4.10 RECREATION

4.10.1 Impacts Common to All Alternatives

Impacts to recreation resources that are common to all alternatives would come from new management direction as described in each alternative and include cultural resource protection, fire management, construction and/or designation of roads and trails, mineral resources development, protection of paleontological resources, changes in recreational opportunities, and designation of ACECs.

Under all of the alternatives, the current federal laws and agency guidelines in place to protect cultural resources would have long-term beneficial and adverse effects on the recreational resources in the VPA. Long-term beneficial effects would be produced through the preservation of cultural resources. In addition to preserving sites of historic importance, the identification, stabilization and protection of cultural resources would expand recreational and educational opportunities (e.g. sightseeing and interpretive study) within the VPA by preserving cultural sites of recreational interest to visitors. Limiting recreational opportunities in order to minimize cultural resource disturbances would potentially have long-term adverse effects on other recreational opportunities, such as OHV use. Also, specific plans developed for the protection of cultural resources, such as site monitoring, identification, stabilization, and/or restoration plans, would restrict recreational activities in specific areas, in the short-term.

Fire management has the potential to have short-term adverse impacts and long-term beneficial impacts on recreation resources and opportunities within the VPA. Direct short-term, adverse impacts from wildland fire management would cause the closing of developed recreation areas and remote, undeveloped recreation areas in the short-term, producing short-term losses of recreational opportunities in the affected areas. Visual quality, often a component of recreational activities, would be degraded in the short-term as well. In the long-term, by reducing fuel loads, moving the present fire regime toward historic, ecologically sustainable fire conditions, reducing the potential for wildland fire, and creating a visual mosaic of vegetation, wildlife habitat, visual quality would improve; subsequently, recreational opportunities for viewing wildlife and for big game hunting would improve. With these measures, as well as the implementation of emergency stabilization and rehabilitation (ESR) treatments as needed, vegetation communities would be improved, which would provide long-term beneficial impacts by enhancing recreational opportunities and improving scenic quality.

Road and trail construction and maintenance, exchanges or acquisition of lands for the purposes of easing access to public lands and resources and/or contributing to a more efficient and manageable land ownership pattern, would have beneficial impacts on some forms of recreational uses in the long term by improving access to recreation areas and expanding trail-related recreational opportunities (e.g., motorized and non-motorized vehicle use, horseback riding). Acquisition of easements proposed for high-, mid-, and low-priority recreation areas would have a long-term, beneficial effect on the availability and accessibility of recreation areas throughout the VPA. Designation of new motorized trails would serve to increase awareness of the trail system and create an increase in motorized activity in the VPA. This would threaten the integrity of cultural resource and paleontological sites in the vicinity of the trail system, and threaten the recreational and educational values of such sites. Recreational overuse of the trail system would have the potential to damage other natural resource values within areas served by

these trails including long-term, adverse impacts to soils, vegetation, riparian areas, and wildlife habitat (and the recreational values that require that these resources remain undisturbed).

Long-term, indirect effects common to all alternatives would include the potential for degradation of recreation resources by off-highway vehicle (OHV) use. This use would also have long-term, indirect adverse effects under all of the alternatives, with varying degrees of adverse resource degradation by each alternative:

- Existing trails would be degraded by OHV overuse.
- Known user conflicts between motorized users and non-motorized users would continue.
- Fewer OHV-designated routes under any alternative would create an increase in cross-country travel, thus increasing the direct, adverse effects of OHV travel.
- OHV use would degrade water resources, soils, riparian areas, and wildlife habitat and, thus, degrade the recreational experiences associated with these resources. Degradation of these resources would intensify with cross-country travel. Resource degradation would be less intense where OHV trails were designated.
- OHV use would increase the risk of wildland fire, which would reduce recreational opportunities in areas affected by fire, or cause closure of areas disturbed by wildland fire.
- Increasing the opportunity for OHV use and fulfilling demand would increase visitation to the area.
- Allowing OHV use in areas where OHV use is not currently allowed would decrease visitation for other forms of recreation, such as mountain biking, hiking, sightseeing, and hunting.

OHV trail designation, under all of the alternatives, would have long-term direct beneficial impacts on recreation by increasing the opportunities for OHV travel, limit resource degradation, and reduce resource use conflicts, and adequately respond to the recreational demand for this particular activity.

The development of mineral resources within the VPA would have direct, adverse impacts on recreational resources in the short- and long-term. Surface disturbances caused by mineral exploration and development, such as the construction of oil and natural gas wells, access roads, pipelines, cross-country seismic exploration; noise; night lighting; and locatable minerals prospects and mines, have the potential to affect vegetation, wildlife, and scenic quality within the VPA and thus, degrade some recreational opportunities within the VPA. However, minerals-related access roads would provide access to portions of the VPA that are currently inaccessible to certain types of recreation uses, such as hunting and OHV use, and this would have long-term beneficial impacts on these recreational activities.

Paleontology management actions to foster public awareness, public appreciation, recreation, and educational opportunities; to encourage recreational collection according to guidelines; and to reduce threats to paleontological resources would have long term, beneficial impacts on recreation, related to the appreciation of and education about paleontology. However, establishment of scientifically significant paleontological sites requiring protection would restrict some forms of recreational opportunities within affected areas. This would have minor adverse impacts on recreation in these restricted areas by reducing recreational opportunities.

