
TABLE X: IMPACTS TO PALEONTOLOGICAL RESOURCES**Significance Criteria:**

- Substantial direct or indirect damage or destruction to or loss of vertebrate fossils or other scientifically significant fossil resources.

Assumption:

- Scientifically significant fossils would continue to be discovered throughout the RMPPA. Most discoveries would occur in Class I and II Paleontological Areas.
- Inventories prior to surface disturbance in high-probability areas would result in the identification and evaluation of previously undiscovered resources, which BLM would then manage accordingly.
- Unmitigated surface disturbing activities could dislodge or damage paleontological resources and features that were not visible prior to surface disturbance.

Methods of Analysis:

Impact analyses and conclusions are based on interdisciplinary team knowledge of resources and the project area, which includes BLM specialists from the Little Snake Field Office and cooperating agencies, as well as a review of existing literature. Effects are quantified where possible using field investigations, paleontological potential models, and geographic information systems. In the absence of quantitative data, best professional judgment was used. Impacts are sometimes described using ranges of potential impacts or in qualitative terms if appropriate. Although the location of every significant paleontological resource in the RMPPA is not known, the analysis considers the different management actions and their potential to directly or indirectly impact paleontological resources. The alternatives presented are programmatic in nature, and their potential impacts will be addressed at that level. To ensure protection of specific paleontological resources and values, further analyses would be required at the implementation level of planning following site-specific resource inventories.

Impacts to paleontological resources result from natural weathering and erosion and from surface disturbing activities. In general, impacts to paleontological resources include the physical destruction or damage of fossil-bearing geological formations (what rock the fossil comes from tells a great deal about the fossil itself) and resulting loss of vertebrate fossils or other scientifically significant fossil resources from un-mitigated surface disturbance. These include fossils or assemblages of fossils, which are unique, unusual, rare, uncommon, diagnostically or stratigraphically important, and those that add to an existing body of knowledge in specific areas, stratigraphically, taxonomically, or regionally. However, removal of some rock material, whether through natural weathering and erosion or surface disturbance, is necessary for paleontological resources to be identified within bedrock. Without removing some rock surrounding fossils, the fossil could remain undetected. Therefore, management actions that result in erosion do not necessarily result in damage to paleontological resources. Excessive erosion, especially when resulting from other surface disturbance, could damage fossils present at the surface. While the location of every significant paleontological locality in the field office is not known, the analysis considers the different management actions and their potential to directly or indirectly impact paleontological resources. Impacts noted in this analysis also include management actions that could result in decreases in surface disturbance. Such restrictions decrease the surface area that could be disturbed, therefore protecting any paleontological resources in those locations.

TABLE X: IMPACTS TO PALEONTOLOGICAL RESOURCES

ALTERNATIVE A (NO ACTION ALTERNATIVE)	ALTERNATIVE B	ALTERNATIVE C	ALTERNATIVE D
SOIL RESOURCES			
Fragile Soils			
<p>A. Allow surface-disturbing activities on isolated sites that meet fragile soil criteria only where performance standards and objectives can be met. Fragile soil criteria areas:</p> <ol style="list-style-type: none"> 1. Are rated as highly or severely erodible by wind or water, as described by the Natural Resources Conservation Service in the Area Soil Survey Report or as described by on-site inspection. 2. Have slopes greater than or equal to 35%, if they also have one of the following soil characteristics: <ol style="list-style-type: none"> a) Surface texture that is sand, loamy sand, very fine sandy loam, silty clay or clay. b) A depth to bedrock less than 20 inches. c) Erosion condition rated as 'poor'. d) K factor greater 	No similar action.	Same as Alternative A.	Same as Alternative A.

TABLE X: IMPACTS TO PALEONTOLOGICAL RESOURCES

ALTERNATIVE A (NO ACTION ALTERNATIVE)	ALTERNATIVE B	ALTERNATIVE C	ALTERNATIVE D
than 0.32.			
<p>B. Permit surface occupancy on federal surface only where adherence to performance objectives for surface-disturbing activities within fragile-soil areas is assured. Performance objectives for fragile soils are the following:</p> <ol style="list-style-type: none"> 1. Maintain the soil productivity by reducing soil loss from erosion and through proper handling of the soil material. 2. Reduce impact to off-site areas by controlling erosion and/or overland flow from these areas. 3. Protect water quality and quantity of adjacent surface and groundwater sources. 4. Reduce accelerated erosion caused by surface-disturbing activities. 5. Select best possible site for development to reduce the impacts to the soil and water resources. 	No similar action.	Same as Alternative A.	Same as Alternative A

TABLE X: IMPACTS TO PALEONTOLOGICAL RESOURCES

ALTERNATIVE A (NO ACTION ALTERNATIVE)	ALTERNATIVE B	ALTERNATIVE C	ALTERNATIVE D
Preventing or minimizing soil erosion beyond expected rates would result in protection, or at least decreased degradation paleontological resources. Since paleontological resources are usually discovered in eroded areas, reducing erosion could reduce the potential for more localities to be discovered.	Not requiring that performance standards and objectives be met when allowing surface disturbing activities or surface occupancy on fragile soil areas could lead to increased erosion in these areas. This could result in damage to paleontological resources, but could also result in identification of more paleontological resources eroding from bedrock.	Same as Alternative A.	Same as Alternative A.
Surface Use			
C. For new oil and gas leases and all surface-disturbing activities permitted under the 1989 RMP ¹ , ensure that applicants demonstrate compliance with performance objectives through a plan of development, using alternative measures, or use of the following mitigative measures: 1. Retain all sediments generated from the surface-disturbing activity on site.	Same as Alternative A.	Same as Alternative A.	Same as Alternative A.

¹ These requirements do not supersede valid existing rights on approved applications for permits to drill, developing leases or entry under the general mining laws; rights-of-way construction will be allowed along Moffat County roads 4, 67 and 126 on a case-by-case basis. BLM will work with operators/permittees/county engineers to develop appropriate compliance measures.

TABLE X: IMPACTS TO PALEONTOLOGICAL RESOURCES

ALTERNATIVE A (NO ACTION ALTERNATIVE)	ALTERNATIVE B	ALTERNATIVE C	ALTERNATIVE D
<p>2. Do not allow construction or other surface-disturbing activities when the soils are saturated to a depth of more than 3 inches.</p> <p>3. Limit vehicle use to existing roads and trails.</p> <p>4. Build all new permanent roads to meet BLM primary road standards in locations approved by the authorized officer (for oil and gas purposes, permanent roads are those used for production).</p> <p>5. Conduct all geophysical and geochemical exploration by helicopter, horseback, on foot or from existing roads.</p> <p>6. Design any sediment-control structures, reserve pits or disposal pits to contain a 100 year, 6 hour storm event and provide storage volumes within these</p>			

TABLE X: IMPACTS TO PALEONTOLOGICAL RESOURCES

ALTERNATIVE A (NO ACTION ALTERNATIVE)	ALTERNATIVE B	ALTERNATIVE C	ALTERNATIVE D
<p>structures that have a design life of 25 years.</p> <p>7. Before reserve, production or emergency pits are reclaimed remove all residue and truck it off site to an approved disposal site.</p> <p>8. Initiate reclamation of disturbed surfaces before November 1 each year.</p> <p>Approve all reclamation plans by the authorized officer in advance and require a bond if necessary, if one has not been previously posted.</p>			
<p>Requiring that performance standards and objectives be met for new oil and gas leases and all surface-disturbing activities would maintain erosion within expected rate. This could protect protection, or at least decreased degradation paleontological resources. Since paleontological resources are usually discovered in eroded areas, reducing erosion could reduce the potential for more localities to be discovered.</p>	<p>Same as Alternative A.</p>	<p>Same as Alternative A.</p>	<p>Same as Alternative A.</p>
WATER RESOURCES			

TABLE X: IMPACTS TO PALEONTOLOGICAL RESOURCES

ALTERNATIVE A (NO ACTION ALTERNATIVE)	ALTERNATIVE B	ALTERNATIVE C	ALTERNATIVE D
A. Establish no-surface occupancy stipulations from within 500 feet to ¼ mile of perennial water sources, depending on type and use of source, soil type and slope steepness.	No similar action.	Establish no-surface occupancy stipulations up to ¼ mile of perennial water sources, if necessary depending on type and use of source, soil type and slope steepness. Exceptions granted according to Appendix X.	Same as Alternative C.
Preventing surface occupancy or ground disturbing activities in ¼ mile buffers around perennial waters could result in an indirect impact to paleontology resources. Preventing surface disturbance and/or occupancy in these areas could protect adjacent paleontological localities in place.	Allowing surface occupancy or ground disturbing activities within ¼ mile of perennial waters could result in the identification or recovery of paleontological resources.	Same as Alternative A.	Same as Alternative A.
VEGETATION			
Vegetation Treatments			
A. Conducted on case-by-case basis as needed.	When consistent with healthy rangeland ecosystems, emphasize vegetation treatments to increase forage production.	<ol style="list-style-type: none"> 1. Use vegetation treatments on an average of 3,030 acres per year over the life of the plan to restore diversity of seral stages and species, as appropriate. 2. Work with the Northwest Colorado Sage-Grouse Working Group to identify, maintain, and restore an average of 530 acres of sagebrush per year. Emphasize creation of functional blocks of sagebrush as sage 	<p>Use vegetation treatments on an average of 7,570 acres per year over the life of the plan to restore diversity of seral stages and species, as appropriate.</p> <p>Work with the Northwest Colorado Sage-Grouse Working Group to identify, maintain, and restore an average of 2,000 acres of sagebrush per year. Emphasize creation of functional blocks of sagebrush.</p>

TABLE X: IMPACTS TO PALEONTOLOGICAL RESOURCES

ALTERNATIVE A (NO ACTION ALTERNATIVE)	ALTERNATIVE B	ALTERNATIVE C	ALTERNATIVE D
		<p>grouse habitat.</p> <p>3. Use vegetation treatments on an average of 1,600 acres per year to reduce encroachment of juniper and woody species to mimic natural conditions.</p> <p>4. Restore a total of 80 acres during the planning period of bitterbrush and other important winter forage species in the Sand Hills and Spring Creek LHAs.</p> <p>5. Restore an average of 100 acres per year of Mountain shrub.</p>	<p>Use vegetation treatments on an average of 3,500 acres per year to reduce encroachment of juniper and woody species to mimic natural conditions.</p> <p>Restore an average of 50 acres per year of bitterbrush and other important winter forage species in all LHAs, starting with the Sand Hills and Spring Creek LHAs.</p> <p>Restore an average of 1,000 acres of per year Mountain shrub.</p>
B. No Similar Action.	Same as Alternative A.	Use vegetation treatments where Land Health Standards are not being met for reasons other than livestock (such as areas where reclamation efforts have not been successful or heavy-use OHV areas), improve conditions on 50 percent of sites during the life of the plan.	Same as Alternative C.
Required assessments to identify and mitigate impacts to paleontological resources before surface disturbing activities would result in no	Same as Alternative A.	Same impacts as Alternative A, except impacts could occur on approximately 5,340 acres. This could impact more or less paleontological localities compared	Same impacts as Alternative A, except impacts could occur on approximately 14,120 acres. This could impact more or less paleontological localities compared

TABLE X: IMPACTS TO PALEONTOLOGICAL RESOURCES

ALTERNATIVE A (NO ACTION ALTERNATIVE)	ALTERNATIVE B	ALTERNATIVE C	ALTERNATIVE D
significant impacts from vegetation manipulation. The most common impact to paleontological resources from vegetation management activities would be the potential identification, recordation, and collection of paleontological resources before the implementation of surface disturbing vegetative treatments. Most areas throughout the RMPPA with paleontological resources present at the surface are not conducive to supporting significant vegetation.		to Alternatives A and B, depending on the level of implementation in those alternatives.	to Alternatives A and B, depending on the level of implementation in those alternatives, but could impact paleontological localities on 8,780 acres than Alternative C.
FISH AND WILDLIFE HABITAT			
A. Raptors (golden eagle, osprey, all accipiters, falcons, except kestrel, butteos, and owls): NSO within 1/8 mile radius of nest site. NSO area may be altered depending upon the active status of the nest site or the geographical relationship of topographical barriers and vegetation screening to the nest site.	No similar action.	Same as Alternative A.	Raptors (golden eagle, osprey, all accipiters, falcons, except kestrel, butteos, and owls): NSO within 1/4 mile radius of nest site. In addition, exceptions granted according to criteria established in Appendix X.
B. Peregrine Falcon: NSO within 1/4 mile radius of cliff nesting complex. No exceptions.	No similar action.	NSO within 1/4 mile radius of cliff nesting complex. In addition, NSO area may be altered depending	Same as Alternative C.

TABLE X: IMPACTS TO PALEONTOLOGICAL RESOURCES

ALTERNATIVE A (NO ACTION ALTERNATIVE)	ALTERNATIVE B	ALTERNATIVE C	ALTERNATIVE D
		upon the active status of the nesting complex or the geographical relationship of topographical barriers and vegetation screening.	
C. Waterfowl and Shorebird: NSO on significant production areas (Waterfowl Habitat Management Areas and rookeries). No exceptions.	No similar action.	Same as Alternative A. In addition, NSO area may be altered depending upon the active status of the production areas or the geographical relationship of topographical barriers and vegetation screening. Exceptions: granted according to criteria established in Appendix X.	Same as Alternative C.
There would be no impacts to paleontological resources from surface occupying mineral developments located within $\frac{1}{8}$ mile of raptor nests sites, $\frac{1}{4}$ mile of Peregrine Falcon cliff nesting complexes, or in Waterfowl Habitat Management Areas and rookeries. In these areas, paleontological resources would be protected in place through no surface occupancy stipulations, although impacts within $\frac{1}{8}$ mile of raptor nests could occur due to changes in nest activity status.	Paleontological resources would not receive indirect preservation from no surface occupation stipulations related to $\frac{1}{8}$ mile of raptor nests sites, $\frac{1}{4}$ mile of Peregrine Falcon cliff nesting complexes, or in Waterfowl Habitat Management Areas and rookeries. This would not necessarily lead to impacts from surface occupying mineral development features, but paleontological localities in these areas would not receive protection from wildlife decisions.	There could be no impacts to paleontological resources from surface occupying mineral developments located within $\frac{1}{8}$ mile of raptor nests sites, $\frac{1}{4}$ mile of Peregrine Falcon cliff nesting complexes, or in Waterfowl Habitat Management Areas and rookeries. In these areas, paleontological resources could be preserved in place through no surface occupancy stipulations, although impacts from mineral development could occur due to exceptions for developments or changes in the NSO area in these areas.	Same impacts as Alternative C, except impacts from surface occupying mineral developments could be prevented within $\frac{1}{4}$ mile of raptor nests, although impacts from mineral development could occur due to exceptions for developments in these areas.
SPECIAL STATUS SPECIES			
Mexican Spotted Owl			
A. Mexican spotted owl nesting and fledgling	No Surface Occupancy shall be applied to all protected activity	Same as Alternative B.	Same as Alternative B.

TABLE X: IMPACTS TO PALEONTOLOGICAL RESOURCES

ALTERNATIVE A (NO ACTION ALTERNATIVE)	ALTERNATIVE B	ALTERNATIVE C	ALTERNATIVE D
habitat – February 1 to July 31. Applied to territories in which an owl(s) has been spotted, but no nests or roosts have been confirmed and in territory where there is confirmed nesting, feeding, and roosting activity. No exceptions.	centers (PACs). Other surface disturbing activities within protected or restricted habitats – such as prescribed fires and fuels reduction – may occur in specific cases, but will require separate Section 7 consultation.		
B. Mexican Spotted Owl: NSO within ¼ mile radius of confirmed roost site and nesting site. No exceptions.	Non-surface disturbing activities in PACs shall avoid the MSO breeding season (March 1 through August 31).	Same as Alternative B.	Same as Alternative B.
C. No similar action	No new recreation facilities or trails will be permitted within PACs. Maintenance and seasonal closure of existing facilities should be continued.	Same as Alternative B.	Same as Alternative B.
Preventing surface occupancy or ground disturbing activities in Mexican Spotted Owl confirmed roost and nesting sites could indirectly protect paleontological resources in place in these areas.	Preventing surface occupancy or ground disturbing activities or new recreation facilities in Mexican Spotted Owl PACs could indirectly protect paleontological resources in place in these areas.	Same as Alternative B.	Same as Alternative B.
Yellow-billed Cuckoo			
D. No similar action	Prohibit permanent surface disturbing activities within ¼ mile of any suitable YBC habitat. Exceptions should be evaluated on a case by case basis to avoid	Same as Alternative B.	Same as Alternative B.

