

EAST FORK HIGH ROCK CANYON WILDERNESS STUDY AREA

1. THE STUDY AREA - 52,639 acres

The East Fork High Rock Canyon WSA (CA-020-914/NV-020-006A) is located in Washoe and Humboldt Counties, Nevada in the northwestern corner of the State. The WSA includes 49,239 acres of BLM and 3,400 acres of split estate lands (BLM surface and private subsurface) while surrounding 532 acres of private inholdings (Table 1). The nearest towns and cities are Cedarville, California (45 miles northwest), Susanville, California (95 miles southwest) and Reno, Nevada (130 miles south). The WSA is bounded by the High Rock Canyon Road on the west, the Hanging Rock-Shoestring Valley Road on the north and private land and the Shoestring Valley-High Rock Lake Road on the east. All of the boundary roads are infrequently maintained dirt roads often requiring 4-wheel drive vehicles.

The WSA lies on a broad, volcanic upland in the northern Calico Mountains. The topography is dominated by High Rock Canyon and the East Fork of High Rock Canyon in the western portion of the WSA. These canyons are deeply cut drainages surrounded by upland sagebrush covered benches. The remainder of the WSA is rolling, sparsely vegetated slopes and terraces. Elevations range from 4,900 to 6,600 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 October, 1987. The study amended the Cowhead/Massacre and Sonoma/Gerlach Management Framework Plans. There were four alternatives considered in the EIS; all wilderness, no wilderness and two partial wilderness alternatives. One partial wilderness alternative had 29,102 acres recommended for wilderness and 23,537 acres released for uses other than wilderness, which is the recommendation of this report. A second partial wilderness alternative had 40,132 acres considered as wilderness and 12,507 acres released for uses other than wilderness.

2. RECOMMENDATION AND RATIONALE - 29,102 acres recommended for wilderness 23,537 acres recommended for non-wilderness

The recommendation for this WSA is to designate 29,102 acres as wilderness and release 23,537 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 29,102 acres recommended for wilderness designation contain a wide range of values and a lack of significant resource conflicts which make them well suited for 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 the east wall of High Rock Canyon, East Fork High Rock Canyon, the hogback between the two canyons, and the uplands to the east of the canyons. The visual and topographic contrast between the open expansive uplands and the deeply incised canyons have led to the formation of an exceptional diversity of scenic quality, cultural resources, recreational opportunities and wildlife values equaled on a regional basis only in nearby WSA's.

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 bright green of the canyon floors and pockets on the wall 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 recommended wilderness remains almost unaltered from the days when John C. Fremont first mapped the canyons and the subsequent gold rush wagon train emigration through High Rock Canyon or the Lassen-Applegate Trail. During the peak year of 1849, more than 10,000 wagons passed through the Canyon. In lower High Rock Canyon, there are several axle grease "graffiti" left there by the pioneers of more than 135 years ago. Before the influx of travelers 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 canyons 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 unique 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 high diversity 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 cool canyons support a small year long mule deer population which swells with winter migrants. The uplands east of the canyons serve as year long home to a sizeable population of pronghorn antelope. Additionally, the canyons have the potential to support a viable population of more than 150 California bighorn sheep, animals eliminated from the area 50 years ago and now proposed for reintroduction. Wilderness designation would provide some benefits for this wilderness dependant species.

The recommended wilderness is manageable as wilderness because of the rugged topography in the area and lack of access to and in the East Fork of High Rock Canyon. Any activity near the periphery of the Area would not necessarily degrade the suitability of the area for wilderness because of the high degree of topographic screening.

The conflicts with other resource uses in the designated wilderness are very limited. Grazing use on the southeastern portion of the area will continue. The area has no known energy resources and no mining claims or mineral exploration activities.

The recommended wilderness in East Fork 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 23,537 acres 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 proposed 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 lands to be released for uses other than wilderness (Areas A & B) consist of the sparsely vegetated, open terrain of the Yellow Hills, Shoestring Valley and the Black Buttes area. The topography and vegetation of these areas is such that reasonable vehicle control points could not be developed. Vehicles can travel cross country in these areas. The area is also accessible to ATV users in the winter months. Wilderness character would be difficult to preserve in these portions of the WSA. In addition, the northwest area (Area A) is used as a key wild horse trap site with requirements for road maintenance for access to the trap site. Use of the site requires that the road to the site be graded to allow passage of tractor-trailer units. This periodic road maintenance was missed during the inventory of the WSA.

The northern portion of Area A has two areas identified for possible development as livestock seedings. This would require sagebrush removal, protective fencing and seeding of productive forage species. Total acreage of the two project areas is 3,300 acres.