Management actions that provide for a wide range of developed and dispersed recreational activities, while continuing to implement public education and environmental awareness programs to protect and preserve areas within the VPA, would have direct, long-term, beneficial impacts on recreational opportunities and the quality of recreational experiences. Continued management of Pelican Lake and Red Mountain-Dry Fork as SRMAs under all of the alternatives, and continued implementation of management plans to protect historic landmarks within the VPA would allow appropriate recreational use levels while protecting resources, benefiting both traditional and interpretive recreation uses. Comprehensive activity plans for Blue Mountain, Fantasy Canyon, Red Mountain-Dry Fork, and Pelican Lake, which would address appropriate recreational uses and facility development, would have long-term, beneficial impacts on recreation resources by resolving user conflicts and maintaining resource integrity. The BLM would maintain or expand the infrastructure at all recreation sites within the VPA, including (but not limited to) stabilizing and preserving Chipeta, Trujillo, Moonshine, and Rat Hole Cabins; and would ensure the safety of all sites for public use. The following recreational management guidelines, intended to help achieve and maintain healthy public lands as defined by the Standards of Rangeland Health, would have long-term, indirect beneficial impacts on recreation:

- Designating OHV use on BLM-administered lands in order to minimize the impacts on natural resources, would help to reduce conflicts among various users, and would promote public safety. Implementation of a continuous monitoring program and subsequent adaptive management strategies would also reduce indirect impacts of OHV use, such as the degradation of water quality, soil quality, and wildlife habitat.
- Establishing wildlife viewing areas along the Book Cliffs Divide Ridge Road would have a long-term, beneficial effect on recreational wildlife viewing and would potentially increase visitation in the area.
- Designating Special Recreation Management Areas (SRMAs) would protect recreational resources, but also increase awareness of these areas for recreation, and increase recreational activity in the area. However, there could be adverse impacts if increasing numbers of visitors threaten the integrity of cultural resource and paleontological sites and the recreational and educational value of such sites. Recreational overuse has the potential to adversely impact other resources within these SRMAs.
- Designating some SRMAs as No Surface Occupancy (NSO) areas for oil and gas development and as Closed to mineral leasing would have direct, long-term, beneficial impacts on recreation resources by preserving the natural, undisturbed qualities of these recreation areas. Each SRMA would have a management plan that would specify the limits of mineral resources development.
- Limiting the height of light poles, the times of operation, and the light intensity; and the use of light shields, would have a long-term, beneficial effect on nighttime visual quality by reducing light pollution, thus potentially improving the quality of recreational opportunities.

The designation and management of Areas of Critical Environmental Concern (ACECs) to protect important historic, cultural, scenic, and wildlife values would have long-term beneficial impacts on most recreational activities. Considering OHV use, this designation would limit use to designated routes in certain ACECs, with such use closed in other ACECs. Identification of segments of river corridors considered suitable for designation under the Wild and Scenic River System would beneficially impact these river segments by preserving the recreational

opportunities in these areas. All of the proposed ACECs would also remain open to oil and gas leasing, and subject to valid existing mineral leasing rights, which would have long-term adverse impacts on recreational opportunities and the quality of recreational experiences.

Under all of the alternatives, segments of the Upper Green and Lower Green River that have already been recommended to Congress as suitable for designation as part of the Wild and Scenic River System would continue to be managed under their suitability status. These areas would continue to be protected for their outstanding and remarkable values, and free-flowing nature, subject to valid existing mineral rights. This would have long-term beneficial protection-related impacts on recreation, as these river segments would continue to provide recreational opportunities.

4.10.2 Alternative Impacts

4.10.2.1 Impacts of Cultural Resource Decisions on Recreation

4.10.2.1.1 Alternative A

The development of on- and off-site interpretive facilities at appropriate archaeological and historic sites would broaden the scope of recreation opportunities available to visitors and serve as a draw for additional visitation to the VPA. Off-highway vehicle use in the Uintah Foothills would be limited to designated routes. Off-highway vehicle use in Little/Devils Hole area, Upper Willow Creek areas and Four Mile Wash would be limited to designated routes to protect areas with high densities of cultural sites. These restrictions would have long-term direct adverse impacts on OHV use, by reducing the areas of overland travel that OHV users are currently allowed under Alternative D – No Action. However, when compared to Alternative D, the activity restriction described above would have direct, long-term beneficial effects on recreation within the VPA by enhancing the opportunities for educational and other recreational activities, potentially improve the recreational experience of those not participating in OHV recreation, improve visitor safety, and reduce resource use conflicts.

4.10.2.1.2 Alternative B

The impacts of Alternative B on recreation resources would be similar to Alternative A, and the impacts compared to Alternative D – No Action for the Uintah Foothills, Little/Devils Hole area, and Upper Willow Creek would be similar to those described under Alternative A. Interpretive facilities would only be developed as mitigation for permitted activities, therefore this alternative would have fewer long-term beneficial impacts than the other action alternatives.

4.10.2.1.3 Alternative C

Under this alternative, the development of interpretive facilities for all appropriate archeological, historical, and cultural resources would have the same effect as described under Alternative A. Closing the Uintah Foothills, Little/Devils Hole area, Four Mile Wash, and Upper Willow Creek area to OHV use would have long-term, adverse effects on OHV recreational opportunities, when compared to Alternative D – No Action. This action would potentially intensify OHV overuse because additional trail development for motorized uses is not a component of Alternative C. The restrictions on OHV use and on oil and gas leasing would have indirect, long-

term beneficial impacts to non-motorized recreation by increasing solitude and wildlife viewing opportunities in these areas, when compared to Alternative D.

4.10.2.1.4 Alternative D – No Action

This alternative would have no adverse impacts on motorized recreational activities, but a lack of resource protection could have direct, long-term, adverse impacts on these sites and on sightseeing or interpretive/educational activities of these sites. Development of interpretative facilities at Old Rock Saloon and Nine Mile Canyon archeological sites and a facility at Nine Mile Canyon to help manage use in the district would have beneficial effects on recreation by increasing the opportunities for interpretation and nature study.

4.10.2.2 Impacts of Fire Management Decisions on Recreation

4.10.2.2.1 Alternatives A, B, and C

Permitting prescribed fire on 156,425 acres per decade would limit the number of acres available for recreational activities in a prescribed burn area, during and after burning. These areas would most likely be unavailable for recreation in the short-term, during vegetation re-growth. Long-term beneficial impacts would occur in these areas because of reduced fuel loads, improved wildlife habitat, improved scenic quality, and the decreased probability of wildland fire that would cause recreation areas to be closed or destroyed by fire. The action alternatives would have a higher degree of short-term adverse impacts and more long-term beneficial impacts, when compared to Alternative D – No Action, because of the larger area designated for prescribed burning.

4.10.2.2.2 Alternative D – No Action

The beneficial and adverse impacts of fire management decisions on recreation under Alternative D – No Action would be the same as the action alternatives (A, B, and C) except that the impacts would be reduced in scope and intensity because 50,900 acres would be designated for prescribed burn treatments as compared to the 156,425 acres designated for prescribed burning under the action alternatives.