TABLE X: IMPACTS TO PALEONTOLOGICAL RESOURCES

ALTERNATIVE A (NO ACTION ALTERNATIVE)	ALTERNATIVE B	ALTERNATIVE C	ALTERNATIVE D
	adverse impact.		
	Prohibiting surface disturbing activities within ¼ mile of suitable YBC habitat could indirectly preserve paleontological resources in place in these areas.	Same as Alternative B.	Same as Alternative B.
Mountain Plover			
E. No similar action	No similar action	<ol style="list-style-type: none"> 1. Surface occupancy and use is prohibited within 1/8 mile of occupied nesting habitat for mountain plovers. 2. <u>Exception:</u> An exception may be granted by the authorized officer if the operator submits a plan which demonstrates that the proposed action will not affect the mountain plover nest site. 3. <u>Modification:</u> The boundaries of the stipulated area may be modified if the authorized officer determines that surface occupancy will not harm the integrity of the nest or nest location. 4. <u>Waiver:</u> The stipulation may be waived if the authorized officer determines that the portion of the lease under the no surface occupancy restriction no longer 	Same as Alternative C

TABLE X: IMPACTS TO PALEONTOLOGICAL RESOURCES

ALTERNATIVE A (NO ACTION ALTERNATIVE)	ALTERNATIVE B	ALTERNATIVE C	ALTERNATIVE D
		provides potential to be used by the species for nesting.	
		Prohibiting surface occupancy or ground disturbing activities within 1/8 mile of occupied mountain plover nesting habitat could indirectly protect paleontological resources in place in these areas.	Same as Alternative C.
Bald Eagle			
F. Bald Eagle: NSO within ¼ mile radius of roost or nest site. NSO area may be altered depending upon the active status of the roost or the geographical relationship of topographical barriers and vegetation screening. No exceptions for nest sites.	Year round No Surface Occupancy within ¼ mile radius of both occupied and unoccupied nests. Definition of 'occupied nest' [from Northern States Bald Eagle Recovery Plan 1983, page D4].: a) young were observed, b) eggs were laid (eggs or eggshell fragments observed), c) one adult observed in incubating ("sitting low") posture on the nest during the incubation period, d) two adults observed at an empty nest or within the breeding area, and e) one adult and one eagle in immature plumage at or near a nest, especially if mating or reproductive behavior (display flights, copulation, nest repair, etc.) was observed.	Same as Alternative B.	Same as Alternative B.
Preventing surface occupancy or ground disturbing activities could indirectly protect paleontological resources in	Same as Alternative A.	Same as Alternative A.	Same as Alternative A.

TABLE X: IMPACTS TO PALEONTOLOGICAL RESOURCES

ALTERNATIVE A (NO ACTION ALTERNATIVE)	ALTERNATIVE B	ALTERNATIVE C	ALTERNATIVE D
place in these areas.			
G. No similar action	No Surface Occupancy within 100 meter radius of abandoned nests (unoccupied for 5 consecutive years, but with all or part of the nest remaining).	Same as Alternative B.	Same as Alternative B.
	Preventing surface occupancy or ground disturbing activities could indirectly protect paleontological resources in place in these areas.	Same as Alternative B.	Same as Alternative B.
H. No similar action	All surface disturbing activities (e.g., project construction) should be prohibited within ¼ mile of known roosts on BLM land, unless the activity will benefit wintering bald eagles or their habitat. Exceptions will require consultation for each individual action.	Same as Alternative B.	Same as Alternative B.
	Prohibiting surface disturbing activities could indirectly protect paleontological resources in place in these areas.	Same as Alternative B.	Same as Alternative B.
FIRE			
A. Use maximum suppression on areas with high resource values, structures, commercial forest, oil and gas developments, cultural values, improvements, and to prevent fire from	Use appropriate fire management response in areas where fire not desired at all or wildfire is not desired such as ecosystems where fire never played a significant positive role in it's function; areas where suppression is required to	Same as Alternative B.	Same as Alternative B.

TABLE X: IMPACTS TO PALEONTOLOGICAL RESOURCES

ALTERNATIVE A (NO ACTION ALTERNATIVE)	ALTERNATIVE B	ALTERNATIVE C	ALTERNATIVE D
spreading to adjacent private property/structures, etc. and provide full protection to buffer areas near or adjacent to critical management areas for threatened, endangered and candidate species, Colorado BLM sensitive plant species, and research natural areas (RNA's).	prevent direct threats to life or property; private lands and urban interfaces, important cultural resources, areas with unnatural fuel buildups, and areas where seed bank does not exist for natural reseeding.		
B. Use conditional fire suppression in areas with resources of low value or that do not warrant full suppression actions and/or high suppression costs, including fires in the Douglas Mountain area (the five WSA's adjacent to Dinosaur National Monument, Diamond Breaks WSA, West Cold Spring WSA, and Cross Mountain WSA).	Use conditional fire suppression in areas where fire is desired but where there may be social, political, or ecological constraints such as air quality considerations (proximity to Class I airsheds or non-attainment areas); threatened or endangered species or habitat considerations.	Same as Alternative B.	Same as Alternative B.
C. No similar action	Use minimal to no fire suppression in areas where fire is desired.	Same as Alternative B.	Same as Alternative B.
D. Use both planned and unplanned prescribed fire to improve resource habitat, condition, etc.	Use both prescribed fire and wildfire to improve resource habitat, condition, etc. where appropriate.	Same as Alternative B.	Same as Alternative B.
Direct impacts to	Same as Alternative A.	Same as Alternative A.	Same as Alternative A.

TABLE X: IMPACTS TO PALEONTOLOGICAL RESOURCES

ALTERNATIVE A (NO ACTION ALTERNATIVE)	ALTERNATIVE B	ALTERNATIVE C	ALTERNATIVE D
paleontological resources could occur as a result of surface disturbances caused by wildland fire suppression activities (e.g., construction of fire lines, bulldozing of access roads, and general movement of heavy equipment). However, most areas throughout the RMPPA with paleontological resources present at the surface are not conducive to wildland fire ignition or spread.			
CULTURAL AND HERITAGE RESOURCES			
Cultural Resource Surveys			
Evaluate all proposed surface-disturbing actions to determine inventory needs and sites potentially impacted by such activities.	Same as Alternative A.	Same as Alternative A.	Same as Alternative A.
Ensure that all sites that are listed on, or potentially eligible for listing on, the National Register of Historic Places are identified and assessed through the Section 106 consultation process before any surface-disturbing action is permitted.	Same as Alternative A.	Same as Alternative A.	Same as Alternative A.
Class 3 cultural surveys will be conducted on the specific sites where surface disturbance will occur. If necessary, the	Same as Alternative A. In addition, prioritize non-project driven Class 3 surveys in the Sand Wash area and Vermillion	Same as Alternative B.	Same as Alternative B.

TABLE X: IMPACTS TO PALEONTOLOGICAL RESOURCES

ALTERNATIVE A (NO ACTION ALTERNATIVE)	ALTERNATIVE B	ALTERNATIVE C	ALTERNATIVE D
surface disturbing activity will be relocated to a site in which surveys reveal no significant cultural/paleontological resources.	Basin.		
Cultural resource inventories, recordation, evaluations, and data recovery excavations could result in identification of paleontological resources.	Same as Alternative A.	Same as Alternative A.	Same as Alternative A.
An overall cultural resource management plan as well as a paleontological management plan will be developed that addresses the prehistoric and historic cultural presence as well as the fossil presence in the RMPPA. Separate plans, on a smaller scale, would be developed to include site specific or region specific areas of the RMPPA. These developed plans would address the existing data gaps and research questions that have been developed in the Little Snake RMPPA Class I Overview (La Point 1987) and the Paleontological Overview (Armstrong n.d.). These future plans will be the data orientation and collection designs needed to develop the basic knowledge of these	No similar action.	No similar action.	Same as Alternative A.

TABLE X: IMPACTS TO PALEONTOLOGICAL RESOURCES

ALTERNATIVE A (NO ACTION ALTERNATIVE)	ALTERNATIVE B	ALTERNATIVE C	ALTERNATIVE D
resources that has been lacking in the past.			
A paleontological management plan would allow for area-specific paleontological resource management decisions to better preserve paleontological resources in the area.			Same as Alternative A.
PALEONTOLOGICAL RESOURCES			
Evaluate all proposed surface-disturbing actions to determine inventory needs and sites potentially impacted by such activities. Surface-disturbing activities in Class I and II Paleontological Areas will have an inventory performed by an accredited paleontologist approved by the Authorized Officer. Mitigative measures for specific locations identified on a case-by-case basis.	Same as Alternative A, but change second paragraph to: Surface-disturbing activities in Class I and II Paleontological Areas devoid of thick soils and vegetation and steep unsafe cliffs will have an inventory performed by a paleontologist with CO BLM paleo permit approved by the Authorized Officer.	Same as Alternative B.	Same as Alternative B.
Most impacts to the physical vertebrate and significant non-vertebrate paleontological resources would be mitigated. Mitigation measures include project relocation or redesign (avoidance), or various	Same as Alternative A, except that limiting inventories to Class I and II Paleontological Areas devoid of thick soils and vegetation and steep unsafe cliffs would limit inventories to where most paleontological	Same as Alternative B.	Same as Alternative B.

TABLE X: IMPACTS TO PALEONTOLOGICAL RESOURCES

ALTERNATIVE A (NO ACTION ALTERNATIVE)	ALTERNATIVE B	ALTERNATIVE C	ALTERNATIVE D
<p>scientific data recovery methods such as recordation, surface collection, subsurface testing, or excavation. Mitigation actions would prevent significant impacts to paleontological resources. They also would increase the knowledge and understanding of the area's paleontological resources and of the history of life on earth. These actions would effectively minimize the potential for unmitigated impacts to known paleontological resources.</p> <p>Performing paleontological resource inventories in Class I and II Paleontological Areas would allow for mitigation needs to be identified and implemented at all phases of development. Implementing mitigation on a case-by-case basis would ensure paleontological resource values are protected from damage that could result from surface disturbing activities.</p>	<p>resources are exposed due to naturally weathering of bedrock.</p>		
<p>An overall paleontological management plan will be developed that addresses the fossil presence in the RMPPA.</p>	<p>No similar action.</p>	<p>No similar action.</p>	<p>Same as Alternative A.</p>

TABLE X: IMPACTS TO PALEONTOLOGICAL RESOURCES

ALTERNATIVE A (NO ACTION ALTERNATIVE)	ALTERNATIVE B	ALTERNATIVE C	ALTERNATIVE D
<p>Separate plans, on a smaller scale, would be developed to include site-specific or region-specific areas of the RMPPA. These developed plans would address the existing data gaps and research questions that have been developed in the Little Snake Resource Area Paleontological Overview (Armstrong n.d.). These future plans will be the data orientation and collection designs needed to develop the basic knowledge of these resources that has been lacking in the past.</p>			
<p>A paleontological management plan would allow for area-specific paleontological resource management decisions to better preserve paleontological resources in the area.</p>			<p>Same as Alternative A.</p>
<p>No similar action.</p>	<p>Standard Discovery Stipulation: If paleontological resources are discovered during exploration operations, the licensee shall immediately notify the Field Office Manager and shall not disturb such discovered resources until the Field Office Manager issues specific</p>	<p>Same as Alternative B</p>	<p>Same as Alternative B</p>

TABLE X: IMPACTS TO PALEONTOLOGICAL RESOURCES

ALTERNATIVE A (NO ACTION ALTERNATIVE)	ALTERNATIVE B	ALTERNATIVE C	ALTERNATIVE D
	<p>instructions.</p> <p>Within 5 working days after notification, the Field Office Manager shall evaluate any paleontological resources discovered and shall determine whether any action may be required to protect or to preserve such discoveries.</p> <p>The cost of data recovery for cultural resources discovered during exploration operations shall be borne by the licensee, if the licensee is ordered to take any protective measures. Ownership of paleontological resources discovered shall be determined in accordance with applicable law.</p>		
	<p>Inadvertently discovered paleontological resources would be protect to the extent possible. While discovery of resources in this manner often results in incidental impacts during the inadvertent discovery, this would protect those resources to the extent possible.</p>	<p>Same as Alternative B</p>	<p>Same as Alternative B</p>
SPECIAL MANAGEMENT AREAS			
Areas of Critical Environmental Concern			

TABLE X: IMPACTS TO PALEONTOLOGICAL RESOURCES

ALTERNATIVE A (NO ACTION ALTERNATIVE)	ALTERNATIVE B	ALTERNATIVE C	ALTERNATIVE D
<p>The following sites, totaling 22,530 acres, are designated to protect enhance the values noted:</p> <p>Limestone Ridge ACEC/RNA (1,350 acres; remnant plant associations, Colorado BLM sensitive plant species, scenic quality).</p> <p>Irish Canyon ACEC, including the Ink Springs area (11,680 acres; remnant plant associations, Colorado BLM sensitive plant species, geologic values, cultural resources, scenic quality).</p> <p>Lookout Mountain ACEC (6,500 acres; Colorado BLM sensitive plant species, scenic quality).</p> <p>Cross Mountain Canyon ACEC (3,000 acres; threatened and endangered species, Colorado BLM sensitive plant species, scenic quality).</p>	<p>Designate no additional ACECs, and remove ACEC designation from all existing ACECs. (Manage 0 acres as ACEC).</p>	<p>Retain designation of the Irish Canyon ACEC (11,680 acres).</p> <p>The following areas would not be retained as ACECs. Management of these areas would be as described below:</p> <ul style="list-style-type: none"> • Limestone Ridge (1,350 acres) • Lookout Mountain (6,500 acres) • Cross Mountain Canyon (3,000 acres) 	<p>Retain Irish Canyon ACEC, Limestone Ridge ACEC, Lookout Mountain ACEC, and Cross Mountain Canyon ACEC.</p> <p>In addition, designate the White-Tailed Prairie Dog ACEC (289,438 acres), Cold Desert Shrublands ACEC (5,755 acres), Gibben's Beardtongue ACEC (5,477 acres), Bull Canyon ACEC (3,416 acres), G Gap ACEC (5,661 acres), Little Juniper Canyon ACEC (14 acres), Bassett Spring ACEC (117 acres), No Name Spring ACEC (76 acres), Pot Creek ACEC (2,230 acres), Whiskey Springs ACEC (2,758 acres), Willow Spring ACEC (88 acres), and Deception Creek ACEC (XX acres).</p>
Limestone Ridge			
Minerals and Energy: No Surface Occupancy for oil	No similar action.	Drop ACEC designation.	Objective: Protect sensitive plants, remnant plant communities, and

TABLE X: IMPACTS TO PALEONTOLOGICAL RESOURCES

ALTERNATIVE A (NO ACTION ALTERNATIVE)	ALTERNATIVE B	ALTERNATIVE C	ALTERNATIVE D
<p>and gas exploration and development</p> <p>Locatable - Closed Other Minerals - Open Coal – Not available for leasing</p> <p>OHV: Closed</p> <p>VRM: Not applicable</p> <p>Lands and Realty: Exclusion area unless associated with valid existing rights.</p>	<p>Minerals and Energy: Open to all exploration and development; however, not available for coal leasing.</p> <p>OHV: Open</p> <p>VRM: Class III</p> <p>Lands and Realty: No restrictions</p>	<p>Objective: Protect sensitive plants, remnant plant communities, and scenic values.</p> <p>Management of the area would be the same as Alternative A, except closed to other minerals.</p>	<p>scenic values.</p> <p>Minerals and Energy: Closed to oil and gas exploration and development Locatable - Closed Other Minerals - Closed Coal – Not available for leasing</p> <p>OHV: Closed</p> <p>VRM: Class II</p> <p>Lands and Realty: Exclusion area unless associated with valid existing rights.</p>
<p>Restrictions on surface-disturbing actions within the ACECs would protect paleontological resources in place.</p>	<p>Paleontological resources would be protected through application of paleontological resource decisions.</p>	<p>Same as Alternative A.</p>	<p>Same as Alternative A.</p>
Irish Canyon			
<p>Minerals and Energy: Controlled Surface Use for oil and gas operations Locatable - Open Other Minerals - Open Coal – Not available for leasing</p> <p>OHV: Limited to Designated</p>	<p>No similar action.</p> <p>Minerals and Energy: Open to all exploration and development; however, not available for coal leasing.</p> <p>OHV: Open</p>	<p>Objective: Protect sensitive plant, remnant plant communities, scenic, cultural, and geologic values.</p> <p>Same as Alternative A, except closed to oil and gas exploration and development.</p>	<p>Objective: Protect sensitive plant, remnant plant communities, scenic, cultural, and geologic values.</p> <p>Minerals and Energy: Closed to oil and gas exploration and development. Locatable - Closed Other Minerals - Closed</p>

TABLE X: IMPACTS TO PALEONTOLOGICAL RESOURCES

ALTERNATIVE A (NO ACTION ALTERNATIVE)	ALTERNATIVE B	ALTERNATIVE C	ALTERNATIVE D
VRM: Not applicable Lands and Realty: Exclusion area unless associated with valid existing rights.	VRM: Class III Lands and Realty: No restrictions		Coal – Not available for leasing OHV: Limited to Designated VRM: Class II Lands and Realty: Exclusion area unless associated with valid existing rights.
Paleontological resources would be protected through application of paleontological resource decisions.	Same as Alternative A.	Paleontological resources would not be impacted by oil and gas development. Paleontological resources would be protected through application of paleontological resource decisions.	Restrictions on surface-disturbing actions within the ACECs would protect paleontological resources in place.
Lookout Mountain			
Minerals and Energy: Controlled Surface Use for oil and gas operations Locatable - Open Other Minerals - Open Coal – Not available for leasing	No similar action. Minerals and Energy: Open to all exploration and development; however, not available for coal leasing. OHV: Open	Drop ACEC designation. Objective: Protect sensitive plant, remnant plant communities, and scenic values. Minerals and Energy: No Surface Occupancy for oil and gas operations Locatable - Closed Other Minerals - Closed Coal – Not available for leasing OHV: Limited to designated	Objective: Protect sensitive plant, remnant plant communities, and scenic values. Minerals and Energy: No Surface Occupancy for oil and gas operations Locatable - Closed Other Minerals - Closed Coal –Not available for leasing OHV: Limited to Designated VRM: Class II