The wilderness values of naturalness, solitude and primitive recreation will be retained over most of the area recommended 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. Two small areas totally 3,300 acres at the north end of the WSA would have naturalness reduced through the implementation of the livestock seeding projects discussed above.

Table 1
Land Status and Acreage Summary of the Study Area

<u>Within Wilderness Study Area</u>	
BLM (Surface and Subsurface)	49,239
Split Estate (BLM surface only)	3,400
Inholdings (state, private)	<u>532</u>
Total	53,171
 <u>Within the Recommended Wilderness Boundary</u>	
BLM (within WSA)	27,096
BLM (outside WSA)	0
Split Estate (within WSA) ⁶	2,006
Split Estate (outside WSA)	<u>0</u>
Total BLM Land Recommended for Wilderness	29,102
 Inholdings (State, private)	 160
 <u>Within the Area Not Recommended for Wilderness</u>	
BLM	22,143
Split Estate	<u>1,394</u>
Total BLM Land Not Recommended for Wilderness	23,537
 Inholdings (State, private)	 372

⁶Appendix 1 provides detailed information on the split estate and inholdings included within the Study.

3. CRITERIA CONSIDERED IN DEVELOPING THE WILDERNESS RECOMMENDATIONS

Wilderness Characteristics

3. Naturalness: The East Fork of High Rock Canyon WSA is predominantly natural with negligible human imprints. The WSA contains two distinctive topographic, vegetational and visual types. The canyons along the western portion of the WSA and the upland benches to the east. The canyons are 200-500 foot deep erosional scars cutting through multicolored layers of volcanic rock. The resistance of the rock to erosion result in a varied terrain of big cliffs, steep talus slopes and short rimrocks. The canyon floors are dominated by a variety of meadow and willow communities. This results in a contrast between the bright green canyon floors and the yellows, red, browns, grays and oranges of the canyon walls. The uplands to the east are sloping benches cut by a series of long, narrow ravines bounded by low rimrocks. The vegetation is dominated by low growing forms of grey-green sagebrush.

In this WSA the imprint of man's work is related to facilities to support livestock grazing and ways used by hunters, livestock permittees and sightseers.

The existing facilities are limited to 13 small reservoirs, two windmills and 22 miles of fence. The water projects are very low profile, mostly revegetated with little impact to naturalness. The fences are visible for miles due to open terrain and hence have a much greater impact to naturalness.

The ways total 31 miles in length. The ways are used primarily by hunters, trappers and livestock permittees. The ways receive light use by light trucks and are thus low impact to naturalness. One exception to this general rule does occur in the northeastern corner of the WSA where large tractor-trailer rigs are used to support horse management operations. These ways show sign of heavy use.

