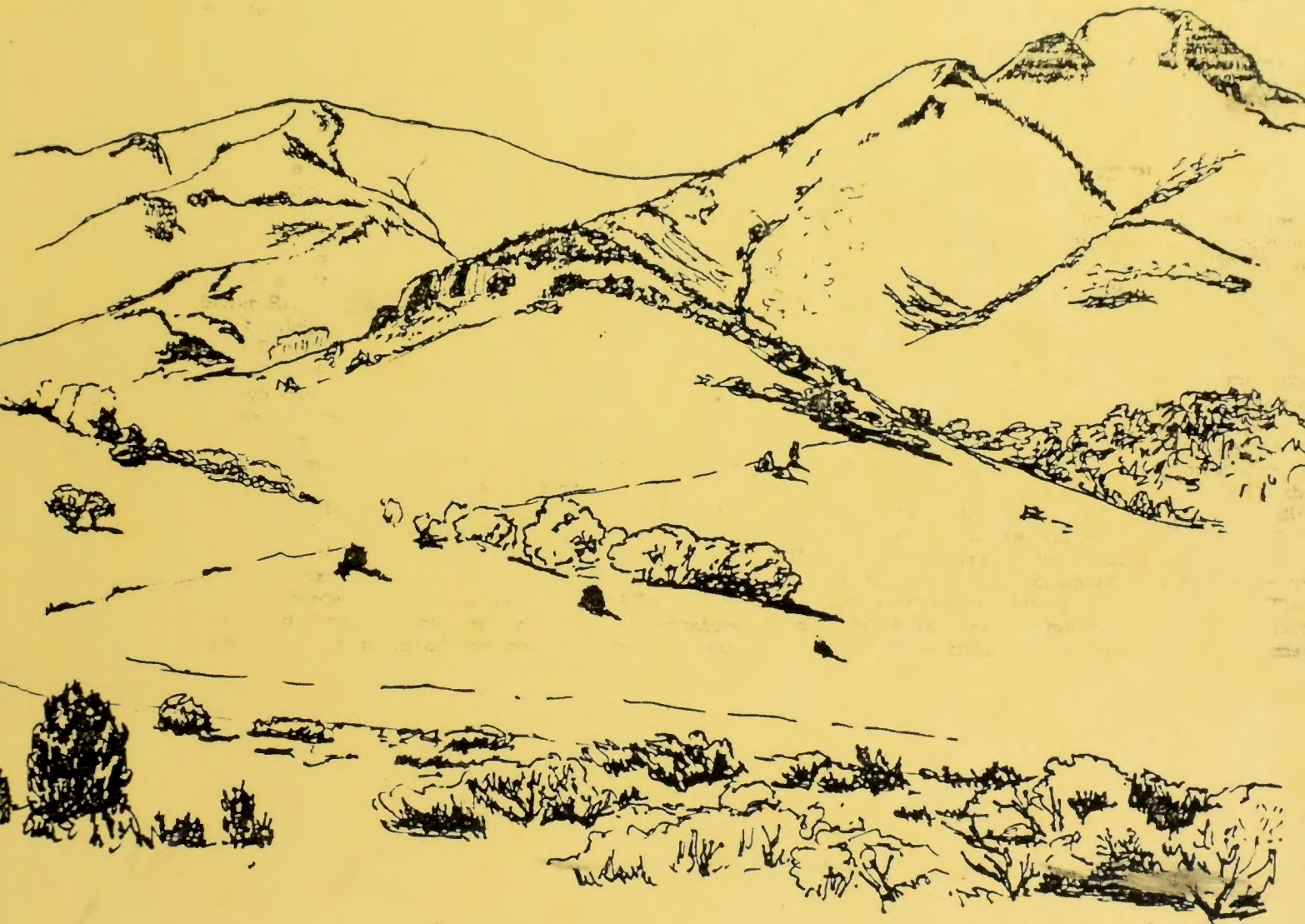


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# SHOSHONE-EUREKA WILDERNESS TECHNICAL REPORT



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U.S. DEPARTMENT OF INTERIOR  
BUREAU OF LAND MANAGEMENT  
BATTLE MOUNTAIN, NEVADA



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## PREFACE

This document has been prepared as a supplement to the Shoshone-Eureka Resource Management Plan/Environmental Impact Statement and is available upon request by contacting:

H. James Fox, District Manager  
Bureau of Land Management,  
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This analysis follows the requirements of the Bureau of Land Management's Wilderness Study Policy as published in the Federal Register Volume 47, No. 23, effective February 3, 1982, and will address the two mandatory criteria and six quality standards necessary to determine an area's suitability for wilderness designation.

### ANTELOPE WILDERNESS STUDY AREA (NV-060-231/241)

#### CRITERION NO. 1 - EVALUATION OF WILDERNESS VALUES

##### Component No. 1 - Quality of the Area's Mandatory Wilderness Characteristics

###### Size

The Antelope wilderness study area is located in the Antelope Range and contains approximately 87,400 acres. It is approximately twenty-five miles long and eight miles wide with an average elevation differential of about two thousand feet. The size of the area contributes significantly to the diversity of landform, vegetation types, and wilderness characteristics within the unit.

###### Naturalness

General Description of Human Imprints Present. The area is generally free from human imprints and is in a natural state. The following imprints are found within the boundary of the wilderness study area: thirteen ways, five water developments, a small seeding in the north-east portion of the unit near Crested Wheat Ridge, four fences which protrude a short way into the unit, and a small enclosure in the south-east portion of the unit. All imprints are the result of livestock grazing operations and firewood cutting. The potential does exist for changing the wilderness area boundaries to omit a number of these imprints near Crested Wheat Ridge. Two fences, a seeding, three ways, and five cherrystemmed roads are included in a 4800-acre area that could be removed by adjusting a short section of the boundary line.

Consideration of Outside Sights and Sounds. The Antelope wilderness study area is in a very remote section of Nevada. Naturalness and opportunities for solitude are affected very little by outside sights and sounds. There are ten cherrystemmed roads and other roads that follow the boundary around most of the unit, but these are, for the most part, unnoticeable from within the unit. Traffic on these roads is very light, and associated mainly with livestock grazing.

#### Outstanding Opportunities for Solitude or Primitive and Unconfined Recreation

Solitude. The unit contains outstanding opportunities for solitude. Located twenty miles from the nearest paved highway, the area is extremely remote and seldom visited. A mixture of diverse topography and vegetation combine to form excellent screening in the unit. In addition, size and topography combine to form almost unlimited secluded spots. Because of the general absence of ways, the interior of the unit provides very limited motorized access ensuring seclusion to almost any degree sought.

Primitive and Unconfined Recreation. The area offers abundant opportunities for sustained high-elevation hiking and horseback riding, hunting, sightseeing, photography, and historical and archaeological study. These factors, in combination, provide an outstanding opportunity for primitive and unconfined recreation within the wilderness study area.

#### Component No. 2 - Special Features: Quality of the Area's Optional Wilderness Characteristics

Untrampled spring meadows, uncommon in Nevada, occur in the southern portion of the unit. A group of Shoshone Indian wickiups, the James Wild Horse Trap (a nominee for the National Register of Historic Places), and many scattered archaeological sites exist in the unit. These relatively undisturbed special features supplement the wilderness characteristics of the area.

#### Component No. 3 - Multiple Resource Benefits: The Benefit to Other Resource Values and Uses Which Only Wilderness Designation Could Ensure

In addition to its value as a setting for primitive recreation or solitude, wilderness can also provide a range of benefits to other multiple resource values and uses which are of significance.

- 1) Watershed and water quality would benefit because development involving surface disturbance of the area would be limited.
- 2) Wildlife species such as mule deer, birds of prey, sage grouse, and a variety of non-game birds would benefit from the added protection of wilderness designation because it would prevent habitat loss as a result of development. Prohibiting recreational motorized vehicle use for hunting activities would also benefit wildlife by limiting easy access into the area and by lessening disturbance of the area.

3) Visual resources and scenic quality of the area would be protected because of limited development inside the unit.

4) Cultural Resources, both known and potential, would benefit because the limited surface disturbance and recreational vehicle access into the area would mean less disturbance to archaeological sites.

#### Component No. 4 - Diversity in the National Wilderness Preservation System

##### Factor No. 1

#### Expanding the Diversity of Natural Systems and Features as Represented by Ecosystems and Landforms

According to the Bailey-Kuchler system of ecosystem classification, the Antelope Wilderness Study Area lies within the Pinyon-Juniper Woodland Ecosystem. Currently, the Pinyon-Juniper Woodland Ecosystem is not represented in the National Wilderness Preservation System. Designation of the Antelope area as wilderness would expand the diversity of natural systems and features as represented by ecosystems and landforms. There are presently 14 areas totaling 535,000 acres which represent this ecosystem that are administratively endorsed for wilderness designation. Many of the other wilderness study areas currently under study that are administered by the Bureau of Land Management within Nevada fit within this ecosystem.

##### Factor No. 2

#### Assessing the Opportunities for Solitude or Primitive Recreation Within a Day's Driving Time (five hours) of Major Population Centers

The Antelope wilderness study area is located within a sparsely-populated portion of central Nevada where there are no major population centers (50,000 people) within one day's driving time (five hours). Wilderness designation of this area would not contribute to preserving opportunities for solitude and primitive recreation within a day's driving time of major population centers.

##### Factor No. 3

#### Balancing the Geographic Distribution of Wilderness

The Jarbidge Wilderness Area, located in northeastern Nevada, is the only area in Nevada designated as wilderness. The Jarbidge Wilderness Area totals 64,847 acres. Designation of the Antelope area as wilderness would contribute to balancing the geographic distribution of wilderness. Two wilderness study areas, the Park Range (NV-040-154), and Fandango (NV-060-190), are separated from the Antelope area by a single lane dirt road. The Tonopah draft wilderness Environmental Impact Statement prepared by the Battle Mountain District identified 234,080 acres within 6 areas as preliminarily suitable for wilderness designation. The Fandango area was preliminarily recommended in the Draft

Draft Tonopah Wilderness Environmental Impact Statement as suitable for wilderness designation. The Schell Resource Area Draft Wilderness Environmental Impact Statement identified 188,707 acres within 7 areas as preliminarily suitable for wilderness designation. These areas are within the Ely District which is east of the Shoshone-Eureka Resource Area. For further reference, please see the attached wilderness status map.

#### CRITERION NO. 2 - MANAGEABILITY

The Antelope wilderness study area is considered to be manageable over the long term. There are no private inholdings, state lands, or mining claims within the unit. The oil and gas leases along the western portion of the unit should not pose a major manageability problem. No rights-of-way are proposed within or near the area. Continued livestock grazing would not be incompatible with wilderness management. Boundaries are generally easily recognizable and offer no problems for wilderness management. An exception is a 2.5-mile portion of the northern boundary which follows a section line. Manageability could be improved by moving the boundary north to coincide with terrain features identifiable on the ground. This boundary revision would encompass an additional 500 acres. Another adjustment would be the deletion of the 4,800-acre area previously mentioned under Naturalness in Criterion No. 1. Deletion of this area would improve manageability by removing a number of imprints, including ways and cherrystemmed roads, where

vehicle use would be a problem for manageability. Other existing ways are not considered a major problem for manageability. Recreational use of these ways would be prohibited and rehabilitation accomplished by natural regeneration.

#### Use of Buffer Zones

The area does not include any buffer zones.

#### Air Quality

All BLM-Administered public lands were designated as Class II by the 1977 Clean Air Act Amendments. The Bureau of Land Management will not consider or recommend any change in air quality classification as part of the wilderness study or wilderness recommendations.

#### QUALITY STANDARDS

Along with the two preceding criteria, six quality standards will be analyzed.



Standard No. 1 - Energy and Mineral Resource Values

The following classification system was used to evaluate the mineral resource potential of the wilderness study areas in the Shoshone-Eureka Resource Area.

Classification Scheme

<u>Rating</u>	<u>Description</u>
1.	The geologic environment and the inferred geologic processes do not indicate favorability for accumulation of mineral resources.
2.	The geologic environment and the inferred geologic processes indicate low favorability for accumulation of mineral resources.
3.	The geologic environment, the inferred geologic processes, and the reported mineral occurrences indicate moderate favorability for accumulation of mineral resources.
4.	The geologic environment, the inferred geologic processes, the reported mineral occurrences, and the known mines or deposits indicate high favorability for accumulation of mineral resources.

