

## **LITTLE HIGH ROCK CANYON WILDERNESS STUDY AREA**

### **1. THE STUDY AREA - 50,951 acres**

The Little High Rock Canyon WSA (CA-020-913/NV-020-008) is located in Washoe and Humboldt Counties near the northwestern corner of Nevada. The WSA includes 50,951 acres of BLM lands and surrounds a 40 acre private inholding. The nearest towns and cities are Cedarville, California (50 miles northwest), Susanville, California (90 miles southwest) and Reno, Nevada (125 miles south). The WSA is bounded by Smokey Canyon Road and private lands on the south and east, the Docking Corral-High Rock Lake Road on the north, the Denio Camp-Docking Corral Road on the northwest and a combination of private lands, Nevada State Highway 34 and a small area of unnatural bladed mineral exploration roads on the southwest. All of the boundary roads, except Highway 34 are infrequently maintained dirt roads.

The WSA lies at the western edge of the Calico Mountains, a broad low volcanic range. The topography is dominated by two deep canyons, Little High Rock and McConnell, which have cut through the surrounding uplands. These canyons contain spectacular rims and cliffs. The remainder of the WSA is a mixture of rolling benches, tables and uplands broken by buttes and rimrocks. The dominant vegetation is sagebrush with willow and meadow communities in the canyon floors. Elevation ranges from 5000 to 6940 feet.

The WSA was studied under Section 603 of the Federal Land Policy and Management Act (FLPMA) and was included in the Eagle Lake-Cedarville Final Wilderness Environmental Impact Statement completed in October, 1987, which amended the Tuleadad/Home Camp, Cowhead/Massacre and Sonoma/Gerlach Management Framework Plans. There were four alternatives analyzed in the EIS; all wilderness, no wilderness and two partial wildernesses. One partial wilderness recommended 17,183 acres for wilderness designation and 33,768 acres for uses other than wilderness which is the recommendation of this report. The other partial wilderness recommended 45,643 acres as wilderness and 5,308 acres for uses other than wilderness.

### **2. RECOMMENDATION AND RATIONALE - 17,183 acres recommended for wilderness 33,768 acres recommended for nonwilderness**

The recommendation for the Little High Rock Canyon WSA is to designate 17,183 acres as wilderness and release 33,768 acres for uses other than wilderness (Map 1). All wilderness is considered to be the environmentally preferable alternative as it would result in the least change from the natural environment over the long term. The partial wilderness alternative, the recommendation of this report, would be implemented in a manner which would utilize all practical means to avoid or minimize environmental impacts.

The 17,183 acres recommended for wilderness designation contain a wide range of values and a lack of significant resource conflicts which make them well suited for wilderness designation. The values include exceptional naturalness, opportunities for solitude and primitive and unconfined recreation significant on a regional basis, regionally and nationally important historic and archaeological values and a complex of important wildlife values. The lack of important resource conflicts would assure that no significant resource development opportunities would be foregone if the area were designated as wilderness.

The recommended wilderness includes Little High Rock Canyon, McConnell Canyon and a series of buttes that lie between the two canyons. The canyons are erosion cut gorges with up to 1,500 feet of relief between the upland terraces and buttes and the willow lined creeks in the canyon bottoms. The topographic diversity in the recommended wilderness leads to an outstanding diversity of scenic quality, cultural

resources, recreational opportunities and wildlife values equaled on a regional basis only in the nearby High Rock Canyon Complex.

The outstanding scenic vistas of the recommended wilderness occur from a multitude of locations within the area. Visitors in the canyons or on the canyon rims are confronted with layers of white, gray, orange and brown rocks of the High Rock formation horizontally bedded in the vertical canyon walls. The canyon floors and pockets on the walls where soil collects contrast with the grey-green of sagebrush. Turning away from canyon rims, the view becomes a 360 degree panorama of valleys, terraces and mountain ranges up to 60 miles in any direction. The vast panorama creates a vivid impression of isolation from the civilized world.

