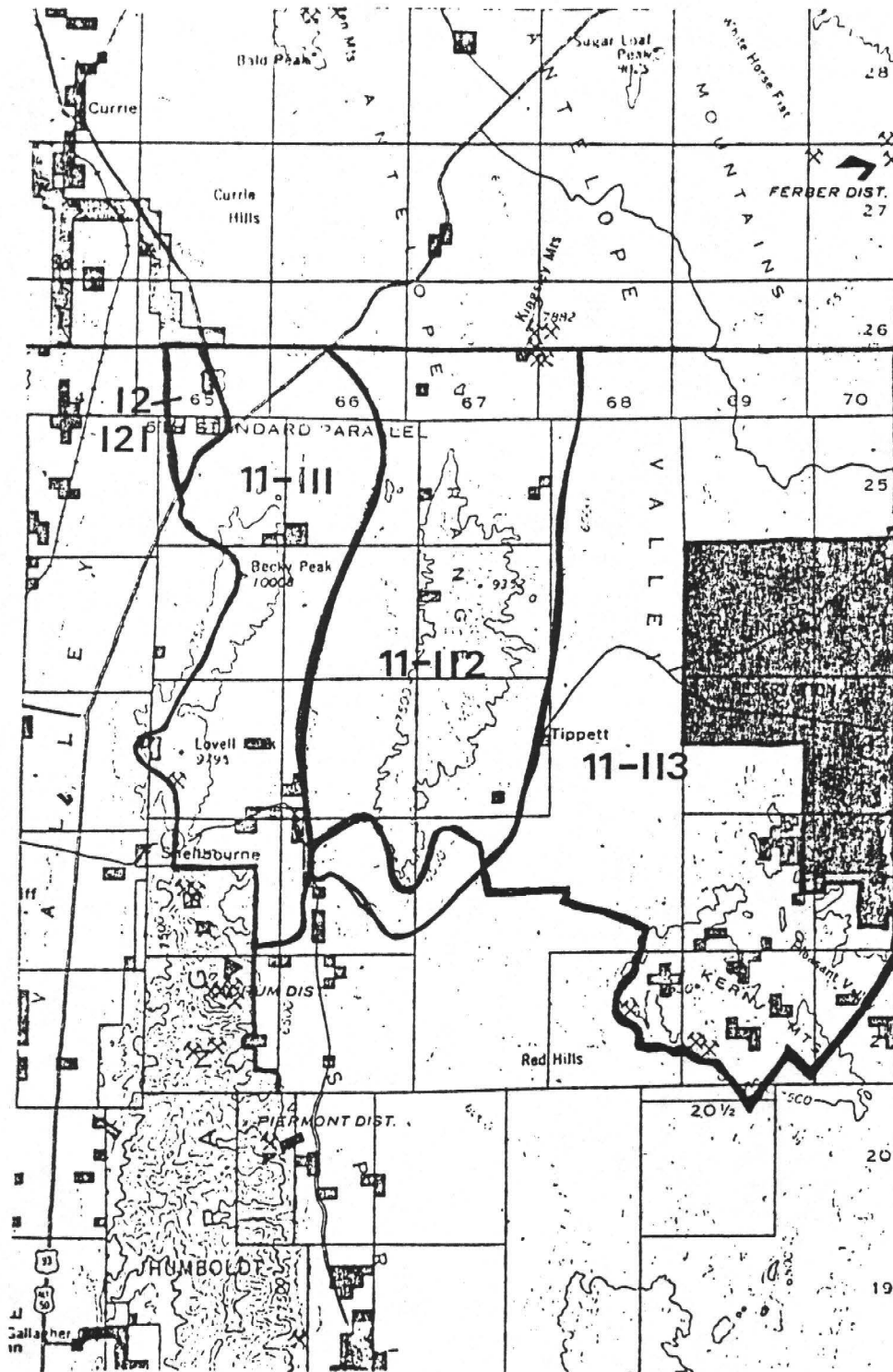
Grazing Allotments within the Antelope Range Coordinated Management Plan Area, Nevada.