Level of Confidence Scheme

<u>Rating</u>	<u>Description</u>
A.	The available data are either insufficient and/or cannot be considered as direct evidence to support or refute the possible existence of mineral resources within the respective area.
B.	The available data provide indirect evidence to support or refute the possible existence of mineral resources.
C.	The available data provide indirect evidence but are quantitatively minimal to support or refute the possible existence of mineral resources.
D.	The available data provide abundant direct and indirect evidence to support or refute the possible existence of mineral resources.

From information obtained by the Shoshone-Eureka Resource Area Geologist and other individuals and groups contacted, the locatable mineral potential of the Antelope wilderness study area has been determined to be generally low with a low degree of confidence. There is potential, but there are few data to support this conclusion.

Most of the area is covered by several hundred feet of Tertiary volcanics related to the Williams Ridge caldera complex. Underlying limestones and dolomites are faulted and fractured which could be a good depositional environment for metallic mineralization. The basic ingredients for mineral accumulation are present within the wilderness study area, but to date, no evidence of mineralization has been discovered. The area is rated as having low potential for locatable minerals based upon sketchy indirect evidence.

The leasable mineral potential of the Antelope wilderness study is generally low. Sodium and potassium compounds will not be discussed any further in this section due to their very low probability of occurrence. Phosphate is rated as moderate, oil and gas potential is low, and geothermal potential is rated as moderate.

Phosphate-bearing formations are reported to occur within the Antelope Range by Rogers, et. al., 1970. However, the precise locations of these occurrences are uncertain. The Rogers report is of such a general nature that assumptions of location, quantity and grade cannot be made. Phosphate potential is classified as moderate based on indirect and sketchy data.

Oil and gas potential is low with source rocks possibly existing below the volcanic caprock covering the surface. The oil and gas potential is rated as low based upon insufficient data.

Geothermal potential is rated as moderate based upon indirect evidence. Large deep-seated faults bound most of the mountain ranges in Nevada. These structural environments are host to literally hundreds of thermal sites elsewhere in the state. The Antelope Range is bordered by such deep-seated faults. For a summary of the mineral potential ratings, see Table 1.

#### Standard No. 2 - Impacts on Other Resources

Should the Antelope wilderness study area be designated as wilderness, considerations of resource values or uses of that area that would be foregone or adversely affected are as follows:

##### Energy and Minerals

Wilderness designation of the Antelope wilderness study area would have a significant adverse impact upon the ability of the mineral industry to explore for and develop potential mineral deposits in this area. The degree of impact upon known and potential mineral exploration and development opportunities varies by mineral type. For a

description of the known mineral values and mineral potentials involved, refer to Standard No.1, Energy and Mineral Resource Values and Table 1.

#### Woodland Products

There is no demand for woodland products (cordwood, fence posts, and pine nuts) within the Antelope wilderness study area. The area is remote and inaccessible. There are sufficient quantities of woodland products outside the boundary of the unit in more accessible areas to meet all foreseeable demands.

#### Rights-of-Way

There are no existing rights-of-way, nor any proposed within or near the Antelope wilderness study area. No adverse impacts can be foreseen.

#### Water Developments

Small water developments would be allowed if the area were designated as wilderness, provided that they were built in accordance with the guidelines of the Wilderness Management Policy. No additional water developments have been proposed.

#### Livestock Grazing

Designation of the Antelope unit as wilderness would have no impact on livestock grazing use of the area. Adjustments to livestock grazing use within the area would be determined using the same monitoring program implemented on the remainder of the resource area.

#### Range Improvements

Maintenance of existing projects and construction of new projects within designated wilderness areas would be governed by the procedures outlined in the Bureau's Wilderness Management Policy. Major types of projects such as seedings would be precluded, but most types of projects could be implemented with minor design changes to make them less obtrusive. No projects anticipated at this time would be precluded by wilderness designation.

#### Recreation

According to a recent study (Division of State Parks, 1981) a significant portion of participation in dispersed recreation within Nevada takes place within the resource area. Lander and Eureka counties with 0.7 percent of the state's total population host 9.7 percent of the state-wide primitive camping; 2.8 percent of hiking and backpacking; 10.6 percent of rockhounding; 4.5 percent of horseback riding; 11.6 percent of exploring; 16.9 percent of hunting; 4.8 percent of photography; 4.7 percent of sightseeing; and 6.1 percent of fishing.

If the area is designated as wilderness, recreation use patterns will be changed from motorized to nonmotorized use. Individuals relying on vehicles for recreation would be prevented from using vehicle ways within the wilderness study area.

Recreational vehicle use of primitive ways would be prohibited. Vehicle use would only be permitted as specifically authorized in a wilderness management plan for emergency use, administrative use, or for use related to a valid existing right. Wilderness-compatible recreation such as hiking, walk-in hunting, camping, fishing, sight seeing and other activities would be enhanced by designation.

#### Wildlife

Wildlife species, such as mule deer, birds of prey, sage grouse, and a variety of non-game species would generally benefit from the added protection that wilderness designation would ensure. Mechanical manipulation of vegetation for wildlife habitat would not be allowed, thus, the opportunity to engage in this type of work would be adversely affected. Currently, there are no plans for vegetative manipulation within the area.

#### Cultural Resources

Designation of the Antelope wilderness study area would provide protection for an estimated 1,167 cultural resource sites by limiting recreational vehicle access and surface-disturbing activities.

#### Watershed

Watershed resource values would benefit because of the added protection from disturbance that wilderness designation would ensure.

#### Socio-economics

(See social and economic sections as listed in the Table of Contents).

#### Standard No. 3 - Impacts of Nondesignation on Wilderness Values

Because of the past history of use of the Antelope wilderness study area and the projected low potential for development, the Antelope wilderness study area would be expected to retain its wilderness character in the long term if designation did not occur. For analytical purposes, long term is defined as 5-15 years. Should the area not be designated as wilderness, alternative uses of the land would be livestock grazing, hunting, and recreational use.

#### Standard No. 4 - Public Comment

Public comment received during the wilderness inventory for the Antelope wilderness study area is documented in the "Wilderness Study Area Decisions," effective November 15, 1980 and was considered in making

the recommendation. Public comment received during the study phase will also be considered and incorporated into the decision-making process.

Standard No. 5 - Local Social and Economic Effects

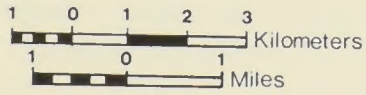
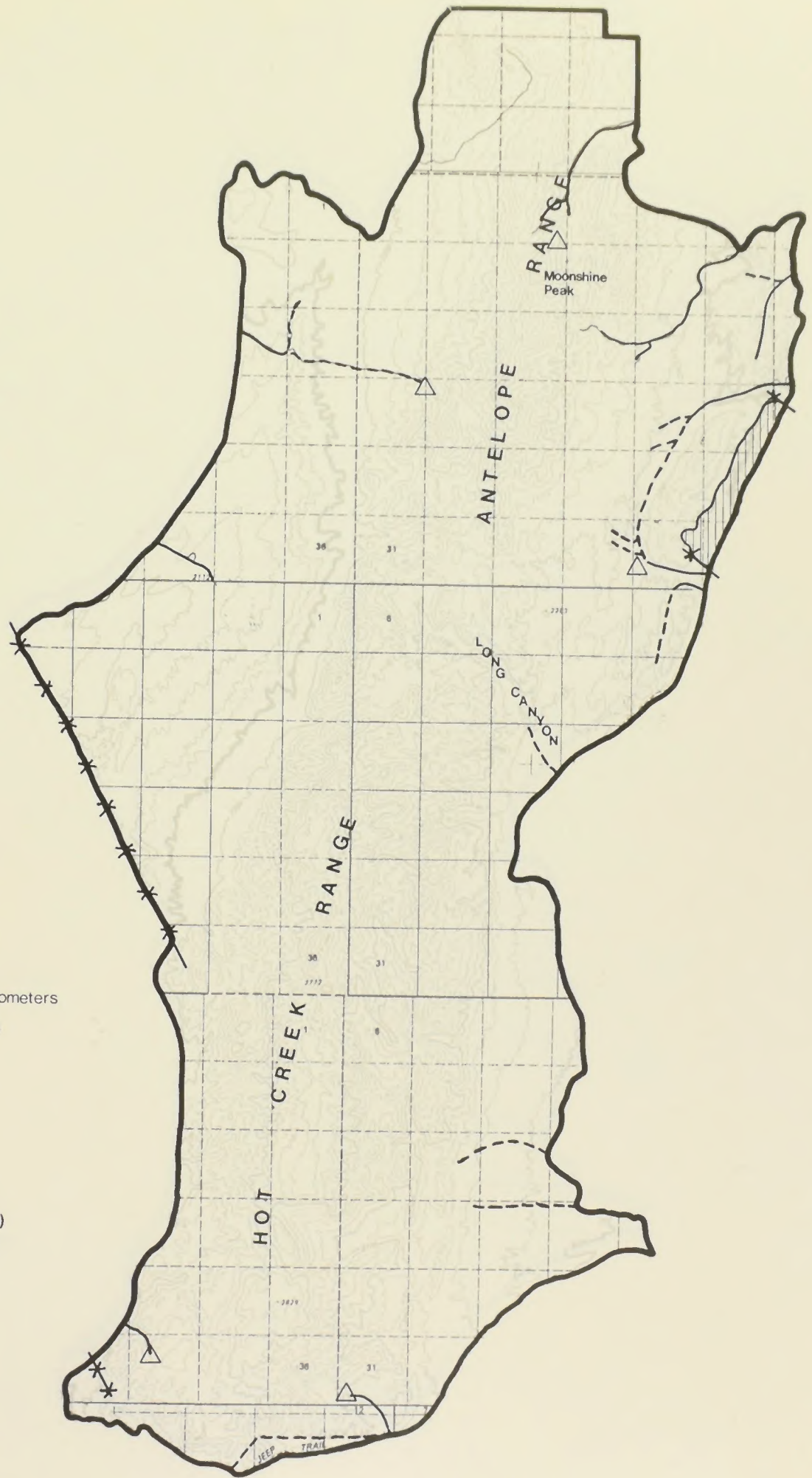
(See the social and economic section as listed in the Table of Contents).

Standard No. 6 - Consistency With Other Plans

The Nevada Statewide Comprehensive Outdoor Recreation Plan (SCORP) recommended support of wilderness designation where it is determined to be the best use of the land. Except for private lands near the unit associated with ranching, there are no other private lands, state and local government lands, lands associated with Indian tribes, or non-bureau-administered federal lands within or near the Antelope wilderness study area. The Bureau of Land Management is not aware of any conflicts with other plans.