The floor of Little High Rock Canyon in the recommended wilderness remains unaltered from the days of 1911 when four local stockmen were murdered by a roving band of Bannock Indians. This event precipitated the largest manhunt in Nevada history and still attracts significant local interest. Before the times of conflict, the canyons were home to Indians for at least 10,000 years and every rock shelter and spring show indications of this use. To archaeologists, the canyon represent a treasure house of significant data which can help unlock the past.

The recommended wilderness represents one of the few places in northwestern Nevada where visitors regularly and eagerly walk long distances from their vehicles in search of hunting opportunities, rockhounding sites, wildlife viewing and general sightseeing. This willingness to abandon the preferred mode of transportation again reflects the special qualities of the area. The recreational and solitude values are thus exceptional.

The diversity of topography leads to a wide range of wildlife habitat diversity. The recommended wilderness supports nesting populations of golden eagles, prairie falcons, hawks and owls. The canyon floors and walls are home to excellent populations of quail, chukar and non-game birds. The shaded canyons support a small yearlong mule deer population which swells with winter migrants. The buttes and uplands between the canyons serve as yearlong home to a sizeable population of pronghorn antelope. Additionally, the canyons have the potential to support a viable population of more than 100 California bighorn sheep, animals eliminated from the area 50 years ago and now proposed for reintroduction. Wilderness designation would provide benefits for this wilderness dependant species.

The recommended wilderness is manageable as wilderness due mostly to the extreme ruggedness of the area. The topography effectively screens outside activities from most visitors. Any activity near the periphery of the wilderness such as mineral development would not degrade the wilderness qualities because of the high degree of topographic screening.

The conflicts with other resource uses in the recommended wilderness are limited. Grazing use on the southern portion of the area will be allowed to continue. The area has no known energy resources and although three small areas have been identified as having moderate potential for gold deposits, no claims have been filed and no development is projected.

The recommended wilderness in Little High Rock is part of a 77,000 acre complex of recommended wilderness included in four adjacent WSA's separated by narrow access corridors. This wilderness complex includes outstanding wilderness values as well as exceptional scientific, cultural and scenic values which would be an important addition to the National Wilderness Preservation System.

The 33,768 acres recommended to be released for uses other than wilderness are less natural than the recommended wilderness. These lands also have less opportunities for solitude and primitive recreation due to a lack of topographic and vegetative diversity. None of the identified special features in the WSA are contained in the nonwilderness portion of the WSA. This portion also has identified resource problems with

sagebrush eradication projects and future minerals exploration. Due to all of the listed problems and lack of significant wilderness values it was determined that the lands would be better managed as nonwilderness.

The land recommended to be released for uses other than wilderness (Area A, B and C, Map 1) consists of volcanic tablelands surrounding Little High Rock and McConnell Canyons. The canyons themselves are deep rim bound gorges, but the surrounding uplands have only discontinuous rims and are accessible to 4-wheel drive vehicles. This area also contains two cherrystem roads, one to a private inholding and a second to a concentration of small reservoirs isolated within the WSA boundary. The western portion (Area B) contains approximately 4,000 acres of a herbicide treatment area and is in an unnatural condition. In order to maintain the productivity of this portion of the WSA for livestock, periodic retreatments with herbicides or other brush removal methods will be required.

The wilderness values of naturalness, solitude and primitive recreation will be retained over most of the lands recommended for release for uses other than wilderness. However, values for primitive recreation are significantly less than found in the recommended wilderness due to a lack of special features such as wildlife concentrations, high scenic values or water sources which attract visitors in the Great Basin. An area of approximately 3,000 acres along the western boundary (Area B, Map 1) near Highway 34 contains 120 mining claims and a moderate potential for development of precious metal deposits. Any development would significantly reduce or eliminate naturalness as well as solitude and primitive recreational use.