TABLE X: IMPACTS TO PALEONTOLOGICAL RESOURCES

ALTERNATIVE A (NO ACTION ALTERNATIVE)	ALTERNATIVE B	ALTERNATIVE C	ALTERNATIVE D
<p>OHV: Limited to Designated</p> <p>VRM: Not applicable</p> <p>Lands and Realty: Exclusion area unless associated with valid existing rights.</p>	<p>VRM: Class III</p> <p>Lands and Realty: No limitations</p>	<p>VRM: Class III</p> <p>Lands and Realty: ROW – Renewal of existing and authorization of future ROWs will be allowed upon approval of a site-specific development plan consistent with area resource objectives.</p>	<p>Lands and Realty: Communication Sites – Existing communication ROWs may be renewed at the end of their term in accordance with area objectives and current regulations. No new communication sites will be authorized.</p> <p>ROW – Exclusion area</p>
<p>Paleontological resources would be protected through application of paleontological resource decisions.</p>	<p>Same as Alternative A.</p>	<p>Restrictions on surface-disturbing actions within the ACECs would protect paleontological resources in place.</p>	<p>Same as Alternative C.</p>
<p>Cross Mountain Canyon (Area is currently within Cross Mountain WSA)</p>			
<p>Minerals and Energy: No Surface Occupancy for oil and gas operations</p> <p>Locatable - Open</p> <p>Other Minerals- Open</p> <p>Coal – Not available for leasing</p> <p>OHV: Closed</p>	<p>No ACEC designation but manage consistent with WSA requirements.</p>	<p>Same as Alternative B.</p>	<p>Objective: Protect sensitive plants, threatened and endangered species, and scenic values.</p> <p>Minerals and Energy: Closed to oil and gas operations</p> <p>Locatable - Closed</p> <p>Other Minerals- Closed Coal – Not available for leasing</p> <p>OHV: Closed</p>

TABLE X: IMPACTS TO PALEONTOLOGICAL RESOURCES

ALTERNATIVE A (NO ACTION ALTERNATIVE)	ALTERNATIVE B	ALTERNATIVE C	ALTERNATIVE D
<p>VRM: Class I</p> <p>Lands and Realty: Exclusion area unless associated with valid existing rights.</p>			<p>VRM: Class I</p> <p>Lands and Realty: Exclusion area unless associated with valid existing rights.</p>
<p>Paleontological resources would be protected through application of paleontological resource decisions.</p>	<p>Managing according to WSA non-impairment would restrict surface disturbing actions, protecting paleontological resources in place.</p>	<p>Same as Alternative B.</p>	<p>Same as Alternative A.</p>
White-Tailed Prairie Dog			
<p>No ACEC designated. Active white-tailed prairie dog colonies are avoidance areas for surface disturbing activities only within black-footed ferret reintroduction area.</p>	<p>Same as Alternative A</p>	<p>Same as Alternative A</p>	<p>Objective: Protect white-tailed prairie dog habitat.</p> <p>The following management applies only to areas within the designated polygon (Map X) containing active/inactive white-tailed prairie dog colonies:</p> <p>Minerals and Energy: No Surface Occupancy for oil and gas operations Locatable - Closed Other Minerals- Closed Coal – Not available for leasing</p>

TABLE X: IMPACTS TO PALEONTOLOGICAL RESOURCES

ALTERNATIVE A (NO ACTION ALTERNATIVE)	ALTERNATIVE B	ALTERNATIVE C	ALTERNATIVE D
			<p>OHV: Limited to Designated</p> <p>VRM: No classification related to prairie dog colonies.</p> <p>Lands and Realty: ROW – exclusion</p>
<p>Paleontological resources would be protected through application of paleontological resource decisions.</p>	<p>Same as Alternative A.</p>	<p>Same as Alternative A.</p>	<p>Restrictions on surface-disturbing actions within the ACECs would protect paleontological resources in place.</p>
<p>Natural Systems ACECs</p>			
<p>No similar action</p>	<p>No similar action</p>	<p>No similar action.</p>	<p>Designate the following ACECs</p> <p>Cold Desert Shrublands ACEC (5,755 acres), Gibben's Beardtongue ACEC (5,477 acres), Bull Canyon ACEC (3,416 acres), G Gap ACEC (5,661 acres), Little Juniper Canyon ACEC (14 acres), Bassett Spring ACEC (117 acres), No Name Spring ACEC (76 acres), Pot Creek ACEC (2,230 acres), Whiskey Springs ACEC (2,758 acres), Willow Spring ACEC (88 acres), Deception Creek ACEC (XX acres).</p> <p>The Objective of these ACECs is to protect sensitive plants and plant communities.</p>

TABLE X: IMPACTS TO PALEONTOLOGICAL RESOURCES

ALTERNATIVE A (NO ACTION ALTERNATIVE)	ALTERNATIVE B	ALTERNATIVE C	ALTERNATIVE D
			<p>The following management applies only to areas within the designated polygons (Map X):</p> <p>Minerals and Energy: Controlled Surface Use for oil and gas operations Locatable - Closed Other Minerals- Closed Coal – Not available for leasing</p> <p>OHV: Limited to Designated Routes</p> <p>VRM: No classification related to ACECs.</p> <p>Lands and Realty: ROW – avoidance</p>
Paleontological resources would be protected through application of paleontological resource decisions.	Same as Alternative A.	Same as Alternative A.	Restrictions on surface-disturbing actions within the ACECs would protect paleontological resources in place.
Wilderness Study Areas			
The Diamond Breaks WSA will be recommended as preliminarily suitable for wilderness designation (RMP/ROD page 22). If Congress does not designate Diamond Breaks as wilderness, the Colorado portion of the WSA (31,480	Diamond Breaks WSA would be managed to preserve its wilderness values according to the IMP (BLM-H-8550-1) and would continue to be managed in that manner until the Congress either designates it wilderness or releases it for other uses.	Diamond Breaks WSA would be managed to preserve its wilderness values according to the IMP (BLM-H-8550-1) and would continue to be managed in that manner until the Congress either designates it wilderness or releases it for other uses.	Diamond Breaks WSA would be managed to preserve its wilderness values according to the IMP (BLM-H-8550-1) and would continue to be managed in that manner until the Congress either designates it wilderness or releases it for other uses.

TABLE X: IMPACTS TO PALEONTOLOGICAL RESOURCES

ALTERNATIVE A (NO ACTION ALTERNATIVE)	ALTERNATIVE B	ALTERNATIVE C	ALTERNATIVE D
<p>acres) would be managed as a recreation management unit; the Utah portion (3,900 acres) would be managed by the Vernal District according to existing management framework plans</p>	<p>If Congress releases Diamond Breaks from wilderness study, it would be managed as multiple use consistent with resource goals and objectives.</p>	<p>If Congress releases Diamond Breaks from wilderness study, it would be managed as follows:</p> <p>OHV – Limited to designated</p> <p>Minerals –</p> <ul style="list-style-type: none"> • Closed to oil and gas exploration and development • Locatable – closed • Other minerals – closed • Coal – Not available for leasing <p>VRM – Class II</p> <p>Lands and Realty: ROW exclusion</p>	<p>If Congress releases Diamond Breaks from wilderness study, it would be managed as follows:</p> <p>OHV – Closed</p> <p>Minerals –</p> <ul style="list-style-type: none"> • Closed to oil and gas exploration and development • Locatable – closed • Other minerals – closed • Coal – Not available for leasing <p>VRM – Class II</p> <p>Lands and Realty: ROW would be considered on a case-by-case basis.</p>
<p>Managing according to WSA non-impairment would restrict surface disturbing actions, protecting paleontological resources in place.</p>	<p>Same as Alternative A.</p> <p>If Congress releases the WSA from wilderness study, paleontological resources would be protected through application of paleontological resource decisions.</p>	<p>Same as Alternative A.</p> <p>If Congress releases the WSA from wilderness study, restrictions on surface-disturbing actions would protect paleontological resources in place.</p>	<p>Same as Alternative A.</p> <p>If Congress releases the WSA from wilderness study, restrictions on surface-disturbing actions would protect paleontological resources in place.</p>
<p>The Cross Mountain WSA (including the proposed Cross Mountain Canyon ACEC) will</p>	<p>Cross Mountain WSA would be managed to preserve its wilderness values according to</p>	<p>Cross Mountain WSA would be managed to preserve its wilderness values according to the IMP (BLM-</p>	<p>Same as Alternative C.</p>

TABLE X: IMPACTS TO PALEONTOLOGICAL RESOURCES

ALTERNATIVE A (NO ACTION ALTERNATIVE)	ALTERNATIVE B	ALTERNATIVE C	ALTERNATIVE D
<p>be recommended as preliminarily suitable for wilderness designation. BLM will recommend that the proposed Cross Mountain wilderness remain open to oil and gas leasing with no-surface-occupancy stipulations. If Congress does not designate Cross Mountain as wilderness, the area would be managed as a special recreation management area (13,000 acres), including the Cross Mountain Canyon ACEC (3,000 acres)</p>	<p>the IMP (BLM-H-8550-1) and would continue to be managed in that manner until the Congress either designates it wilderness or releases it for other uses.</p> <p>If Congress releases Cross Mountain from wilderness study, it would be managed as multiple use consistent with resource goals and objectives.</p>	<p>H-8550-1) and would continue to be managed in that manner until the Congress either designates it wilderness or releases it for other uses.</p> <p>If Congress releases Diamond Breaks from wilderness study, it would be managed as an ACEC as follows:</p> <p>Objective: Protect sensitive plants, threatened and endangered species, and scenic values.</p> <p>Minerals and Energy: Closed to oil and gas operations Locatable - closed Other Minerals- closed Coal – Not available for leasing</p> <p>OHV: Closed</p> <p>VRM: Class II</p> <p>Lands and Realty: Exclusion area unless associated with valid existing rights.</p>	
<p>Managing according to WSA non-impairment would restrict surface disturbing actions,</p>	<p>Same as Alternative A.</p>	<p>Same as Alternative A.</p>	<p>Same as Alternative C.</p>

TABLE X: IMPACTS TO PALEONTOLOGICAL RESOURCES

ALTERNATIVE A (NO ACTION ALTERNATIVE)	ALTERNATIVE B	ALTERNATIVE C	ALTERNATIVE D
protecting paleontological resources in place.	If Congress releases the WSA from wilderness study, paleontological resources would be protected through application of paleontological resource decisions.	If Congress releases the WSA from wilderness study, restrictions on surface-disturbing actions would protect paleontological resources in place.	
<p>The West Cold Spring WSA will be recommended as nonsuitable for wilderness designation. If Congress does not designate the area as wilderness, the Colorado portion of West Cold Spring would be managed as the Cold Spring and Little Snake River management units (total of 14,482 acres). The Utah portion of the WSA would be managed under the Brown's Park Management Framework Plan</p>	<p>West Cold Spring WSA would be managed to preserve its wilderness values according to the IMP (BLM-H-8550-1) and would continue to be managed in that manner until the Congress either designates it wilderness or releases it for other uses.</p> <p>If Congress releases West Cold Springs from wilderness study, it would be managed as multiple use consistent with resource goals and objectives.</p>	<p>West Cold Spring WSA would be managed to preserve its wilderness values according to the IMP (BLM-H-8550-1) and would continue to be managed in that manner until the Congress either designates it wilderness or releases it for other uses.</p> <p>If Congress releases West Cold Springs from wilderness study, it would be managed the same as the adjacent wilderness character area:</p> <p>Minerals and Energy: Closed to oil and gas operations Locatable - Closed Other Minerals - Closed Coal – Not available for leasing</p> <p>OHV: Limited (apply adaptive criteria)</p>	<p>West Cold Spring WSA would be managed to preserve its wilderness values according to the IMP (BLM-H-8550-1) and would continue to be managed in that manner until the Congress either designates it wilderness or releases it for other uses.</p> <p>If Congress releases West Cold Springs from wilderness study, it would be managed the same as the adjacent SRMA:</p> <p>Designate as a backcountry SRMA.</p> <p>Minerals and Energy: Closed to oil and gas operations Locatable - Closed Other Minerals - Closed Coal – Not available for leasing</p> <p>OHV: Limited to Designated</p> <p>VRM: Class I</p>

TABLE X: IMPACTS TO PALEONTOLOGICAL RESOURCES

ALTERNATIVE A (NO ACTION ALTERNATIVE)	ALTERNATIVE B	ALTERNATIVE C	ALTERNATIVE D
		VRM: Class III Lands and Realty: ROW – avoidance; accept wind energy applications on case-by-case basis.	Lands and Realty: ROW – exclusion; no wind energy
Managing according to WSA non-impairment would restrict surface disturbing actions, protecting paleontological resources in place.	Same as Alternative A. If Congress releases the WSA from wilderness study, paleontological resources would be protected through application of paleontological resource decisions.	Same as Alternative A. If Congress releases the WSA from wilderness study, restrictions on surface-disturbing actions would protect paleontological resources in place.	Same as Alternative C.
Four WSAs evaluated under Section 202 of FLPMA – Ant Hills, Chew Winter Camp, Peterson Draw, and Vale of Tears – will be recommended as nonsuitable for wilderness designation but would be recommended to the Secretary for forwarding to Congress for the final decision. If Congress does not designate these areas as wilderness, they would be managed as follows: 1. The northwest corner of Ant Hills would be managed as the Douglas Mountain Management Unit and the remainder as the Scattered Sands Management Unit.	Ant Hills, Chew Winter Camp, Peterson Draw, and Vale of Tears WSAs would be managed to preserve their wilderness values according to the IMP (BLM-H-8550-1) and would continue to be managed in that manner until the Congress either designates them wilderness or releases them for other uses. If Congress releases Ant Hills, Chew Winter Camp, Peterson Draw, and Vale of Tears from wilderness study, it would be managed as multiple use consistent with resource goals and objectives.	Ant Hills, Chew Winter Camp, Peterson Draw, and Vale of Tears WSAs would be managed to preserve its wilderness values according to the IMP (BLM-H-8550-1) and would continue to be managed in that manner until the Congress either designates it wilderness or releases it for other uses. If Congress releases Ant Hills, Chew Winter Camp, Peterson Draw, and Vale of Tears from wilderness study, they would be managed the same as the adjacent wilderness character area:	Ant Hills, Chew Winter Camp, Peterson Draw, and Vale of Tears WSAs would be managed to preserve its wilderness values according to the IMP (BLM-H-8550-1) and would continue to be managed in that manner until the Congress either designates it wilderness or releases it for other uses. If Congress releases Ant Hills, Chew Winter Camp, Peterson Draw, and Vale of Tears from wilderness study, they would be managed the same as the adjacent SRMA: Designate as a backcountry SRMA. Minerals and Energy:

TABLE X: IMPACTS TO PALEONTOLOGICAL RESOURCES

ALTERNATIVE A (NO ACTION ALTERNATIVE)	ALTERNATIVE B	ALTERNATIVE C	ALTERNATIVE D
<p>2. Chew Winter Camp would be managed as the Scattered Sands Management Unit.</p> <p>3. The north third of Peterson Draw would be managed as the Scattered Sands Management Unit and the remainder as the Douglas Mountain Management Unit.</p> <p>4. Most of the Vale of Tears would be managed as the Little Snake River Management Unit and the other portions in the northwest corner would be managed as the Douglas Mountain and Scattered Sands Management Units (Little Snake Resource Management Plan (1989))</p> <p>5. The Cross Mountain, Diamond Breaks, West Cold Spring, Ant Hills, Chew Winter Camp, Peterson Draw, and Vale of Tears Wilderness Study Areas will not be leased. This is 35,280 acres of BLM-administered mineral estate within the Little Snake RMPPA</p>		<p>Minerals and Energy: Closed to oil and gas exploration and development Locatable - Closed Other Minerals - Closed Coal – Not available for leasing</p> <p>OHV: Limited (apply adaptive criteria)</p> <p>VRM: Class II</p> <p>Lands and Realty: ROW – avoidance; no wind energy</p>	<p>Closed to oil and gas exploration and development Locatable - Closed Other Minerals - Closed Coal – Not available for leasing</p> <p>OHV: Limited to Designated</p> <p>VRM: Class I</p> <p>Lands and Realty: ROW – exclusion; no wind energy</p>
Managing according to WSA non-impairment would restrict	Same as Alternative A.	Same as Alternative A.	Same as Alternative C.

