### CHAPTER 4

### ENVIRONMENTAL CONSEQUENCES

# APPENDICITIS HILL

#### Proposed Action (No Wilderness Alternative)

Under the proposed action, the entire 21,900 acres of the Appendicitis Hill WSA would be recommended for nonwilderness uses. The primary impacts under this alternative relate to timber harvest and mountain mahogany thinning, and the resultant impacts on wilderness values.

### Impact on Wilderness Values

The entire WSA would be recommended for nonwilderness designation and none of the wilderness values on 21,900 acres would receive the special legislative protection provided by wilderness designation. There could be short-term impacts to wilderness values associated with this action if commercial timber thinning and mountain mahogany thinning occurs in the present planning horizon (15 to 20 years).

If not in the short-term, then, wilderness values would be lost in the long-term due to timber harvest in the west side of the WSA and due to mountain mahogany thinning on the southern part of the WSA.

The Big Lost MFP identified 300 acres of commercial Douglas fir in T5N, R25E, Section 33 for commercial thinning, in which 325 MBF (thousand board feet) would be cut, representing approximately 25% of the overstory. Average dbh is over 15 inches. This would require one mile of main logging road to be constructed and one mile of existing vehicle way to be substantially improved. In addition, two miles of skid road would be constructed.

This action would result in the wilderness value of naturalness being lost on 315 acres consisting of the timber sale area and new roads. Further, the perception of naturalness would be adversely impacted on an additional 500 acres surrounding the timber activity, the area in which at least some portion of the man-caused development could be seen by a casual visitor. Impacts would include noise of the logging equipment, the new road, and the equipment itself in the short-term. Long-term impacts would include the road, and the slash and stumps that are the aftermath of timber harvest. The end result is 815 acres on which the wilderness value of naturalness would be either lost or impaired.

The wilderness value of solitude would be similarly impaired, but essentially only during the period of active timber harvest. Sights and sounds of the logging operation would reduce the feeling of solitude on 815 acres while the thinning project was occurring. After the project terminated, the impact to solitude would be negligible. The Big Lost MFP also called for thinning a 500 acre stand of decadent mountain mahogany to stimulate new growth with the end result being an improvement in crucial winter forage for mule deer. Thinning would entail the use of powersaws. No new roads would be required and there would be no surface disturbance. Stumps would be visible as would the cut mahogany which would be left where it fell.

This action would result in minimal impacts to naturalness on 500 acres. The nature of the mahogany thinning is such that it would be essentially unnoticeable unless the viewer was amid the thinning area where the stumps and cuttings could be seen. Away from the thinned area, the activity would be substantially unnoticeable and the impacts to naturalness negligible.

The mountain mahogany thinning would impact the wilderness value of solitude only during the thinning operation. Sights and sounds of the thinning would adversely impact solitude on 700 acres; after the project was completed, there would be no impacts to the wilderness value of solitude.

The three gravel pits that are anticipated along the edge of the WSA would have a negligible impact to naturalness and solitude. Surface disturbance from the gravel pits would only total 15 acres (5 acres each) and they would be unnoticeable beyond the immediate area.

Sights and sounds from recreational ORV use would have an adverse impact on solitude. However, the impact would be minimal because ORV use is estimated to be only 50 visitor days annually and is expected to remain below 100 visitor days in the foreseeable future.

Other recreation uses would increase slightly but would remain below 150 visitor days annually for the foreseeable future. This increase would not significantly impact opportunities for solitude.

<u>Conclusion</u>: The wilderness values of naturalness and solitude in the Appendicitis Hill WSA would be lost or impaired on 1,515 acres for the short-term. In the long-term, the wilderness value of naturalness would be lost or impaired on 1,315 acres. Solitude would be impaired only during the actual commercial thinning or mahogany thinning.

Impacts on Recreational Off-Road Vehicle Use

The Big Lost MFP limits ORV use in the Appendicitis Hill WSA to existing roads and ways. This designation would continue once the WSA was released for nonwilderness uses. The three miles of new road associated with commercial thinning of timber southeast of Crawford Peak would only slightly increase vehicle accessibility of the WSA as a whole. Recreational ORV use is projected to remain below 100 visitor days annually for the foreseeable future. <u>Conclusion</u>: There would be only a minor increase in accessibility in the WSA and ORV use is expected to remain below 100 visitor days annually for the foreseeable future. There would be no significant impacts to recreational ORV use.