Table 1  
Land Status and Acreage Summary of the Study Area

|   |           |
|---|-----------|
| <u>Within Wilderness Study Area</u>                       |           |
| BLM (Surface and Subsurface)                              | 50,951    |
| Split Estate (BLM Surface only)                           | 0         |
| Inholdings (state, private)                               | <u>40</u> |
| Total   | 50,991    |
| <br><u>Within the Recommended Wilderness Boundary</u>     |           |
| BLM (within WSA)  | 17,183    |
| BLM (outside WSA)   | 0         |
| Split Estate (within WSA)                                 | 0         |
| Split Estate (outside WSA)                                | <u>0</u>  |
| Total BLM Land Recommended for Wilderness                 | 17,183    |
| <br>Inholdings (State, private)                           | <br>0     |
| <br><u>Within the Area Not Recommended for Wilderness</u> |           |
| BLM   | 33,768    |
| Split Estate  | <u>0</u>  |
| Total BLM Land Not Recommended for Wilderness             | 33,768    |
| <br>Inholdings (State, private)                           | <br>40    |

### **3. CRITERIA CONSIDERED IN DEVELOPING THE WILDERNESS RECOMMENDATIONS**

#### **Wilderness Characteristics**

**A. Naturalness:** The Little High Rock Canyon WSA is predominantly natural with negligible human imprints. The WSA consists of two intermingled land forms. Little High Rock and McConnell Canyons are deep

erosional gorges cutting through the surrounding volcanic tables, buttes and sloping plateaus. The canyons contain a wide variety of multicolored rock formations, rims, talus slopes and sparsely vegetated slopes. The canyon floors are willow and wet meadow communities where bright greens contrast with the reds, browns, grays, yellows and oranges of the canyon slopes and walls. The uplands are dominated by grey-green expanses of low growing sagebrush broken by the low rimrocks of the plateaus, buttes and the walls of the two major canyons.

In this WSA the imprint of man's work is related to facilities to support livestock grazing and ways used for shepherding activities, allotment inspection, as well as by hunters and sightseers. The existing facilities include 14 reservoirs, 19 miles of fence, seven developed springs and a 2,500 acre herbicide spray area. Most of the projects are of low impact to naturalness due to small size and low concentrations. The spray release area on the western boundary is highly visible for miles and does degrade naturalness in some people's eyes.

The ways total approximately 35 miles in length. The ways are used by sheepherders, hunters, trappers, cattlemen, sightseers and management personnel. The ways receive light use by light trucks on an irregular but continuing basis. The ways are of generally low impact to naturalness. The passage of vehicles maintains the ways in existing condition.

The impacts to naturalness are not evenly distributed within the WSA. Little High Rock Canyon, McConnell Canyon and the ridges between the two canyons have no project work and only short lengths of ways (1.5 miles total). This area is recommended for wilderness. In the portion of the WSA recommended for release for uses other than wilderness, the area north of Little High Rock Canyon contains a number of very small reservoirs and approximately 13 miles of ways (Area A, Map 1). The remainder of the projects and ways are concentrated in the western half of the WSA (Area C, Map 1). This western portion of the WSA is substantially less natural in character than the remainder of the WSA.