- WSA BOUNDARY
- XXX FENCE
- ROAD
- - - WAY
- ▨ SEEDING
- △ WATER DEVELOPMENT











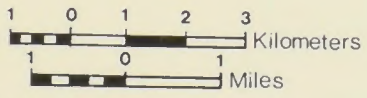
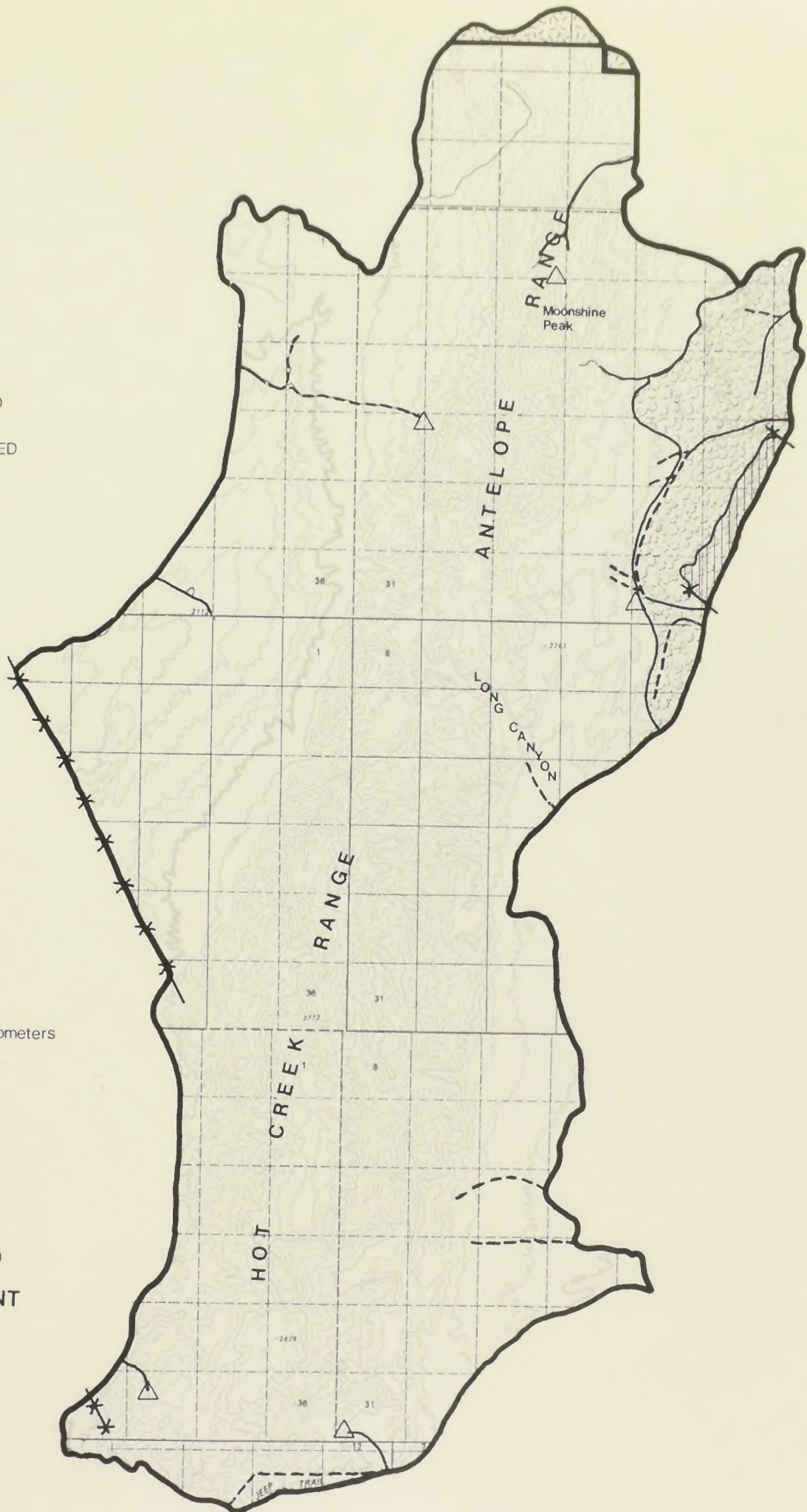
ANTELOPE WSA (NV-060-231/241)

IMPRINTS OF MAN





-  WSA BOUNDARY
-  FENCE
-  ROAD
-  WAY
-  SEEDING
-  WATER DEVELOPMENT
-  POTENTIAL ACREAGE ADDED
-  POTENTIAL ACREAGE DELETED



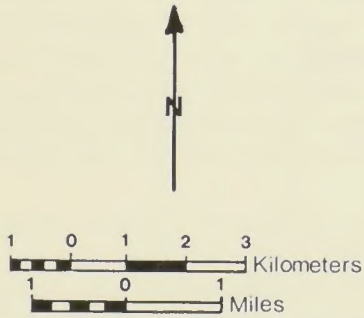
ANTELOPE WSA (NV-060-231/241)  
WSA BOUNDARY ADJUSTMENT



MINERAL POTENTIAL (LOCATABLE)

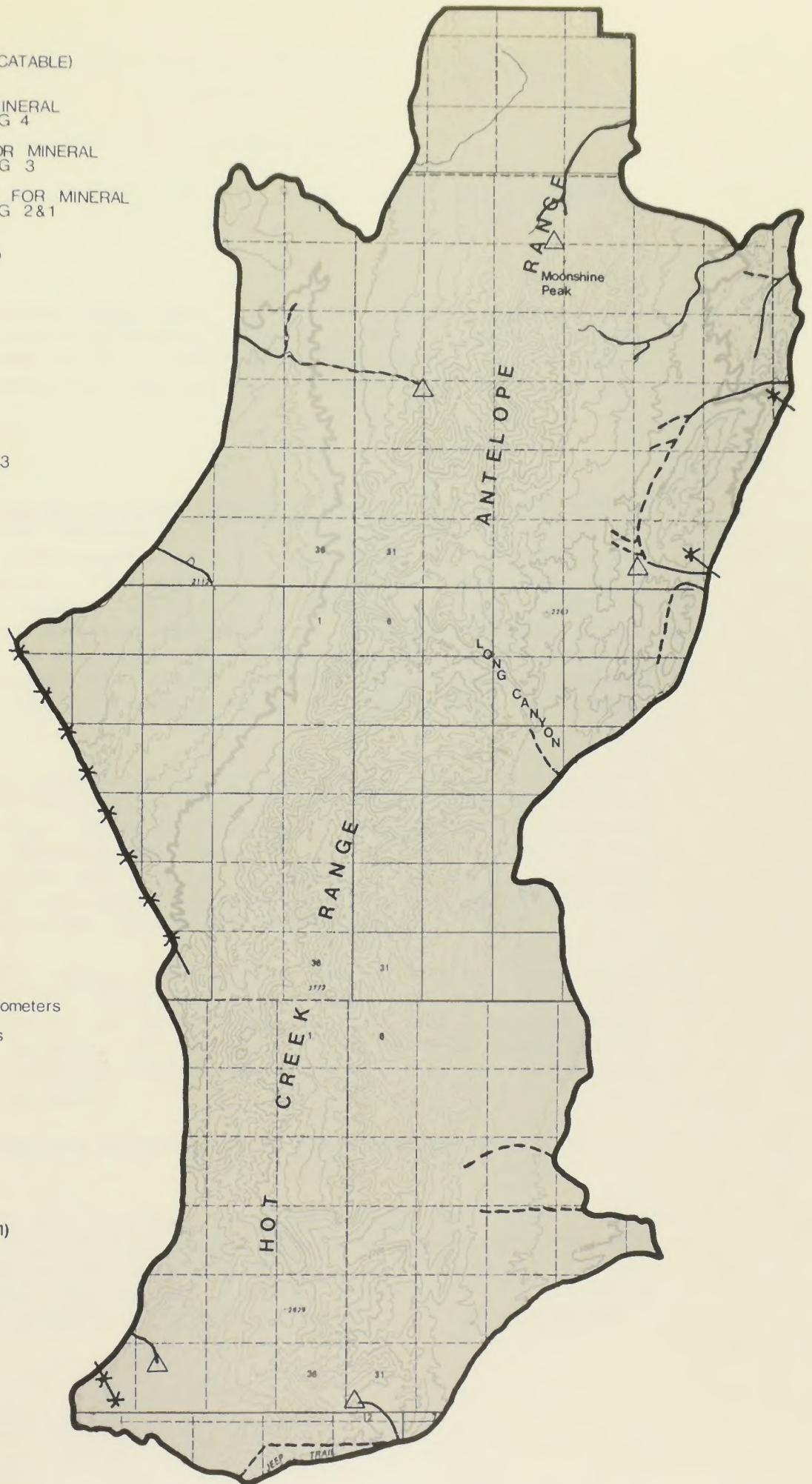
- NONE** HIGH FAVORABILITY FOR MINERAL ACCUMULATION GEM RATING 4
- NONE** MODERATE FAVORABILITY FOR MINERAL ACCUMULATION GEM RATING 3
- NONE** LOW OR NO FAVORABILITY FOR MINERAL ACCUMULATION GEM RATING 2&1
- NONE** MINING CLAIMS ON RECORD

DATA AS OF JAN 31, 1983



ANTELOPE WSA (NV-060-231/241)

MINERAL POTENTIAL  
MINING CLAIMS





ROBERTS WILDERNESS STUDY AREA  
(NV-060-541)

CRITERION NO. 1 - EVALUATION OF WILDERNESS VALUES

Component No. 1 - Quality of the Area's Mandatory Wilderness Characteristics

Size

The Roberts wilderness study area is located in the Roberts Creek Mountains and contains approximately 15,090 acres. It is irregularly shaped and surrounded on three sides by major valleys. For its size, the unit offers diverse features and characteristics not common in central Nevada.

Naturalness

General Description of Human Imprints Present. The area is generally free from human imprints and is in a natural state. Those imprints present are substantially unnoticeable in the Roberts wilderness study area as a whole. Five ways are in the unit. These ways would rehabilitate under natural conditions if they were closed to vehicle traffic. Two fences protrude into the unit. A small abandoned mining prospect was found on the north side of the unit, but is substantially unnoticeable in the area as a whole. No potential exists for changing the area's boundaries. The nature of the intrusions does not warrant their exclusion.

Consideration of Outside Sights and Sounds. Ranches and roads outside the boundary are visible from certain points inside the Roberts wilderness study area. These outside sights are considered minor and may add to the wilderness experience by giving one a sense of remoteness and isolation and also by heightening the user's awareness and appreciation of the area's outstanding wilderness values in contrast to sights and sounds outside the wilderness area.

There are no existing major noise sources outside the unit that would have an affect upon the wilderness experience. The possibility does exist for development of two major mines near the area. Several roads form part of the boundary of the unit. The roads are not heavily traveled and the occasional vehicle noise would not affect the wilderness character of the area.

Outstanding Opportunities for Solitude or Primitive and Unconfined Recreation

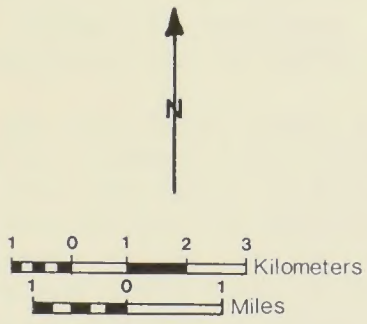
Solitude. The unit contains outstanding opportunities for solitude. Spread over an extremely jagged and varied topography, the unit is characterized by narrow, deep canyons forested with willow, cottonwood, aspen, birch, and dogwood trees. Barren rock ridges with isolated stands of mountain mahogany and limber pine combine with the