### Impacts on Development of Energy and Mineral Resources

All lands within the Appendicitis Hill WSA (21,900 acres) would remain open for mineral entry and leasing. All potential energy and mineral resources would be available for development. This includes a moderate favorability for discovery of oil and gas, and moderate favorability for saleable materials (sand and gravel). Development of oil and gas resources is unlikely because there is limited direct evidence that such resources do indeed exist in the WSA.

<u>Conclusion</u>: Potential mineral resources would be available for development. This would be a beneficial impact to the development of mineral resources in the Appendicitis Hill WSA.

## Impacts on Forest Management Actions

The Big Lost MFP identified 300 acres of Douglas fir for commercial thinning and this could occur under the proposed action. Approximately 325 MBF would be cut (about 25% of the total overstory in the stand). Other stands could be logged under the proposed action although it is unlikely to happen for at least the next twenty years if the current balance between supply, demand, and cost structure remains consistent. Other timber management practices such as tree planting could occur.

<u>Conclusion</u>: Commercial thinning on 300 acres could occur as anticipated, resulting in 325 MBF of timber cut. Other intensive forest management practices could occur although harvests on other stands is unlikely. This would be a beneficial impact to forest resources in the Appendicitis Hill WSA.

### Impacts on Mule Deer Winter Range

The Big Lost MFP calls for improving mule deer crucial winter range by thinning 500 acres of decadent mountain mahogany. This could occur under the Proposed Action. Thinning would be done using chainsaws and cuttings would be left where they fell; from 1/3 to 1/2 of the mature shrubs would be removed.

Thinning mahogany would encourage new sprouting from the stumps and limb ends of the shrubs. By providing new growth, the quality and quantity of crucial winter forage for mule deer on this 500 acre stand would be improved. Because cuttings would be left where they fell, these would protect new seedlings from deer browsing until the seedlings were well established and large enough to recuperate from browsing. Cuttings would also provide immediate (first year) forage. The end result would be an overall improvement in the quality of 500 acres of crucial winter range for mule deer in the WSA, and an increase of 30 percent in the mule deer population. <u>Conclusion</u>: Thinning of decadent mountain mahogany could occur, resulting in the improvement in the quality of 500 acres of crucial winter range for mule deer and a 30 percent increase in population in the Appendicitis Hill WSA. Deer utilizing this range would have a better chance of surviving a harsh winter. This would be a beneficial impact to the wintering mule deer population in the WSA.

# Partial Wilderness Alternative

Under the Partial Wilderness Alternative, 13,670 acres would be recommended for wilderness and 8,230 acres would be recommended for nonwilderness uses (Map 4). The primary impacts of this action relate to wilderness designation, foregone timber harvest opportunities, and foregone opportunities to improve mule deer winter range.

## Impacts on Wilderness Values

Wilderness values on 13,670 acres of the WSA would be protected by legislative mandate, while 8,230 acres would not receive the special legislative protection provided by wilderness designation. No timber harvest would be allowed in the designated wilderness portion of the WSA. Because all of the commercial timber lies within the area recommended for wilderness under this alternative, the wilderness values of naturalness and solitude would benefit.

An estimated 15 visitor days annually of recreational ORV use would be eliminated from the wilderness portion of the WSA. Although encounters between ORV users and other recreationists are infrequent at current levels of use, the elimination of ORV use would benefit the wilderness value of solitude because visitors would not encounter or hear ORV users in the area. Beneficial impacts to naturalness due to elimination of ORV use would be negligible because current use levels are quite low.

All 500 acres of mountain mahogany identified for thinning lies within the designated wilderness portion of the WSA under this alternative. Because of this, no improvement of crucial winter range for mule deer would be done. This would benefit the wilderness values of naturalness and solitude because of the elimination of the activity of thinning and because the stand would be left in its natural state.

Wilderness designation would result in the withdrawal of 13,670 acres from all forms of mineral entry and leasing. While mineral development in this WSA is unlikely, this action would forego any future mineral resource development. The wilderness values of naturalness and solitude would thus benefit over the long term.

Under this alternative, the 8,230 acres of the WSA recommended for nonwilderness uses would remain open for mineral entry and leasing. No development is anticipated, however, so wilderness values would not be impacted in the short-term. Three gravel pits along the eastern edge of the WSA would impair naturalness and solitude only negligibly because surface disturbance would be minimal (total of 15 acres) and they would be unnoticeable beyond the immediate area. Sights and sounds from recreational ORV use in the nondesignated portion of the WSA would have an adverse impact on solitude. The impact would be minimal because ORV use is estimated to be less than 35 visitor days annually. Recreational ORV use is expected to remain below 100 visitor days annually for the foreseeable future so the long-term impact of ORV use on the wilderness value of solitude would be negligible.