4.10.2.3 Impacts of Land and Realty Management Decisions on Recreation

4.10.2.3.1 Alternative A

Public access to the White River at the mouth of Cowboy Canyon, Bonanza Ridge and Wagon Hound Road would increase the amount of land accessible for a variety of recreational opportunities, thereby having direct long-term beneficial impacts on recreation resources. This alternative would more beneficial impacts than Alternative D – No Action, which would not specify these areas for public access. The acquisition of Indian Trust Lands in Bitter Creek and near the confluence of the South and Sweetwater Canyons would also have long-term beneficial impacts on recreation resources by increasing recreational opportunities in these areas. All of these areas would be managed under ERMA or SRMA stipulations, which would have beneficial, protection-related impacts on recreation resources.

Locatable mineral withdrawal or other protective measures that would preclude mineral entry in the Green River Scenic Corridor in Browns Park (8,208 acres), White River (9,218 acres), Lears

Canyon (1,377 acres), the Book Cliffs Natural Area (401 acres), and the Lower Green River ACEC (17,063 acres) would have long-term beneficial impacts on recreation by protecting natural features and scenic quality in these areas. Compared to Alternative D, Alternative A would have more beneficial impacts: Alternative D would not preclude mineral entry along the White River and from the Book Cliffs. However, when compared to Alternative A, the lack of protection-related mineral withdrawal designations under Alternative A would have direct, long-term adverse impacts to recreation in 5,000 acres of developed and potential recreation sites in the VPA.

4.10.2.3.2 Alternative B

Public access would not be pursued for any area under Alternative B, which would have the same impacts as Alternative D – No Action. Locatable mineral withdrawal impacts would be the same as those described under Alternative A.

4.10.2.3.3 Alternative C

The impacts of Alternative C would be the same as those described under Alternative A, with the exception that an easement for the old Uintah Railroad bed would be pursued from the Utah/ Colorado state line to Watson in Evacuation Creek. The easement would improve recreation access to areas adjacent to this easement. When compared to Alternative D – No Action, the easement under Alternative C would have greater long-term beneficial effects on recreation resources than Alternative D, which would not pursue this access. Locatable mineral withdrawal impacts would be the same as those described under Alternative A.

4.10.2.3.4 Alternative D – No Action

The pursuit of public access would be unspecified under Alternative D – No Action. Therefore current management would not improve recreational access. Mineral withdrawal would occur for 19,400 acres along the Green River Scenic Corridor in Browns Park, 3,600 acres of relict vegetation, 7,900 acres within the lower Green River ACEC, and 5,000 acres of developed and potential recreation sites. This would have beneficial preservation-related impacts on recreation, but less than the action alternatives.

4.10.2.4 Impacts of Minerals Decisions on Recreation

As described under Section 4.10.1 Impacts Common to All Alternatives, minerals-related exploration, development, access road, and infrastructure construction on BLM administered land within the VPA would create surface disturbances, noise, and light pollution that would adversely and beneficially affect recreation resources in the long-term. The proposed acreages available for minerals leasing are tabulated below in Table 4.10.1 (**Note**: Among the alternatives, there is some overlap of acres available for the various minerals uses; the total acreages are an approximation, and the sum of acres is greater than the acres within the VPA).

TABLE 4.10.1. MINERAL LEASING ACREAGES				
	Alternative A	**Alternative B**	**Alternative C**	**Alternative D**
Oil and Gas – Standard Stipulations, Timing and Controlled Surface Use	1,776,782	1,819,397	1,627,085	1,536,030
Combined Hydrocarbon/Special Tar Sands – Standard Stipulations, Timing and Controlled Surface Use	252,665	259,662	239,096	217,487
Mineral Materials – Open	415,395	432,953	388,699	387,700
Phosphate – Open	87,724	87,724	63,571	84,600
Oil Shale - Open	298,629	305,736	292,453	290,740
Total	**2,831,195**	**2,905,472**	**2,610,904**	**2,516,557**
Gilsonite (miles)	172	172	172	168

4.10.2.4.1 Alternative A

Alternative A would allow minerals development (including oil, gas, tar sands, oil shale, mineral materials, and phosphate) with Open, Standard Stipulations, or Timing and Controlled Surface Use on approximately 2,831,195 acres of BLM administered lands within the VPA. Compared to Alternative D – No Action, Alternative A would allow 314,638 more acres or 11 % more BLM land potentially open to minerals development. The estimated total short-term and long-term surface disturbance would be 18,945 acres (for oil and gas development). As described in Section 4.10.1, the leasing of areas for oil, gas, coal-bed methane (CBM), and other mineral uses would have direct long-term adverse impacts on most recreational opportunities by degrading the natural characteristics of the landscape, and degrading scenic quality and wildlife habitat. Off-highway vehicle access would improve in areas where new minerals-related access and spur roads were built, thus having indirect long-term beneficial impacts on this type of recreational activity.

4.10.2.4.2 Alternative B

Alternative B would allow mineral development with Open, Standard Stipulations or Timing and Controlled Surface Use on approximately 2,905,472 acres of BLM administered lands within the VPA. Compared to Alternative D – No Action, Alternative B would allow 388,915 more acres or 15 % more BLM land open to minerals development. The impacts would be similar to Alternative A, but to a greater degree. The estimated acres of short-term and long-term surface disturbance under this alternative would be 19,033 (for oil and gas development).

4.10.2.4.3 Alternative C

Alternative C would allow mineral development with Open, Standard Stipulations or Timing and Controlled Surface Use on approximately 2,610,904 acres of BLM administered land within the VPA. The estimated total short-term and long-term surface disturbance would be 18,757 acres (for oil and gas development). Compared to Alternative D – No Action, Alternative C would

allow 94,347 acres or 4 % more BLM land open to minerals development. The impacts would be similar to Alternative A, but to a lesser degree.