**GEOHERMAL POTENTIAL**

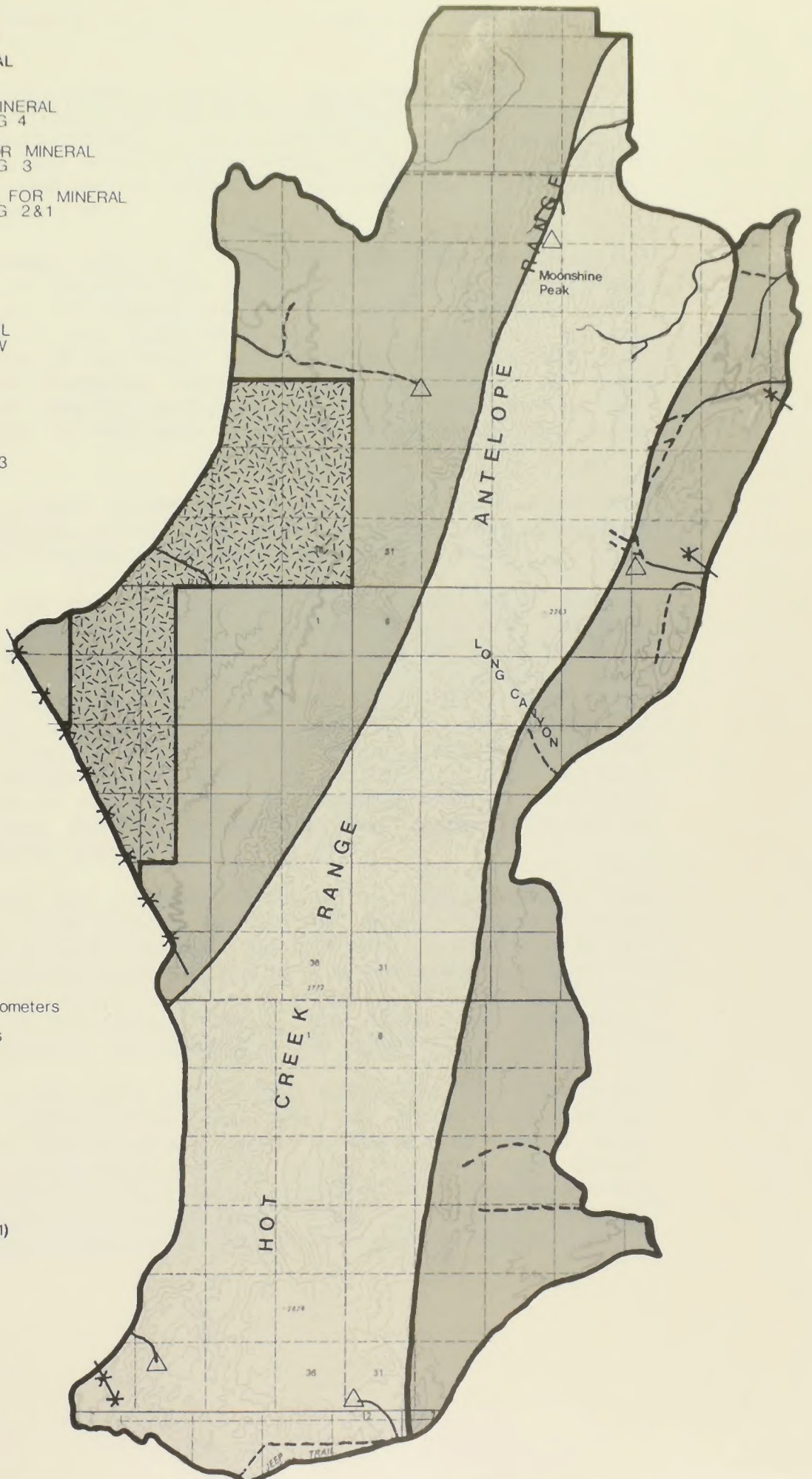
- NONE HIGH FAVORABILITY FOR MINERAL ACCUMULATION GEM RATING 4
  - MODERATE FAVORABILITY FOR MINERAL ACCUMULATION GEM RATING 3
  - LOW OR NO FAVORABILITY FOR MINERAL ACCUMULATION GEM RATING 2&1
  - OIL & GAS LEASES
  - NONE GEOHERMAL LEASES
- MINERAL POTENTIAL FOR OIL AND GAS IS RATED AS LOW

DATA AS OF JAN 31, 1983



ANTELOPE WSA (NV-060-231/241)

**GEOHERMAL POTENTIAL  
OIL & GAS LEASES**







canyons to offer abundant natural screening and offer many opportunities for the user to find a secluded spot.

Primitive and Unconfined Recreation. The Roberts wilderness study area does offer outstanding opportunities for primitive and unconfined recreation. The unit offers a wide diversity of terrain, vegetation and scenery. The massif consists of a series of rugged peaks forming a broken ridge. Numerous canyons and valleys surround the ridge breaking the unit into numerous areas.

The late spring through late fall offers the best times for travel in the area. August and September can be hot (90 to 100 degrees) at the lower elevations but the higher slopes are usually pleasantly cool. Winter temperatures are cold (very often sub-zero). High winds and almost perpetual clouds at the higher elevations make winter travel difficult except in the sheltered canyon bottoms. Snow depths at these lower elevations are usually sufficient for over-the-snow travel, but access to these areas is difficult except via Vinini Creek from State Route 51.

The peaks are the primary attraction of the unit and provide the main objectives for primitive travel. The roughness of the crest encourages the use of different canyons for access to each of the peaks.

The canyons vary from gently-sloping to steep, narrow, rocky gorges. The canyons of the west side of the unit (specifically Neil and Pete Hanson drainages) are longer than most in the unit and trips of up to five or six miles are possible without using a peak as a destination. The north fork of Pete Hansen Creek is particularly attractive. From the edge of the unit (and an undeveloped campsite) one can follow the perennial stream along a gently-sloping, vague trail suitable for horseback travel through pinyon then aspen forests to a small 25-foot waterfall. Although no areas suitable for camping exist at the falls, a number of sheltered level sites are available nearby. Forage is available but is better further up the canyon.

From the falls there are a number of routes to higher areas in the unit. Hikers can climb through the narrow, densely-vegetated gorge above the falls to a grassy valley. An alternate route skirts to the south around the rock outcrops then splits with one branch going to the grassy valley and the other, south route dropping into the upper part of the south fork of Pete Hansen Creek. This route shows some livestock use and is passable, but difficult, for horses.

The grassy valley on the upper part of Pete Hansen Creek is dramatically different than below. The stream here is extremely attractive, flowing over stones between grassy banks, in and out of several aspen groves and farther up skirting and then passing through a small limber pine forest. Ultimately, this fork terminates at a saddle between Roberts Creek Mountain and Cooper Peak. From here one can continue east around the rather steep north side of Roberts Creek Mountain or

climb one of the peaks. All along the creek one can turn north into various side draws to climb the crags along the central crest. Below these crags are huge mountain mahogany, perhaps of record size.

The south fork of Pete Hansen Creek branches about one mile into the unit and a mile further upstream becomes so densely vegetated that passage is nearly impossible. Dogwood and mountain birch grow here and provide an opportunity to view these uncommon species.

Neil Creek offers similar, but less dramatic opportunities than Pete Hansen Creek. Horseback riding would be limited to the lower areas with no routes out of the drainage. Ample areas suitable for camping occur along the stream.

Kelly and Birch canyons on the north side of the unit are similar in nature. Both climb fairly quickly and have abandoned woodcutting routes along the streams. These old tracks extend for about one and a half miles and end at the forks in the perennial streams. The vegetation is primarily willow, cottonwood and some pinyons and junipers (intruding from the higher slopes). Above the forks, the canyons become increasingly steeper, except for occasional small meadows and are dotted with aspen stands. A limited number of areas suitable for campsites occur in these upper areas. Eventually, the canyons disappear into steep slopes dotted with limber pine. From here one can climb to the top of most of the peaks in the range.

The roads along the east side of the unit provide easy access to the higher elevations. Potential aspen sheltered campsites exist, but livestock use reduces their desirability. An unusual cave formation below Cooper Peak is best reached from the Dry Creek road by a one mile hike or horseback ride. The cave consists of a vertical shaft approximately 20 feet in diameter which is spanned by a natural arch. The cave shelters a perpetual snowbank.

An old route up the south side of Roberts Creek Mountain provides the easiest route to the top of the massif. It passes two intermittent ponds sheltered by a stand of aspen. These are attractive only in the early summer due to livestock use and evaporation. From the ponds, the route ascends into a "bowl" surrounded by five peaks. Springs that feed large meadows provide a reliable water source here, but there is little natural shelter.

Horseback riding is fairly easy throughout this area and access to all of the peaks surrounding the bowl is not difficult. For extended travel, one can climb out of the bowl and drop into the Pete Hansen or Dry Creek drainages.

The south side of the unit is steep and provides few opportunities to penetrate the unit. There are a number of small caves above Roberts Creek. Most are located on cliff faces and may require some degree of rock climbing ability. The rocks are crumbly Devonian sedimentaries with numerous fossils.

The road along the south side of the unit provides access to the upper end of the south fork of Pete Hansen Creek and the routes previously discussed.

The Roberts Creek/Vinini Creek and the Dry Creek areas offer slopes of varying degrees and a variety of scenic attractions for cross country skiing and snowshoeing. Suitable snow depths usually occur throughout this area.

Component No. 2 - Special Features: Quality of the Area's Optional Wilderness Characteristics

Considering the small amount of acreage contained in the unit, the area offers a wide variety of special features. Much diversity in ecological features is found. Because of its rapid change in elevation, the unit exhibits a variety of habitats in close proximity to one another. These include the northern desert shrub community, a pinyon/juniper tree forest, a sub-alpine herbaceous/sage community, and a scattered boreal forest of limber pine. Open stands of mountain mahogany replace the pinyon/juniper forest and subalpine vegetation in some areas, primarily on south facing slopes.

The Roberts Mountain Thrust Fault, responsible for the mountain's existence, is one of the important structural features of the intermountain west. The thrust provides an excellent opportunity for geological study. Universities as far away as Ohio and Nebraska, and students from England have participated in geologic field trips and mapping exercises in the area during the summer months. The main scientific values of the area are its "window on the mantle" characteristic, a geological formation associated with the Roberts Mountain Thrust Fault, and the ecological island aspect of the higher elevations. The unit offers much scenic value and dominates the view for miles around. Western Peak, a rocky, high-elevation point, is an interesting formation, and offers scenic value from many observation points outside of the unit. A perennial, twenty-five foot waterfall occurs in the north fork of Pete Hansen Creek. Two small seasonal ponds are found on Roberts Creek Mountain. Numerous caves and at least one natural arch are found in the rock cliffs within the unit.

Component No. 3 - Multiple Resource Benefits: The Benefits to Other Multiple Resource Values and Uses Which Only Wilderness Designation of the Area Could Ensure

In addition to its value as a setting for primitive recreation or solitude, wilderness can also provide a range of benefits to other multiple resource values and uses which are of significance.

- 1) Watershed and water quality would benefit because development involving surface disturbance of the area would be limited.
- 2) Wildlife species such as mule deer, birds of prey, sage grouse, and a variety of non-game birds would benefit from the added protection of

wilderness designation because it would prevent habitat loss as a result of development. Prohibiting recreational motorized vehicle use for hunting activities would also benefit wildlife by limiting easy access into the area and by lessening disturbance of the area.

3) Visual resources and scenic quality of the area would be protected because of limited development inside the unit.

4) Cultural Resources, both known and potential, would benefit because the limited surface disturbance and recreational vehicle access into the area would mean less disturbance to archaeological sites.

#### Component No. 4 - Diversity in the National Wilderness Preservation System

##### Factor No. 1

##### Expanding the Diversity of Natural Systems and Features as Represented by Ecosystems and Landforms

According to the Bailey-Kuchler system of ecosystem classification, the Roberts wilderness study area lies within the Pinyon-Juniper Woodland Ecosystem. Currently, the Pinyon-Juniper Woodland Ecosystem is not represented in the National Wilderness Preservation System. Designation of the Roberts area as wilderness would expand the diversity of natural systems and features as represented by ecosystems and landforms. There are presently 14 areas totaling 535,000 acres which represent this ecosystem that are administratively endorsed for wilderness designation. Many of the other wilderness study areas currently under study that are administered by the Bureau of Land Management within Nevada fit within this ecosystem.

##### Factor No. 2

##### Assessing the Opportunities for Solitude or Primitive Recreation Within a Day's Driving Time (five hours) of Major Population Centers

The Roberts wilderness study area is located within a sparsely populated portion of central Nevada where there are no major population centers (50,000 people) within one day's driving time (five hours). Wilderness designation of this area would not contribute to preserving opportunities for solitude and primitive recreation within a day's driving time of major population centers.

##### Factor No. 3

##### Balancing the Geographic Distribution of Wilderness

The Jarbidge Wilderness Area, located in northeastern Nevada, is the only area in Nevada designated as wilderness. The Jarbidge Wilderness Area totals 64,847 acres. Designation of the Roberts area as wilderness would contribute to balancing the geographic distribution of

wilderness. The Tonopah Draft Wilderness Environmental Impact Statement prepared by the Battle Mountain District identified 234,080 acres within 6 areas as preliminarily suitable for wilderness designation. The Schell Resource Area Draft Wilderness Environmental Impact Statement identified 188,707 acres within 7 areas as preliminarily suitable for wilderness designation. These areas are within the Ely District which is east of the Shoshone-Eureka Resource Area. For further reference, please see the attached wilderness status map.