TABLE X: IMPACTS TO PALEONTOLOGICAL RESOURCES

ALTERNATIVE A (NO ACTION ALTERNATIVE)	ALTERNATIVE B	ALTERNATIVE C	ALTERNATIVE D
surface disturbing actions, protecting paleontological resources in place.	If Congress releases the WSA from wilderness study, paleontological resources would be protected through application of paleontological resource decisions.	If Congress releases the WSA from wilderness study, restrictions on surface-disturbing actions would protect paleontological resources in place.	
Wild and Scenic Rivers			
<p>Existing land use plans contain no decisions regarding wild and scenic rivers.</p> <p>As directed by BLM IM-2004-196, manage all of <i>eligible</i> river segments (XX miles) to protect their outstandingly remarkable values, free-flowing nature, and tentative classification, as follows:</p> <p>In keeping with BLM Manual 8351, .32C and .33 C, suitability determinations would not be made for any of the eligible river segments. They would remain eligible and would be managed to protect their outstandingly remarkable values, free-flowing nature, and tentative classification to the degree that BLM has authority (i.e., BLM lands within the corridor) and within</p>	No recommendations as suitable for inclusion in the National Wild and Scenic River System.	Determine and Manage Yampa Segments 1, 2 and 3 as suitable for inclusion in the National Wild and Scenic River System.	Determine and manage all eligible segments and tentative classifications (listed below) as suitable for inclusion in the National Wild and Scenic River System: Beaver Creek Segment 1 (wild) Vermillion Creek Segment 1 (Lower Vermillion Creek, scenic) Yampa Segment 1 (River Mile 126 to Milk Creek, recreational) Yampa Segment 2 (Milk Creek to Duffy Tunnel, scenic) Yampa Segment 3 (Cross Mountain Canyon, wild)

TABLE X: IMPACTS TO PALEONTOLOGICAL RESOURCES

ALTERNATIVE A (NO ACTION ALTERNATIVE)	ALTERNATIVE B	ALTERNATIVE C	ALTERNATIVE D
the parameters of decisions made in the previous planning documents until such time as suitability determinations are made.			
No similar action.	No similar action.	No similar action.	<p>The following management actions would only apply to the portions of the river segments where the river corridor is managed by the BLM.</p> <p>Manage Beaver Creek Segment 1 as suitable for inclusion in the National Wild and Scenic River System with the tentative classification of <i>wild</i>.</p> <p>Manage to protect the outstandingly remarkable values, including fish. Specific management prescriptions within one-quarter mile of each side of the river include—</p> <ul style="list-style-type: none"> • Close to OHV • Close to oil and gas leasing. • Recommend withdrawing from mineral entry.
No similar action.	No similar action.	No similar action.	<p>The following management actions would only apply to the portions of the river segments where the river corridor is managed by the BLM.</p> <p>Manage Vermillion Creek Segment 1 as suitable for inclusion in the National Wild and Scenic River</p>

TABLE X: IMPACTS TO PALEONTOLOGICAL RESOURCES

ALTERNATIVE A (NO ACTION ALTERNATIVE)	ALTERNATIVE B	ALTERNATIVE C	ALTERNATIVE D
			<p>System with the tentative classification of <i>scenic</i>.</p> <p>Manage to protect the outstandingly remarkable values, including cultural and geology. Specific management prescriptions within one-quarter mile of each side of the river include—</p> <ul style="list-style-type: none"> • Close to OHV • Close to oil and gas leasing. • Recommend withdrawing from mineral entry.
No similar action.	No similar action.	<p>The following management actions would only apply to the portions of the river segments where the river corridor is managed by the BLM.</p> <p>Manage Segment 1 of the Yampa River (2.8 miles from River Mile #126 to Milk Creek area) as suitable for inclusion in the National Wild and Scenic River System with the tentative classification of <i>recreational</i>.</p> <p>Manage to protect the outstandingly remarkable values, including recreation and fish. Specific management prescriptions within one-quarter mile of each side of the river include—</p> <ul style="list-style-type: none"> • Close to OHV • Close to oil and gas leasing. 	<p>The following management actions would only apply to the portions of the river segments where the river corridor is managed by the BLM.</p> <p>Manage Segment 1 of the Yampa River (2.8 miles from River Mile #126 to Milk Creek area) as suitable for inclusion in the National Wild and Scenic River System with the tentative classification of <i>recreational</i>.</p> <p>Manage to protect the outstandingly remarkable values, including recreation and fish. Specific management prescriptions within one-quarter mile of each side of the river include—</p> <ul style="list-style-type: none"> • Close to OHV • Close to oil and gas leasing.

TABLE X: IMPACTS TO PALEONTOLOGICAL RESOURCES

ALTERNATIVE A (NO ACTION ALTERNATIVE)	ALTERNATIVE B	ALTERNATIVE C	ALTERNATIVE D
		<ul style="list-style-type: none"> • Recommend withdrawing from mineral entry. <p>For sites within the segment where habitat loss is a risk, remedial actions would be implemented to ensure that the suitability of the spawning habitat is maintained, or enhanced.</p>	<ul style="list-style-type: none"> • Recommend withdrawing from mineral entry. • For sites within the segment where habitat loss is a risk, remedial actions would be implemented to ensure that the suitability of the spawning habitat is maintained, or enhanced.
No similar action.	No similar action.	<p>The following management actions would only apply to the portions of the river segments where the river corridor is managed by the BLM.</p> <p>Manage Segment 2 of the Yampa River (13.9 miles from Milk Creek to Duffy Tunnel) as suitable for inclusion in the National Wild and Scenic River System with the tentative classification of <i>scenic</i>.</p> <p>Manage to protect the outstandingly remarkable values, including recreation and fish. Specific management prescriptions within one-quarter mile of each side of the river include—</p> <ul style="list-style-type: none"> • Close to OHV • Close to oil and gas leasing. • Recommend withdrawing from mineral entry. • For sites within the segment 	<p>The following management actions would only apply to the portions of the river segments where the river corridor is managed by the BLM.</p> <p>Manage Segment 2 of the Yampa River (13.9 miles from Milk Creek to Duffy Tunnel) as suitable for inclusion in the National Wild and Scenic River System with the tentative classification of <i>scenic</i>.</p> <p>Manage to protect the outstandingly remarkable values, including recreation and fish. Specific management prescriptions within one-quarter mile of each side of the river include—</p> <ul style="list-style-type: none"> • Close to OHV • Close to oil and gas leasing. • Recommend withdrawing from mineral entry. • For sites within the segment

TABLE X: IMPACTS TO PALEONTOLOGICAL RESOURCES

ALTERNATIVE A (NO ACTION ALTERNATIVE)	ALTERNATIVE B	ALTERNATIVE C	ALTERNATIVE D
		<p>where habitat loss is a risk, remedial actions would be implemented to ensure that the suitability of the spawning habitat is maintained, or enhanced.</p>	<p>where habitat loss is a risk, remedial actions would be implemented to ensure that the suitability of the spawning habitat is maintained, or enhanced.</p> <ul style="list-style-type: none"> • Close to livestock grazing during the months of June and July.
No similar action.	No similar action.	<p>The following management actions would only apply to the portions of the river segments where the river corridor is managed by the BLM.</p> <p>Manage Segment 3 of the Yampa River (3.3 miles through Cross Mountain Canyon) as suitable for inclusion in the National Wild and Scenic River System with the tentative classification of <i>wild</i>.</p> <p>Manage to protect the outstandingly remarkable values, including scenic, recreation, geologic, and fish. Specific management prescriptions within one-quarter mile of each side of the river include—</p> <ul style="list-style-type: none"> • Close to OHV • Close to oil and gas leasing. • Recommend withdrawing from mineral entry. 	<p>The following management actions would only apply to the portions of the river segments where the river corridor is managed by the BLM.</p> <p>Manage Segment 3 of the Yampa River (3.3 miles through Cross Mountain Canyon) as suitable for inclusion in the National Wild and Scenic River System with the tentative classification of <i>wild</i>.</p> <p>Manage to protect the outstandingly remarkable values, including scenic, recreation, geologic, and fish. Specific management prescriptions within one-quarter mile of each side of the river include—</p> <ul style="list-style-type: none"> • Close to OHV • Close to oil and gas leasing. • Recommend withdrawing from mineral entry.
Protecting the outstandingly remarkable values of eligible		Restrictions on surface-disturbing actions to protect outstandingly	Same as Alternative C, but more localities could be preserved due to

TABLE X: IMPACTS TO PALEONTOLOGICAL RESOURCES

ALTERNATIVE A (NO ACTION ALTERNATIVE)	ALTERNATIVE B	ALTERNATIVE C	ALTERNATIVE D
river segments would indirectly protect paleontological resources in place.		remarkable values of suitable river segments would indirectly protect paleontological resources in place.	increases in the number of river segments.
Lands With Wilderness Character Outside Existing WSAs			
<i>Vermillion Basin</i>			
<p>Minerals and Energy: Open to new oil and gas leasing Locatable - Open Other Minerals - Open Coal – Not available for leasing</p> <p>OHV: Open, some Limited to Existing</p> <p>VRM: Not applicable</p> <p>Lands and Realty: Considered on a case-by-case basis.</p>	<p>Objectives: Allow for oil and gas leasing, exploration, and development by utilizing state of the art technology, while protecting natural values. Manage for minimal surface disturbance by focusing development near existing trails, ROWs, canyons and washes and clustering wells where feasible. Manage to minimize visual intrusions, Lookout Mountain as observation point Control infrastructure by requiring pre-planning, including transportation planning. Lease in larger leases (4 section blocks) in order to facilitate seismic exploration and allow operators to drill fewer wells</p> <p>Minerals and Energy: Open to new oil and gas leasing with a Controlled Surface Use</p>	<p>Zone 1 (Northern Zone of High and Medium potential):</p> <p>Objectives: Allow for oil and gas leasing, exploration, and development by utilizing state of the art technology, while protecting natural values. Manage for minimal surface disturbance by focusing development near existing trails, ROWs, canyons and washes and clustering wells where feasible. Manage to minimize visual intrusions, Lookout Mountain as observation point Control infrastructure by requiring pre-planning, including transportation planning. Lease in larger leases (4 section blocks) in order to facilitate seismic exploration and allow operators to drill fewer wells Long term goal for Vermillion Basin is to manage the area so that any disturbance caused by permitted actions will eventually be returned to</p>	<p>Objective: provide quality primitive recreational experiences in largely natural settings</p> <p>Designate as a backcountry SRMA.</p> <p>Minerals and Energy: Closed to new oil and gas leasing Locatable - Closed Other Minerals - Closed Coal – Not available for leasing</p> <p>OHV: Closed</p> <p>VRM: Class II</p> <p>Lands and Realty: Exclusion area</p>

TABLE X: IMPACTS TO PALEONTOLOGICAL RESOURCES

ALTERNATIVE A (NO ACTION ALTERNATIVE)	ALTERNATIVE B	ALTERNATIVE C	ALTERNATIVE D
	<p>stipulation. Stipulation language would reference Objectives above.</p> <p>Locatable – Closed</p> <p>Other Minerals - Closed</p> <p>Coal – Not available for leasing</p> <p>OHV: Limited to Designated Routes</p> <p>VRM: Class III, Class II for Vermillion Bluffs area</p> <p>Lands and Realty: Case-by-case basis, avoidance for Vermillion Bluffs and fragile soil areas</p>	<p>the state prior to development.</p> <p>Minerals and Energy: Open to new oil and gas leasing with a Controlled Surface Use stipulation. Stipulation language would reference Objectives above.</p> <p>Locatable – Closed</p> <p>Other Minerals - Closed</p> <p>Coal – Not available for leasing</p> <p>OHV: Limited to Designated Routes</p> <p>VRM: Class III, Class II for Vermillion Bluffs area</p> <p>Lands and Realty: Case-by-case basis, avoidance for Vermillion Bluffs and fragile soil areas?</p> <p>Zone 2: (Southwest area of Low and No Known potential) Objectives: Manage to protect naturalness, opportunities for semi-primitive recreation, and solitude.</p> <p>Minerals and Energy: Closed to new oil and gas leasing</p> <p>Locatable – Closed</p> <p>Other Minerals - Closed</p>	

TABLE X: IMPACTS TO PALEONTOLOGICAL RESOURCES

ALTERNATIVE A (NO ACTION ALTERNATIVE)	ALTERNATIVE B	ALTERNATIVE C	ALTERNATIVE D
		<p>Coal – Closed</p> <p>OHV: The portion of Vermillion Basin south and east of Ted's Draw will be Limited to Designated Routes The remaining portion of Zone 2 will be Closed to OHVs.</p> <p>VRM: II</p> <p>Lands and Realty: ROW Avoidance - the portion of Vermillion Basin south and east of Ted's Draw</p> <p>ROW Exclusion – remaining portion of Zone 2</p>	
Paleontological resources would be protected through application of paleontological resource decisions.	Minimizing and other restrictions on surface-disturbing actions and would protect paleontological resources in place.	<p>Zone 1: Same as Alternative B.</p> <p>Zone 2: Restrictions on surface-disturbing actions would protect paleontological resources in place.</p>	Restrictions on surface-disturbing actions would protect paleontological resources in place.
<i>Dinosaur North</i>			
<p>Multiple use outside existing WSAs</p> <p>Minerals and Energy: Open Locatable - Open Other Minerals - Open</p>	Same as Alternative A.	<p>WHEN CALCULATING AREA, MAKE SURE TO INCLUDE WILD MOUNTAIN.</p> <p>Objective: Manage to protect naturalness, opportunities for semi-primitive recreation, and solitude.</p>	<p>WHEN CALCULATING AREA, MAKE SURE TO INCLUDE WILD MOUNTAIN.</p> <p>Objective: Provide quality primitive recreational experiences in largely natural settings.</p>

TABLE X: IMPACTS TO PALEONTOLOGICAL RESOURCES

ALTERNATIVE A (NO ACTION ALTERNATIVE)	ALTERNATIVE B	ALTERNATIVE C	ALTERNATIVE D
<p>Coal – Not available for leasing</p> <p>OHV: Open</p> <p>VRM: Not applicable</p> <p>Lands and Realty: No restrictions, case-by-case basis</p>		<p>No designation with the following prescriptions:</p> <p>Minerals and Energy: Closed to oil and gas operations Locatable - Closed Other Minerals - Closed Coal – Not available for leasing</p> <p>OHV: Limited to Designated Routes</p> <p>VRM: Class II</p> <p>Lands and Realty: ROW – avoidance; no wind energy</p>	<p>Designate as a backcountry SRMA.</p> <p>Minerals and Energy: Closed to oil and gas operations Locatable - Closed Other Minerals - Closed Coal – Not available for leasing</p> <p>OHV: Closed</p> <p>VRM: Class II</p> <p>Lands and Realty: ROW – exclusion; no wind energy</p>
Paleontological resources would be protected through application of paleontological resource decisions.	Same as Alternative A.	Restrictions on surface-disturbing actions would protect paleontological resources in place.	Same as Alternative C.
<i>Cold Springs Mountain</i>			
<p>Multiple use outside existing WSAs</p> <p>Minerals and Energy: Open Locatable - Open Other Minerals - Open Coal – Not available for leasing</p>	Same as Alternative A.	<p>Objective: Manage to protect naturalness, opportunities for semi-primitive recreation, and solitude.</p> <p>No designation with the following prescriptions:</p> <p>Minerals and Energy:</p>	<p>Objective: Provide quality primitive recreational experiences in largely natural settings</p> <p>Designate as a backcountry SRMA.</p> <p>Minerals and Energy: Closed to oil and gas operations</p>

TABLE X: IMPACTS TO PALEONTOLOGICAL RESOURCES

ALTERNATIVE A (NO ACTION ALTERNATIVE)	ALTERNATIVE B	ALTERNATIVE C	ALTERNATIVE D
<p>OHV: Majority Limited to Existing, remainder is Open</p> <p>VRM: Not applicable</p> <p>Lands and Realty: No restrictions, case-by-case basis</p>		<p>Closed to oil and gas operations Locatable - Closed Other Minerals - Closed Coal – Not available for leasing</p> <p>OHV: Limited to designated routes</p> <p>VRM: Class III</p> <p>Lands and Realty: ROW – avoidance; accept wind energy applications on case-by-case basis.</p>	<p>Locatable - Closed Other Minerals - Closed Coal - Not available for leasing</p> <p>OHV: Closed</p> <p>VRM: Class II</p> <p>Lands and Realty: ROW – exclusion; no wind energy</p>
<p>Paleontological resources would be protected through application of paleontological resource decisions.</p>	<p>Same as Alternative A.</p>	<p>Restrictions on surface-disturbing actions would protect paleontological resources in place from most surface disturbing actions. Paleontological resource localities could be identified and/or recovered during wind energy developments.</p>	<p>Restrictions on surface-disturbing actions would protect paleontological resources in place.</p>
<p><i>Lands with Backcountry Characteristics outside existing WSAs</i></p>			
<p>No Similar Action</p>	<p>No similar action</p>	<p>No similar action</p>	<p>Cross Mountain Area XX acres adjacent to Cross Mountain WSA. See Map X.</p> <p>Objective: Provide backcountry recreation experience in predominantly natural settings</p> <p>Minerals and Energy: Closed to oil and gas operations</p>

TABLE X: IMPACTS TO PALEONTOLOGICAL RESOURCES

ALTERNATIVE A (NO ACTION ALTERNATIVE)	ALTERNATIVE B	ALTERNATIVE C	ALTERNATIVE D
			<p>Locatable - Closed Other Minerals - Closed Coal – Not available for leasing</p> <p>OHV: Closed</p> <p>VRM: Class II</p> <p>Lands and Realty: ROW – exclusion.</p>
No similar action	No similar action	No similar action	<p>Diamond Breaks Area XX acres adjacent to Diamond Breaks WSA. See Map X.</p> <p>Objective: Provide backcountry recreation experience in predominantly natural settings</p> <p>Minerals and Energy: Closed to oil and gas operations Locatable - Closed Other Minerals - Closed Coal - Not available for leasing</p> <p>OHV: Closed</p> <p>VRM: Class II</p> <p>Lands and Realty: ROW – exclusion.</p>

TABLE X: IMPACTS TO PALEONTOLOGICAL RESOURCES

ALTERNATIVE A (NO ACTION ALTERNATIVE)	ALTERNATIVE B	ALTERNATIVE C	ALTERNATIVE D
No similar action	No similar action	No similar action	<p>Pinyon Ridge Area XX acres. See Map X.</p> <p>Objective: Provide backcountry recreation experience in predominantly natural settings</p> <p>Minerals and Energy: Closed to oil and gas operations Locatable - Closed Other Minerals - Closed Coal - Not available for leasing</p> <p>OHV: Closed</p> <p>VRM: Class II Lands and Realty: ROW – exclusion.</p>
Paleontological resources would be protected through application of paleontological resource decisions.	Same as Alternative A.	Same as Alternative A.	Restrictions on surface-disturbing actions would protect paleontological resources in place.
VISUAL RESOURCE MANAGEMENT (VRM)			
VRM Class I			
WSAs (manage in accordance with IM)	Same as Alternative A	Same as Alternative A	In addition to WSAs, Cross Mountain Canyon ACEC
Restrictions on visually obtrusive developments on	Same as Alternative A	Same as Alternative A	Same as Alternative A, except paleontological resources on more

TABLE X: IMPACTS TO PALEONTOLOGICAL RESOURCES

ALTERNATIVE A (NO ACTION ALTERNATIVE)	ALTERNATIVE B	ALTERNATIVE C	ALTERNATIVE D
VRM Class I areas would limit development in view of key observation. While not a restriction on surface disturbance, VRM Class I would reduce disturbance that could impact paleontological resources. This long term impact would usually protect paleontological resources in place.			acres would be preserved through VRM I management.
ENERGY AND MINERALS			
Leasing Decisions			
Closed to Oil and Gas Leasing			
A. WSAs	WSAs	WSAs; Limestone Ridge, Dinosaur North, Cold Springs Area (outside WSA), Vermillion Basin (Zone 2), Irish Canyon ACEC; WSR Segments 1, 2, and 3.	WSAs, Vermillion Basin, Limestone Ridge ACEC, Cross Mountain Canyon ACEC, Irish Canyon ACEC, all suitable WSR segments; Cross Mountain backcountry area; Diamond Breaks backcountry area; Pinyon Ridge backcountry area; Little Yampa Canyon SRMA, Juniper Mountain SRMA; Cedar Mountain SRMA; Dinosaur North SRMA, Cold Springs Area SRMA,
There would be no impacts to paleontological resources from oil and gas development on XXX,XXX acres through closures. There would also be a reduced need for data recovery efforts and an associated reduction in the	Same as Alternative A.	Same as Alternative A, although there would be no impacts to paleontological resources from oil and gas development on XXX,XXX acres through closures.	Same as Alternative A, although there would be no impacts to paleontological resources from oil and gas development on XXX,XXX acres through closures.