4.10.2.4.4 Alternative D – No Action

Alternative D would have fewer adverse impacts to recreation than any of the other alternatives, as it would designate the fewest acres (2,516,557 acres) to minerals leasing and development. The estimated minerals-related surface disturbance, both short-term and long-term, would be 18,212 acres (for oil and gas development). The scope and type of impacts to recreation would be similar to the impacts described under Impacts Common to All Alternatives (Section 4.10.1).

4.10.2.5 Impacts of Paleontology Decisions on Recreation

4.10.2.5.1 Alternatives A and C

By providing information on paleontology, local paleontological sites, amateur fossil collecting, and fossil collection rules to the public via websites, publications, and personal contacts; allowing collection of common invertebrate and plant fossils for personal, non-commercial use; issuing Paleontological Resources Use Permits for scientific study; and promoting or supporting paleontological investigations in poorly known areas, Alternatives A and C would increase the recreational opportunities related to paleontology. This would have long-term beneficial impacts on recreation resources. Compared to Alternative D – No Action, the increase in recreational opportunity (and activity) under Alternatives A and C would be more beneficial to recreation resources.

4.10.2.5.2 Alternatives B and D – No Action

These alternatives would have negligible impacts on recreation due to the lack of any specific improvements supporting the scientific study and dissemination of paleontological information.

4.10.2.6 Impacts of Recreation Decisions on Recreation

Impacts to recreation from recreation decisions are analyzed through alternative comparisons of Backcountry Byways, Special Recreation Management Areas (SRMAs), trails, mitigation of noise and light, and recreational cabin development.

4.10.2.6.1 Alternative A

Recreation management actions proposed under Alternative A would provide for a range of recreational opportunities within the VPA. A number of existing recreation opportunities would be expanded and improved under this alternative, while other opportunities would be limited. New recreation activities would also be established that would expand the range of recreational opportunities. The effects of these changes on existing resources and activities in both the short-term and long-term are discussed below.

4.10.2.6.1.1 Backcountry Byways

The designation of the Seep Ridge, Book Cliff Divide, and Atchee Ridge Roads as BLM Backcountry Byways under Alternative A would have long-term beneficial impacts on recreation by educating the public about recreational opportunities for backcountry sightseeing and scenic driving. The designation of roads as Utah State Highway Scenic Backcountry Byways would

increase awareness of the scenic opportunities associated with these byways, which would increase traffic volume and encourage recreational visitation to the region. These designations would have greater beneficial impacts on recreation resources when compared to Alternative D – No Action, which would not designate Backcountry Byways.

Designation of Backcountry Byways would have long-term, indirect, adverse impacts on air-quality, in the form of increased fugitive dust caused by vehicle traffic. More vehicle traffic would also adversely increase the potential risk of wildland fire and increase the potential for vehicle/wildlife collisions. Designating Backcountry Byways would increase the potential for automobile conflicts with livestock and with minerals resource-related traffic. As increasing numbers of visitors enter more remote areas of the VPA some travelers could experience a reduction in the semi-primitive, isolated conditions that were expected, with some loss of this recreational opportunity.

4.10.2.6.1.2 SRMAs

The designation of SRMAs on BLM administered land within the VPA would provide recreational opportunities for experiencing outstanding scenic vistas, and enhance recreation-related resources (e.g., riparian areas, fisheries, special status species, water quality) and associated activities (e.g., water-based recreation; hunting; a comprehensive trail system offering opportunities for hiking, biking, horse riding, and OHV use; camping; and facilities offering cultural and historical resource learning opportunities). Alternative A would beneficially increase the combined acreage of SRMAs from 87,960 acres under current management to 499,620 acres, an increase of 568 % when compared to Alternative D – No Action. The increase of 411,660 acres would beneficially expand the existing Browns Park and Nine Mile SRMAs by 71,233 acres, with the remaining acreage comprising the new White River, Blue Mountain and Book Cliffs SRMAs. Special Recreation Management Area-designated acreage would comprise 29 % of the 1,725,512 acres of BLM administered lands within the VPA. Each of the five SRMAs would manage for the type and range of recreational activities that are inherent in a given SRMA: Nine Mile SRMA (81,168 acres) would be managed to protect high-value cultural values and scenic quality; Browns Park SRMA (52,720 acres), White River SRMA (24,183 acres) and Pelican Lake SRMA (1,020 acres) would offer water-based recreational opportunities, in addition to other recreational opportunities. The western portion of the White River SRMA would be managed under No Surface Occupancy (NSO) stipulations, thus beneficially protecting the area from the adverse impacts to recreation from mineral development.

The Blue Mountain SRMA (42,758 acres) would also offer a beneficially broad range of recreational opportunities with an emphasis on activities such as hang gliding, hunting, equestrian use, camping, hiking, and rock climbing. Designating 273,486 acres in the Book Cliffs as an SRMA would have long-term beneficial impacts on recreational resources. The SRMA would offer opportunities for unconfined, dispersed, and primitive recreational activities. The Book Cliffs SRMA is currently leased for mineral development on approximately 90 % of the area, and this existing condition would have long-term adverse impacts on recreational opportunities in the SRMA. In comparison, there would be no expansion of existing SRMAs or new SRMA designations under Alternative D – No Action.

Establishing a comprehensive integrated activity level plan for the 69-acre Fantasy Canyon area would have beneficial protection-related impacts on the area by increase protection of the unique geological formations in the area, and address health and safety considerations. An activity plan

would help reduce conflicts between users in Fantasy Canyon, which would have beneficial impacts on recreation resources.

4.10.2.6.1.3 Trails

Signing and/or improvement of existing trails and the development of new hiking, horseback and mechanized (i.e., non-motorized) would increase the total miles of hiking trails to 400 miles, a total increase of 727% when compared to Alternative D – No Action. The increased number of trail miles would also reduce user densities on the trails, potentially alleviating user conflicts and improving individual users' experiences. Increased development of trails could cause increased adverse impacts to cultural and paleontological sites (and impacts to the recreational and educational value of such sites), and the ensuing increase in human activity would increase the potential for wildland fire (which would cause temporary closures of recreational areas or diminish the scenic quality in recreational areas). Since new areas for mountain biking are currently being sought, increasing non-motorized trails would beneficially impact recreation in the VPA by acting as an attraction to mountain bikers seeking new opportunities outside of existing, and often overcrowded, areas elsewhere in the state.