#### CRITERION NO. 2 - MANAGEABILITY

Wilderness designation of the Roberts wilderness study area would create some problems for manageability due mainly to an unrecognizable boundary on the west side. Closure of one way may present a small problem for manageability because it would be difficult to prevent four-wheel-drive vehicles from using it. The area is considered to be manageable over the long term. There are no private inholdings or state lands within the area. There are no pre-FLPMA mining claims present but several post-FLPMA mining claims do exist that have potential for further development (see analysis for quality standard number 1, energy and mineral resource values). The oil and gas leases in the northern portion of the unit should not pose a major manageability problem as the potential for oil and gas is very low. There are no rights-of-way proposed within or near the unit. Continued livestock grazing would not be incompatible with wilderness management.

#### Use of Buffer Zones

The area does not include any buffer zones.

#### Air Quality

All ELM-Administered public lands were designated as Class II by the 1977 Clean Air Act Amendments. The Bureau of Land Management will not consider or recommend any change in air quality classification as part of the wilderness study or wilderness recommendations.

#### QUALITY STANDARDS

Along with the two preceding criteria, six quality standards will be analyzed.

#### Standard No. 1 - Energy and Mineral Resource Values

The classification system used to evaluate the mineral resource potential of the wilderness study areas in the Shoshone-Eureka Resource Areas is described in the Antelope portion of this report.

From information gathered by the Shoshone-Eureka Resource Area geologist, the geology energy, and minerals (GEM) report prepared for this area, and information obtained from other individuals and groups contacted, the locatable mineral potential of the Roberts wilderness study area is high in the southern portion of the area (see mineral potential and mining claims map) and moderate in the northern portion of the area.

The southern portion of the Roberts unit has high potential for both precious and base metals as well as barite based upon indirect evidence. The structural features, stratigraphic characteristics, gravity data, aeromagnetic data, and the presence of numerous intrusive bodies all are favorable for mineral accumulation. The northern portion of the area is rated as having moderate favorability based upon both abundant direct and sketchy indirect evidence. The leasable mineral potential for the Roberts wilderness study area is very low for oil, gas, sodium, and potassium, moderate for phosphate, and low for geothermal resources. Oil, gas, sodium and potassium will not be discussed any further in this section due to their low probability of occurrence.

Phosphate-bearing sections are reported to occur in the Vinini formation by Rogers, et. al., 1970. The section of occurrence is reported to be on Vinini Creek immediately east of the study area.

The Vinini formation is known to occur within the boundaries of the wilderness study area itself and this indirect evidence is the basis for the moderate rating.

Geothermal potential is greatest along the prominent faults of the north boundary of the Roberts wilderness study area. Large-scale faulting permeates the entire area and presents a good source for circulation of thermal waters. The geothermal potential is classified as low based upon insufficient data. For a summary of the mineral potential ratings, see Table 1.

#### Standard No. 2 - Impacts on Other Resources

Should the Roberts wilderness study area be designated as wilderness, considerations of resource values or uses of the area that would be foregone or adversely affected are as follows:

##### Energy and Minerals

Wilderness designation of the Roberts wilderness study area would have a significant adverse impact upon the ability of the minerals industry to explore for and develop potential mineral deposits in this area.

The degree of impact upon known and potential mineral exploration and development opportunities varies by mineral type. For a description of the known mineral values and mineral potentials involved, refer to Standard No.1, Energy and Mineral Resource Values, and Table 1.

##### Woodland Products

There is no demand for woodland products (cordwood, fence posts, and pine nuts) in the Roberts wilderness study area. There are sufficient quantities of woodland products outside the boundary of the unit to meet all foreseeable demands.

## Rights-of-Way

There are no existing rights-of-way, nor any proposed within or near the Roberts wilderness study area. No adverse effects can be foreseen.

## Water Developments

Small water developments would be allowed if the area were designated as wilderness, provided that they were built in accordance with the guidelines of the Wilderness Management Policy. No new water developments are planned.

## Livestock Grazing

Designation of the Roberts unit as wilderness would have no impact on livestock grazing use of the area. Adjustments to livestock grazing use within the area would be determined using the same monitoring program implemented on the remainder of the resource area.

## Range Improvements

Maintenance of existing projects and construction of new projects within designated wilderness areas would be governed by the procedures outlined in the Bureau's Wilderness Management Policy. Major types of projects such as seedings would be precluded, but most types of projects could be implemented with minor design changes to make them less obtrusive. No projects anticipated at this time would be precluded by wilderness designation.

## Recreation

According to a recent study (Division of State Parks, 1981) a significant portion of participation in dispersed recreation within Nevada takes place within the resource area. Lander and Eureka counties with 0.7 percent of the state's total population host 9.7 percent of the state-wide primitive camping; 2.8 percent of hiking and backpacking; 10.6 percent of rockhounding; 4.5 percent of horseback riding; 11.6 percent of exploring; 16.9 percent of hunting; 4.8 percent of photography; 4.7 percent of sight seeing; and 6.1 percent of fishing.

If the area is designated as wilderness, recreation use patterns will be changed from motorized to nonmotorized use. Individuals relying on vehicles for recreation would be prevented from using vehicle ways within the wilderness study areas.

Recreational vehicle use of primitive ways would be prohibited. Vehicle use would only be permitted as specifically authorized in a wilderness management plan for emergency use, administrative use, or for use related to a valid existing right. Wilderness-compatible recreation such as hiking, walk-in hunting, camping, fishing, sight seeing and other activities would be enhanced by designation.

## Wildlife

Wildlife species, such as mule deer, birds of prey, sage grouse, and a variety of non-game species would generally benefit from the added protection that wilderness designation would ensure. Mechanical manipulation of vegetation for wildlife habitat would not be allowed, thus, the opportunity to engage in this type of work would be adversely affected. Currently, there are no plans for vegetative manipulation within the area.

## Cultural Resources

Designation of the Roberts wilderness study area would provide protection for an estimated 215 cultural resource sites by limiting recreational vehicle access and surface-disturbing activities.

## Watershed

Watershed resource values would benefit because of the added protection from disturbance that wilderness designation would ensure.

## Socio-economics

(See social and economic section as listed in the Table of Contents).

### Standard No. 3 - Impacts of Nondesignation on Wilderness Values

Because of the potential for development, the wilderness character of the Roberts wilderness study area could be expected to be lost within five years after the removal of interim management restrictions. Should the area not be designated as wilderness, the main alternative use of the land would be mineral exploration, mining, and livestock grazing. If additional road construction and other development occurs, the wilderness character of the area will be eliminated. Nondesignation would result in the loss of protection for watersheds, natural plant communities and wildlife habitat, and the loss of social benefits associated with wilderness. The cumulative effect of development would restrict opportunity for solitude and/or primitive and unconfined recreation.

### Standard No. 4 - Public Comment

Public comment received during the wilderness inventory for the Roberts wilderness study area is documented in the "Wilderness Study Area Decisions," effective November 15, 1980 and was considered in making the recommendation. Public comment received during the study phase will also be considered and incorporated into the decision-making process.

### Standard No. 5 - Local Social and Economic Effects

(See social and economic impact section as listed in the Table of Contents).



Standard No. 6 - Consistency With Other Plans

The Nevada Statewide Comprehensive Outdoor Recreation Plan (SCORP) recommended support of wilderness designation where it is determined to be the best use of the land. Except for private lands near the unit associated with ranching, there are no other private lands, state and local government lands, lands associated with Indian tribes, or non-bureau-administered federal lands within or near the Roberts wilderness study area. The Bureau of Land Management is not aware of any conflicts with other plans.



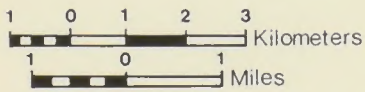
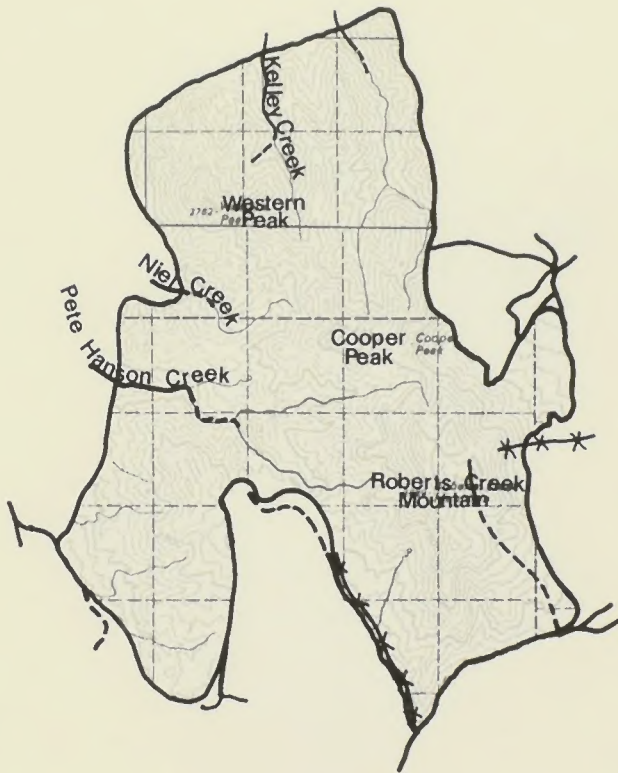
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



DATA AS OF JAN 31, 1983



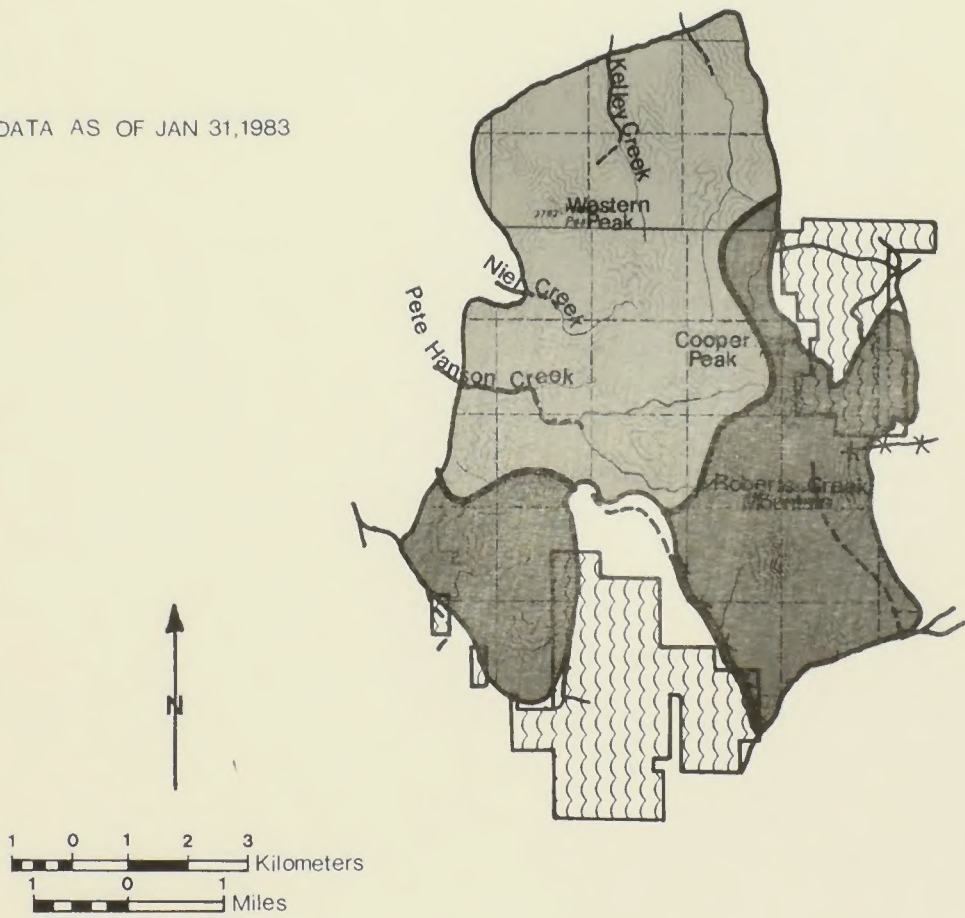
ROBERTS WSA (NV-060-541)  
IMPRINTS OF MAN



MINERAL POTENTIAL (LOCATABLE)

-  HIGH FAVORABILITY FOR MINERAL ACCUMULATION GEM RATING 4
-  MODERATE FAVORABILITY FOR MINERAL ACCUMULATION GEM RATING 3
-  LOW OR NO FAVORABILITY FOR MINERAL ACCUMULATION GEM RATING 2&1
-  MINING CLAIMS ON RECORD



DATA AS OF JAN 31, 1983



ROBERTS WSA (NV-060-541)  
MINERAL POTENTIAL  
MINING CLAIMS



**GEOHERMAL POTENTIAL**

- NONE** HIGH FAVORABILITY FOR MINERAL ACCUMULATION GEM RATING 4
  - NONE** MODERATE FAVORABILITY FOR MINERAL ACCUMULATION GEM RATING 3
  -  LOW OR NO FAVORABILITY FOR MINERAL ACCUMULATION GEM RATING 2&1
  -  OIL & GAS LEASES
  - NONE** GEOHERMAL LEASES
- MINERAL POTENTIAL FOR OIL AND GAS IS RATED AS LOW

DATA AS OF JAN 31, 1983



**ROBERTS WSA (NV-060-541)  
GEOHERMAL POTENTIAL  
OIL & GAS LEASES**





SIMPSON PARK WILDERNESS STUDY AREA  
(NV-060-428)

CRITERION NO. 1 - EVALUATION OF WILDERNESS VALUES

Component No. 1 - Quality of the Area's Mandatory Wilderness Characteristics

Size

The Simpson Park wilderness study area is located in the Simpson Park Mountain Range and contains approximately 49,670 acres. It is approximately seventeen miles long and five miles wide. The area is of sufficient size to offer a variety of wildlife habitat, vegetation, and topography.