<u>Conclusion</u>: Wilderness values of naturalness and solitude would be protected on 13,670 acres of the Appendicitis Hill WSA. Impacts to naturalness and solitude would not occur on 1,315 acres. Wilderness values on 8,230 acres of the WSA would not be protected but no development or impairing use is anticipated on this portion of the WSA. Thus, impacts to wilderness values on 8,230 acres of nonwilderness would be minimal in the short-term.

Impacts on Recreational Off-Road Vehicle Use

The Big Lost MFP limits ORV use in the Appendicitis Hill WSA to existing roads and ways. This designation would continue on 8,230 acres of land recommended for nonwilderness uses under this alternative. No new roads are anticipated. Recreational ORV use in the 8,230 acre nonwilderness portion of the WSA is projected to remain below 100 visitor days annually for the foreseeable future.

An estimated 15 visitor days annually of recreational ORV use would be eliminated from the 13,670 acres designated as wilderness under this alternative. Future opportunities would be foregone. However, there are similar or superior opportunities for ORV use on public land throughout the region. Any ORV use displaced from this portion of the WSA upon designation would be absorbed on the surrounding public land.

<u>Conclusion</u>: Recreational ORV use would continue at a level below 35 visitor days annually on 8,230 acres of land recommended for nonwilderness uses. ORV use of 15 visitor days annually would be eliminated from the 13,670 acres recommended for wilderness. The impact of this action on recreational ORV use in the Appendicitis Hill WSA would be minimal because of similar or superior opportunities for ORV use on surrounding public land.

Impacts on Development of Energy and Mineral Resources

The 8,230 acres of the WSA recommended for nonwilderness uses would remain open to mineral entry and leasing. All potential mineral resources in this portion of the WSA would be available for development. Other than the three gravel pits along the eastern edge of the WSA, no further mineral developments are planned and none are anticipated in the foreseeable future.

The remaining 13,670 acres recommended for wilderness designation would be withdrawn from all forms of mineral entry and leasing. This includes a moderate favorability for discovery of oil and gas. There are no plans to develop any mineral resource within the 13,670 acre area recommended for wilderness, nor are there any projections to do so in the foreseeable future, with or without wilderness designation.

<u>Conclusion</u>: Potential mineral resources would be available for development on 8,230 acres of the Appendicitis Hill WSA. Opportunities to develop mineral resources on 13,670 acres of the WSA would be foregone. The impact of this action on development of mineral resources would be minimal because future projections do not indicate the likelihood of mineral development in this portion of the WSA.

Impacts on Forest Management Actions

No timber harvest would be allowed in the 13,670 acres recommended for wilderness under this alternative. All of the commercial timber in the WSA lies within the portion recommended for wilderness, so forest management practices would be minimal. Commercial thinning of 300 acres, as called for in the Big Lost MFP, would not occur.

<u>Conclusion</u>: The opportunity to commercially thin 300 acres of Douglas fir would be foregone. Future timber harvest on the remaining stands of commercial timber would also be foregone but the impact would be minimal because the current balance between supply, demand, and cost structure makes it unlikely that any further timber harvest would occur in the foreseeable future.

Impacts on Mule Deer Winter Range

Under this alternative, no mountain mahogany thinning would occur because the 500 acre stand identified in the Big Lost MFP lies within the 13,670 acres recommended for wilderness. Other vegetative manipulations are either expressly not allowed in wilderness or they are not feasible. For example, prescribed fire is allowable in wilderness, but it is not a feasible treatment method for mountain mahogany. Mahogany is an extremely fire sensitive species. Due to the intensity of a mountain mahogany fire, plants are killed and seed sources destroyed. Studies in similar areas show that it may take up to 17 years for a burned stand of mahogany to begin rejuvenation. Other activities such as chaining, hand cutting, and spraying are not allowable in designated wilderness.

Without any improvement in the crucial winter range for mule deer in the WSA, deer populations would continue to utilize the existing habitat. Mountain mahogany would continue to be the preferred forage until it was depleted, then the deer would switch to sagebrush as the primary forage. Sagebrush is lower in quality than mahogany as a forage plant, and does not provide the nutrients available from mahogany. Mule deer would probably not suffer any adverse impacts in the short-term. Over the long-term, there would be loss of habitat and a downward trend in the mule deer population by as much as 30%. <u>Conclusion</u>: Crucial winter habitat for mule deer would not be improved because the 500 acre mountain mahogany thinning would not be allowed. There would be no impacts to the mule deer population in the short-term, but there would be a long-term reduction of the population by as much as 30%.