The improvement/development/signing of 800 miles of motorized trails represents a direct, long-term beneficial impact relative to current conditions under Alternative D for OHV use. Currently, the Red Mountain Trail is the only designated motorized trail. The additional number of trail miles would reduce the density of OHV users, increase user safety, and reduce user conflicts. The designation would also alleviate strains on trails currently used for a variety of recreational activities and would potentially reduce overland OHV use.

Banning the use of OHVs in big game retrieval off designated routes would minimize the amount of overland travel by OHV users, thereby minimizing surface disturbances caused by this activity. The ban would have a direct beneficial impact on recreation resources by preserving vegetation, habitat, waterways, and scenic quality within the VPA.

The reduction of OHV use in Browns Park would have beneficial protection-related impacts on vegetation, riparian areas, water and soil quality, and wildlife habitat and, thus, would help maintain those resource values important to many other recreationists.

4.10.2.6.1.4 Mitigation of Noise and Light

The BLM would work in conjunction with the National Park Service and the energy industry to mitigate noise and light pollution adjacent to Dinosaur National Monument. Currently, there are no mitigation procedures in place. Mitigation would have long-term beneficial effects on recreation by limiting noise and light pollution, with corresponding enhancements in the visitor experience.

4.10.2.6.1.5 Cabins

Alternative A would increase the total number of cabins (there are currently five), based on an assessment of needs. Cabins would be constructed near the existing Chipeta, Trujillo, Moonshine, Rat Hole and Wolf Den cabins and at West Water Point, Dick Canyon, and other locations. Increasing the number of cabins would have a long-term, beneficial effect on recreation opportunities, potentially enhancing hunting, mountain biking, hiking, equestrian, and OHV experiences. Increased visitation with longer periods of use extended into historically less-

active seasons could adversely affect wildlife and thus, the recreational activity of wildlife viewing, particularly if the activity is extended into crucial wildlife winter ranges.

4.10.2.6.2 Alternative B

The impacts of Alternative B would be similar to Alternative D – No Action. The following list indicates those components of Alternative B that are the same as the other alternatives. The impacts of management decisions unique to Alternative B are discussed below.

4.10.2.6.2.1 Back Country Byways

Back Country Byways, motorized trails, noise and light mitigation, and cabin development would have the same management and impacts as under Alternative A.

4.10.2.6.2.2 SRMAs

Management of SRMAs would be the same as Alternative D – No Action. The White River area would continue under current conditions, with minimal managerial oversight for water-based recreational activities. The following existing SRMAs would continue to be managed for their scenic, cultural, wildlife, and/or recreation values:

- Browns Park: continued management of 18,474 acres
- Red Mountain-Dry Fork: continued management of 24,285 acres
- Nine Mile Canyon: continued management of 44,181 acres
- Pelican Lake: continued management of 1,020 acres

A total of 87,960 acres (or 5%) of BLM-administered land (1,725,512 acres) within the VPA would be managed under SRMA guidelines. The remaining land within the VPA would be managed under ERMA guidelines. With only 87,960 acres managed as SRMAs, the educational and recreational opportunities within the VPA would remain relatively undeveloped. Accessibility and availability of facilities would be difficult and safety would be an issue. As the majority of the land within the VPA would be managed without recreation resources protection, mineral exploration and development, and unmanaged OHV use would have adverse impacts on recreation resources and on recreational opportunities within the VPA. This would maintain resource protection and management at current levels (the same management as Alternative D – No Action).

4.10.2.6.2.3 Trails

No hiking, horseback riding, or mechanized (non-motorized) trails would be developed under this alternative. However, 800 miles of motorized trails would be improved or developed, with impacts similar to those described under Alternative A.

4.10.2.6.3 Alternative C

4.10.2.6.3.1 Backcountry Byways

The impacts on recreation under Alternative C would be similar to Alternative D – No Action. No Back Country Byways would be designated under this alternative, which would be the same as Alternative D. Noise and light near Dinosaur National Park would be mitigated to levels similar to those described under Alternative A.

4.10.2.6.3.2 SRMAs

SRMA designation would be the same as Alternative A for Blue Mountain, Browns Park, and Nine Mile Canyon, Pelican Lake, and Red Mountain-Dry Fork, with similar impacts as described under Alternative A.

Sixty-nine acres in Fantasy Canyon would be designated as an SRMA to provide for guided or self-guided tours, hiking, and interpretation. This action would have direct, long-term beneficial impacts on recreation as compared to Alternative D. The management of the Book Cliffs SRMA would be the same as Alternative A, with exception of Wolf Point and Bitter Creek drainages, and the head of Sweetwater Canyon, which would be managed as oil and gas No Leasing areas. This action would have beneficial impacts on recreation resources by limiting oil and gas development and thus, limiting scenic quality degradation and wildlife disturbances. The White River SRMA would be expanded to 47,130 acres, providing the highest level of direct, long-term beneficial impacts to recreation in this area. In comparison, Alternative D would not designate the White River as an SRMA.

4.10.2.6.3.3 Trails

Trails for hiking, horseback riding, and mechanized (non-motorized) recreation would be developed under this alternative as under Alternative A, with similar impacts. Alternative C would not develop or improve motorized trails, which would be the same management as Alternative D. By not developing and improving motorized trails, the opportunities for those participating in OHV recreation would be limited, which would limit (and adversely impact) the opportunities for this form of recreation. Red Mountain Trail is the only trail currently managed and maintained for motorized use, and the lack of established trails could produce an increase in cross-country travel, thereby increasing the adverse impacts to vegetation, soil and water, wildlife habitat, and scenic quality within the VPA. Without further management or designation of OHV trails, overland riding, recreation resource user conflicts, user densities, and safety would remain as OHV-related adverse impacts within the VPA.

Limiting OHV recreation would also have a long-term, beneficial effect on soils, vegetation, riparian health, and wildlife habitat (and the recreational experiences that require that these resources remain undisturbed) by reducing impacts to resources. Reducing the opportunity for OHV use would also have long-term beneficial impacts on other forms of recreation, such as non-motorized use (e.g., hiking, mountain biking, dispersed camping), by decreasing user conflicts on trails. See 4.10.2.8 for a further analysis of OHV management decisions and impacts.