TABLE X: IMPACTS TO PALEONTOLOGICAL RESOURCES

ALTERNATIVE A (NO ACTION ALTERNATIVE)	ALTERNATIVE B	ALTERNATIVE C	ALTERNATIVE D
potential for site identification and recordation associated with development compared to areas open for oil and gas development.			
No Surface Occupancy Stipulations			
B. Leases within the area of federally leased coal lands where oil and gas development would likely be incompatible with coal extraction. Stipulation may be waived if lessee agrees to outlined conditions.	Same as Alternative A. [Assuming this is non-discretionary]	Same as Alternative A.	Same as Alternative A.
C. Special status plant species: NSO on habitat areas containing special status species (federally listed, proposed, and candidate). NSO may be altered after important factors are considered in the impact analysis such as the type and amount of surface disturbance, plant frequency and density, and the relocation of disturbances.	No similar action	No similar action	No similar action.
D. NSO areas: Limestone Ridge ACEC; Cross Mountain Canyon ACEC; Little Yampa/Juniper Canyon SRMA; Cedar Mountain SRMA;	No similar action	Lookout Mountain, Little Yampa Canyon SRMA, Juniper Mountain SRMA, Cedar Mountain SRMA	Lookout Mountain ACEC, White-tailed prairie dog ACEC

TABLE X: IMPACTS TO PALEONTOLOGICAL RESOURCES

ALTERNATIVE A (NO ACTION ALTERNATIVE)	ALTERNATIVE B	ALTERNATIVE C	ALTERNATIVE D
Steamboat Lake State Park; Pearl Lake State Park. No exceptions.			
<p>Preventing oil and gas surface occupancy could indirectly protect paleontological resources from well-pad development on XX,XXX acres. However, paleontological resource assessments related to short-term land disturbances could result in the identification of sites and could also result in paleontological resource values being preserved through data recovery.</p> <p>Oil and gas development facilities throughout the field office could result in inadvertent damage to paleontological resources (paleontological resources found during and not prior to ground disturbing activities). Inadvertent damage to paleontological resources would generally result in significant impacts.</p>		Same as Alternative A, although paleontological resources on XXX,XXX acres could be indirectly protected from well-pad development.	Same as Alternative A, although paleontological resources on XXX,XXX acres could be indirectly protected from well-pad development.
Controlled Surface Use Stipulations			
E. No similar action.	Special status plant species: CSU on habitat areas containing special status species (federally	Same as Alternative B.	Same as Alternative B.

TABLE X: IMPACTS TO PALEONTOLOGICAL RESOURCES

ALTERNATIVE A (NO ACTION ALTERNATIVE)	ALTERNATIVE B	ALTERNATIVE C	ALTERNATIVE D
	listed, proposed, and candidate). Exception criteria detailed in Appendix X apply.		
F. Attached to leases where operations proposed within the area of an approved surface or underground coal mine will be relocated outside the area to be mined or to accommodate room and pillar mining operations. Stipulations may be waived subject to outlined conditions.	Same as Alternative A. [Assuming this is non-discretionary]	Same as Alternative A.	Same as Alternative A.
G. Fragile Soil Areas – performance objectives must be met prior to surface disturbance.	No similar action	Fragile Soil Areas (see Soils section for performance objectives and fragile soil criteria)	Same as Alternative C
H. Prior to surface disturbance on slopes of, or greater than, 40 percent, an engineering/ reclamation plan must be approved by the Authorized Officer. Stipulations may be excepted subject to an on-site impact analysis. Stipulation not applied where the Authorized Officer determines that relocation up to 200 meters can be applied to protect the riparian system during well siting.	No similar action	Prior to surface disturbance on slopes of, or greater than, 35 percent, an engineering/ reclamation plan must be approved by the Authorized Officer. Stipulations may be excepted subject to an on-site impact analysis. Stipulation not applied where the Authorized Officer determines that relocation up to 200 meters can be applied to protect the riparian system during well siting.	Same as Alternative C

TABLE X: IMPACTS TO PALEONTOLOGICAL RESOURCES

ALTERNATIVE A (NO ACTION ALTERNATIVE)	ALTERNATIVE B	ALTERNATIVE C	ALTERNATIVE D
I. Irish Canyon ACEC: Inventory for sensitive plant and remnant vegetation associations will be required. Sensitive plants and associations identified will be avoided. Known geologic values and cultural resources will be avoided. No exceptions.	No similar action	No similar action	No similar action
J. Lookout Mountain ACEC: Inventory for sensitive plant and remnant vegetation associations will be required. Sensitive plants and associations identified will be avoided. No exceptions.	No similar action	No similar action	No similar action
K. No similar action	Vermillion Basin; Dinosaur North; Cold Springs Area (outside WSA)	Vermillion Basin (Zone 1)	Natural Systems ACECs
Timing Limitations Stipulations			
L. No helicopter or motor vehicle use allowed in the wild horse herd management area during foaling season (March 2 to June 30). No exceptions.	No similar action.	Consider seasonal closures in wild horse foaling areas on an as needed basis for all activities based on site specific transportation planning results, consistency with other resource restrictions, and resource conflicts.	The wild horse herd management area would be closed to motor vehicle use and all permitted activities during the wild horse foaling period (March 2 to June 30).
M. No drilling or development operations permitted within 1-mile radius from March 1 to December 1 from Wild	No similar action.	Consider seasonal closures around wild horse water sources on an as needed basis for all activities based on consistency with other resource	Same as Alternative A.

TABLE X: IMPACTS TO PALEONTOLOGICAL RESOURCES

ALTERNATIVE A (NO ACTION ALTERNATIVE)	ALTERNATIVE B	ALTERNATIVE C	ALTERNATIVE D
Horse Spring, Shepherd Spring, Coffee Pot Spring, Two Bar Spring, and Dugout Draw Spring. Exceptions would include provision, by the operator, of an alternate dependable water source at a suitable location outside the mile radius of the spring prior to authorized activity.		restrictions and resource conflicts.	
Open			
N. All remaining areas subject to existing standard terms and conditions consistent with applicable law.	All remaining areas subject to existing standard terms and conditions consistent with applicable law.	All remaining areas subject to existing standard terms and conditions consistent with applicable law.	All remaining areas subject to existing standard terms and conditions consistent with applicable law.
<p>Paleontological resource values on XXX,XXX acres would be protected from surface disturbance related to oil and gas development through mitigation methods such as avoidance and data recovery.</p> <p>Oil and gas development facilities throughout the field office could result in inadvertent damage to Paleontological resources (Paleontological resources found during and not prior to</p>	<p>Paleontological resource values on XXX,XXX acres would be protected from surface disturbance related to oil and gas development through mitigation methods such as avoidance and data recovery.</p> <p>Oil and gas development facilities throughout the field office could result in inadvertent damage to paleontological resources (paleontological resources found during and not prior to ground disturbing activities).</p>	<p>Paleontological resource values on XXX,XXX acres would be protected from surface disturbance related to oil and gas development through mitigation methods such as avoidance and data recovery.</p> <p>Oil and gas development facilities throughout the field office could result in inadvertent damage to paleontological resources (paleontological resources found during and not prior to ground disturbing activities).</p>	<p>Paleontological resource values on XXX,XXX acres would be protected from surface disturbance related to oil and gas development through mitigation methods such as avoidance and data recovery.</p> <p>Oil and gas development facilities throughout the field office could result in inadvertent damage to paleontological resources (paleontological resources found during and not prior to ground disturbing activities).</p>

TABLE X: IMPACTS TO PALEONTOLOGICAL RESOURCES

ALTERNATIVE A (NO ACTION ALTERNATIVE)	ALTERNATIVE B	ALTERNATIVE C	ALTERNATIVE D
ground disturbing activities).			
Exception, Waiver, and/or Modification			
O. Stipulations or restrictions may be waived or reduced if resource conditions change and the protection is no longer necessary or if the lessee can demonstrate that operations can be conducted without causing unacceptable impacts.	Same as Alternative A	Exception (case-by-case temporary), waiver (permanent exemption), and modification (change stip) criteria would be applied on a case-by-case basis consistent with the process identified in Appendix X.	No similar action
P. Conditions of Approval will be applied to operational approvals as determined necessary by the Authorized Officer to protect other resources and values within the terms, conditions, and stipulations of the lease contract.	Same as Alternative A	Same as Alternative A	Same as Alternative A
If exceptions, waiver, and/or modifications allow development of oil and gas in areas currently managed as closed or NSO, impacts to paleontological resources would be the same as in areas open to oil and gas leasing.	Same as Alternative A.	Same as Alternative A.	Same as Alternative A.
Vermillion Basin			
Q. Open to leasing subject to standard terms and conditions and specific	Open to new oil and gas leasing with a Controlled	Zone 1 (Northern Zone of High and Medium potential):	Closed to leasing.

TABLE X: IMPACTS TO PALEONTOLOGICAL RESOURCES

ALTERNATIVE A (NO ACTION ALTERNATIVE)	ALTERNATIVE B	ALTERNATIVE C	ALTERNATIVE D
stipulations.	<p>Surface Use stipulation. Stipulation language would reference Objectives below.</p> <ul style="list-style-type: none"> • Allow for oil and gas leasing, exploration, and development by utilizing Best Management Practices, while protecting natural values. • Manage for the least amount of surface disturbance consistent with lease rights by focusing development near existing trails, ROWs, canyons and washes and clustering wells where feasible. • Manage to minimize visual intrusions, Lookout Mountain as observation point <p>Control infrastructure by requiring pre-planning, including transportation planning.</p> <p>Lease in larger leases (4 section blocks) in order to facilitate seismic exploration and allow operators to drill fewer wells.</p>	<p>Open to new oil and gas leasing with a Controlled Surface Use stipulation. Stipulation language would reference Objectives below.</p> <ul style="list-style-type: none"> • Allow for oil and gas leasing, exploration, and development by utilizing Best Management Practices, while protecting natural values. • Manage for the least amount of surface disturbance consistent with lease rights by focusing development near existing trails, ROWs, canyons and washes and clustering wells where feasible. • Manage to minimize visual intrusions, Lookout Mountain as observation point • Control infrastructure by requiring pre-planning, including transportation planning. • Lease in larger leases (4 section blocks) in order to facilitate seismic exploration and allow operators to drill fewer wells • Long term goal for Vermillion Basin is to manage the area so that any disturbance caused by permitted actions will eventually be returned to the state prior to development. <p>Zone 2: (Southwest area of Low and</p>	

TABLE X: IMPACTS TO PALEONTOLOGICAL RESOURCES

ALTERNATIVE A (NO ACTION ALTERNATIVE)	ALTERNATIVE B	ALTERNATIVE C	ALTERNATIVE D
		No Known potential)	
		Closed to new oil and gas leasing	
Impacts would be the same as those noted in areas open to leasing. (delineate impact by paleontological classes)	Impacts would be the same as those noted in areas open to leasing. (delineate impact by paleontological classes)	Impacts would be the same as those noted in areas open to leasing. (delineate impact by paleontological classes)	Paleontological resources would be preserved in place.
Locatable Minerals, Mineral Materials, and Non-Energy Leasable Minerals, Others			
A. All public land is open to mineral entry and development under the General Mining Law of 1872 unless administratively withdrawn or proposed for withdrawal (proposed wilderness designation). Locatable mineral exploration and development on public land would be regulated under 43 CFR 3800. B. No Action – all areas open except WSAs, Limestone Ridge ACEC	Same as Alternative A, except Limestone Ridge ACEC open to mineral location. Vermillion Basin would be withdrawn from mineral location.	WSAs, Lookout Mountain ACEC, Cross Mountain Canyon ACEC, WSR suitable segments 1, 2, and 3, Vermillion Basin, Dinosaur North, Cold Springs Mountain; Cedar Mountain SRMA; South Sand Wash SRMA; Serviceberry SRMA; Flycreek SRMA; would be withdrawn from mineral location.	WSAs, all ACECs, all suitable WSR segments, Vermillion Basin, Dinosaur North, Cross Mountain backcountry area, Diamond Breaks backcountry area, Pinyon Ridge backcountry area; Little Yampa Canyon SRMA, Juniper Mountain SRMA; Cedar Mountain SRMA; South Sand Wash SRMA; Serviceberry SRMA; Flycreek SRMA; Cold Springs Mountain SRMA would be withdrawn from mineral location.
Paleontological resources located in areas open to mineral entry could be impacted prior to inventory and mitigation. Paleontological resources in areas withdrawn from mineral entry would be	Same as Alternative A, except more acres would be withdrawn from mineral entry.	Same as Alternative A, except more acres would be withdrawn from mineral entry than Alternative B.	Same as Alternative A, except more acres would be withdrawn from mineral entry than Alternative C.

