

BIGHORN NATIONAL FOREST

Land and Resource Management Plan – Draft

Oil and Gas Leasing Stipulations

Introduction

This appendix displays the stipulations applied to oil and gas leases to be consistent with Forest Plan Standards and Guidelines, and a short explanation of the reasons for the stipulations. This is mandated by the oil and gas regulations found in 36 CFR 228.102 (c)(1)(ii). This section also discusses the guidelines by which waivers, exceptions, or modifications may be granted.

Waivers, exceptions, or modifications will be considered in accordance with the requirements of 36 CFR 228.104. Requests for waiver, exemption or modification will be considered in the environmental analysis (NEPA compliance) for an Application for Permit to Drill (APD). The Deciding Officer will make a determination based on this information.

All the following stipulations are consistent with and necessary to implement the land and resource management plan.

Definition of Terms

- **Stipulation:** A provision that modifies standard lease rights and is attached to and made a part of the lease. Stipulations have been developed for the categories of: 1) No Surface Occupancy, 2) Timing Limitations or seasonal restrictions, and 3) Controlled Surface Use.
- **No Surface Occupancy (NSO):** Use or occupancy of the land surface for fluid mineral exploration or development is prohibited to protect identified resource values.
- **Timing Limitation (TL) (Seasonal Restriction):** Prohibits surface use during specified time periods to protect identified resource values. This stipulation does not apply to the operation and maintenance of production facilities unless the findings of analysis demonstrate the continued need for such mitigation and that less stringent, project-specific mitigation measures would be insufficient.
- **Controlled Surface Use (CSU):** Use and occupancy is allowed (unless restricted by another stipulation), but identified resource values require special operational constraints that may modify the lease rights. CSU is used for operating guidance, not as a substitute for NSO or Timing stipulations.

Stipulations by Management Area

Stipulation Justification

Table E-1. Stipulations by Management Area.

Mgmt Area	MA Description	Stipulation	Alt A	Alt B	Alt C	Alt D	Alt E
1.11	Pristine Wilderness	NAA	130,799	130,803	130,798	130,798	130,808
1.13	Semi-primitive Wilderness	NAA	61,098	61,094	61,100	61,100	61,090
1.2	Recommended Wilderness	NSO	0	0	125,569	0	0
1.31	Backcountry Recreation - Nonmotorized	NSO	0	34,273	235	24,711	7,702
1.32	Backcountry Recreation - Nonmotorized Summer	NSO	58,943	42,342	71,209	36,939	27,472
1.33	Backcountry Recreation – Limited Motorized Use	NSO	20,053	32,546	36,901	6,099	15,224
1.5	National River System-Wild	NSO	13,217	20,871	22,082	10,251	10,420
2.1	Special Interest Areas	NSO	89	20,004	17,024	0	0
2.2	Research Natural Areas	NSO	1,618	21,190	21,188	21,190	1,618
3.1	Special interest area (Medicine Wheel)	NSO	61	20,863	20,865	20,863	20,863
3.24	Riparian and Aquatic Ecosystems	NSO	931	0	0	0	0
3.31	Backcountry Recreation - Year-round Motorized	CSU	25,464	118,242	193,877	82,733	12,719
3.4	National River System-Scenic	NSO	17,110	5,815	4,817	2,887	1,470
3.5	Plant and Wildlife Habitat Management	NSO	156,448	178,587	95,325	94,823	0
4.2	Scenery	CSU	19,147	95,418	93,294	102,083	6,007
4.3	Dispersed Recreation	CSU	0	36,234	63,888	25,558	4,794
4.4	National River System-Rec	CSU	0	10,901	10,900	74	0
5.4	Plant and Wildlife Habitat	CSU	0	0	0	0	134,374

Mgmt Area	MA Description	Stipulation	Alt A	Alt B	Alt C	Alt D	Alt E
5.41	Deer and Elk Winter Range	TL	27,680	28,213	21,325	28,852	29,638
8.22	Ski Resorts	NSO	1,217	2,580	2,580	2,575	2,540
Total	-----	-----	533,875	859,976	992,977	651,536	466,739

The following discussion describes area wide restrictions placed on oil and gas development based on management area direction.

MA 1.1 Pristine Wilderness – NAA

As a designated wilderness, the Cloud Peak wilderness is legally not administratively available for oil and gas leasing. This means the mineral estate is not available, and activities must maintain Wilderness qualities. Motorized travel for geophysical activities is prohibited, and if geophysical activities occur, portable techniques must be used. All Alternatives propose to make the same acres NAA.