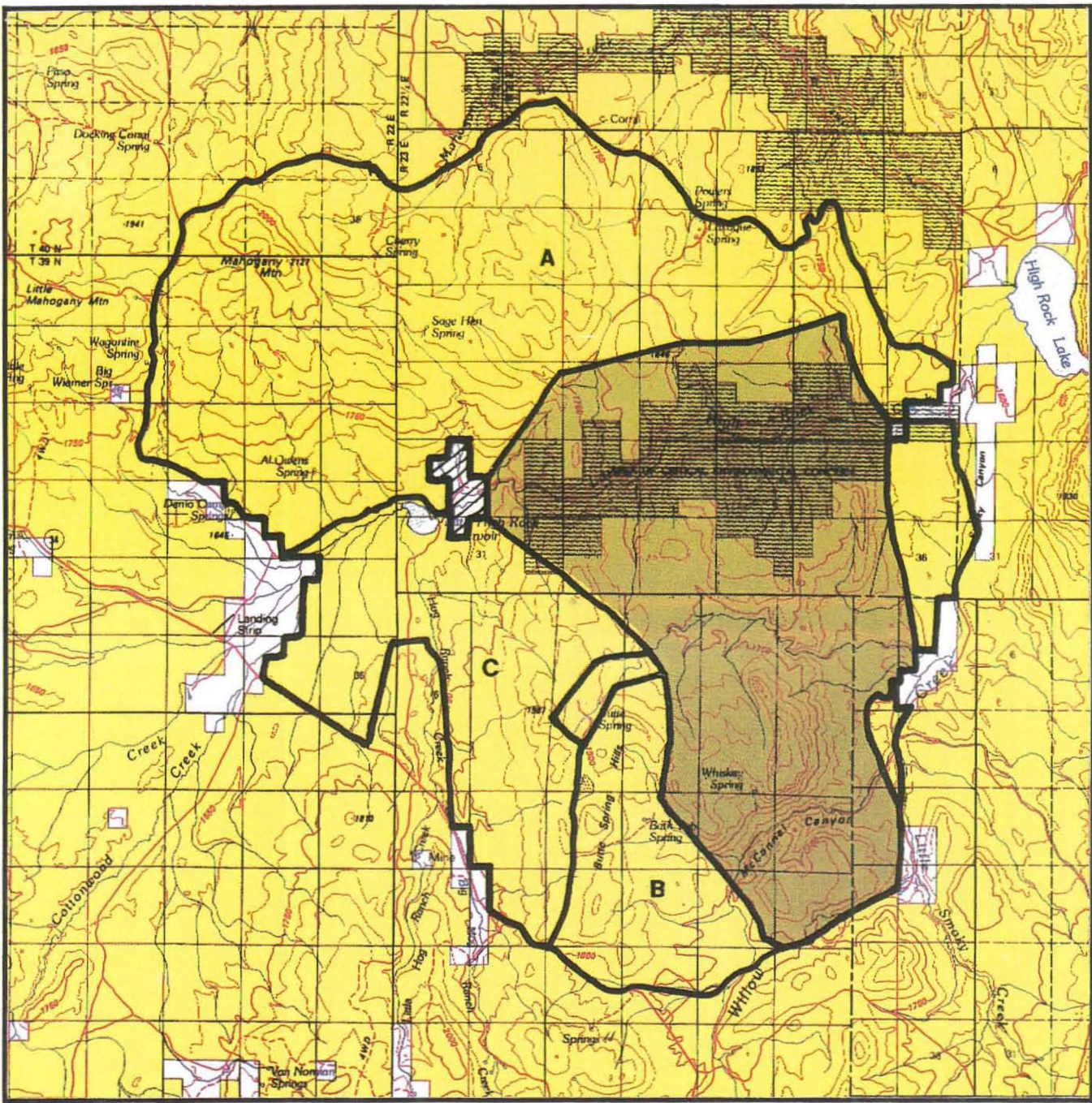
**B. Solitude:** The Little High Rock Canyon WSA has outstanding opportunities for solitude. Most of the area would offer visitors an excellent opportunity to experience solitude. The numerous drainages, canyons, mountain peaks and rocky bluffs provide obstacles that would force visitors to disperse, thus increasing the likelihood of being removed from other visitors and secondly, they provide numerous places where one could 'hold-up' and not have contact with another person. The opportunities for solitude should be considered excellent in and about such topographic features. A number of flats exist between the above mentioned topographic features that allow some long range views where a visitor might visually observe other visitors to the area, however, the individual would not be in view for any period of time and his presence would quickly be absorbed in the broken natural features.

**C. Primitive and Unconfined Recreation:** The WSA has outstanding opportunities for primitive and unconfined recreation. The types of dispersed recreation available are hiking and horseback riding for sightseeing, hunting, or rockhounding. Additionally, the scenic qualities within the WSA and surrounding lands enhances the recreational values. The best primitive recreation opportunities occur on the recommended wilderness portion of the WSA.

**D. Special Features:** Little High Rock Canyon is part of the designated High Rock ACEC (Area of Critical Environmental Concern). The High Rock ACEC is designated to protect cultural and wildlife values, while preserving the primitive character of the area.

California bighorn sheep were once common in the WSA. Reintroduction of bighorn sheep into the Little High Rock area is proposed in the near future. It is expected that bighorn would thrive in the canyon. This reintroduction would increase the wilderness values of the area by the presence of a wilderness dependant species.