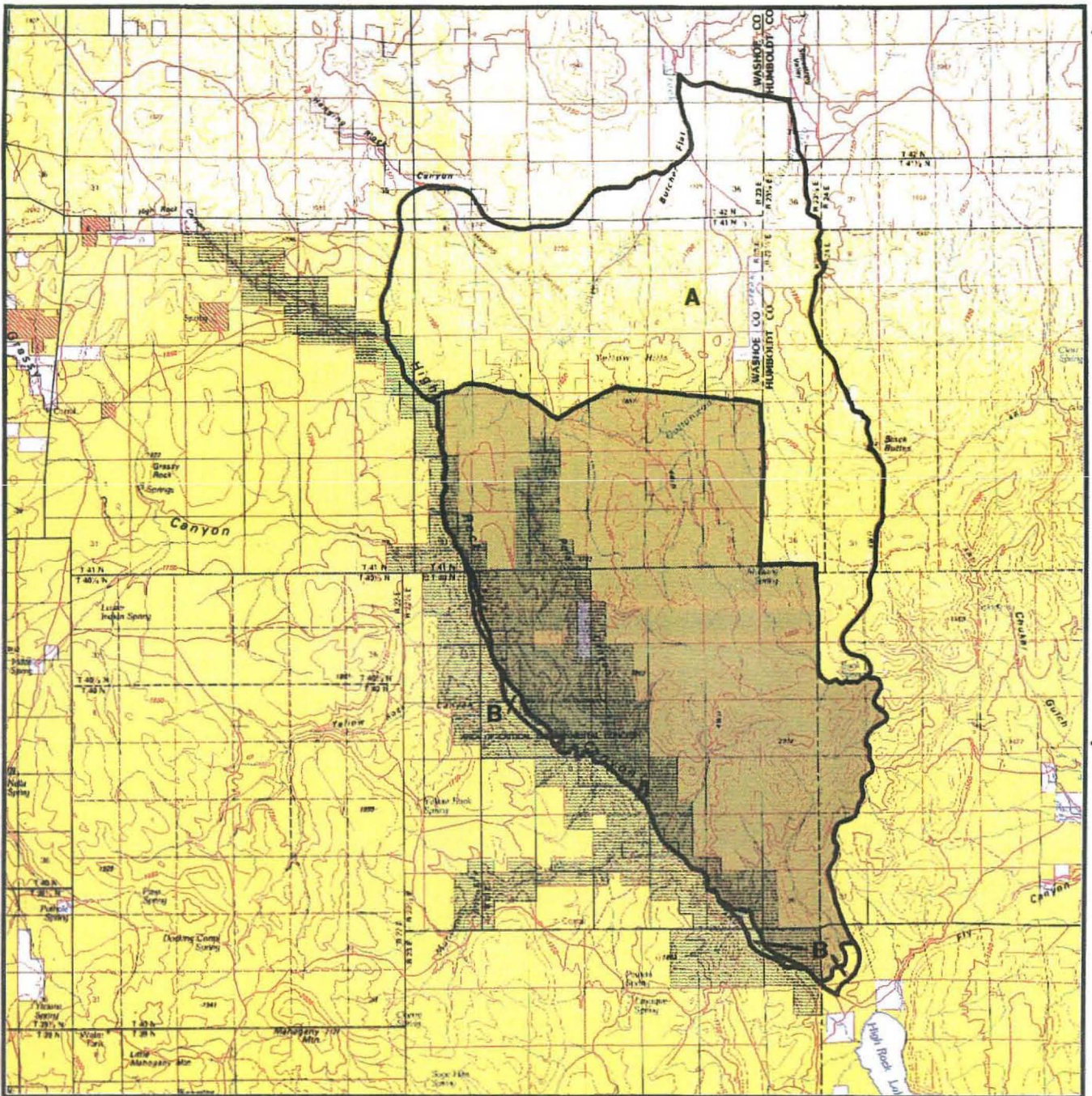
The impacts to naturalness are not evenly distributed within the WSA. The northern third has almost all of the ways, both windmills and over half of the fencing. These are all in the non-wilderness portion of the WSA. The southern two-thirds has most of the reservoirs and the remainder of the fencing. The reservoirs are very small, often difficult to recognize as a human imprint. The fence is near the eastern boundary of the WSA.

B. Solitude: The East Fork High Rock Canyon WSA has outstanding opportunities for solitude. The numerous intermittent and irregular drainages, combined with the undulating ridges provide outstanding occasions for isolation in the southern portion of the Unit. The High Rock drainages also provide excellent opportunities for remoteness..

The western boundary road in High Rock Canyon receives high levels of vehicle use (in excess of 1,000 vehicles per year). Thus, solitude is reduced in a narrow band adjacent to the road. The other boundary roads receive such irregular levels of use that solitude is not affected.

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, and rockhounding. Additionally, the scenic qualities within the WSA and surrounding lands enhances the recreational values. The best opportunities for primitive and unconfined recreation occur on the recommended wilderness portion of the WSA.

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



T42N
T41N
T40N

R22E

R23E



RECOMMENDED FOR WILDERNESS -



RECOMMENDED FOR NONWILDERNESS



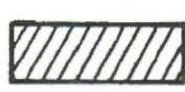
LAND OUTSIDE WSA RECOMMENDED FOR WILDERNESS - NONE



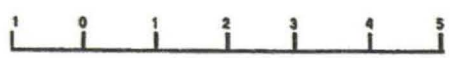
SPLIT ESTATE - NONE



STATE - NONE



PRIVATE - NONE



MILES

East Fork High Rock Canyon Proposal

CA-020-914
February 1990

California bighorn sheep were once common in the WSA. A plan proposes reintroduction of bighorn sheep into the East Fork High area in the near future. It is expected that bighorn would live yearlong in the canyons. This reintroduction would increase the wilderness values of the area by the presence of a wilderness dependant species.

Exceptional prehistoric and historic values are found in the WSA. Numerous prehistoric sites have been documented in canyons, including caves and rockshelters with ancient deposits, open occupation sites, temporary camps and rim-edge hunting stations. The historic Lassen-Applegate Trail, currently listed on the National Register of Historic Places, passes up High Rock Canyon. Documented trail remains include wagon wheel ruts and historic "graffiti". Historic structures have been documented in the canyons and additional historic resources are expected. The remainder of the WSA has had little survey work, but major prehistoric occupation sites are predicted for lower Wall Canyon, Hanging Rock Canyon and Cottonwood Creek. Occupation of several large caves has been documented. Small to moderate lithic scatters can be expected in drainages, at springs, and along benches and rim-edges related to prehistoric hunting activity.