4.10.2.6.3.4 Cabins

Under Alternative C no new cabins would be developed, thus having the same impacts as Alternative D – No Action.

4.10.2.6.4 Alternative D – No Action

4.10.2.6.4.1 Back Country Byways

The designation of Back Country Byways, additional cabins, and light and noise mitigation are unspecified for this alternative.

4.10.2.6.4.2 SRMAs

Special Recreation Management Areas, activity plans, and non-motorized trail management would be managed as described for Alternative B.

4.10.2.6.4.3 Trails

Additional motorized trails would not be developed, with impacts similar to those described under Alternative C, but the existing Red Mountain Trail would continue to be managed under current conditions for motorized use, with impacts as described under Alternative C. Alternative D would add 55 miles of non-motorized hiking and/or horseback trails along the Green River, in the Dry Fork, Ashley Creek, Beaver Creek, Willow Creek, Nine Mile areas, and in other places within the VPA. It would add 2 miles of mountain bicycle trails along existing rural roads and trails as well as a non-motorized trail in Sears Canyon. The addition of 55 miles of hiking and horse trails and 2 miles of mountain bike trails would have long-term beneficial impacts on recreation, and the recreational opportunities would be enhanced. However, the trail lengths would be limited, potentially creating direct long-term adverse impacts related to user-density, safety, and resource-use conflicts.

4.10.2.7 Impacts of Special Designation Decisions on Recreation

4.10.2.7.1 Alternative A

The effects of special designations management decisions under Alternative A would have impacts on recreation throughout the VPA. Areas of Critical Environmental Concern (ACECs) totaling 348,016 acres would be established or maintained in the following locations:

- Bitter Creek: 71,000 acres
- Coyote Basin: 87,743 acres
- Lower Green River: 10,170 acres
- White River: 17,810 acres
- Browns Park: 52,721 acres
- Red Mountain-Dry Fork: 24,285 acres
- Nine Mile Canyon: 48,000 acres
- Lears Canyon: 1,375
- Pariette: 10,437
- Red Creek: 24,475

The Bitter Creek ACEC would be designated as an ACEC/Research Natural Area (RNA) due to its high-value, old growth pinyon pines, cultural resources, historic features, and high-quality watersheds. This would have long-term protection-related beneficial impacts on the area, and visitors to this ACEC would benefit from the special protection given to its unique ecosystem.

Coyote Basin would also be designated as an ACEC/RNA due to the white-tailed prairie dog, numerous special status wildlife species, and the high-value ecosystems that support this wildlife. Wildlife viewing opportunities would be enhanced within this ACEC.

While managed as ACECs, Browns Park and Nine Mile Canyon would receive comprehensive integrated activity plans, with direct long-term beneficial protection-related impacts that would address SRMA values. Both sites have a broad range of valuable resources including high scenic quality, wildlife habitat, cultural, historic, and recreational opportunities. Each of the above ACEC designations would impact OHV use as such use would either be closed or limited to designated routes. Loss of these areas for motorized use would be balanced by new trails proposed under Alternative A (see Section 4.10.2.8).

Managing Red Mountain-Dry Fork as an ACEC for recreational purposes, specifically for OHV use, would enhance the recreation experience, diminish the adverse impacts from OHVs in this area, reduce direct, adverse resource-use conflicts between OHV and non-OHV users, and improve health and human safety.

As noted in Section 4.10.1, with the exception of portions of the White River and the Browns Park ACECs, all of the proposed ACECs would be available for oil and gas leasing, and subject to valid existing mineral leasing rights. These potential mineral leasings would have long-term adverse impacts on the range of recreational opportunities and the quality of recreation experiences.

This alternative would have more beneficial impacts to recreation due to the increased number of special designation areas than Alternative D – No Action, which would not designate any new ACECs nor expand any currently designated areas.

Alternative A would identify Wild and Scenic River suitability designations along segments of the White River, which would increase the number of free-flowing river miles and preserve cultural and scenic natural resources along the rivers (and thus, the recreational opportunities that are supported by cultural and scenic resources) within the suitability designation areas. These suitability designated river segments would have greater long-term protection-related beneficial impacts on recreation resources than Alternative D, under which suitability findings would not be made on either the White or Green rivers. Under Alternative A, segments along Evacuation Creek, Bitter Creek, and Argyle Creek would not be identified for Wild or Scenic designation.

4.10.2.7.2 Alternative B

Under Alternative B there would be one new ACEC designated or expanded in the VPA (within Coyote Basin) as an ACEC/Research Natural Area for protection of the black-footed ferret and associated prey. This ACEC designation would constitute 47,659 acres, and would have minor beneficial impacts on recreation, as the area would be designated for the protection and enhancement of ferret habitat, and recreational opportunities for wildlife viewing would be possible Therefore the impacts on recreation would be similar but slightly more beneficial to recreation than Alternative D – No Action.

There would be no new Wild and Scenic River suitability designations under Alternative B, which would have the same impacts on this recreation resource as Alternative D – No Action.

4.10.2.7.3 Alternative C

Under Alternative C, the greatest number of acres within the BLM-administered VPA would be designated as ACECs, when compared to Alternative D – No Action, which would not expand or designate any new ACECs. Areas of Critical Environmental Concern (ACECs) totaling 681,310 acres would be established or maintained in the following locations:

- Bitter Creek: 68,834 acres
- Bitter Creek/P.R. Spring: 78,591
- Browns Park: 52,721 acres
- Coyote Basin Complex: 124,161 acres
- Four Mile Wash: 50,280 acres
- Lower Green River: 10,170 acres
- Middle Green River: 6,768 acres
- White River: 47,130 acres
- Main Canyon: 199,915 acres
- Red Mountain-Dry Fork: 24,285 acres
- Nine Mile Canyon: 81,168 acres
- Lears Canyon: 1,375
- Pariette: 10,437
- Red Creek: 24,475