TABLE X: IMPACTS TO PALEONTOLOGICAL RESOURCES

ALTERNATIVE A (NO ACTION ALTERNATIVE)	ALTERNATIVE B	ALTERNATIVE C	ALTERNATIVE D
protected in place.			
C. Applications for removing common variety mineral materials, including sand and gravel, will continue to be processed as they are received. Interdisciplinary review of each proposal will determine stipulations to protect important surface values. Mineral material sales will not be allowed in WSAs, Cross Mountain Canyon ACEC, Limestone Ridge ACEC/RNA, Little Yampa/Juniper Canyon SRMA, and the Cedar Mountain Recreation management unit.	Same as Alternative A	WSAs, Limestone Ridge ACEC, Lookout Mountain ACEC, Cross Mountain Canyon ACEC, WSR suitable segments 1, 2, and 3, Vermillion Basin, Cedar Mountain SRMA would be closed to mineral material sales.	WSAs, all ACECs, all suitable WSR segments, Vermillion Basin, Dinosaur North, Cross Mountain backcountry area, Diamond Breaks backcountry area, Pinyon Ridge backcountry area; Little Yampa Canyon SRMA, Juniper Mountain SRMA; Cedar Mountain SRMA; Serviceberry SRMA; Cold Springs Mountain SRMA would be closed to mineral material sales.
Mineral material removal/sales could result in the identification of paleontological resource localities prior to site development. Sites would be identified through the permitting process and adverse effects would be mitigated prior to implementation. These effects would not occur in areas closed to mineral material development.	Same as Alternative A.	Same as Alternative A except more areas would be closed to mineral material development.	Same as Alternative A except more areas would be closed to mineral material development than Alternative C.
Coal and Oil Shale			

TABLE X: IMPACTS TO PALEONTOLOGICAL RESOURCES

ALTERNATIVE A (NO ACTION ALTERNATIVE)	ALTERNATIVE B	ALTERNATIVE C	ALTERNATIVE D
Coal			
<p>A. Approximately 638,800 acres (containing an estimated 5.8 billion tons of coal) are acceptable for further consideration for federal coal leasing. Of this total, approximately 457,089 acres (an estimated 4.2 billion tons of coal) are acceptable for further consideration for leasing for surface or underground development.</p>	<p>Lands found acceptable in this resource management plan (RMP) will be available for further consideration for leasing and/or exchange. However, all lands determined to be suitable, unsuitable, or unacceptable for further consideration for leasing and/or exchange may be reviewed and suitability determinations modified based on new data during activity planning efforts. Unsuitability criteria apply only to surface coal mining, not underground mining.</p> <p>The lands with coal resource development potential in the Little Snake coal planning area are located in the Yampa and Dansforth Hills Coal Fields. The coal planning includes federal coal within the following townships:</p> <p>Sixth Principal Meridian T. 3 N., R. 85 W. T. 3 N., R. 86 W. T. 3 N., R. 90 W. - R. 95 W. T. 4 N., R. 86 W. - R. 95 W. T. 5 N., R. 85 W. - R. 93 W.</p>	<p>Same as Alternative B.</p>	<p>Same as Alternative B, but only XX acres are suitable for surface mining after no lease decision for Little Yampa Canyon SRMA).</p>

TABLE X: IMPACTS TO PALEONTOLOGICAL RESOURCES

ALTERNATIVE A (NO ACTION ALTERNATIVE)	ALTERNATIVE B	ALTERNATIVE C	ALTERNATIVE D
	<p>T. 6 N., R. 86 W. - R. 93 W. T. 7 N., R. 87 W. - R. 94 W. T. 8 N., R. 86 W. - R. 94 W. T. 9 N., R. 86 W.</p> <p>The coal planning area contains approximately 671,168 acres federal coal lands. This entire area is available for underground coal mining.</p> <p>Unsuitability criteria were applied to these lands to determine areas unsuitable for surface mining. Results are shown in Appendix "Coal."</p> <p>After applying unsuitability criteria and exceptions, approximately 621,978 acres are acceptable for further consideration for leasing for surface or underground development.</p>		
<p>B. Approximately 181,669 acres (an estimated 1.3 billion tons of coal) are acceptable for further consideration for leasing for underground development only (RMP/ROD pages 7-8).</p>	<p>No Similar Action (see above)</p>	<p>No Similar Action (see above)</p>	<p>No Similar Action (see above)</p>

TABLE X: IMPACTS TO PALEONTOLOGICAL RESOURCES

ALTERNATIVE A (NO ACTION ALTERNATIVE)	ALTERNATIVE B	ALTERNATIVE C	ALTERNATIVE D
Approximately 266 million tons of coal throughout the region are not available for surface mining.			
C. Exploratory drilling will be allowed in order to obtain sufficient data for resource management decisions and fair market value determinations.	Same as Alternative A.	Same as Alternative A.	Same as Alternative A.
D. No Surface Occupancy stipulations will be used to protect Cross Mountain Canyon and Limestone Ridge Areas of Critical Environmental Concern (ACEC); Little Yampa/Juniper Canyon, Cedar Mountain Special Recreation Management Areas; Steamboat Lake and Pearl Lake State Parks; coal mines where development would be incompatible with the planned coal extraction; grouse, raptor, bald eagle, peregrine falcon, Mexican spotted owl, waterfowl and shorebird nests; and special status plant species.	Same as Alternative A. In addition, Stagecoach State Park would also be designated NSO.	Same as Alternative B.	Same as Alternative B.
Paleontological resource values would be protected from damage from surface	Same as Alternative A, except areas suitable for surface mining of coal include XX acres of	Same as Alternative A, except areas suitable for surface mining of coal include XX acres of Class I and II	Same as Alternative A, except areas suitable for surface mining of coal include XX acres of Class I and II

TABLE X: IMPACTS TO PALEONTOLOGICAL RESOURCES

ALTERNATIVE A (NO ACTION ALTERNATIVE)	ALTERNATIVE B	ALTERNATIVE C	ALTERNATIVE D
<p>disturbance related to coal mining, whether surface coal mining or structures related to subsurface mining, through mitigation methods such as avoidance and data recovery. Data recovery would protect paleontological resources through data preservation for surface mined coal. While data recovery would increase knowledge of cultural resources in the areas of mining, it would also eliminate the potential for future study by other, potentially more precise data recovery methods. In addition, development in the areas suitable for surface coal mining would increase the potential for inadvertent damage to paleontological resources. Areas suitable for surface mining of coal include XX acres of Class I and II paleontological areas.</p>	<p>Class I and II paleontological areas.</p>	<p>paleontological areas.</p>	<p>paleontological areas.</p>
RECREATION			
Special Recreation Management Areas			
<i>Little Yampa/Juniper Canyon</i>			
<p>A. The Little Yampa/Juniper Canyon area (19,840 acres) will be administered as a special recreation management</p>	<p>Little Yampa/Juniper Canyon area will be managed as an ERMA. See the ERMA objectives below.</p>	<p>The existing Little Yampa/Juniper Canyon SRMA will be expanded by 10,092 acres (Map X) and administered as the Little Yampa Canyon SRMA to provide quality</p>	<p>The existing Little Yampa/Juniper Canyon SRMA will be expanded by XXX acres (Map X) and administered as the Little Yampa Canyon SRMA to provide quality</p>

TABLE X: IMPACTS TO PALEONTOLOGICAL RESOURCES

ALTERNATIVE A (NO ACTION ALTERNATIVE)	ALTERNATIVE B	ALTERNATIVE C	ALTERNATIVE D
area to provide unrestricted flatwater river floatboating in the region.		camping experiences related to river boating in the region and big game hunting.	camping experiences related to river boating in the region and big game hunting.
<p>Administration:</p> <ul style="list-style-type: none"> Minerals and Energy: <ul style="list-style-type: none"> No Surface Occupancy for oil and gas exploration and development Locatable - Open Other Minerals - Open Coal - Open OHV: Limited to Designated Routes <p>B. VRM: Not determined</p>	No similar action.	<p>Administration:</p> <ul style="list-style-type: none"> Minerals and Energy: <ul style="list-style-type: none"> No Surface Occupancy for oil and gas exploration and development Locatable - Open Other Minerals - Open Coal - Open OHV: Limited to Designated Routes VRM: Class II from river bottom to ridgeline; Class III in all other areas Lands and Realty: <ul style="list-style-type: none"> Determined on a case-by-case basis consistent with SRMA objectives. 	<p>Administration:</p> <ul style="list-style-type: none"> Minerals and Energy: <ul style="list-style-type: none"> Closed to oil and gas exploration and development Locatable - Closed Other Minerals - Closed Coal - Closed OHV: XX acres Closed; XX acres Limited to Designated Routes. (To be calculated when GIS is completed) VRM: Class II from river bottom to ridgeline; Class III in all other areas. Lands and Realty: <ul style="list-style-type: none"> Determined on a case-by-case basis consistent with SRMA objectives.
<p>Zone 2: No similar action. This area was not included in the SRMA.</p>	No similar action.	<p><u>Zone:</u> Zone 2: North of CR 17 Activity Planning Framework</p> <p>Management: Provide camping facilities and improved roads to these facilities in high impact areas related to hunting season uses.</p> <p>Administration:</p> <ul style="list-style-type: none"> Minerals and Energy: 	<p><u>Zone:</u> Zone 2: North of CR 17 Activity Planning Framework</p> <p>Management: Provide camping facilities in high impact areas related to hunting season uses.</p> <p>Administration:</p> <ul style="list-style-type: none"> Minerals and Energy: <ul style="list-style-type: none"> Closed to oil and gas

TABLE X: IMPACTS TO PALEONTOLOGICAL RESOURCES

ALTERNATIVE A (NO ACTION ALTERNATIVE)	ALTERNATIVE B	ALTERNATIVE C	ALTERNATIVE D
		<p>No Surface Occupancy for oil and gas exploration and development Locatable - Open Other Minerals - Open Coal - Open</p> <ul style="list-style-type: none"> • OHV: Limited to Designated Routes • VRM: Class II from river bottom to ridgeline; Class III in all other areas • Lands and Realty: Determined on a case-by-case basis consistent with SRMA objectives. 	<p>exploration and development Locatable - Closed Other Minerals - Closed Coal - Closed</p> <ul style="list-style-type: none"> • OHV: Limited to Designated Routes. • VRM: Class II from river bottom to ridgeline; Class III in all other areas. • Lands and Realty: Determined on a case-by-case basis consistent with SRMA objectives.
<p>Preventing surface occupancy or ground disturbing activities could indirectly protect paleontological resources in place in these areas.</p>	<p>Allowing unrestricted recreation use could increase impacts compared to Alternative A. The potential for significant paleontological resource impacts is greater from non-developed recreation sites. While use is dispersed, reducing the magnitude of impact at a given site, non-developed recreation sites usually don't have paleontological resource assessments/clearances prior to being established. Impacts from non-developed recreation are mitigated on a case-by-case</p>	<p>Preventing surface occupancy or ground disturbing activities could indirectly protect paleontological resources in place in these areas.</p> <p>Paleontological resource assessments conducted prior to construction of developed recreation sites would identify most paleontological localities, increasing the database of known paleontological resources.</p>	<p>Preventing ground disturbing activities through closures could indirectly protect paleontological resources in place in these areas.</p> <p>Paleontological resource assessments conducted prior to construction of developed recreation sites would identify most paleontological localities, increasing the database of known paleontological resources.</p>

TABLE X: IMPACTS TO PALEONTOLOGICAL RESOURCES

ALTERNATIVE A (NO ACTION ALTERNATIVE)	ALTERNATIVE B	ALTERNATIVE C	ALTERNATIVE D
	basis when discovered.		
Juniper Mountain			
Juniper Mountain is currently managed within the Little Yampa /Juniper Canyon SRMA. See Little Yampa Canyon SRMA.	Juniper Mountain will be managed as an ERMA. See the ERMA objectives below.	<p>The Juniper Canyon portion of the existing Little Yampa/Juniper Canyon SRMA will be administered as the Juniper Mountain SRMA.</p> <p><u>Zone:</u> Zone 1: Yampa River Corridor</p> <p>Administration:</p> <ul style="list-style-type: none"> • Minerals and Energy: <ul style="list-style-type: none"> No Surface Occupancy for oil and gas exploration and development Locatable - Open Other Minerals - Open Coal - Open • OHV: Limited to Designated Routes • VRM: Class II from river bottom to ridgeline; Class III in all other areas • Lands and Realty: Determined on a case-by-case basis consistent with SRMA objectives. 	<p>The Juniper Canyon portion of the existing Little Yampa/Juniper Canyon SRMA will be administered as the Juniper Mountain SRMA.</p> <p><u>Zone:</u> Zone 1: Yampa River Corridor</p> <p>Administration:</p> <ul style="list-style-type: none"> • Minerals and Energy: <ul style="list-style-type: none"> Closed to oil and gas exploration and development Locatable - Closed Other Minerals - Closed Coal - Closed • OHV: Limited to Designated Routes. • VRM: Class II from river bottom to ridgeline; Class III in all other areas. • Lands and Realty: Determined on a case-by-case basis consistent with SRMA objectives.
No similar action	No similar action	<p><u>Zone:</u> Zone 2: Outside river corridor</p> <p><u>Activity Planning Framework</u></p> <p>Management: Provide camping facilities in high impact areas related to hunting season uses. Develop a</p>	<p><u>Zone:</u> Zone 2: Outside river corridor</p> <p><u>Activity Planning Framework</u></p> <p>Management: Provide camping facilities in high impact areas related to hunting season uses. Develop a</p>

TABLE X: IMPACTS TO PALEONTOLOGICAL RESOURCES

ALTERNATIVE A (NO ACTION ALTERNATIVE)	ALTERNATIVE B	ALTERNATIVE C	ALTERNATIVE D
		<p>managed and maintained motorized trail system within the area during hunting season.</p> <p>Administration:</p> <ul style="list-style-type: none"> • Minerals and Energy: <ul style="list-style-type: none"> No Surface Occupancy for oil and gas exploration and development Locatable - Open Other Minerals - Open Coal - Open • OHV: Limited to Designated Routes • VRM: Class II from river bottom to ridgeline; Class III in all other areas • Lands and Realty: Determined on a case-by-case basis consistent with SRMA objectives. 	<p>managed and maintained non-motorized trail system within the area during hunting season.</p> <p>Administration:</p> <ul style="list-style-type: none"> • Minerals and Energy: <ul style="list-style-type: none"> Closed to oil and gas exploration and development Locatable - Closed Other Minerals - Closed Coal - Closed • OHV: Limited to Designated Routes. • VRM: Class II from river bottom to ridgeline; Class III in all other areas. • Lands and Realty: Determined on a case-by-case basis consistent with SRMA objectives.
<p>Preventing surface occupancy or ground disturbing activities could indirectly protect paleontological resources in place in these areas.</p>	<p>Allowing unrestricted recreation use could increase impacts compared to Alternative A. The potential for significant paleontological resource impacts is greater from non-developed recreation sites. While use is dispersed, reducing the magnitude of impact at a given site, non-developed recreation sites usually don't</p>	<p>Preventing surface occupancy or ground disturbing activities could indirectly protect paleontological resources in place in these areas.</p> <p>Paleontological resource assessments conducted prior to construction of developed recreation sites would identify most paleontological localities, increasing the database of known</p>	<p>Preventing ground disturbing activities through closures could indirectly protect paleontological resources in place in these areas.</p> <p>Paleontological resource assessments conducted prior to construction of developed recreation sites would identify most paleontological localities, increasing the database of known</p>

TABLE X: IMPACTS TO PALEONTOLOGICAL RESOURCES

ALTERNATIVE A (NO ACTION ALTERNATIVE)	ALTERNATIVE B	ALTERNATIVE C	ALTERNATIVE D
	have paleontological resource assessments/clearances prior to being established. Impacts from non-developed recreation are mitigated on a case-by-case basis when discovered.	paleontological resources.	paleontological resources.
Cedar Mountain			
C. No similar action	Cedar Mountain is managed as an ERMA. See the ERMA objectives below.	The Cedar Mountain area (904 acres) will be administered as a special recreation management area to provide opportunities in close proximity to the City of Craig for hiking, nature interpretation, and picnicking.	The Cedar Mountain area (904 acres) will be administered as a special recreation management area to provide opportunities in close proximity to the City of Craig for hiking, nature interpretation, and picnicking.
D. No similar action	No similar action	<p><u>Zone:</u> Zone 1: Picnic area <u>Activity Planning Framework</u></p> <p>Management: Vehicle parking for picnicking and trail use will be provided. Prohibit overnight camping, and discharging of firearms not associated with hunting.</p> <p>Administration:</p> <ul style="list-style-type: none"> • Minerals and Energy: <ul style="list-style-type: none"> No Surface Occupancy for oil and gas leasing Locatable - Closed Other Minerals - Closed Coal - Closed • OHV: Limited to designated routes • VRM: Class III 	<p><u>Zone:</u> Zone 1: Picnic area <u>Activity Planning Framework</u></p> <p>Management: Vehicle parking for picnicking and trail use will be provided. Prohibit overnight camping and discharging of firearms. Recreation use of the area would be restricted as a day use area (6:00 a.m. to 10:00 p.m.).</p> <p>Administration:</p> <ul style="list-style-type: none"> • Minerals and Energy: <ul style="list-style-type: none"> Closed to oil and gas leasing Locatable - Closed Other Minerals - Closed Coal - Closed • OHV: Limited to

TABLE X: IMPACTS TO PALEONTOLOGICAL RESOURCES

ALTERNATIVE A (NO ACTION ALTERNATIVE)	ALTERNATIVE B	ALTERNATIVE C	ALTERNATIVE D
		<ul style="list-style-type: none"> Lands and Realty: Require collocation of communication facilities. Avoidance area for additional ROW 	<p>designated routes</p> <ul style="list-style-type: none"> VRM: Class III Lands and Realty: Require collocation of communication facilities. Exclusion area for additional ROW
E. No similar action	No similar action	<p><u>Zone:</u> Zone 2: Trail system <u>Activity Planning Framework</u> Management: Provide and maintain a managed non-motorized trail system. Administration:</p> <ul style="list-style-type: none"> Minerals and Energy: No Surface Occupancy for oil and gas leasing Locatable - Closed Other Minerals - Closed Coal - Closed OHV: Limited to designated routes VRM: Class III Lands and Realty: Require collocation of communication facilities. Avoidance area for additional ROW 	<p><u>Zone:</u> Zone 2: Trail system <u>Activity Planning Framework</u> Management: Provide and maintain a managed non-motorized and non-mechanized trail system. Administration:</p> <ul style="list-style-type: none"> Minerals and Energy: Closed to oil and gas leasing Locatable - Closed Other Minerals - Closed Coal - Closed OHV: Limited to designated routes VRM: Class III Lands and Realty: Require collocation of communication facilities. Exclusion area for additional ROW
The potential for significant paleontological resource impacts is greater from non-developed recreation sites. While use is dispersed, reducing the magnitude of	Same as Alternative A.	Concentrating recreation use by providing recreation developments decreases unmitigated impacts to paleontological resources compared to Alternative A.	Concentrating recreation use by providing recreation developments decreases unmitigated impacts to paleontological resources compared to Alternative A.