Naturalness

General Description of Human Imprints Present. The northern portion of the unit contains a substantial number of human imprints, some of which were missed during the initial wilderness inventory, that negatively affect its wilderness character. The southern portion of the unit is generally free from human imprints and is in a natural state. In the northern portion, disturbances from past and current mining activity are present in Big Canyon, Moonshine Canyon, Hiller Canyon, and along the main ridge of the range west of Shagnasty Basin. Areas disturbed from current mining exploration activity authorized under the Bureau of Land Management Interim Management Policy and Guidelines for Lands under Wilderness Review will be reclaimed prior to the time the Secretary of the Interior is scheduled to make his wilderness suitability recommendations to the President. A way extends into Moonshine Canyon for approximately one mile, and at one point crosses the slope and connects with a road in the canyon lying directly south of Moonshine Canyon. A cherry-stemmed road extends into Big Canyon approximately one mile and turns into a way that continues approximately one more mile to a spring development. Numerous mining scrapes are also present in Big Canyon. Approximately one-half mile south of Big Canyon, a way follows the slope to a mining scrape near the top of the range. A way extends into Hiller Canyon for approximately one mile. A spring development is present further up the canyon. Underwood canyon has a way extending one and one-half miles into the unit. A spring development located on forty acres of private property is further up the canyon. Wood Canyon has a way protruding five-eighths of a mile into the unit. A spring development is present further up the canyon. At the head of Trail Canyon a road circles in and back out of the unit. A way and a fence extend a short way into the unit on the west side of Ackerman Canyon. In Salt Marsh Canyon, a way extends north from the private ground for approximately one and one-fourth miles. Another way is present near the private ground further into Ackerman Canyon. Cow Canyon has a way extending one mile into the unit. In Grubbs Canyon, a way extends a short distance west from the boundary of the private



property. Shagnasty Basin was identified during the wilderness inventory as unnatural. Numerous ways and old mining scrapes extend west from the boundary of the unnatural area into the unit. One goes for approximately one and one-half miles to another forty-acre parcel of private land within the unit. East of this, another way extends in one mile and then out of the unit. Another way extends from that way for approximately one and one-half miles to Fagin Mountain. Snow Water Canyon has a way extending from the cherry-stemmed road approximately one and one-half miles. Immediately north of Snow Water Canyon another way protrudes one mile into the unit. A way extends from the cherry-stemmed road in West Cottonwood Canyon and splits into two separate ways. Another way stems off from here towards Fagin Spring. At Petunia Springs a way leads to a water development and from there it extends up the mountain approximately two miles and connects into the way extending from Cottonwood Canyon. A cherry-stemmed road extends into the unit approximately one and one-half miles just north of North Fork Stream and turns into a way extending a mile and one-half both north and south of Buck Mountain. Numerous fences and several other water developments are present within the unit, mainly on the northern end.

Consideration of Outside Sights and Sounds. Sights and sounds outside the boundary of the Simpson Park wilderness study area would have little effect on the quality of a wilderness experience within the unit. A lack of major developments and the remoteness of the area are the primary reasons for this.

Private land borders the unit at five places: the Gund Ranch in the northeast portion, the Indian Ranch in the southwest portion, two places at the Ackerman Ranch, and at Grubbs Canyon in the southeast portion of the unit.

#### Outstanding Opportunities for Solitude or Primitive and Unconfined Recreation

Solitude. The area is long and narrow with private land protruding into the mountain range at various places, making the unit even more narrow. The northern part of the unit is made up of low mountains conducive to the growth of the northern desert shrub community, which offers little natural screening. Scattered stands of mountain mahogany and a large stand of pinyon-juniper in the southern portion of the unit offer some natural screening. However, these woodlands are in close proximity to private lands and unavoidable intrusions such as mining scrapes and roads. With all the intrusions present, solitude would be unobtainable in the north. There is some opportunity for solitude in the southern portion of the unit.

Primitive and Unconfined Recreation. The diversity of opportunities for hiking, horseback riding, and hunting create an overall outstanding opportunity for recreation. There are no fishable streams within the unit. No outstanding recreational or wilderness opportunities exist that would attract visitors, and no known plants, rocks, or minerals of collectable value are known to exist.

Component No. 2 - Special Features: Quality of the Area's Optional Wilderness Characteristics

No special features of ecological or geological value, or other features of scientific, educational, scenic, or historical value are known to exist in the Simpson Park wilderness study area.

Component No. 3 - Multiple Resource Benefits: The Benefits to Other Multiple Resource Values and Uses Which Only Wilderness Designation of the Area Could Ensure

In addition to its value as a setting for primitive recreation or solitude, wilderness can also provide a range of benefits to other multiple resource values and uses which are of significance.

- 1) Watershed and water quality would benefit because development of the area would be limited.
- 2) Wildlife species such as mule deer, birds of prey, sage grouse, and other non-game birds would benefit from the added protection of wilderness designation because it would prevent habitat loss as a result of development. Prohibited recreational motorized vehicle use for hunting activities would also benefit wildlife by limiting easy access into the area and by lessening disturbance of the area.
- 3) Visual resources and scenic quality of the area would be protected because of limited development inside the unit.
- 4) Cultural Resources, both known and potential, would benefit because the limited surface disturbance and recreational vehicle access into the area would mean less disturbance to archaeological sites.

Component No. 4 - Diversity in the National Wilderness Preservation System

Factor No. 1

**Expanding the Diversity of Natural Systems and Features as Represented by Ecosystems and Landforms**

According to the Bailey-Kuchler system of ecosystem classification, the Simpson Park wilderness study area lies within the Great Basin Sagebrush Ecosystem. The Great Basin Sagebrush Ecosystem is currently represented in the National Wilderness Preservation System by one area in California which totals 62,695 acres. Designation of the Simpson Park area as wilderness would expand the diversity of natural systems and features as represented by ecosystems and landforms. There are eight areas totaling 783,510 acres which represent this ecosystem that are administratively endorsed for wilderness designation. Additionally, there are several areas which represent this ecosystem that are scheduled to be studied for possible inclusion into the National Wilderness Preservation System.

## Factor No. 2

### Assessing the Opportunities for Solitude or Primitive Recreation Within a Day's Driving Time (five hours) of Major Population Centers

The Simpson Park wilderness study area is located within a sparsely-populated portion of central Nevada where there are no major population centers (50,000 people) within one day's driving time (five hours). Wilderness designation of this area would not contribute to preserving opportunities for solitude and primitive recreation within a day's driving time of major population centers.

## Factor No. 3

### Balancing the Geographic Distribution of Wilderness

The Jarbidge Wilderness Area, located in northeastern Nevada, is the only area in Nevada designated as wilderness. The Jarbidge Wilderness Area totals 64,847 acres. Designation of the Simpson Park area as wilderness would contribute to balancing the geographic distribution of wilderness. The Tonopah Draft Wilderness Environmental Impact Statement prepared by the Battle Mountain District identified 234,080 acres within 6 areas as preliminarily suitable for wilderness. The Schell Resource Area Draft Wilderness Environmental Impact Statement identified 188,707 acres within 7 areas as preliminarily suitable for wilderness designation. These areas are within the Ely District which is east of the Shoshone-Eureka Resource Area. For further reference, see the attached wilderness status map.

## CRITERION NO. 2 - MANAGEABILITY

The Simpson Park wilderness study area is not considered to be manageable over the long term. Unfenced private inholdings of large acreage protrude into the unit at five places. Two private inholdings of forty acres each exist within the unit. There is a large number of post-Federal Land Policy and Management Act mining claims and mineral leases in the northern portion of the unit. Identifying boundaries would present a problem because the majority of the boundary is located along topographic lines that are unrecognizable on the ground. The development potential of the area for mining is high. Expected surface disturbing activities would present a problem for manageability. The large number of roads and ways associated with the unit would make it virtually impossible to prevent unauthorized vehicle use. Closure of all these roads and ways would not be feasible and motorized vehicle traffic could not be controlled. Continued livestock grazing would not be incompatible with wilderness management.

### Use of Buffer Zones

The unit contains no buffer zones.

## Air Quality

All BLM-Administered public lands were designated as Class II by the 1977 Clean Air Act Amendments. The Bureau of Land Management will not consider or recommend any change in air quality classification as part of the wilderness study or wilderness recommendations.

### QUALITY STANDARDS

Along with the two preceding criteria, six quality standards will be analyzed.

#### Standard No. 1 - Energy and Mineral Resource Values

The classification system used to evaluate the mineral resource potential of the wilderness study areas in the Shoshone-Eureka Resource Areas is described in the Antelope portion of this report.

From information obtained by the Shoshone-Eureka Resource Area geologist and other individuals and groups contacted, the locatable mineral potential of the Simpson Park wilderness study area has been determined to be high. The northern end of the area has known outcrops of barite and excellent potential for additional deposits. The available data provide abundant direct evidence to indicate high favorability for accumulation of mineral resources in the northern end of the Simpson Park wilderness study area.

There are presently three mining plans of operation on record for this area. Upon release from wilderness interim management procedures, further exploration would occur. Extraction of the identified locatable mineral resources would be expected.

The leasable mineral potential of the Simpson Park wilderness study area is very low for oil, gas, and sodium; low for phosphosphate; and moderate for geothermal resources. Oil, gas, sodium, and potassium will not be discussed any further in this section due to their low probability of occurrence.

Phosphate-bearing sections are reported to occur in the Vinini formation by Rogers, et. al., 1970. No phosphate is specifically reported in the Simpson Park wilderness study area itself; however, the Vinini formation does cover a significant portion of the study area. Therefore, the mineral potential for phosphate is rated as low based upon indirect evidence.

Geothermal potential is greatest along the range front fault on the west side of the Simpson Park Range. Walti Hot Springs, four miles north of the wilderness study area, exhibits artesian flow of approximately five hundred gallons per minute with a measured temperature of 73 degrees centigrade (162 degrees fahrenheit). The geothermal potential is rated as moderate only due to lack of identified thermal springs at the surface. For a summary of the mineral potential ratings, see Table 1.

## Standard No. 2 - Impacts on Other Resources

Should the Simpson Park Wilderness Study Area be designated as wilderness, considerations of resource values or uses of that area that would be foregone or adversely affected are as follows:

### Energy and Minerals

Wilderness designation of the Simpson Park Wilderness Study Area would have a significant adverse impact upon the ability of the minerals industry to explore for and develop potential mineral deposits in the area. The degree of impact upon known and potential mineral exploration and development opportunities varies by mineral type. For a description of the known mineral values and mineral potentials involved, refer to Standard No. 1 Energy and Mineral Resources Values, and Table 1.