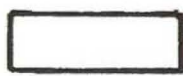


R22E

R23E



RECOMMENDED FOR WILDERNESS -



RECOMMENDED FOR NONWILDERNESS -



LAND OUTSIDE WSA RECOMMENDED FOR WILDERNESS - NONE



SPLIT ESTATE - NONE



STATE - NONE



PRIVATE -



MILES

Little High Rock Canyon Proposal

CA-020-913  
February 1990



Prehistoric occupation was most likely confined to saddles, spring sources, canyon bottoms, caves and rockshelters. Within the WSA, only Little High Rock Canyon has been subjected to intensive inventory. The canyons are characterized by extremely rugged terrain, occasionally interrupted by open flats and broad benches. The canyon is exceptionally rich in cultural resources and a National Register District has been proposed. A historic event of great local and regional significance occurred within the WSA in 1911. Four local stockmen in search of missing livestock were massacred in Little High Rock Canyon by a family group of Bannock Indians led by Mike Dagget. The killing and ensuing events became national news. The episode reflects on a period of cultural change, which is also documented in the archaeological record. Several books have been published on the event and visitors come to Little High Rock Canyon to get a feel for the tragedy in the unaltered landscape. The remainder of the WSA is characterized by large prehistoric quarry sites and lithic scatters. Major occupation sites are found at spring sources and several open occupation sites are known to occur in association with other water sources. Prehistorically occupied caves and rockshelters are anticipated in the steep canyon areas. Many of these sites are eligible for listing in the National Register of Historic Places.

**Diversity in the National Wilderness Preservation System**

**A. Assessing the diversity of natural systems and features as represented by ecosystems:** Wilderness designation of the Little High Rock Canyon would not add a new ecosystem to the National Wilderness Preservation System or to Nevada. This WSA is in the sagebrush-steppe desert ecosystem. At the present time, there are four existing wilderness areas; Jarbidge and Santa Rosa in Nevada, South Warner in California and Craters of the Moon in Idaho, within this ecotype.

Table 2  
Ecosystem Representation

| Bailey-Kuchler Classification<br>Domain/Province/PNV | <u>NWPS Areas</u> |         | <u>Other BLM Studies</u> |           |
|--|-------------------|---------|--------------------------|-----------|
|  | Areas             | Acres   | Areas                    | Acres     |
| <u>NATIONWIDE</u>                                    |                   |         |                          |           |
| Intermountain Sagebrush Province                     |                   |         |                          |           |
| Sagebrush Steppe                                     | 4                 | 131,199 | 138                      | 4,356,340 |
| <u>NEVADA</u>  |                   |         |                          |           |
| Sagebrush Steppe                                     | 2                 | 86,907  | 34                       | 1,252,442 |

**B. Expanding the opportunities for solitude or primitive recreation within a day's driving time (five hours) of major population centers:** The WSA is within a five hour drive of two major population centers. Table 3 summarizes the number and acreage of designated areas and other BLM study areas within a five hour drive of the population centers.

Table 3  
Wilderness Opportunities for Residents of Major Population Centers

| Population Centers | <u>NWPS Areas</u> |           | <u>Other BLM Studies</u> |           |
|--------------------|-------------------|-----------|--------------------------|-----------|
|                    | Areas             | Acres     | Areas                    | Acres     |
| <u>Nevada</u>      |                   |           |                          |           |
| Reno               | 45                | 4,967,230 | 175                      | 6,945,487 |
| <u>California</u>  |                   |           |                          |           |
| Redding            | 14                | 1,236,503 | 11                       | 344,633   |



**C. Balancing the geographic distribution of wilderness areas:** The WSA is within a 50 mile radius of 6 BLM WSA's recommended for wilderness designation. The South Warner Wilderness, administered by the Modoc National Forest is the only designated wilderness area within 50 miles of the WSA.

**Manageability** (the area must be capable of being effectively managed to preserve its wilderness character).

The entire WSA can reasonably be managed as wilderness. The portion recommended for wilderness designation can easily be managed as wilderness. The area contains no private inholdings, "cherrystemmed" roads or valid rights which would impair manageability. Additionally, the boundaries of the area use topographic features which would preclude problems with intentional or unintentional vehicle use.