MA 1.13 Wilderness Semi-primitive – NAA

As a designated wilderness, the Cloud Peak wilderness is legally not administratively available for oil and gas leasing. This means the mineral estate is not available, and activities must maintain Wilderness qualities. Motorized travel for geophysical activities is prohibited, and if geophysical activities occur, portable techniques must be used. All Alternatives propose to make the same acres NAA.

MA 1.2 Areas Recommended for Wilderness – NSO

Alternative C is the only alternative that has areas recommended for Wilderness, MA 1.2 that carry an NSO stipulation. In this management area oil and gas leasing is allowed, but no surface occupancy or use is permitted. This means the mineral estate may only be accessed from adjacent areas, and activities must maintain Wilderness qualities. Motorized travel for geophysical activities is prohibited, and if geophysical activities occur, portable techniques must be used.

Protecting areas recommended for Wilderness to maintain their consideration for Wilderness designation would impact oil and gas exploration. Effects would range from increased costs of drilling, to loss of access to oil and gas resources, to the loss of some rental and royalty income. The magnitude of the loss would depend on the resources available in the particular area. Leaving the oil and gas in place usually preserves the resource for future use (except in drainage situations).

MA 1.31 Backcountry Recreation, Nonmotorized – NSO

Alternatives B, C, D, and E have areas allocated to Backcountry Recreation Nonmotorized, MA 1.31, that carry an NSO stipulation. In these areas oil and gas leasing is allowed, but no surface occupancy is permitted. This means the mineral estate may only be accessed from adjacent areas, and activities must maintain backcountry qualities. Motorized travel for geophysical activities is prohibited, and if geophysical activities occur, portable techniques must be used.

Protecting areas to maintain backcountry characteristics would impact oil and gas exploration. Effects would range from increased costs of drilling, to loss of access to oil and gas resources, to the loss of some rental and royalty income. The magnitude of the loss would depend on the resources available in the particular area. Leaving the oil and gas in place usually preserves the resource for future use (except in drainage situations).

Alternative B has the most acres with the NSO stipulation allocated to this management area, followed by Alternatives D, E, and C. Alternatives A has no acres allocated to MA 1.31.

MA 1.32 Backcountry Recreation, Nonmotorized Summer with Limited Winter Motorized Use – NSO

All Alternatives have areas allocated to Backcountry Recreation, Nonmotorized Summer Use With Winter Limited Motorized, MA 1.32. In these areas oil and gas leasing is allowed, but no surface occupancy is permitted. This means the mineral estate may only be accessed from adjacent areas, and activities must maintain backcountry qualities. Motorized travel for geophysical activities is prohibited, and if geophysical activities occur, portable techniques must be used.

Protecting areas to maintain backcountry characteristics would impact oil and gas. Effects would range from increased costs of drilling, to loss of access to oil and gas resources, to the loss of some rental and royalty income. The magnitude of the loss would depend on the resources available in the particular area. Leaving the oil and gas in place usually preserves the resource for future use (except in drainage situations).

Alternative C has the most acres with the NSO stipulation allocated to this management area, followed by Alternatives A, B, D, and E.

MA 1.33 Backcountry Recreation with Limited Summer and Winter Motorized Use – NSO

All Alternatives have areas allocated to Backcountry Recreation with Limited Summer and Winter Motorized Use, MA 1.33. In these areas oil and gas leasing is allowed, but no surface occupancy is permitted. This means the mineral estate may only be accessed from adjacent areas, and activities must maintain backcountry qualities. Motorized travel for

geophysical activities is prohibited, and if geophysical activities occur, portable techniques must be used.

Protecting areas to maintain backcountry characteristics would impact oil and gas. Effects would range from increased costs of drilling, to loss of access to oil and gas resources, to the loss of some rental and royalty income. The magnitude of the loss would depend on the resources available in the particular area. Leaving the oil and gas in place usually preserves the resource for future use (except in drainage situations).

Alternative C has the most acres allocated to this management area, followed by Alternatives B, A, E, and D.

MA 1.5 National River System – Wild Rivers, Designated and Eligible – NSO

All Alternatives have areas allocated to National River System-Wild Rivers, Designated and Eligible, MA 1.5. In these areas oil and gas leasing is allowed, but no surface occupancy is permitted. This means the mineral estate may only be accessed from adjacent areas, and activities must maintain backcountry qualities. Motorized use is allowed on existing designated routes. Road construction or reconstruction is prohibited. If geophysical activities occur, existing designated travel routes or portable techniques must be used.

Protecting areas to perpetuate designated and eligible Wild River segments would impact oil and gas exploration. Effects would range from increased costs of drilling, to loss of access to oil and gas resources, to the loss of some rental and royalty income. The magnitude of the loss would depend on the resources available in the particular area. Leaving the oil and gas in place usually preserves the resource for future use (except in drainage situations). The magnitude of the loss is expected to be small because, for the most part, areas considered for Wild River designation are relatively small and easily accessible from adjacent land.