### Woodland Products

There is no demand for woodland products (cordwood, fence posts, and pine nuts) within the Simpson Park wilderness study area. There are sufficient quantities of these woodland products outside the boundary of the unit to meet all foreseeable needs.

### Rights-of-Way

There are no existing rights-of-way, nor any proposed within or near the Simpson Park wilderness study area. No adverse effects can be foreseen.

### Water Developments

Small water developments would be allowed if the area were designated as wilderness, provided that they were built in accordance with the guidelines of the Wilderness Management Policy. No developments are planned at this time.

### Livestock Grazing

Designation of the Simpson Park unit as wilderness would have no impact on livestock grazing use of the area. Adjustments to livestock grazing use within the area would be determined using the same monitoring program implemented on the remainder of the resource area.

### Range Improvements

Maintenance of existing projects and construction of new projects within designated wilderness areas would be governed by the procedures outlined in the Bureau's Wilderness Management Policy. Major types of projects such as seedings would be precluded, but most types of projects could be implemented with minor design changes to make them less obtrusive. No projects anticipated at this time would be precluded by wilderness designation.

## Recreation

According to a recent study (Division of State Parks, 1981) a significant portion of participation in dispersed recreation within Nevada takes place within the resource area. Lander and Eureka counties with 0.7 percent of the state's total population host 9.7 percent of the state-wide primitive camping; 2.8 percent of hiking and backpacking; 10.6 percent of rockhounding; 4.5 percent of horseback riding; 11.6 percent of exploring; 16.9 percent of hunting; 4.8 percent of photography; 4.7 percent of sight seeing; and 6.1 percent of fishing.

If the area is designated as wilderness, recreation use patterns will be changed from motorized to nonmotorized use. Individuals relying on vehicles for recreation would be prevented from using vehicle ways within the wilderness study areas.

Recreational use of primitive vehicle ways would be prohibited except as specifically authorized in a wilderness management plan for emergency use, administrative use, or for use related to a valid existing right. Wilderness-compatible recreation such as hiking, walk-in hunting, camping, fishing, sight seeing and other activities would be enhanced by designation.

## Wildlife

Wildlife species such as mule deer, birds of prey, sage grouse, and a variety of non-game species would generally benefit from the added protection that wilderness designation would ensure. Mechanical manipulation of vegetation for wildlife habitat would not be allowed, thus, the opportunity to engage in this type of work would be adversely affected. Currently, there are no plans for vegetative manipulation within the area.

## Cultural Resources

Designation of the Simpson Park wilderness study area would provide protection for an estimated 771 cultural resource sites by limiting recreational vehicle access and surface-disturbing activities.

## Watershed

Watershed resource values would benefit because of the added protection from disturbance that wilderness designation would ensure.

## Socio-economics

(See social and economic sections as listed in the Table of Contents).

## Standard No. 3 - Impacts of Nondesignation on Wilderness Values

Because of the high potential for development of the Simpson Park wilderness study area, the wilderness character of the northern portion



of the area could be expected to be lost within five years after the removal of interim management restrictions. Because of the lower mineral potential of the southern portion of the area, it is expected that the wilderness character of this area would continue during the long term (5-15 years). Should the area not be designated as wilderness, the main alternative uses of the land would be mineral development and livestock grazing. Nondesignation would result in the loss of protection for watersheds, natural plant communities and wildlife habitat, and the loss of social benefits associated with wilderness. The cumulative effect of development would restrict opportunity for solitude and/or primitive and unconfined recreation.

#### Standard No. 4 - Public Comment

Public comment received during the wilderness inventory for the Simpson Park wilderness study area is documented in the "Wilderness Study Area Decisions," effective November 15, 1980 and was considered in making the recommendation. Public comment received during the study phase will also be considered and incorporated into the decision-making process.

#### Standard No. 5 - Local Social and Economic Effects

(See the social and economic section as listed in the Table of Contents).

#### Standard No. 6 - Consistency With Other Plans

The Nevada Statewide Comprehensive Outdoor Recreation Plan (SCORP) recommended support of wilderness designation where it is determined to be the best use of the land. There are private lands associated with ranching and a ranch owned by the University of Nevada that protrude into the unit. There are no lands associated with Indian tribes or non-bureau-administered federal lands within or near the Simpson Park wilderness study area. The Bureau of Land Management is not aware of any conflicts with other plans.



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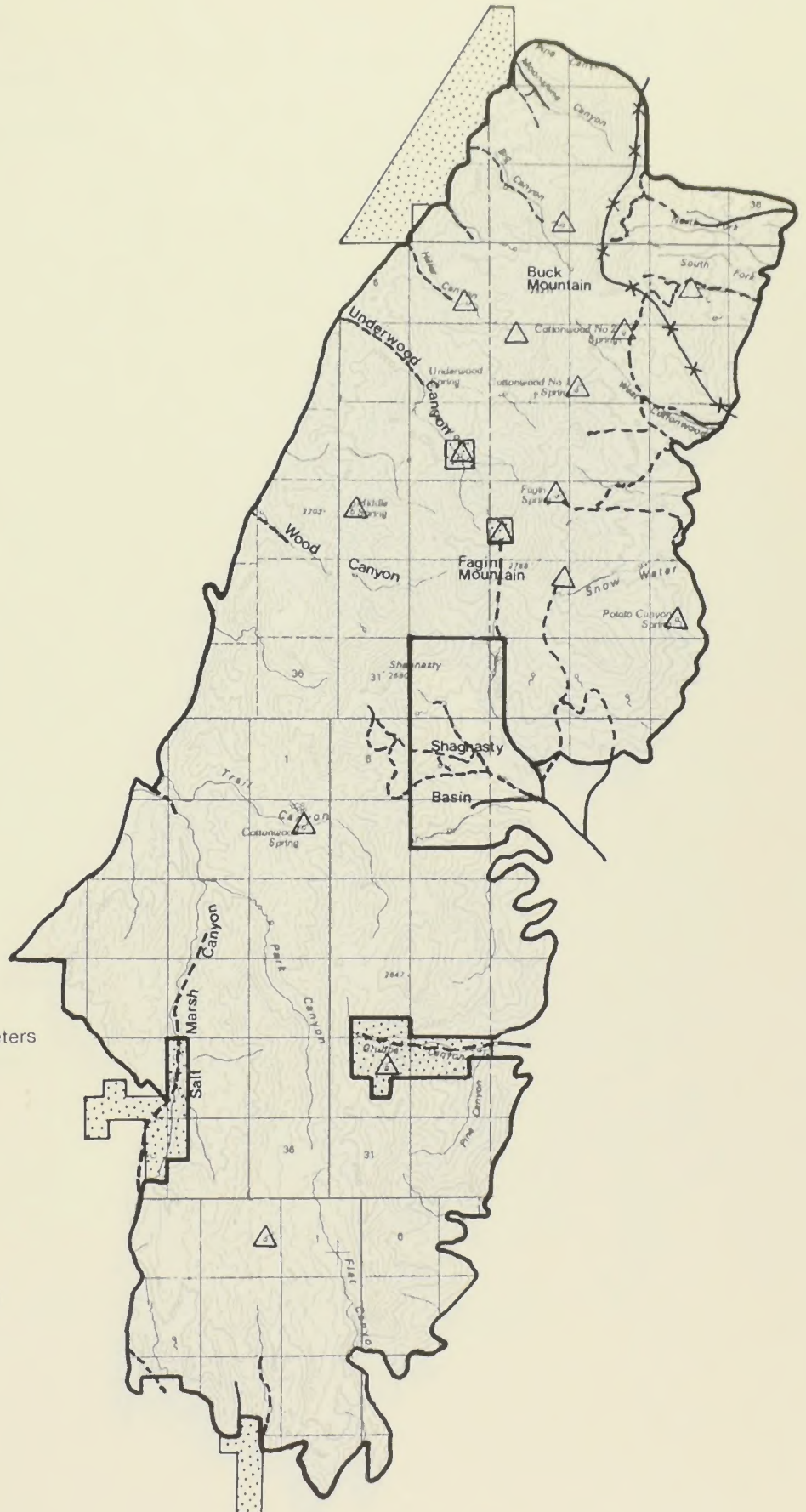
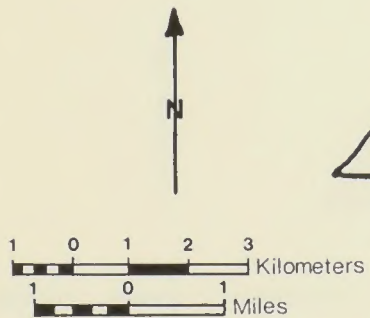
— ROAD

- - - WAY

▨ PRIVATE LAND

△ WATER DEVELOPMENT

DATA AS OF JULY, 1979







SIMPSON PARK WSA (NV-060-428)

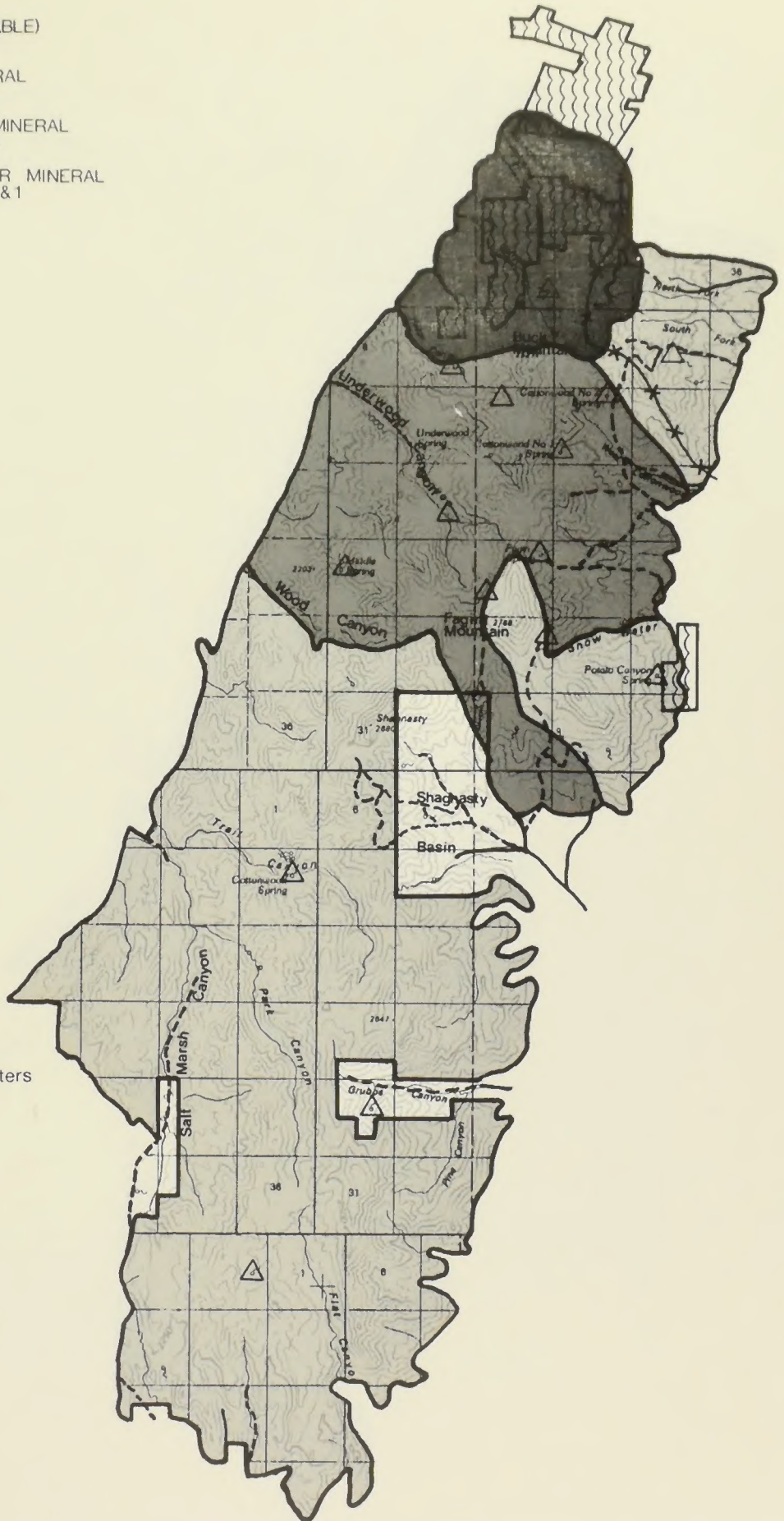
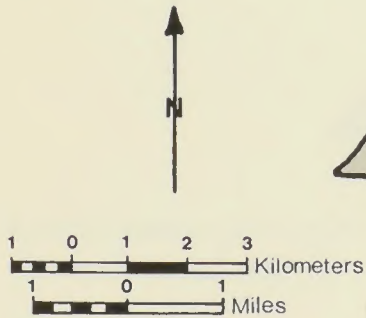
IMPRINTS OF MAN