The portion recommended for release for uses other than wilderness could also be managed as wilderness. However, several factors would make management of the area difficult. Most of this portion is open, (Areas B & C, Map 1), rolling terrain dominated by sparse stands of low growing sagebrush. It is common practice for hunters to travel cross country in vehicles to avoid long walks. Additionally, the penetration of the nonsuitable portion by two "cherrystem" roads would allow vehicles good access to the interior of the Unit increasing the probability of cross country travel (Area B, Map 1). The nature of Area B is such that erection of barriers would not be effective as vehicles could easily drive around them. Additionally, if minerals were developed in the southwestern portion of the WSA (Area B, Map 1), management to retain the existing wilderness values would be extremely difficult in the face of open pit mining, haul roads and processing facilities. Maintenance of the pre-FLPMA 2,500 acre sagebrush eradication area for livestock forage at the north end of Area B would reduce naturalness of the treatment area.

#### **Energy and Mineral Resource Values**

The geology of the Little High Rock Canyon area indicates a low to moderate potential for the occurrence of mineral resources. Approximately 130 claims by two companies are in the WSA near the southern boundary and are part of a much larger block of at least 780 claims located mostly outside the WSA. Exploration drilling has been conducted within the WSA, with 34 holes drilled to date. These were done by a small exploration drill and the area has reverted to a natural appearance.

The GEM Report (1982) indicates a low favorability for accumulation of locatable mineral resources. The Report indicates tungsten, zinc, molybdenum, mercury and barium values significantly above average in stream sediment samples. A portion of the western edge of the WSA is considered favorable for uranium deposits in volcanic sediments. There are no sand and gravel use sites within the WSA. There are no known geologic structures for competitive leasing of oil and gas in this WSA. A recent USGS report concluded that this WSA is considered to have almost no petroleum potential because it contains no surviving hydrocarbons in petroleum or reservoir rocks due to the high geothermal temperatures to which they were subjected. There has been no exploratory drilling for any leasable minerals in this WSA.

The joint U.S. Bureau of Mines/U.S. Geological Survey report for the portion of the WSA recommended for designation as wilderness indicates three areas of moderate potential for gold and silver. The level of certainty assigned for these areas is one that indicates that additional information is needed before any predictive resource assessment can be made.

#### **Impacts on Resources**

The following comparative impact table summarizes the effects on pertinent resources for all the alternatives considered including designation or nondesignation of the entire area as wilderness.



**Table 4**  
**Comparative Summary of the Impacts by Alternative**

| <u>Issue Topics</u>                    | <u>Proposed Action (Partial Wilderness)</u>  | <u>All Wilderness Alternative</u>  | <u>Partial Wilderness Alternative</u>  | <u>No Wilderness/No Action Alternative</u>   |
|--|--|--|--|--|
| Wilderness Values                      | On the 17,183 acres designated, naturalness and opportunities for solitude would be enhanced. On the nonwilderness portion, naturalness would be lost on about 5,300 acres. Opportunities for solitude and primitive and unconfined recreation would be slightly reduced with no impact to special features. | Wilderness values would be protected. Wilderness values of naturalness and opportunities for solitude and primitive and unconfined recreation would be slightly enhanced. Special features would not significantly change. | Wilderness values of naturalness, opportunities for solitude and primitive and unconfined recreation would be slightly improved in the designated portion. On the remainder of the WSA naturalness would be lost on approximately 5,300 acres. Opportunities for solitude and primitive and unconfined recreation would not be impacted. | Naturalness would be lost on 5,300 acres. On the remainder of the WSA, naturalness and opportunities for solitude and primitive and unconfined recreation would be slightly reduced. Special features would not be impacted. |
| Livestock Grazing and Range Management | All actions proposed would occur. There would be no impacts on livestock grazing and range management activities.  | There would be no impacts on two allotments. On the other two allotments available forage would be reduced due to restrictions on vegetative treatment areas with a moderate impact.                                       | All actions proposed would occur. There would be no impacts on livestock grazing and range management activities.  | All actions proposed would occur. There would be no impacts on livestock grazing and range management activities.  |
| Mineral Resource Development           | The 17,183 acres designated as wilderness has no known potential. The 33,768 acre non-wilderness portion would be available for exploration and development. Development of a 300 acre precious metals mine would occur. There would be no significant impact.   | Mineral resource exploration and development would be foregone on the entire WSA. This would be a significant impact, since development of a 500 acre precious mine would be precluded.                                    | Exploration and development would be foregone on 45,643 acres of the WSA. This would be a significant impact since a development of a metals mine would be precluded.  | Exploration and development could occur on the entire WSA. There would be no impacts on mineral resources.   |
| Recreational ORV Use                   | The 200 visitor days of use impacted would be absorbed on other public lands. There would be no significant impacts.   | Approximately 900 ORV use days would be displaced or foregone annually.  | Approximately 850 ORV use days would be displaced or foregone annually.  | Recreational ORV use would increase by 100 visitor days to 1,000 visitor days over the long term. There would be no impacts on recreational ORV use.   |