- |      |               |      |                  |
|------|---------------|------|------------------|
| 0101 | Becky Springs | 0102 | Goshute Mountain |
| 0103 | Deep Creek    | 0104 | Chin Creek       |
| 0105 | Sampson Creek | 0106 | Tippet           |

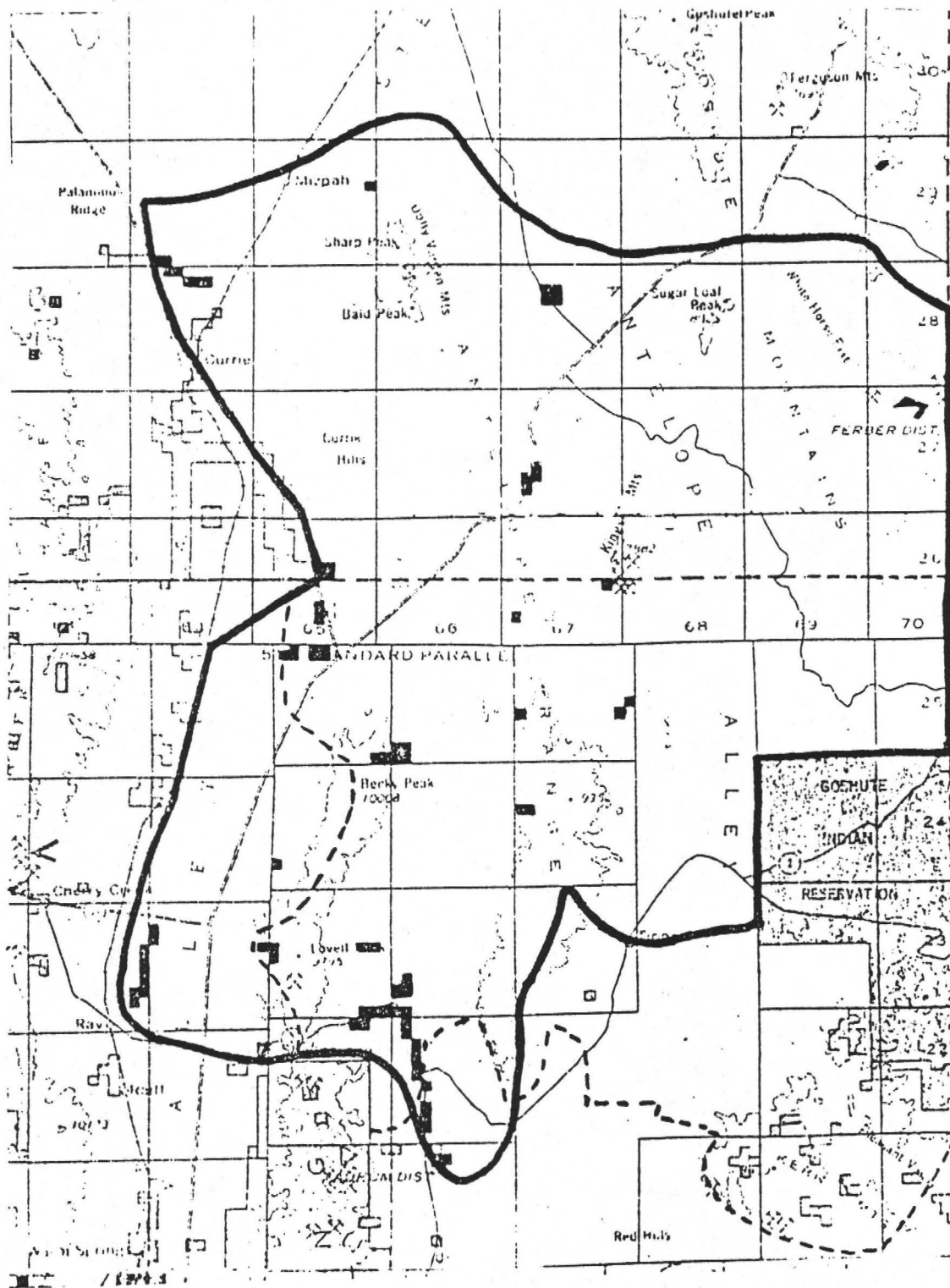


NDOW Pronghorn Antelope Herd Areas within the Antelope Range Coordinated Management Plan Area, Nevada.

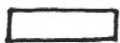




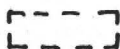
NDOW Mule Deer Herd Areas within the Antelope Range Coordinated Management Plan Area, Nevada.



- Antelope Horse Herd Area within the Antelope Range Coordinated Management Plan Area and the Entire Antelope Horse Herd Area.



Antelope Horse Herd Area



Antelope Range Coordinated Management Plan Area