MINERAL POTENTIAL (LOCATABLE)

-  HIGH FAVORABILITY FOR MINERAL ACCUMULATION GEM RATING 4
-  MODERATE FAVORABILITY FOR MINERAL ACCUMULATION GEM RATING 3
-  LOW OR NO FAVORABILITY FOR MINERAL ACCUMULATION GEM RATING 2&1
-  MINING CLAIMS ON RECORD

DATA AS OF JULY, 1979






SIMPSON PARK WSA (NV-060-428)

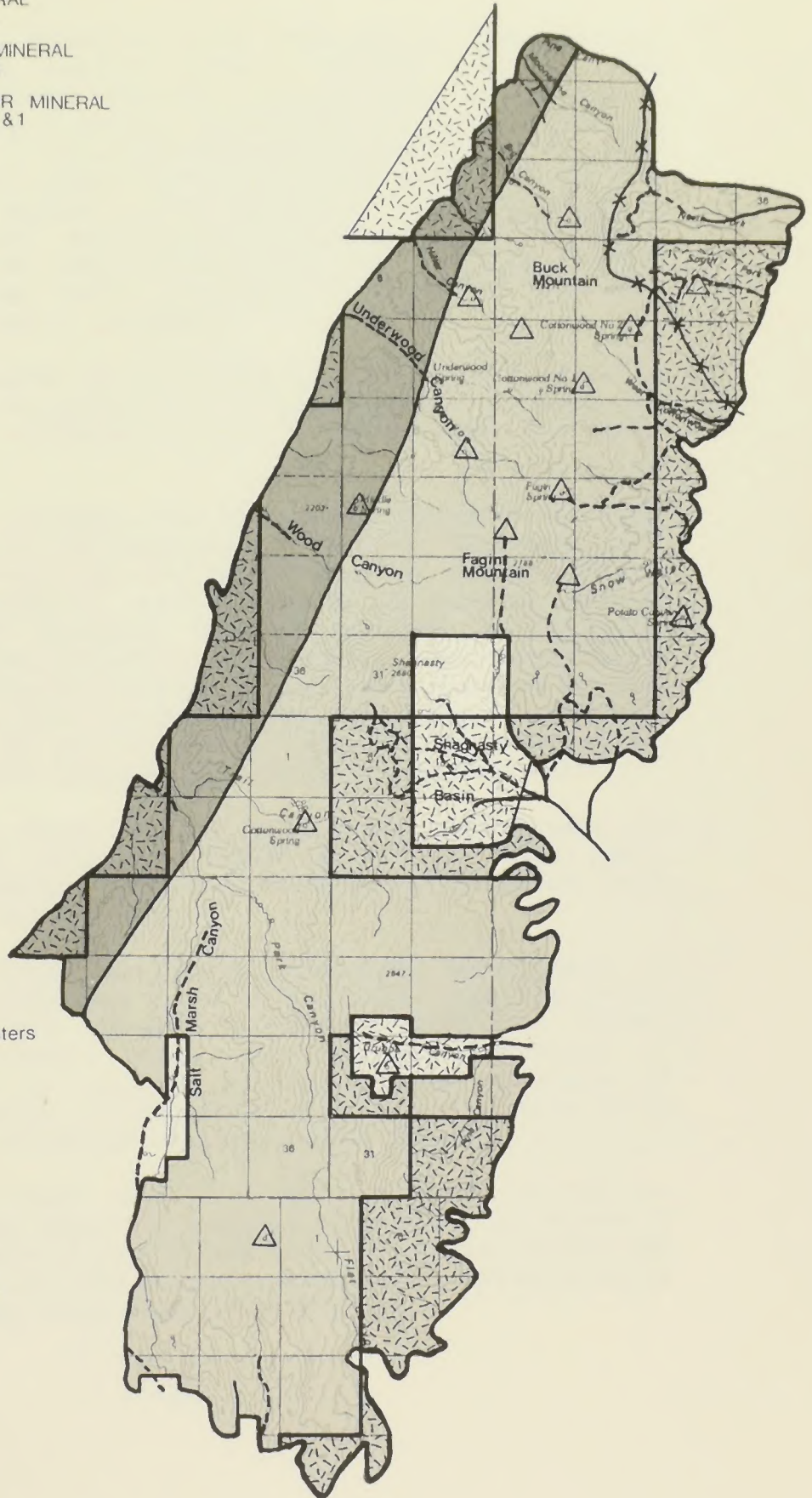
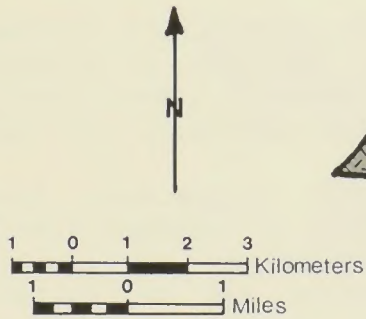
MINERAL POTENTIAL  
MINING CLAIMS



**GEOHERMAL POTENTIAL**

- NONE** HIGH FAVORABILITY FOR MINERAL ACCUMULATION GEM RATING 4
-  MODERATE FAVORABILITY FOR MINERAL ACCUMULATION GEM RATING 3
-  LOW OR NO FAVORABILITY FOR MINERAL ACCUMULATION GEM RATING 2&1
-  OIL & GAS LEASES
- NONE** GEOTHERMAL LEASES
- MINERAL POTENTIAL FOR OIL AND GAS IS RATED AS LOW

DATA AS OF JULY, 1979



SIMPSON PARK WSA (NV-060-428)

**GEOHERMAL POTENTIAL  
OIL & GAS LEASES**





## SHOSHONE-EUREKA WILDERNESS STUDY AREA SOCIAL AND ECONOMIC ANALYSIS

Economic interest in the wilderness study areas derives from their use for grazing, recreation, woodland products, mineral production, and taxable assets. Preliminary analysis indicates that no significant alteration of the economy in Eureka, Lander, and Nye counties would be expected to occur due to formal wilderness designation of the areas considered in this report. While there may be some minor trade-offs in income and employment impacts, with particular industries such as recreation being enhanced, and mineral extraction being discouraged, the basic structure of the local economy would remain intact. Impacts at the state and national levels, exclusive of intangible wilderness preservation values, would be unnoticed.

Wilderness designation would not have a significant impact on range use because there would be no reduction in present animal unit months and no restrictive grazing stipulations would be imposed upon the operators.

There is no conclusive evidence that significant increases in recreation use would occur due to designation. However, increases estimated at 4,500 visitor hours per year may be expected due to publicity and increased public awareness. Such changes as may occur do not hold the promise of either important economic benefits or disruptive impacts. The retail trade and services industries, particularly hotels and lodging places, eating and drinking places, and recreation services would benefit slightly from increased recreation use. Additional demand is expected to be insufficient to encourage the entry of new businesses, but would most likely be manifested in increased sales.

Wilderness designation would have no significant impact upon the harvesting of woodland products. Public demand for fence posts, Christmas trees, firewood and pine nuts would be met on public lands outside the wilderness study areas.

Mineral development within designated wilderness areas would be adversely impacted by additional costs of compliance with regulations of access and reclamation designed to protect wilderness values. Evaluation of the economic impact upon mineral development of wilderness designation is hindered by the lack of knowledge of potential mineral deposits, of sufficient quantity and quality to be commercially feasible, within the wilderness study areas.

Wilderness designation would have no significant effect on the tax structure itself, or the amount of revenues received. The Bureau of Land Management's payments in lieu of tax funds for Lander, Eureka, and Nye counties in Fiscal Year 1980 amounted to \$517,432. Unless there is a change in this program, these funds would continue.



The State of Nevada receives 50 percent of all mineral leasing revenues, a percentage of grazing revenues, and 4 percent of all revenues from sale of lands and minerals. Grazing revenues should remain the same, suffering only from the loss of development of potential additional animal unit months.

Mineral leasing revenues may be impacted slightly. Revenues from sale of lands and materials would be unchanged. Losses in mineral leasing revenues and potential grazing revenues foregone would be offset by increased sales taxes from recreational visitors.

#### INCOME AND EMPLOYMENT

Income and employment occurring within the wilderness study areas comes from livestock grazing and mineral exploration. Also associated with the wilderness study areas is some unquantifiable recreation-generated income and employment.

While there is a potential in the future for less income and employment to those industries utilizing the commodity resources which would be removed from commercial exploitation, immediate impacts are not seen as significant.

Income and employment in the livestock industry would remain within its present levels and trends, suffering only the loss derived from foregone development of additional grazing lands. There could be a slight, but insignificant, additional cost for some operators due to limitations on motor vehicle access for fence maintenance and water hauling. Previous studies have estimated the average increase in costs to be on the order of \$0.07 per animal unit month.

While there is no current mineral production within the wilderness study areas, and therefore no income, there is some employment for exploration. This would generally be foregone along with any potential employment associated with mineral development.

No income and employment impacts are expected to occur in the harvesting of wood products because past harvesting has occurred outside of the wilderness study areas.

Income and employment in the recreation-related trades and services sectors are expected to be enhanced. The degree of enhancement which would occur will depend entirely on the tastes of the recreation public and the ability of the areas to draw recreationists.

Social Analysis

No significant change in local resident access to public land resources would occur. Wilderness designation would not reduce the availability of woodland products because the productive capacity of the harvest base far exceeds demand. Wilderness designation would restrict mineral exploration and development opportunities in several areas with moderate potential, but no operations are presently dependent upon these areas. Livestock grazing opportunities would not be affected by wilderness designation. Present recreation use would not be significantly altered as a result of wilderness designation. In summary, no significant social impacts will occur as a result of wilderness designation.

Shoshone-Eureka Wilderness Technical Report

Table 1 Summary of Geology, Energy, and Mineral Classification Ratings for the Simpson Park, Roberts, and Antelope Wilderness Study Areas.

Commodity	Simpson Park		Roberts		Antelope	
	Rating	Approximate area within the WSA 1/	Rating	Approximate area within the WSA	Rating	Approximate area within the WSA
Locatables: Barite	4D2/ 3C	Northern 1/8 Northern 1/2 (excluding 1/8 shown above) Isolated pockets Southern 1/2 All	3B	All	1A	All
Precious and Base Metals	2B 1A (2A) 3/		3D 3B 2B	Southern 1/3 Northern 2/3 All	2B 2B	All All
Uranium	2B	All				
Leasables: Oil and Gas Geothermal	1C (3B) 1A	All Extreme western edge Majority of the unit	1C 2A	All All	2A 3A	All Western 1/2
Sodium and Potassium Phosphate	1D (2B)	All All	(1D) (3B)	All All	(1D) (3B)	All All
Saleables: 4/ Stone Sand and Gravel	3C 1A	All All	3C 1A	All All	3C 1A	All All

Source: Great Basin GEM Joint Venture, January 11, 1983 a, b, c, and May 6, 1983, and professional judgement, Shoshone-Eureka Resource Area Geologist.

1/ wilderness study area

2/ CLASSIFICATION SCHEME, 1) Very low potential; 2) Low potential; 3) Moderate potential; 4) High potential.

LEVEL OF CONFIDENCE SCHEME, A) Data are insufficient; B) Indirect evidence only; C) Minimal direct evidence; D) Abundant direct evidence.

3/ Ratings in parentheses are the professional judgement of the Shoshone-Eureka Resource Area Geologist, not necessarily the rating used in the Geology, Energy and Minerals technical reports.

4/ These materials are readily available within the resource area at locations more accessible than the WSAs.