### All Wilderness Alternative

Under the All Wilderness Alternative, the entire 21,900 acre Appendicitis Hill WSA would be recommended for wilderness designation (Map 4). The primary impacts of this action relate to wilderness designation and the resultant foregone timber harvest, along with the inability to improve crucial winter range for mule deer.

### Impacts on Wilderness Values

Wilderness values on the entire 21,900 acre Appendicitis Hill would receive the special legislative protection provided by wilderness designation. No timber harvest or mountain mahogany thinning would occur, resulting in a beneficial impact to wilderness values of naturalness and solitude on 1,315 acres. The entire area would be withdrawn from all forms of mineral entry and leasing, so again, wilderness values would benefit.

An estimated 50 visitor days annually of ORV use would be eliminated by wilderness designation. Although encounters between ORV users and other recreationists are infrequent at current levels of use, the elimination of ORVs would benefit the wilderness value of solitude because visitors would not encounter or hear ORV users in the area. Beneficial impacts to naturalness would be negligible because current use levels are low.

<u>Conclusion</u>: Wilderness values of naturalness and solitude would be protected on the entire 21,900 acres of the Appendicitis Hill WSA. Adverse impacts to naturalness and solitude would not occur on 1,315 acres. This would be beneficial to wilderness values.

## Impacts on Recreational Off-Road Vehicle Use

An estimated 50 visitor days annually of ORV use would be eliminated from the entire 21,900 acres of the WSA. Future opportunities for ORV oriented recreation would be foregone. However, there are similar or superior opportunities for ORV use on public land throughout the region. Any ORV use displaced from the WSA upon wilderness designation would be absorbed with no consequence on surrounding public land.

<u>Conclusion</u>: Recreational ORV use of 50 visitor days annually would be foregone; the impacts of displacing this use to other nonwilderness public land would be negligible.

# Impacts on Development of Energy and Mineral Resources

Wilderness designation would withdraw all 21,900 acres of the Appendicitis Hill WSA from mineral entry or leasing, subject to valid existing rights at the time of designation. The opportunity to explore for and develop mineral resources, including a moderate favorability for oil and gas, would be foregone. Other than the three gravel pits anticipated along the eastern edge of the WSA, there are no plans to develop any mineral resource within the WSA, nor are there any projections to do so in the foreseeable future.

<u>Conclusion</u>: The entire 21,900 acres of the Appendicitis Hill WSA would be withdrawn from mineral entry and leasing. This would not be a significant impact because there are no plans for development, nor are there any projections for development in the future.

# Impacts on Forest Management Actions

By designating the entire WSA as wilderness, timber harvest opportunities on 870 acres of commercial timber would be foregone. Forest management practices on all forested land in the WSA (2,100 acres) would be minimal. The current balance between supply, demand, and cost structure is such that it is highly unlikely that any timber harvest would occur in the foreseeable future, except for the planned commercial thinning of 300 acres of commercial timber. Commercial thinning would result in 325 MBF of timber cut, so wilderness designation would preclude the harvest of 325 MBF of timber.

Conclusion: Wilderness designation of the entire Appendicitis Hill WSA would result in the loss of 325 MBF of timber harvested and would preclude future timber sales on 870 acres of commercial timber. This impact is minimal, however, because current market trends make it unlikely that there would be any timber harvests in the foreseeable future.

# Impacts on Mule Deer Winter Range

Wilderness designation for the entire WSA would preclude thinning mountain mahogany to improve crucial winter range for mule deer on 500 acres. As stated in the Partial Wilderness Alternative, thinning mahogany is the only feasible method to stimulate new growth and increase available forage.

Without any improvement in the crucial winter range for mule deer in the WSA, deer would continue to use existing habitat. Mountain mahogany would continue as the preferred forage until it was depleted, then the deer would switch to sagebrush. Sagebrush is lower in quality than is mahogany as a forage plant and does not provide the nutrients available from mahogany. Mule deer would probably not suffer any adverse impacts in the short-term. Over the long-term, there would be a gradual loss of habitat and a downward trend in the mule deer population by s much as 30%. <u>Conclusion</u>: Crucial winter habitat for mule deer would not be improved on 500 acres because the mountain mahogany thinning would not be allowed. There would be no impacts to the mule deer population in the short-term, but there would be a long-term reduction of the population by as much as 30%.