**Local Social and Economic Considerations**

Social and economic factors were not an issue for the Little High Rock Canyon WSA.

## **Summary of WSA-Specific Public Comments/Involvement**

During the inventory phase, BLM received 60 comments regarding the Little High Rock Canyon WSA. Forty-two of the comments either supported wilderness designation or study for wilderness designation. Fifteen of the comments opposed wilderness designation because of existing and future uses for minerals and livestock. Three comments supported partial wilderness designation.

Special values that enhance wilderness and are specific to this WSA were also mentioned during the inventory phase. They include the outstanding scenic quality of Little High Rock and McConnell Canyons, the high wildlife values of the unit including raptor nesting habitat and potential for reintroduction of bighorn and the high value for archaeological resources. We had numerous comments that the Little High Rock Canyon, Yellow Rock Canyon and East Fork High Rock Canyon WSA's are only separated by dirt roads and should be combined into a wilderness complex.

The Susanville District Advisory Council (DAC) after reviewing the BLM Wilderness Study/EIS Process, recommended to the District Manager and California State Director that the Technical Review Team process be used to assist the BLM in preparing the Draft Wilderness EIS. The Technical Review Team (TRT) process was developed by the Modoc/Washoe Experimental Stewardship Committee. It was used as a tool to lessen the chances of polarization of interest groups and provide the Bureau with better quality input for decision making purposes through a consensus recommendation process. The Council selected eight member team, representing the following resources and interests:

- Livestock-Adjacent Landowners
- Wildlife-Agencies-Sportsmen
- Wilderness-Environmental-Dispersed Recreation
- Minerals-Energy-Utilities
- Wild Horses
- Motorized Recreation
- Cultural-Historical-Archaeological
- Bureau of Land Management

This group reviewed the WSA in the field and solicited public input before meeting to work out a recommendation on the WSA. Consensus was required before a recommendation was forwarded to the District Advisory Council (DAC). The DAC then accepted the recommendation and forwarded it to the District Manager. The District Manager reviewed the TRT's recommendation and it became the BLM's preferred recommendation for this wilderness study report.

During the formal public review of the draft EIS, a total of 348 comments specifically addressing the WSA were received. Written comments consisted of 335 letters while 13 oral comments were received at three public hearings. Seventy-one comments supported the Bureau's recommendation, 267 comments supported more wilderness than the Bureau's recommendation and seven comments supported non-wilderness. Those favoring the Bureau's recommendation mentioned the consensus reached by the TRT group and reiterated the wilderness values of the WSA. Both those who commented in favor of no wilderness and more wilderness than the Bureau's recommendation, mentioned non-specific concerns about wilderness values or potential resource conflicts.

The State of Nevada, through its' Governor's Consistency Review and the Office of Community Services, supported the Bureau's recommendation in the DEIS. The Nevada Division of State Parks wanted more area than in the DEIS preferred alternative preserved as wilderness. The Nevada Department of Minerals supported No Wilderness Alternative for this WSA. The Nevada Department of Conservation and Natural Resources, the Bureau of Reclamation and the Environmental Protection Agency all commented on aspects of the EIS but did not take a position on wilderness designation.