Compared to Alternative D – No Action, acreages for ACEC designation would be designated or increased in Bitter Creek, in the Coyote Basin-Snake John- Kennedy Wash sub-complexes, Four Mile Wash, along the Lower and Middle Green River, in Main Canyon, Nine Mile Canyon, and Red Mountain-Dry Fork. These new ACECS or enlarged, existing ACECS, would directly benefit recreation resources as described under Alternative A. The Coyote Basin, Snake John, and Kennedy Wash ACEC would include the Myton Bench and Shiner areas that would also offer protection to reintroduced black-footed ferrets, but would have beneficial impacts on recreation within the VPA, as described under Alternative A. These increases in acreage would beneficially improve and enhance non-motorized recreation opportunities in the long-term as described in Alternative A, although adverse impacts to recreation from oil and gas leasing could still occur. An ACEC designation for Four Mile Wash (50,280 acres) would be unique to this alternative and, further, would classify the area as an Outstanding Natural Area because of its high scenic quality, primitive recreational opportunities, riparian ecosystems, and special status fish species. This would have long-term beneficial protection-related impacts on recreation resources. An integrated activity level plan would provide additional site-specific management prescriptions and resource protection. The area would be closed to oil and gas leasing and OHV use would be limited to designated routes, which would have direct, long-term beneficial impacts on the area's recreation resources.

Alternative C would add 164 miles of Wild and Scenic River suitability designations for segments of the White River, Nine-Mile Creek, Middle Green River, Evacuation Creek, Bitter Creek, and Argyle Creek, increasing the number of free-flowing river miles and preserving the cultural- and scenic-resource-based recreational opportunities within the designated areas. This alternative would have the greatest number of miles of Wild and Scenic Rivers designated, having long-term direct beneficial impacts on recreation resources, as compared to Alternative D – No Action.

4.10.2.7.4 Alternative D – No Action

The ACECs currently established for the Lower Green River, Lears Canyon, Red Creek, Pariette, Browns Park, Red Mountain-Dry Fork, and Nine Mile Canyon would continue to have long-term beneficial protection-related impacts on recreation within these areas, with impacts to recreation as described under Alternative A.

The Browns Park, Nine Mile Canyon, and Red Mountain-Dry Fork ACECs would continue to be managed as noted in Alternative A, however, management under this alternative would also be less restrictive. Comprehensive integrated activity plans would not be developed and there would be fewer restrictions on oil and gas leasing. Off-highway vehicle use and VRM classifications would be unspecified. The No Action Alternative would provide protection to deer winter range, special status species, outstanding scenic, cultural, riparian, and fisheries resources, which would have beneficial, indirect impacts on recreational opportunities.

4.10.2.8 Impacts of Travel/Roads and Trails Decisions on Recreation

4.10.2.8.1 *Alternative A*

Under Alternative A, areas within the VPA designated as "open" to OHV travel would be limited to approximately 6,202 acres (a decrease of approximately 781,657 acres when compared to Alternative D – No Action). The impacts of limiting the number of open-designated acres would be long-term direct and indirect, adverse and beneficial on recreation. Long-term, direct adverse effects would include the reduction in opportunities for OHV travel. This loss would be offset by the 800 miles of trails proposed for OHV use in Alternative A. However, the long-term, beneficial effects of increased protection of soil, water, and wildlife habitat (which would preserve the quality of recreational activities associated with these resources) would counter the adverse effects of travel decisions. The reduction in noise, surface disturbances, visual quality degradation, and resource-use conflicts with other recreational activities would have direct long-term beneficial impacts on recreation. Indirect beneficial impacts to recreational activities that require high visual quality would result from the reduction in soil erosion and fugitive dust produced by OHV activities.

Areas designated as "limited" to OHV travel would be increased to 1,643,475 acres (an increase of 756,200 acres from current management as described in Alternative D – No Action), which would have direct long-term beneficial impacts on recreation by increasing the level of OHV management within the VPA. This would have direct beneficial impacts on recreation by reducing recreational resource-use conflicts.

Designating areas "closed" to OHV travel would be increased from 50,388 acres (under Alternative D) to 75,845 acres (an increase of 25,457 acres) and the miles of designated routes would increase from zero miles under existing conditions (Alternative D) to 4,860 miles. This increase in designated OHV routes would have direct, long-term beneficial impacts on other recreational opportunities activities by reducing recreation resource-use conflicts, and by reducing the OHV-related disturbances to soil, water, and wildlife habitat resources. Increasing the number of closed acres within the VPA would have minor restriction-related adverse impacts on OHV use, but the long-term direct and indirect benefits of reduced surface disturbances and reduced resource-use conflicts with other recreational activities would counter the adverse effects on OHV use.

4.10.2.8.2 Alternative B

Areas open to OHV travel would decrease to 5,434 acres (a decrease of 782,425 acres when compared to current management as described in Alternative D – No Action).

Areas limited to OHV travel would increase to 1,659,901 acres (an increase of 772,626 acres from current management as described in Alternative D).

Areas closed to OHV travel would increase to a total of 60,187 acres (an increase of 9,799 acres compared to Alternative D), the least amount of all the alternatives.

The number of miles of routes designated would increase from zero miles under existing conditions (Alternative D) to 4,860 miles.

The effects of Alternative B would be similar to those described under Alternative A, for areas open to OHV travel. Areas designated as closed to OHV use would be reduced, which would reduce surface disturbances caused by overland OHV travel. Alternative B would have long-term beneficial impacts on other recreation resources similar to those described under Alternative A

4.10.2.8.3 Alternative C

The impacts of road, trail, and OHV management decisions would be similar to those described under Alternative A. There would be 5,434 acres open to OHV travel (the same as Alternative B), and the impacts of open OHV areas would be similar to those described under Alternative A.

Areas designated as limited OHV travel would be increased to 1,353,529 acres (an increase of 466,254 acres from current management as described in Alternative D – No Action), allowing for increased use in a more managed setting, and potentially sustaining the existing levels of OHV use.

Areas closed to OHV travel would be increased from 50,388 acres (under Alternative D) to 366,559 acres, which would have direct long-term beneficial impacts on soil, water, and wildlife habitat resources.

The number of miles of routes designated would increase from zero miles under existing conditions to 4,707 miles.