#### WHITE KNOB MOUNTAINS

# Proposed Action (No Wilderness Alternative)

Under the proposed action, the entire 9,950 acres of the White Knob Mountains WSA would be recommended for nonwilderness uses. The primary impacts under this alternative relate to the development of mineral resources and the resultant impacts on wilderness values in the long-term.

#### Impacts on Wilderness Values

The entire WSA would be recommended for nonwilderness uses and none of the wilderness values on the 9,950 acres of the WSA would receive the special legislative protection provided by wilderness designation. The short-term impact of this action would be negligible because little development activity is anticipated in the short-term whether or not the area is designated wilderness.

In the long-term, however, wilderness values would be lost as a result of mineral development along the WSA's eastern boundary in Waddoups Canyon, oil and gas development near the head of Schoolhouse Canyon, and gravel extraction on the WSA's southwestern boundary.

It is assumed that three existing lode claims along the WSA's eastern boundary in Waddoups Canyon would be explored. This would require construction of one mile of new road; the claims are close to an existing road so the requirements for additional road is small. Development activities on each claim would include 20 acres of surface disturbance associated with tailing piles, adits, loading areas, and buildings. The three claims, then, would have a total of 60 acres of surface disturbance and a total of one mile of new road.

One oil and gas well is anticipated to be drilled near the head of Schoolhouse Canyon. Access for this well would be from the Waddoups Canyon Road over the ridge to the west side of Schoolhouse Canyon. This would require two miles of new road to get into Schoolhouse Canyon; there would be 10 acres of surface disturbance at the well site associated with the drill pad and equipment parking areas.

The single gravel pit along the WSA's southwestern border requires no new road, but would entail five acres of surface disturbance.

While somewhat isolated from one another, the three aforementioned activities would combine to reduce the naturalness of the area. The development of the three lode claims in Waddoups Canyon would impact the perception of naturalness on approximately 240 acres immediately surrounding the claims due to the visibility of the estimated surface disturbance of the claims. The gravel pit would impact naturalness on only twenty acres because of its small size and limited activity. Conversely, the oil and gas well would negatively affect naturalness on 720 acres. During the exploratory phase, the noise of the machinery, the lights, the new road, and the machinery itself would combine to reduce naturalness in an area much larger than the actual surface disturbance. During the well's production phase, impacts to naturalness would be lessened, but it would still impact the perception of naturalness on 320 acres. This includes the impacts of the access road, the well, and the collection and storage facility.

Opportunities for solitude would also be negatively impacted by mineral development. Sights and sounds from traffic, construction, and production would reduce the quality of solitude to the same degree as naturalness. Outstanding opportunities for solitude would be lost on a total of 980 acres from all energy and mineral activities.

Sights and sounds from recreational ORV use would also have an adverse impact on solitude. However, this impact would be minimal because ORV use is estimated to be only 50 visitor days annually and is expected to remain below 100 visitor days annually for the foreseeable future.

Other recreation uses would increase slightly but would remain below 150 visitor days annually for the foreseeable future. This increase would not significantly impact opportunities for solitude.

<u>Conclusion</u>: The White Knob Mountains WSA's wilderness values of naturalness and outstanding opportunities for solitude would be lost or impaired on 980 acres, or 10% of the WSA. Naturalness and solitude on 8,970 acres would be subject to loss in the long-term, but no impairing activities are anticipated in the foreseeable future.

Impacts on Recreational Off-Road Vehicle Use

The WSA would be open to ORV use. The two miles of new road associated with oil and gas development in Schoolhouse Canyon would make the north-central portion of the WSA more accessible to ORV users. However, recreational ORV use is projected to remain below 100 visitor days annually for the foreseeable future.

<u>Conclusion</u>: While some of the WSA would be more accessible, recreational ORV use would remain below 100 visitor days annually. There would be no significant impact on recreational ORV use.

Impacts on Development of Energy and Mineral Resources

All lands within the White Knob Mountains WSA would remain open for mineral entry and leasing. All potential mineral resources would be available for development. This includes a moderate favorability for the discovery of oil and gas, low to moderate favorability for metallic minerals, and moderate favorability for saleable minerals (sand and gravel).

<u>Conclusion</u>: Potential mineral resources would be available for development. This would be a beneficial impact to the development of mineral resources in the White Knob Mountains WSA.