TABLE X: IMPACTS TO PALEONTOLOGICAL RESOURCES

ALTERNATIVE A (NO ACTION ALTERNATIVE)	ALTERNATIVE B	ALTERNATIVE C	ALTERNATIVE D
impact at a given site, non-developed recreation sites usually don't have paleontological resource assessments/clearances prior to being established. Impacts from non-developed recreation are mitigated on a case-by-case basis when discovered.		Preventing surface occupancy or ground disturbing activities could indirectly protect paleontological resources in place in these areas. Paleontological resource assessments conducted prior to construction of developed recreation sites would identify most paleontological localities, increasing the database of known paleontological resources.	Preventing ground disturbing activities through closures could indirectly protect paleontological resources in place in these areas. Paleontological resource assessments conducted prior to construction of developed recreation sites would identify most paleontological localities, increasing the database of known paleontological resources.
Serviceberry			
F. The Serviceberry area is open to OHV use under the current RMP; however, is temporarily closed to OHV use. This area is currently managed as part of the ERMA.	Same as Alternative A, except temporary OHV closures would be removed and would be managed as open to OHV use.	The Serviceberry area (12,375 acres) will be administered as a Special Recreation Management Area (SRMA) to provide backcountry, non-motorized hunting experiences.	The Serviceberry area (12,375 acres) will be administered as a Special Recreation Management Area (SRMA) to provide backcountry, non-motorized hunting experiences.
G. No similar action	No similar action	<u>Zone:</u> Zone 1: Willow Creek and north Serviceberry access <u>Activity Planning Framework</u> Management: Provide camping facilities and improved roads to these facilities in high impact areas related to hunting season uses. Develop a managed and maintained trail system within the area. Administration: • Minerals and Energy:	<u>Zone:</u> Zone 1: Willow Creek and north Serviceberry access <u>Activity Planning Framework</u> Management: Provide camping facilities in high impact areas related to hunting season uses. Develop a managed and maintained trail system within the area. Administration: • Minerals and Energy: Open to oil and gas

TABLE X: IMPACTS TO PALEONTOLOGICAL RESOURCES

ALTERNATIVE A (NO ACTION ALTERNATIVE)	ALTERNATIVE B	ALTERNATIVE C	ALTERNATIVE D
		<p>Open to oil and gas exploration and development Locatable – closed Other minerals – open Coal – Not available for leasing</p> <ul style="list-style-type: none"> • OHV: Limited to Designated Routes • VRM – Class III • Lands and Realty: Determined on a case-by-case basis consistent with SRMA objectives. 	<p>exploration and development Locatable – closed Other minerals – open Coal – Not available for leasing</p> <ul style="list-style-type: none"> • OHV: Designated Routes • VRM – Class III • Lands and Realty: Determined on a case-by-case basis consistent with SRMA objectives.
H. No similar action	No similar action	<p><u>Zone:</u> Zone 2: Serviceberry backcountry <u>Activity Planning Framework</u> Management: Develop a managed and maintained non-motorized trail system within the area. Administration:</p> <ul style="list-style-type: none"> • Minerals and Energy: <ul style="list-style-type: none"> Open to oil and gas exploration and development Locatable – closed Other minerals – open Coal – Not available for leasing • OHV: Closed • VRM – Class III 	<p><u>Zone:</u> Zone 2: Serviceberry backcountry <u>Activity Planning Framework</u> Management: Develop a minimal managed and maintained non-motorized trail system within the area. Administration:</p> <ul style="list-style-type: none"> • Minerals and Energy: <ul style="list-style-type: none"> Open to oil and gas exploration and development Locatable – closed Other minerals – open Coal – Not available for leasing • OHV: Closed • VRM – Class III

TABLE X: IMPACTS TO PALEONTOLOGICAL RESOURCES

ALTERNATIVE A (NO ACTION ALTERNATIVE)	ALTERNATIVE B	ALTERNATIVE C	ALTERNATIVE D
		<ul style="list-style-type: none"> Lands and Realty: ROW would be considered on a case-by-case basis 	<ul style="list-style-type: none"> Lands and Realty: ROW would be considered on a case-by-case basis.
<p>The potential for significant paleontological resource impacts is greater from non-developed recreation sites. While use is dispersed, reducing the magnitude of impact at a given site, non-developed recreation sites usually don't have paleontological resource assessments/clearances prior to being established. Impacts from non-developed recreation are mitigated on a case-by-case basis when discovered.</p>	Same as Alternative A.	<p>Concentrating recreation use by providing recreation developments decreases unmitigated impacts to paleontological resources compared to Alternative A.</p> <p>Paleontological resource assessments conducted prior to construction of developed recreation sites would identify most paleontological localities, increasing the database of known paleontological resources.</p>	Same as Alternative C.
Flycreek			
<p>1. The Flycreek area is open to OHV use under the current RMP; however, is temporarily closed to OHV use. This area is currently managed as part of the ERMA.</p>	Same as Alternative A, except temporary OHV closures would be removed and would be managed as open to OHV use.	<ol style="list-style-type: none"> The Flycreek area (12,342 acres) will be administered as a backcountry, non-motorized hunting area. Increase education and interpretation during hunting season to reduce resource impacts and conflicts. Develop a managed and maintained a non-motorized trail system within the area. 	<p>The Flycreek area (12,342 acres) will be administered as a Special Recreation Management Area (SRMA) to provide backcountry, non-motorized hunting experiences.</p> <p><u>Zone:</u> All one RMZ <u>Activity Planning Framework</u> Management: Develop a managed and maintained a non-motorized trail system within the area. Increase education and interpretation during hunting season to reduce resource impacts and conflicts. Maintain</p>

TABLE X: IMPACTS TO PALEONTOLOGICAL RESOURCES

ALTERNATIVE A (NO ACTION ALTERNATIVE)	ALTERNATIVE B	ALTERNATIVE C	ALTERNATIVE D
		<p>4. OHV – closed</p> <p>5. Minerals –</p> <ul style="list-style-type: none"> • Open to oil and gas exploration and development • Locatable – closed • Other minerals – open • Coal - Not available for leasing <p>6. VRM –Class III</p> <p>7. Lands and Realty: ROW would be considered on a case-by-case basis.</p>	<p>property boundary signing. Administration:</p> <ul style="list-style-type: none"> • Minerals and Energy: <ul style="list-style-type: none"> Open to oil and gas exploration and development Locatable – closed Other minerals – open Coal - Not available for leasing • OHV: Closed • VRM: Class III • Lands and Realty: ROW would be considered on a case-by-case basis.
<p>The potential for significant paleontological resource impacts is greater from non-developed recreation sites. While use is dispersed, reducing the magnitude of impact at a given site, non-developed recreation sites usually don't have paleontological resource assessments/clearances prior to being established. Impacts from non-developed recreation are mitigated on a case-by-case basis when discovered.</p>	<p>Same as Alternative A.</p>	<p>Concentrating recreation use by providing recreation developments decreases unmitigated impacts to paleontological resources compared to Alternative A.</p> <p>Paleontological resource assessments conducted prior to construction of developed recreation sites would identify most paleontological localities, increasing the database of known paleontological resources.</p>	<p>Same as Alternative C.</p>
<p>Dinosaur North Area (outside of WSA)</p>			

TABLE X: IMPACTS TO PALEONTOLOGICAL RESOURCES

ALTERNATIVE A (NO ACTION ALTERNATIVE)	ALTERNATIVE B	ALTERNATIVE C	ALTERNATIVE D
<p>J. Multiple use outside existing WSAs</p> <p>K. Minerals and Energy:</p> <ul style="list-style-type: none"> • Controlled Surface Use for oil and gas exploration and development • Locatable - Open • Other Minerals - Open • Coal - Not available for leasing <p>L. OHV: Open</p> <p>M. VRM: Not applicable</p> <p>N. Lands and Realty: No restrictions, case-by-case basis</p>	Same as Alternative A.	<p>Objective: Manage to protect naturalness, opportunities for semi-primitive recreation, and solitude.</p> <ol style="list-style-type: none"> 1. No designation with the following prescriptions: 2. Minerals and Energy: <ul style="list-style-type: none"> • Closed to oil and gas exploration and development • Locatable - Closed • Other Minerals - Open • Coal - Not available for leasing 3. OHV: Limited to Designated Routes 4. VRM: Class II 5. Lands and Realty: ROW – avoidance; no wind energy 	<p>The Dinosaur North area (41,355 acres) will be administered as a Special Recreation Management Area (SRMA) to provide quality primitive recreational experiences in largely natural settings.</p> <p><u>Activity Planning Framework</u></p> <p>Management: Provide minimally developed trailhead parking and interpretive information adjacent to roads that provide access to the edges of access points.</p> <p>Administration:</p> <ul style="list-style-type: none"> • Minerals and Energy: <ul style="list-style-type: none"> Closed to oil and gas exploration and development Locatable - Closed Other Minerals - Closed Coal - Not available for leasing • OHV: Closed • VRM: Class II • Lands and Realty: ROW – exclusion; no wind energy
<i>Cold Springs Area (outside of WSA)</i>			
<p>O. Multiple use outside existing WSAs</p> <p>P. Minerals and Energy:</p> <ul style="list-style-type: none"> • Controlled Surface 	Same as Alternative A.	<p>Objective: Manage to protect naturalness, opportunities for semi-primitive recreation, and solitude.</p> <ol style="list-style-type: none"> 1. No designation with the 	<p>The Cold Springs Mountain area (30,479 acres) will be administered as a Special Recreation Management Area (SRMA) to provide quality primitive recreational</p>

TABLE X: IMPACTS TO PALEONTOLOGICAL RESOURCES

ALTERNATIVE A (NO ACTION ALTERNATIVE)	ALTERNATIVE B	ALTERNATIVE C	ALTERNATIVE D
<p>Use for oil and gas exploration and development</p> <ul style="list-style-type: none"> • Locatable - Open • Other Minerals - Open • Coal - Not available for leasing <p>Q. OHV: Majority Limited to Existing, remainder is Open</p> <p>R. VRM: Not applicable</p> <p>S. Lands and Realty: No restrictions, case-by-case basis</p>		<p>following prescriptions:</p> <ol style="list-style-type: none"> 2. Minerals and Energy: <ul style="list-style-type: none"> • Closed to oil and gas exploration and development • Locatable - Closed • Other Minerals - Open • Coal - Not available for leasing 3. OHV: Limited to Designated routes 4. VRM: Class III 5. Lands and Realty: ROW – avoidance; accept wind energy applications on case-by-case basis. 	<p>experiences in largely natural settings.</p> <p><u>Activity Planning Framework</u></p> <p>Management: Provide minimally developed trailhead parking and interpretive information adjacent to roads that provide access to the edges of access points. Provide minimal managed and signed trail system.</p> <p>Administration:</p> <ul style="list-style-type: none"> • Minerals and Energy: <ul style="list-style-type: none"> Closed to oil and gas exploration and development Locatable - Closed Other Minerals - Closed Coal - Not available for leasing • OHV: Closed • VRM: Class II • Lands and Realty: ROW – exclusion; no wind energy
<p>The potential for significant paleontological resource impacts is greater from non-developed recreation sites. While use is dispersed, reducing the magnitude of impact at a given site, non-developed recreation sites usually don't have</p>	<p>Same as Alternative A.</p>	<p>Preventing ground disturbing activities through closures could indirectly protect paleontological resources in place in these areas.</p>	<p>Concentrating recreation use by providing recreation developments decreases unmitigated impacts to paleontological resources compared to Alternative A.</p> <p>Preventing ground disturbing activities through closures could</p>

TABLE X: IMPACTS TO PALEONTOLOGICAL RESOURCES

ALTERNATIVE A (NO ACTION ALTERNATIVE)	ALTERNATIVE B	ALTERNATIVE C	ALTERNATIVE D
<p>paleontological resource assessments/clearances prior to being established. Impacts from non-developed recreation are mitigated on a case-by-case basis when discovered.</p>			<p>indirectly protect paleontological resources in place in these areas.</p> <p>Paleontological resource assessments conducted prior to construction of developed recreation sites would identify most paleontological localities, increasing the database of known paleontological resources.</p>
Extensive Recreation Management Areas			
<p>T. The remainder of the RMPPA will receive limited management as an Extensive Recreation Management Area where recreation use is dispersed and requires only minimal management. BLM will provide basic information on public safety and recreation opportunities within the RMPPA, and provide access and minimal facilities as demand warrants.</p>	<p>All BLM-managed lands within the planning area that are not delineated as Special Recreation Management Areas in an Extensive Recreation Management Area (ERMA). Objectives for the ERMA are as follows:</p> <p><u>Visitor health and safety:</u></p> <ul style="list-style-type: none"> • Provide direction and destination signing for public safety and service. • Achieve greater understanding of safety hazards and risks associated with recreation activities. <p><u>User conflicts:</u></p> <ul style="list-style-type: none"> • Focus public land 	<p>Same as Alternative B.</p>	<p>Same as Alternative B</p>

TABLE X: IMPACTS TO PALEONTOLOGICAL RESOURCES

ALTERNATIVE A (NO ACTION ALTERNATIVE)	ALTERNATIVE B	ALTERNATIVE C	ALTERNATIVE D
	<p>boundary signing in fragmented lands to reduce trespass onto private lands.</p> <ul style="list-style-type: none"> • Monitor user conflicts and apply criteria in Appendix XX to determine if transportation planning or other activity planning is triggered. <p><u>Resource protection:</u></p> <ul style="list-style-type: none"> • Monitor resource conditions and apply criteria in Appendix XX to determine if transportation planning or other activity planning is triggered. • Utilize education as a means to further resource protection. 		
<p>The potential for significant paleontological resource impacts is greater from non-developed recreation sites. While use is dispersed, reducing the magnitude of impact at a given site, non-developed recreation sites usually don't have paleontological resource</p>	<p>Same as Alternative A.</p>	<p>Same as Alternative A.</p>	<p>Same as Alternative A.</p>

TABLE X: IMPACTS TO PALEONTOLOGICAL RESOURCES

ALTERNATIVE A (NO ACTION ALTERNATIVE)	ALTERNATIVE B	ALTERNATIVE C	ALTERNATIVE D
assessments/clearances prior to being established. Impacts from non-developed recreation are mitigated on a case-by-case basis when discovered.			
Developed Recreation Sites			
U. No similar action	No similar action.	Increase number of interpretive sites and viewing pullouts as need and opportunities arise.	Same as Alternative C.
V. Boat Ramp (Yampa) W. Campground at Irish Canyon and Rocky Reservoir X. Picnic Sites at Irish Canyon and Cedar Mountain	No additional recreation sites would be developed and current sites would remain at the same service and use levels.	1. Provide developed recreation sites in association with SRMAs (campgrounds, boat launch, picnic sites). 2. Current sites would remain at the same service and use levels.	Same as Alternative C.
The potential for significant paleontological resource impacts is greater from non-developed recreation sites. While use is dispersed, reducing the magnitude of impact at a given site, non-developed recreation sites usually don't have paleontological resource assessments/clearances prior to being established. Impacts from non-developed recreation are mitigated on a case-by-case basis when discovered.		Same as Alternative A.	Same as Alternative A.

TABLE X: IMPACTS TO PALEONTOLOGICAL RESOURCES

ALTERNATIVE A (NO ACTION ALTERNATIVE)	ALTERNATIVE B	ALTERNATIVE C	ALTERNATIVE D
Special Recreation Permits			
Y. Current plans provide no guidance on competitive events.	<p>Permit no competitive events in WSAs.</p> <p>Authorize motorized and non-motorized competitive events consistent with OHV area and route designations.</p> <p>No similar action</p> <p>Permitted commercial events in the ERMA will be evaluated on a case-by-case basis.</p>	<p>Same as Alternative B</p> <p>Same as Alternative B</p> <p>Permitted commercial events in backcountry SRMAs (Serviceberry SRMA) will be limited to 50 participants and non-motorized events.</p> <p>Permitted commercial events in the ERMA and non-backcountry SRMAs (Cedar Mountain SRMA, South Sand Wash SRMA, Little Yampa Canyon SRMA, and Juniper Mountain SRMA) will be evaluated on a case-by-case basis.</p>	<p>Same as Alternative B</p> <p>Same as Alternative B</p> <p>Permitted commercial events in backcountry SRMAs (Serviceberry SRMA, Flycreek SRMA, Cold Springs Mountain SRMA, Dinosaur North SRMA,), will be limited to 25 participants and non-motorized events.</p> <p>Same as Alternative C</p>
Paleontological resources would be protected through application of paleontological resource decisions.	Same as Alternative A.	Same as Alternative A.	Same as Alternative A.
LANDS AND REALTY			
Land Tenure Adjustments			

TABLE X: IMPACTS TO PALEONTOLOGICAL RESOURCES

ALTERNATIVE A (NO ACTION ALTERNATIVE)	ALTERNATIVE B	ALTERNATIVE C	ALTERNATIVE D
<p>The BLM-administered lands in the RMPPA have been divided into general retention and disposal areas.</p> <p>A. The retention area is the existing land base to be managed under multiple use concepts. All land tenure adjustment actions (including recreation and public purposes [R&PP] actions and exchanges), except sales under Section 203 of FLPMA, will be considered on a case-by-case basis, if the public interest would be served. Section 302 leases and permits will be allowed. Conveyance actions will be precluded in wilderness and other special management areas</p> <p>B. Disposal land tenure adjustment actions will be allowed on approximately 6,670 acres of public land that meet the criteria for disposal under applicable authority. This acreage includes land tenure adjustment actions for</p>	<p>Disposal land tenure adjustment actions (both exchanges and sales) will be allowed on lands that meet the following criteria:</p> <ul style="list-style-type: none"> • Lands suitable for public purposes adjacent to or of special importance to local communities, and state and/or federal agencies for purposes including, but not limited to, community expansion, extended community services, or economic development. • Lands without legal public access. • Lands that have facilities which are in trespass and predate the RMP. • Lands that are isolated with public access by foot or horseback only. • Lands with irregular shapes, narrow parcels, small parcels or any configuration which makes the land difficult to manage and increases trespass situations. • Lands with public road access that are so small that 	<p>The BLM-administered lands in the RMPPA will be divided into three retention and disposal zones: the East, Central, and West Zones (Map X). Disposal and exchange criteria specific to each zone are the same as in Alternative B with the additional criteria for each zone described as follows:</p> <p>EAST ZONE</p> <ul style="list-style-type: none"> • Actively seek opportunities to exchange or sell lands (surface and/or mineral estate) in order to facilitate better management of BLM lands and to benefit the public. Sales should be tied to identification of the purchase of non-federal lands within LSFO, as appropriate and in the public's interest. • Look to exchange lands with the appropriate local, state and federal agencies to facilitate one agency management in particular areas, to include but not limited to, Stagecoach State Park, Steamboat Lake State Park, Indian Run State Wildlife, Steamboat Springs Mountain Park, Jimmy Dun Gulch 	<p>Same as Alternative C.</p>

TABLE X: IMPACTS TO PALEONTOLOGICAL RESOURCES

ALTERNATIVE A (NO ACTION ALTERNATIVE)	ALTERNATIVE B	ALTERNATIVE C	ALTERNATIVE D
<p>existing BLM authorized sanitary landfill sites near Oak Creek and Maybell located within the retention area. Section 302 leases and permits would also be allowed.</p> <p>C. Acquisition of land will be pursued based on identified resource values and needs (RMP/ROD pages 30-31).</p>	<p>they cannot be proactively managed for a variety of resource values.</p> <ul style="list-style-type: none"> Lands that would be better suited in private or other agency ownership. <p>Acquisition land tenure adjustment actions will be allowed on lands that meet the following criteria:</p> <ul style="list-style-type: none"> Lands that would help block up existing BLM land. Lands near communities that provide open space, preserve agriculture, protect wildlife, protect the environment, enhance recreational opportunities and generally serve the public good. Lands that would provide public access to public lands or other public assets such as but not limited to river 	<p>CDOW/SLB lease area and the Emerald Mountain ² area.</p> <ul style="list-style-type: none"> Retain and seek acquisition of addition lands within identified acquisition areas, to include but not limited to, Sleeping Giant, Emerald Mountain, West Gibraltar Peak, Copper Ridge, Pagoda/Hamilton, Dry Fork/Bull Gulch, Sage Creek, Bear Gulch, Little Middle Creek, Rattle Snake Butte (near Oak Creek), and Watson Creek (near Yampa) areas. Additional retention or acquisition areas can be identified during the life of the plan for the public good. <p>CENTRAL ZONE</p> <ul style="list-style-type: none"> When the opportunity arise, exchange or sell lands (surface and/or mineral estate) in order to facilitate better management of BLM lands and to benefit the public. Sales should be tied to identification of the purchase of non-federal lands within LSFO, as appropriate and in the public's interest. 	