Alternative C would be the most restrictive on OHV use. A decrease in the number of acres available for OHV use would have long-term beneficial impacts on other non-motorized forms of recreation by reducing resource-user conflicts and by enhancing and/or protecting recreation resources as described under Alternative A.

Alternative C would also provide the highest degree of protection for natural resources, and create the lowest potential threat from OHV-caused wildland fires. This would have direct and indirect long-term beneficial impacts on all recreational activities within the VPA.

4.10.2.8.4 Alternative D – No Action

Current management practices designate a total of 787,859 acres as open to OHV travel, 887,275 acres as limited, and 50,388 acres as closed. No OHV routes would be designated under this alternative. Travel management under current conditions would be less restrictive to OHV users when compared to the action alternatives, but would maintain the current adverse impacts to natural and cultural resources and to non-motorized users, as discussed above. The adverse

impacts of OHV-caused surface disturbances to soil, water, visual quality, and wildlife habitat would continue, as would recreational resource-use conflicts.

4.10.2.9 Impacts of Visual Resource Management Decisions on Recreation

The following activities are dependent on visual resources and would be affected more by decisions related to visual resources:

- Sight-seeing (the primary reason for current visitation to the VPA)
- Scenic driving
- Wildlife viewing
- Nature study

Many recreational activities in the VPA are related, in some way, to scenic quality. The degree to which scenic quality would be maintained is directly related to the degree to which the recreational experience would be maintained. Since VRM Classes I and II are most desirable for the recreation experience, the long-term beneficial effects of VRM upon recreation under each alternative are represented as acreages categorized as VRM Class I or Class II.

4.10.2.9.1 Alternative A

Alternative A would increase the current acreage of VRM Classes I and II by 227,187 acres to a total of 513,644 acres. This increase would have long-term beneficial effect on recreation throughout the VPA, when compared with Alternative D – No Action.

4.10.2.9.2 Alternatives B and D – No Action

Maintaining approximately 286,801 acres as VRM Class I or II under Alternative B would have the least protection-related beneficial impacts on the scenic quality component of recreation resources.

4.10.2.9.3 Alternative C

The management actions under Alternative C would increase VRM Class I and Class II lands by 482,433 acres to approximately 768,890 acres throughout the BLM administered VPA, when compared to current conditions under Alternative D. This would be a large increase when compared to Alternative D, and the increase in Class I and II acres would have the most long-term beneficial effects on recreational opportunities and activities, when compared to the other action alternatives.

4.10.2.10 Summary

4.10.2.10.1 Alternative A

This alternative would have a moderate degree of adverse impacts when compared to other the action alternatives and major beneficial impacts when compared to Alternative D – No Action.

- Increases in oil and gas production would have major adverse impacts on recreation opportunities.
- Increases in OHV management would have adverse impacts on motorized recreation, by restricting OHV use in the VPA.

- Increases in OHV management would have beneficial impacts on non-motorized recreation through protection of wildlife, wilderness values, and the reduction of user conflicts.
- Protection of areas as ACECs and management of SRMAs would have a major beneficial impact on recreation.

4.10.2.10.2 Alternative B

This alternative would have the most adverse impacts to recreation resources due to the large number of acres available for oil and gas leasing.

- Protection of wildlife and special status species would be the least under this alternative, with the greatest adverse impacts to recreation values that are related to these resources.
- No ACECs would be designated under this alternative, so there would be no resource protection-related beneficial impacts to recreation from these designations.
- Limited protection of visual resources would have major adverse impacts on recreational opportunities in which scenic quality is an important component.

4.10.2.10.3 Alternative C

This alternative would have the most beneficial impacts on recreation.

- Designation of additional ACECs and eligibility designations of Wild and Scenic River segments would have beneficial impacts or recreation.
- Limits on OHV travel would be greatest under this alternative, producing adverse impacts on motorized recreation and beneficial impacts on non-motorized recreation.
- Limits on oil and gas leasing and increased protection of wildlife and special status species would produce the most beneficial impacts and the least adverse impacts on recreation.
- Classification of the most acreage of VRM Classes I and II would provide the most protection to visual resources, and therefore would provide the greatest beneficial impacts to those recreational opportunities in which scenic quality is an important recreational component.

4.10.2.10.4 Alternative D

Oil and gas leasing would have a major adverse impact on recreation.

- Lack of limits on OHV use would have major beneficial impacts on motorized recreation, and major adverse impacts on all other types of non-motorized recreation.
- Lack of designation of any new ACECs or eligible Wild and Scenic River segments would provide no protection-related beneficial impacts to recreation.
- Limited protection of visual resources would have major adverse impacts on recreational opportunities in which scenic quality is an important component.

4.10.2.11 Mitigation Measures

All of the alternatives would affect recreation resources to varying degrees and so would require varying forms of mitigation measures.

Mitigation measures would include:

- Where prescribed fire treatments overlap recreation areas, promoting recreational use of other areas with similar recreational opportunities.
- Maintaining wildlife viewing opportunities by following mitigation recommendations in the Wildlife and Minerals portions of this RMP.
- Controlling fugitive dust with dust suppressants along scenic byways, oil and gas development areas, and major recreational access routes.
- Separating recreational uses and opportunities, temporally or spatially, to mitigate conflict between user groups.
- Educating the users of recreation resources on the impacts that their activities have on the natural environment, in an effort to reduce the adverse impacts on natural resources, especially by OHV users.

4.10.3 Unavoidable Adverse Impacts

Some mineral development activities associated with the management actions of the alternatives would have unavoidable, adverse impacts on recreation resources. Exploration and development would fragment hunting areas and impact OHV and non-motorized trails.

4.10.4 Short-term Use Versus Long-term Productivity

Short-term use of recreation resources in the VPA would result in negligible impacts on the long-term productivity of the resource.

4.10.5 Irreversible and Irretrievable Impacts

No irreversible impacts to recreation resources or activities are anticipated. There would be long-term irretrievable impacts to recreation resources from unmanaged OHV use, and minerals development in areas formerly used for solitary, remote, and unconfined recreation. Short-term irretrievable impacts to recreation resources would be caused by prescribed burning and/or other fire treatments.

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