#### All Wilderness Alternative

Under the All Wilderness Alternative, all 9,950 acres of public land in the White Knob Mountains WSA would be recommended for wilderness. The primary impacts of this alternative relate to the mineral withdrawal and ORV closure in designated wilderness.

# Impacts on Wilderness Values

The entire WSA would be recommended for wilderness so wilderness values on the 9,950 acres of the WSA would be protected by legislative mandate. Mining claims in the WSA with valid existing rights could be fully developed if a validity examination showed that the claims held sufficient quantity and quality of material so that a prudent man could expect a reasonable return on his investment. For the existing claims in the WSA, it is assumed for purposes of analysis that the claims would not satisfy a validity examination and thus, could not be developed. Wilderness designation would also withdraw the WSA from any future mineral entry and possible development. Wilderness values of naturalness and solitude would be retained in the WSA.

An estimated 50 visitor days annually of ORV use would be foregone under the All Wilderness Alternative. This would enhance naturalness and opportunities for solitude within the WSA.

<u>Conclusion</u>: Wilderness values would be retained on all 9,950 acres of the White Knob Mountains WSA. Negative impacts on 980 acres would not occur.

Impacts on Recreational Off-Road Vehicle Use

Wilderness designation would close the entire 9,950 acre White Knob Mountains WSA to all forms of recreational ORV use. The present level of 50 visitor days annually of ORV use in the WSA would be eliminated. However, there are similar or superior opportunities for ORV use on public land throughout the region. Any ORV use displaced from the WSA upon wilderness designation would be absorbed on the surrounding public land.

<u>Conclusion</u>: Recreational ORV use of 50 visitor days annually would be foregone. The impacts of displacing this use to other nonwilderness public land would be negligible.

Impacts on Development of Energy and Mineral Resources

Wilderness designation would withdraw all 9,950 acres of public land within the WSA from all forms of mineral entry and leasing, subject to valid rights at the time of designation. There would be no oil and gas development activities.

Prior to commencing work on the existing claims in the WSA, a validity examination must show that the claims hold sufficient quantity and quality of material so that a prudent man could expect a reasonable return on his investment. For purposes of analysis, it is assumed that the existing claims within the WSA would not pass a validity examination and thus, could not be developed. Other, as yet undiscovered energy and mineral resources could not be developed.

There would also be no further sales of sand and gravel from within the WSA. This would be a negligible impact, however, because ample supplies exist outside the WSA.

<u>Conclusion</u>: Opportunities to explore for and develop potential metallic mineral deposits and sand and gravel would be foregone. There would be no oil and gas development activities.

### BURNT CREEK

# Proposed Action (No Wilderness Alternative)

Under the proposed action, the entire 24,980 acres of the Burnt Creek WSA would be recommended for nonwilderness uses. The principal impacts under this alternative relate to the development of oil and gas resources and the resultant impacts on wilderness values in the long-term.

#### Impacts on Wilderness Values

The entire WSA would be recommended for nonwilderness uses and none of the wilderness values on the 24,980 acres of the WSA would receive the special legislative protection provided by wilderness designation. The short-term impact of this action would be negligible because little development activity is anticipated in the short-term whether or not the area is designated wilderness.

In the long-term, wilderness values would be lost as a result of oil and gas development in the Short Creek drainage. It is anticipated that one well would be drilled in this drainage. Access to the well would be up the existing Short Creek Road to its end, then continue up the west side approximately one mile to the well site. There would be 10 acres of surface disturbance at the well site associated with the drill pad and equipment parking areas. Such a development would negatively affect the perception of naturalness on 975 acres, the estimated area in which at least some portion of the man-made development could be seen by the casual visitor. Impacts include the noise of the machinery, lights, new road, and the machinery itself; these would be obvious intrusions into an otherwise natural appearing landscape.

Opportunities for solitude would also be lost because of oil and gas development. Sights and sounds of traffic, construction, and production would decrease one's chances of finding solitude to the same degree as naturalness. Outstanding opportunities for solitude would thus be lost on 975 acres in the Short Creek drainage.

Sights and sounds from recreational ORV use would also have an adverse impact on solitude but the impact would be minimal because ORV use levels are low. Presently, ORV use is estimated to be 100 visitor days annually and is expected to remain below 200 visitor days annually for the foreseeable future.

Other recreation uses would increase slightly but would remain at levels below 200 visitor days annually for the foreseeable future. This increase would not significantly affect opportunities for solitude.