Diversity in the National Wilderness Preservation System

A. Assessing the diversity of natural systems and features as represented by ecosystems: Wilderness designation of the East Fork 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 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 be managed as wilderness preserving the values now present in the area.

The portion of the WSA recommended as wilderness is manageable as wilderness. No valid existing rights are known to exist which would significantly impair wilderness values over the short or long term. Although 3,320 acres of split estate lands are present, it is assumed that the land use decision to acquire the mineral rights through exchange can be carried out and, the minerals will revert to the BLM. Therefore, there would be no impact to wilderness.

The portion of the WSA 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, 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. The nature of the non-wilderness portion is such that erection of barriers would not be effective as vehicles could easily drive around the barriers. Additionally, if minerals were developed in the eastern portion of the WSA, management to retain the existing wilderness values would be extremely difficult in the face of open pit mining, haul roads and processing facilities.

Energy and Mineral Resource Values

The geology of the East Fork High Rock Canyon area indicates a low to moderate potential for the accumulation of mineral resources. This is based primarily on stream sediment analysis associated with the GEM Study. There are 4 mining claims at the southern tip of the WSA with no exploratory activities conducted as of 1989. There are no sand and gravel use sites within the WSA. None of the WSA is prospectively valuable for geothermal. 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 temperatures to which they were subjected. There are no leases for oil and gas. No exploratory drilling has been conducted for any leasable minerals in this WSA. The Cowhead/Massacre Land Use Plan recommends that 7,000 acres of the WSA be withdrawn from mineral entry. This withdrawal was directed due to the high cultural, wildlife, scenic and recreational values in the High Rock ACEC area.

The joint U.S. Bureau of Mines/U.S. Geological Survey report for the portion of the WSA recommended for wilderness designation indicates two areas of approximately 200 acres with moderate potential for gold, silver and mercury, one area with moderate potential for zeolites (800 acres) and the entire area with low potential for geothermal.

Impacts on Resources

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

Table 4
Comparative Summary of the Impacts by Alternative

Issue Topics	Proposed Action (Partial Wilderness)	All Wilderness Alternative	Partial Wilderness Alternative	No-Wilderness/No Action Alternative
Wilderness Values	On the 29,102 acres designated as wilderness, naturalness, opportunities for solitude and primitive and unconfined recreation and the identified special features would be slightly enhanced. On the remainder of the WSA, naturalness would be lost on 3,650 acres due to mining and livestock improvements. Naturalness and opportunities for solitude and primitive and unconfined recreation would be slightly reduced on the remainder of the non-wilderness portion. Special features would not be impacted.	All wilderness values would be protected and slightly enhanced over existing levels. Illegal ORV use on the northern end would slightly degrade solitude.	On the 40,132 acres designated as wilderness, naturalness, opportunities for solitude and primitive and unconfined recreation and the identified special features would be slightly enhanced. On the 12,507 acres of non-wilderness, naturalness would be lost on 3,620 acres. Naturalness and opportunities for solitude and primitive and unconfined recreation would be slightly reduced on the remainder of the non-wilderness portion. Special features would not be impacted.	Naturalness would be lost on 3,700 acres due to mining and livestock improvements. On the remainder of the WSA naturalness and opportunities for solitude and primitive and unconfined recreation would be slightly reduced. Special features would not significantly change.
Livestock Grazing and Range Management	All actions proposed would occur. There would be no impacts on livestock grazing and range management activities.	Approximately 200 AUMs of forage would be foregone. This would lead to moderately slower rate of range improvements on two allotments.	All actions proposed would occur. There would be no impacts.	All actions proposed would occur. There would be no impacts.
Mineral Resource Development	The recommended wilderness area has a low to moderate potential. The non-wilderness portion has a low potential for a mine. There would be no significant impact on mineral resource development.	Exploration and development would be foregone on the entire 52,639 acre WSA. This could be a low to moderate impact since development of a mine would be precluded.	Mineral resources development would be foregone on 52,639 acres designated as wilderness. This portion has no known economic potential. The 12,507 acre non-wilderness portion has low potential for a mine. There would be no significant impacts on mineral resource development.	Exploration and development could occur within the entire WSA. There would be no impacts on mineral resource development.