² The Emerald Mountain Land Exchange is currently in progress. It involves approximately 15,000 acres of BLM land scattered throughout Routt County in 131 parcels for one contiguous block of State land containing approximately 6,000. Emerald Mountain is located in the heart of Routt County south and west of Steamboat Springs. The exchange is scheduled to be completed before the RMP Revision is finished and the Emerald Mountain parcel may become BLM land (both surface and mineral estate).

TABLE X: IMPACTS TO PALEONTOLOGICAL RESOURCES

ALTERNATIVE A (NO ACTION ALTERNATIVE)	ALTERNATIVE B	ALTERNATIVE C	ALTERNATIVE D
	<p>access.</p> <p>Retain lands that are blocked up, have public access, have significant public value, and are efficient to manage.</p> <p>Other land tenure adjustments will be processed on a case-by-case basis.</p>	<ul style="list-style-type: none"> • LU lands should be retained as much as possible, and acquisition of additional lands in the area should be actively sought to protect wildlife habitat, especially sage grouse. • Look to exchange lands with the appropriate state agencies to facilitate one agency management in particular areas, to include but not limited to the Little Snake State Wildlife area. • Retain and seek acquisition of addition lands within identified acquisition areas, to include but not limited to, Thornburg Mountain, Yampa Canyon SRMA, Juniper Mountain SRMA and Serviceberry Mountain areas. • Additional retention or acquisition areas can be identified during the life of the plan for the public good. <p>WEST ZONE</p> <ul style="list-style-type: none"> • In rare cases exchange or sell lands (surface and/or mineral estate) in order to facilitate better management of BLM lands and to benefit the public. Sales should be tied to identification of the purchase of non-federal lands within LSFO, as appropriate and in the public's interest. • Look to exchange lands with the 	

TABLE X: IMPACTS TO PALEONTOLOGICAL RESOURCES

ALTERNATIVE A (NO ACTION ALTERNATIVE)	ALTERNATIVE B	ALTERNATIVE C	ALTERNATIVE D
		<p>appropriate state agencies to facilitate one agency management in particular areas, to include but not limited to, the Sand Wash Basin and Vermillion Basin areas.</p> <ul style="list-style-type: none"> • Additional retention or acquisition areas can be identified during the life of the plan for the public good. 	
<p>Paleontological assessments would be required before transferring lands from federal jurisdiction, ensuring resources are documented, evaluated, and mitigated before ownership changed. BLM could retain or obtain lands containing significant paleontological resources, providing protection under federal management policies.</p>	<p>Same as Alternative A.</p>	<p>Same as Alternative A.</p>	<p>Same as Alternative A.</p>
Rights-of-Way			
<p>D. No rights-of-way corridors are formally designated.</p> <p>E. The existing and potential corridors identified as suitable on page 29 of the RMP/ROD and displayed on pages 32 and 33 of the RMP/ROD are considered open and are preferred routes.</p>	<p>ROWs allowed on a case-by-case basis.</p>	<p>Encourage ROW in the following existing corridors:</p> <ul style="list-style-type: none"> • Major roads including county roads (e.g., CR 20, 4, 7, 57) • Power transmission lines • Oil and gas pipelines 	<p>Encourage ROW in the following existing corridors:</p> <ul style="list-style-type: none"> • Major roads including county roads (e.g., CR 20, 4, 7, 57) • Power transmission lines • Oil and gas pipelines

TABLE X: IMPACTS TO PALEONTOLOGICAL RESOURCES

ALTERNATIVE A (NO ACTION ALTERNATIVE)	ALTERNATIVE B	ALTERNATIVE C	ALTERNATIVE D
<p>F. Minor rights-of-way will be processed on a case-by-case basis, generally guided by the criteria identified for major rights-of-way.</p> <p>G. Rights-of-way will be allowed in all areas if needed to develop valid existing rights.</p>			
<p>H. Specific areas unsuitable for major rights-of-way are:</p> <ul style="list-style-type: none"> • WSAs • Limestone Ridge ACEC/RNA • Lookout Mountain ACEC • Irish Canyon ACEC • Little Yampa/Juniper Canyon SRMA (lower unit) 	<p>ROW Exclusion: WSAs; VRM Class I</p>	<p>ROW Exclusion:</p> <ul style="list-style-type: none"> • WSAs • VRM Class I areas • Portions of Vermillion Basin Zone 2 	<p>ROW Exclusion:</p> <ul style="list-style-type: none"> • WSAs • VRM Class I and II • Lookout Mountain ACEC • Limestone Ridge ACEC • Irish Canyon ACEC • Cross Mountain Canyon ACEC • White-Tailed Prairie Dog ACEC • If released from Congress, WSAs recommended as non-suitable (Ant Hills, Chew Winter Camp, Peterson Draw, Vale of Tears) • Vermillion Basin • Dinosaur North • Cold Springs Mountain • Cedar Mountain SRMA
<p>I. Specific areas that are</p>	<p>ROW Avoidance:</p>	<p>ROW Avoidance:</p>	<p>ROW Avoidance:</p>

TABLE X: IMPACTS TO PALEONTOLOGICAL RESOURCES

ALTERNATIVE A (NO ACTION ALTERNATIVE)	ALTERNATIVE B	ALTERNATIVE C	ALTERNATIVE D
<p>sensitive for siting major rights-of-way are:</p> <ul style="list-style-type: none"> • Little Yampa/Juniper Canyon SRMA (upper unit) • Lookout Mountain ACEC • Horse Draw • Vermillion Creek • Ace-in-the-Hole • Vermillion Bluffs • G Gap • Hells Canyon • Portions of Vermillion Creek Drainage • Sand Wash Drainage • Buffalo Gulch/Twelvemile Mesa • Little Snake River • Sand Creek • Conway Draw • Deception Creek • Occupied black-footed ferret habitat. 	<ul style="list-style-type: none"> • VRM Class II • Occupied black-footed ferret habitat. 	<ul style="list-style-type: none"> • VRM II • West Cold Springs WSA • If released from Congress, WSAs recommended as non-suitable (Ant Hills, Chew Winter Camp, Peterson Draw, Vale of Tears) • Cold Springs Mountain • Cedar Mountain SRMA • Dinosaur North • Vermillion Bluffs in Vermillion Basin Zone 1 • Portions of Vermillion Basin Zone 2 • Occupied black-footed ferret habitat. 	<ul style="list-style-type: none"> • Natural Systems ACECs • Occupied black-footed ferret habitat.
<p>Paleontological resources would be protected through application of paleontological resource decisions. Location of ROWs could increase the number of identified sites. This would not occur in unsuitable areas, and to a lesser degree in unsuitable areas.</p>	<p>Same as Alternative A, except areas less likely for ROWs (unsuitable or avoidance) are less than Alternative A.</p>	<p>Concentrating ROWs in corridors would reduce surface disturbance and associated impacts to paleontological resources such as locality identification, data recovery, or incidental damage. There are more areas less likely for ROWs (unsuitable or avoidance) are less/more than Alternative A.</p>	<p>Same as Alternative C, except there are more unsuitable areas where impacts from ROWs would not occur.</p>

TABLE X: IMPACTS TO PALEONTOLOGICAL RESOURCES

ALTERNATIVE A (NO ACTION ALTERNATIVE)	ALTERNATIVE B	ALTERNATIVE C	ALTERNATIVE D
TRANSPORTATION AND ACCESS & TRAVEL MANAGEMENT			
Travel Management			
Closed			
<p>A. The following area would be managed as closed to OHV use:</p> <ul style="list-style-type: none"> • Diamond Breaks WSA • Limestone ACEC • Cross Mountain WSA • Serviceberry area • Fly Creek area • Maybell Uranium pit 	<p>The following area would be managed as closed to OHV use.</p> <ul style="list-style-type: none"> • Diamond Breaks WSA • Cross Mountain WSA • Maybell Uranium pit 	<p>The following area would be managed as closed to OHV use.</p> <ul style="list-style-type: none"> • Diamond Breaks WSA • Limestone Ridge • Cross Mountain WSA (Including Wild and Scenic River segment) • Water impoundments (year-round) and within the high water mark when dry, except where a designated road crosses impoundment. 	<p>The following area would be managed as closed to OHV use:</p> <ul style="list-style-type: none"> • All WSAs • Limestone Ridge ACEC • Serviceberry SRMA • Fly Creek SRMA • Dinosaur North SRMA • Maybell Uranium pit • Water impoundments (year-round) and within the high water mark when dry, except where a designated road crosses impoundment.
<p>Paleontological resources in areas closed to OHV use would not be impacted by OHV use. This would protect XX acres Class I and Class II paleontological areas.</p>	<p>Paleontological resources in areas closed to OHV use would not be impacted by OHV use. This would protect XX acres Class I and Class II paleontological areas.</p>	<p>Paleontological resources in areas closed to OHV use would not be impacted by OHV use. This would protect XX acres Class I and Class II paleontological areas.</p>	<p>Paleontological resources in areas closed to OHV use would not be impacted by OHV use. This would protect XX acres Class I and Class II paleontological areas.</p>
Limited to Designated Roads and Trails			
<p>B. The following areas would be managed as limited to designated roads and trails:</p> <ul style="list-style-type: none"> • Lookout Mountain ACEC • Irish Canyon ACEC • Sections of Little Yampa/Juniper 	<p>No areas would be managed as limited to designated roads and trails.</p>	<p>Designate routes determined through adaptive management and travel management planning.</p> <p>The following areas would be managed as limited to designated routes for OHV use:</p> <ul style="list-style-type: none"> • Little Yampa Canyon SRMA 	<p>All areas not managed as open or closed would be managed as limited to designated roads and trails.</p> <p>Criteria in Appendix XX would be used to prioritize areas for transportation planning.</p>

TABLE X: IMPACTS TO PALEONTOLOGICAL RESOURCES

ALTERNATIVE A (NO ACTION ALTERNATIVE)	ALTERNATIVE B	ALTERNATIVE C	ALTERNATIVE D
Canyon SRMA <ul style="list-style-type: none"> • Cottonwood Creek area • Cedar Mountain • Browns Park cellular site • Wild Mountain area • Hoy Mountain area 		<ul style="list-style-type: none"> • Cedar Mountain SRMA • Cottonwood Creek area • Irish Canyon ACEC • Lookout Mountain ACEC • Browns Park cellular site • Wild Mountain area • Hoy Mountain area • Zones within South Sand Wash SRMA 	
Limited to Existing Roads and Trails			
C. The following areas would be managed as limited to existing roads and trails: <ul style="list-style-type: none"> • Areas that meet fragile soil criteria • WSAs: All except Diamond Breaks and Cross Mountain • Lands adjacent to Cross Mountain WSA • Sections of Little Yampa/Juniper Canyon SRMA • Pole Gulch area • Big Hole Gulch area • Cold Springs Mountain • Sections of Axial Basin • Willow Creek area 	The following areas would be managed as limited to existing roads and trails: <ul style="list-style-type: none"> • WSAs: All except Diamond Breaks and Cross Mountain • Areas that meet fragile soil criteria 	All areas not managed as open or closed would be managed as limited to existing roads and trails. See adaptive OHV designation process explained below.	No areas would be managed as limited to existing roads and trails.

TABLE X: IMPACTS TO PALEONTOLOGICAL RESOURCES

ALTERNATIVE A (NO ACTION ALTERNATIVE)	ALTERNATIVE B	ALTERNATIVE C	ALTERNATIVE D
<ul style="list-style-type: none"> South Nipple area 			
<p>Limiting OHV use to existing or designated routes could result in surface disturbance from route widening, route braiding, and route pioneering. Use on existing routes could result in amplified erosion impacts. Impacts to paleontological resources from this erosion and surface disturbance could continue on the areas limited to designated routes, especially in XX acres of Class I and Class II paleontological areas.</p>	<p>Same as Alternative A, except impacts would be limited to just XXX acres where OHV use is limited to existing routes, XX acres of which are in Class I and Class II paleontological areas.</p>	<p>Same as Alternative A, except impacts would be limited to just XXX acres where OHV use is limited to existing routes, XX acres of which are in Class I and Class II paleontological areas.</p>	<p>Same as Alternative A, except impacts would be limited to just XXX acres where OHV use is limited to existing routes, XX acres of which are in Class I and Class II paleontological areas.</p>
Open			
<p>D. Approximately 71% of the Field Office would be managed as open to OHV use.</p>	<p>All areas of the Field Office that would not be managed as limited or closed to OHV use.</p>	<p>The following areas would be managed as open to OHV use:</p> <ul style="list-style-type: none"> South Sand Wash SRMA (play area south edge and Clay Buttes area) Hiawatha open, except from April 15 to July 15 it would be limited to existing routes. 	<p>The following areas would be managed as open to OHV use:</p> <ul style="list-style-type: none"> South Sand Wash SRMA (play area south edge, smaller area than Alternative C).
<p>Allowing cross-country OHV travel on XXX,XXX acres (71 percent) throughout the RMPPA would decrease vegetation density; increase erosion; and generally break, spread, and otherwise disturb cultural resources at the</p>			

TABLE X: IMPACTS TO PALEONTOLOGICAL RESOURCES

ALTERNATIVE A (NO ACTION ALTERNATIVE)	ALTERNATIVE B	ALTERNATIVE C	ALTERNATIVE D
<p>surface. These impacts are substantially higher in this alternative than in the remainder.</p> <p>OHV use on XXX,XXX acres (XX percent) of the field office designated as limited to existing or designated roads could result in route widening, route braiding, and route pioneering. Use on existing routes would result in amplified erosion impacts. Impacts to cultural resources from this erosion and surface disturbance would continue on the areas limited to designated routes. As stated in the general assumptions, this analysis assumes public land users will follow the decisions in the plan. Impacts from route pioneering will not be analyzed further here because it is an education and enforcement issue.</p> <p>Cultural resources in areas closed to OHV use (216,800 acres, approximately 10 percent) would not be impacted by OHV use.</p>			
<p>Cross-country OHV use would decrease vegetation density, increases erosion, and</p>	<p>Same as Alternative A, but impacts would be focused on XXX acres of Class I and Class</p>	<p>Same as Alternative A, but impacts would be focused on XXX acres of Class I and Class II paleontological</p>	<p>Same as Alternative A, but impacts would be focused on XXX acres of Class I and Class II paleontological</p>

TABLE X: IMPACTS TO PALEONTOLOGICAL RESOURCES

ALTERNATIVE A (NO ACTION ALTERNATIVE)	ALTERNATIVE B	ALTERNATIVE C	ALTERNATIVE D
<p>generally break, spread, and otherwise disturb paleontological resources at the surface. Unlike other permitted uses, paleontological resource assessments/clearances were not completed prior to designating these large "open" areas. Mitigation of paleontological resource damage would be accomplished through data recovery efforts implemented on a case-by-case basis when the damage is discovered. These impacts would be most likely on XX acres of Class I and Class II paleontological areas in areas open to cross country OHV use.</p>	<p>II paleontological areas in areas open to cross country OHV use.</p>	<p>areas in areas open to cross country OHV use.</p>	<p>areas in areas open to cross country OHV use.</p>