<u>Conclusion</u>: The Burnt Creek WSA's wilderness values of naturalness and outstanding opportunities for solitude would be lost on 975 acres. Naturalness and solitude on 24,005 acres would be subject to loss in the long-term but no adverse activities are presently anticipated. Impacts on Recreational Off-Road Vehicle Use

The Ellis-Pahsimeroi MFP limits ORV use in the Burnt Creek WSA to existing roads and ways. This designation would continue to be in affect once the WSA was released for nonwilderness uses. The mile of new road associated with the Short Creek oil and gas well would add little to the vehicle accessibility of the WSA as a whole. Recreational ORV use is projected to remain below 200 visitor days annually for the foreseeable future.

<u>Conclusion</u>: There would be only a minor increase in accessibility in the WSA and ORV use is expected to remain below 200 visitor days annually for the foreseeable future. There would be no significant impact to recreational ORV use.

Impacts on Development of Energy and Mineral Resources

All lands within the Burnt Creek WSA would remain open for mineral entry and leasing. All potential mineral resources would be available for development. This includes a moderate favorability for discovery of oil and gas.

<u>Conclusion</u>: Potential mineral resources would be available for development. This would be a beneficial impact to the development of mineral resources in the Burnt Creek WSA.

## Partial Wilderness Alternative

Under the Partial Wilderness Alternative, 8,300 acres of the Burnt Creek WSA would be recommended for wilderness while 16,680 acres would be recommended for nonwilderness uses (See Map 6). The primary impacts under this alternative relate to the development of oil and gas resources and the resultant impacts on wilderness values in the long-term.

Impacts on Wilderness Values

None of the wilderness values on 16,680 acres would receive special legislative protection provided by wilderness designation. The short term impact of this action would be negligible because little development activity is anticipated in the next five years.

In the long-term, wilderness values on 16,680 acres are expected to suffer adverse impacts or be lost due to oil and gas exploration and development. One oil and gas well is expected to be drilled in the Short Creek drainage, outside but adjacent to the area recommended for wilderness under this alternative. The well would entail 10 acres of surface disturbance and one mile of new road. As a result, the wilderness value of naturalness would be lost on 975 acres, including 225 acres inside the area recommended for wilderness. In addition to naturalness, activities associated with oil and gas development would adversely impact the wilderness value of outstanding opportunities for solitude. Sights and sounds from traffic, construction, and production at the wellsite would lower the quality of solitude on 975 acres, again including 225 acres inside the area recommended for wilderness.

Sights and sounds from recreational ORV use in the nondesignated area would also have an adverse impact on solitude, but the impact would be minimal because ORV use is estimated to be less than 65 visitor days annually. Recreational ORV use is expected to remain below 150 visitor days annually for the foreseeable future, so the long-term impact of ORV use on the wilderness value of solitude would be negligible.

Wilderness values on 8,300 acres would be protected by legislative mandate. Wilderness designation would withdraw these lands from mineral entry and leasing and would eliminate the potential for future mineral development on 8,300 acres. Wilderness values of naturalness and solitude would benefit from this action.

An estimated 35 visitor days annually of recreational ORV use would be eliminated from the wilderness portion of the WSA. Although encounters between ORV users and other recreationists are infrequent at current levels of use, the elimination of ORV use would benefit the wilderness value of solitude because visitors would not encounter or hear ORV users in the area. Beneficial effects to naturalness due to elimination of ORV use would be negligible because current use levels are quite low.

<u>Conclusion</u>: Wilderness values of naturalness and solitude would be adversely affected on four percent (975 acres) and retained on 33% (8,300 acres) of the WSA. Wilderness values on 63% (15,705 acres) of the WSA would be subject to loss in the long-term but no adverse activities are presently anticipated.

Impacts on Recreational Off-Road Vehicle Use

The Ellis-Pahsimeroi MFP limits ORV use in the Burnt Creek WSA to existing roads and ways. This designation would continue in the 16,680 acres of nonwilderness in the WSA. The mile of new road associated with the anticipated oil and gas well in the Short Creek drainage would add little to the accessibility of the WSA. Recreational ORV use in the 16,680-acre nonwilderness portion of the WSA is projected to remain below 150 visitor days annually in the foreseeable future.