**Table 4 Continued
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>
Recreational ORV Use	Elimination of 300 visitor days and closure of 15 miles of ways in the 39,102 acres designated as wilderness would have only a negligible impact on recreational ORV use. This portion of the WSA receives little use. On the remaining 23,537 acres not designated recreational ORV use would increase by 400 visitor days per year to a total of 1,400 visitor days.	Approximately 1,300 visitor use days or ORV use would be displaced annually. This would be a marginal impact since the use could be absorbed on other lands.	Elimination of 300 visitor days and closure of 23 miles of ways in the 40,132 acres designated as wilderness would have a negligible impact on recreational ORV use. This portion of the WSA receives little use. On the remaining 12,507 acres not designated recreational ORV use would increase by 400 visitor days per year to a total of 1,400 visitor days.	The High Rock ACEC Management Plan would close 15 miles of ways within the 7,000 acre ACEC displacing 300 visitor days of recreational ORV use. An increase of 300 visitor days would occur in the remainder of the WSA. Impacts would be negligible on recreational ORV use.
Wildlife Management Facilities	Two reservoirs would not be constructed. Antelope populations would not increase.	Two reservoirs would not be constructed. Antelope populations would not increase.	Two reservoirs would not be constructed. Antelope populations would not increase.	Two reservoirs would be constructed. Ante-lope populations would slightly increase. Wild
Horse & Burro Herd Management	Gathering actions would continue as currently practiced. There would be no impacts on herd management.	Gathering actions would continue as currently practiced. There would be no impacts on herd management.	Gathering actions would continue as currently practiced. There would be no impacts on herd management.	Gathering actions would continue as currently practiced. There would be no impacts on herd management.
Watershed Management	Two control structures would be constructed. Riparian habitat would be improved in the High Rock and East Fork drainages.	One control structure would be constructed. Riparian improvement rates in the High Rock and East Fork drainages would be slightly reduced.	One control structure would be constructed. Riparian improvement rates in the High Rock and East Fork drainages would be slightly reduced.	Two control structures would be constructed. Riparian habitat would be improved in the High Rock and East Fork drainages.

Local Social and Economic Considerations

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

Summary of WSA-Specific Public Comments/Involvement

During the inventory phase, BLM received approximately 50 comments regarding the East Fork High Rock Canyon WSA. Two-thirds of the comments either supported wilderness designation or study for wilderness designation. One-third of the comments opposed wilderness designation because of existing and future uses for minerals and livestock.

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 High Rock, the high wildlife values of the Unit including raptor nesting habitat and potential for reintroduction of bighorn sheep and the presence of

the Lassen-Applegate Trail. Many comments grouped the East Fork High Rock Canyon WSA with the Little High Rock Canyon, Yellow Rock Canyon and High Rock Canyon WSA's. People stated that the WSA's are closely related and are only separated by dirt roads.

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 public input for decision making purposes through a consensus recommendation process. The Council selected an 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 as shown in this 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-five comments supported the Bureau's recommendation, 265 comments supported more wilderness than the Bureau's recommendation and seven comments supported nonwilderness. 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 to protect the canyon rims from potential cross country vehicle traffic. 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.

APPENDIX 1
ESTIMATED COSTS OF ACQUISITION OF NON-FEDERAL HOLDINGS
WITHIN AREAS RECOMMENDED FOR DESIGNATION

<u>Legal Description</u>	<u>Total Acreage</u>	<u>Number of Owners</u>	<u>Type of Ownership by Estate</u>		<u>Presently Proposed for Acquisition</u>	<u>Preferred Method of Acquisition</u>	<u>Estimated Costs of Acquisition</u>	
			<u>Surface Estate</u>	<u>Sub-Surface Estate</u>			<u>Land Costs</u>	<u>Processing Costs</u>
Parcels #1-8 T40N, R23E portions of Sections 6, 7, 9, 16, 17, 18 21 & 27 T41N, R23E portions of Sections 19, 21, 24, 26, 27, 28, 30 & 31 ^a	2,006	1	Federal	Private	Yes	Exchange	N/A	\$4,300
Parcel #9 T40N, R23E Sec. 5 E 1/2 SE 1/4, SE 1/4 NE 1/4; Sec. 8 NE 1/4 NE 1/4	160	1	Private	Private	Yes	Purchase	\$19,000-\$24,000	\$ 500

^aThe estimated costs listed in this Appendix in no way represent a federal appraised value of the lands, but are rough estimates based upon sales of lands with similar characteristics to those included in the WSA. The estimates are for the purpose of establishing a range of potential costs to the government of acquiring non-federal holdings and in no way represent an offer to purchase or exchange at the cost estimates.

^aThe parcels listed are part of an ongoing exchange for High Rock area private minerals of approximately 5,000 total acres.