An estimated 35 visitor days annually of recreational ORV use would be eliminated from the 8,300-acre designated wilderness portion of the WSA. Future opportunities for ORV-oriented recreation in this portion of the WSA would be foregone. However, there are similar or superior opportunities for ORV use on public land throughout the region. Any ORV use displaced from this portion of the WSA upon designation would be absorbed on the surrounding public land. <u>Conclusion</u>: Recreational ORV use would continue at a level below 65 visitor days annually on 16,680 acres of nonwilderness; 35 visitor days annually of ORV use would be eliminated from the 8,300 acre wilderness portion of the WSA. Future opportunities for recreational ORV use on 8,300 acres would be foregone.

Impacts on Development of Energy and Mineral Resources

The 16,680 acres of the WSA recommended for nonwilderness uses would remain open to mineral entry and leasing. All potential mineral resources in this portion of the WSA would be available for development. It is anticipated that one oil and gas well would be drilled in the Short Creek drainage.

The 8,300 acres of the WSA recommended for wilderness would be withdrawn from all forms of mineral entry and leasing. However, there are no plans to develop any mineral resource within the 8,300-acre area recommended for wilderness, nor are there any projections favorable for such developments.

<u>Conclusion</u>: Potential mineral resources would be available for development on 16,680 acres of the Burnt Creek WSA. Opportunities to develop mineral resources on 8,300 acres would be foregone. This impact would be minimal because future projections do not indicate the likelihood of mineral development in this portion of the WSA.

### All Wilderness Alternative

Under the All Wilderness Alternative, the entire 24,980 acres of the Burnt Creek WSA would be recommended for wilderness. The primary impacts of this alternative relate to the mineral withdrawal and ORV closure in designated wilderness.

## Impacts on Wilderness Values

Wilderness values on the entire WSA (24,980 acres) would receive the special legislative protection provided by wilderness designation. Wilderness values of naturalness and solitude would benefit from this action because 975 acres of the WSA would not be impacted by oil and gas development activities.

An estimated 100 visitor days annually of recreational ORV use would be eliminated from the WSA by wilderness designation. Although encounters between ORV users are infrequent with current levels of use, the elimination of ORV use would benefit the wilderness value of solitude because visitors would not encounter or hear ORV users in the area. Beneficial effects to naturalness due to elimination of ORV use would be negligible because the present level of use is low.

<u>Conclusion</u>: Wilderness values would be maintained on all 24,980 acres of the WSA. Because development of potential oil and gas resources would be foregone, adverse impacts to naturalness and solitude would not occur on 975 acres that would otherwise be disturbed. Impacts on Development of Energy and Mineral Resources

Wilderness designation would withdraw all 24,980 acres of the Burnt Creek WSA from mineral entry and leasing, subject to valid existing rights at the time of designation. No mining claims currently exist in the WSA. The opportunity to explore for and develop mineral resources, including oil and gas, would be foregone.

Conclusion: Opportunities to explore for and develop potential energy and mineral resources would be foregone on 24,980 acres.

Impacts on Recreational Off-Road Vehicle Use

Wilderness designation would close the entire 24,980-acre Burnt Creek WSA to all forms of recreational ORV use. An estimated 100 visitor days annually of ORV use in the WSA would be eliminated. However, there are similar or superior opportunities for ORV use on public land throughout the region. Any ORV use displaced from the WSA upon wilderness designation would be absorbed on the surrounding public land.

Conclusion: Recreational ORV use of 100 visitor days annually would be foregone; the impacts of displacing this use to other nonwilderness public land would be negligible.

# RELATIONSHIP BETWEEN SHORT-TERM USE OF THE ENVIRONMENT AND THE MAINTENANCE AND ENHANCEMENT OF LONG-TERM PRODUCTIVITY

If a WSA is not designated wilderness, all present, short-term uses would continue. Off-road vehicle use, timber harvest, mining, and mineral leasing activities could reduce the wilderness values over the long-term.

If an area is designated wilderness, it would ensure the long-term productivity of ecosystems and would maintain or enhance present wilderness values. Motorized vehicles could no longer be used except where prescribed by an area's wilderness management plan. Mineral resources would not be available for location and development after December 31, 1983.

# IRREVERSIBLE AND IRRETRIEVABLE COMMITMENT OF RESOURCES

Activities such as mining, mineral leasing, and material sales, could create an irreversible commitment of the wilderness resource in part or all of a WSA, if not designated as wilderness. Wilderness designation would not create an irretrievable or irreversible commitment of resources within a WSA. Designation would restrict or stop development activities and maintain an area's natural condition. If, in the future, Congress decides it would be in the national interest to develop certain resources within a wilderness, they can modify the law to allow it.