Alternative C has the most acres allocated to this management area, followed by Alternatives B, A, E, and D.

MA 2.1 Special Interest Areas (outside Wilderness) – NSO

Alternatives A, B, and C have acreage allocated to Special Interest Areas. This means that in these Alternatives, activities in SIAs must maintain the identified special values for which the area was established.

In alternatives with SIAs, the mineral estate may only be accessed from adjacent areas. Motorized use is allowed on existing designated routes. Road construction and reconstruction is prohibited. If geophysical activities occur, existing designated travel routes or portable techniques must be used.

Protecting SIAs to perpetuate the identified special values would impact oil and gas

exploration. Effects would range from increased costs of drilling, to loss of access to oil and gas resources, to the loss of some rental and royalty income. The magnitude of the loss would depend on the resources available in the particular area. Leaving the oil and gas in place usually preserves the resource for future use (except in drainage situations). The magnitude of the loss is expected to be small because SIAs are relatively small and easily accessible from adjacent land.

Alternative B has the most area within this management area followed by Alternatives C and A.

MA 2.2 Research Natural Areas – NSO

All Alternatives have areas allocated to Research Natural Areas (RNA), MA 2.2. In this management area oil and gas leasing is allowed, but no surface occupancy or use is permitted. This means the mineral estate may only be accessed from adjacent areas, and activities must protect the natural condition of the ecosystem, its processes, and any species or values for which the RNA was established. Road construction or reconstruction is prohibited. If geophysical activities occur, portable techniques must be used.

Protecting recommended Research Natural Areas to maintain their consideration for designation would impact oil and gas exploration. Effects would range from increased costs of drilling, to loss of access to oil and gas resources, to the loss of some rental and royalty income. The magnitude of the loss would depend on the resources available in the particular area. Leaving the oil and gas in place usually preserves the resource for future use (except in drainage situations).

Alternatives B, C, and D have the same amount of area in management area with the NSO stipulation followed by Alternatives A and E, having similar land area.

MA 3.1 Special Interest Area – Medicine Wheel – NSO

All Alternatives have areas allocated to Special Interest Area – Medicine Wheel, MA 3.1. In this management area oil and gas leasing is allowed, but no surface occupancy or use is permitted. This means the mineral estate may only be accessed from adjacent areas, and activities must protect the natural condition of the ecosystem, its processes, and any species or values for which the Special Interest Area was established. Road construction or reconstruction is prohibited. If geophysical activities occur, portable techniques must be used.

Protecting Special Interest Areas to maintain their consideration for designation would impact oil and gas exploration. Effects would range from increased costs of drilling, to loss of access to oil and gas resources, to the loss of some rental and royalty income. The magnitude of the loss would depend on the resources available in the particular area. Leaving the oil and gas in place usually preserves the resource for future use (except in drainage situations).

Alternatives B, C, D, and E have approximately the same amount of land area, with Alternative A having the smallest management area allocation.

MA 3.24 Riparian and Aquatic Ecosystem Management – NSO

Only Alternative A has any allocation to Riparian Corridors, MA 3.24, which carry an NSO stipulation and falls within the moderate or low oil and gas resource potential areas. In these areas oil and gas leasing is allowed, but no surface occupancy is permitted. This means the mineral estate may only be accessed from adjacent areas, and activities must maintain current biological diversity and semi-primitive character.

In portions of this management area with a semi-primitive nonmotorized Recreation Opportunity Spectrum (ROS) classification, all motorized travel is prohibited. In areas with a semi-primitive motorized ROS class, motorized travel is limited to designated routes. Road construction or reconstruction is prohibited. This means if geophysical activities occur, portable techniques must be used except in areas with semi-primitive motorized classification where motorized activities could occur on designated travel routes only.

Protecting riparian corridors for migration and dispersal of wildlife would impact oil and gas exploration. Effects would range from increased costs of drilling, to loss of access to oil and gas resources, to the loss of some rental and royalty income. The magnitude of the loss would depend on the resources available in the particular area. Leaving the oil and gas in place usually preserves the resource for future use (except in drainage situations).

MA 3.31 Backcountry Recreation, Year-round Motorized – NSO

All Alternatives have areas allocated to Backcountry Recreation, Year-round Motorized, MA 3.31. In these areas oil and gas leasing is allowed, but no surface occupancy is permitted. This means the mineral estate may only be accessed from adjacent areas, and activities must maintain backcountry qualities. Motorized travel is limited to designated routes. Road construction or reconstruction is prohibited. Off road motorized access for geophysical activities is prohibited. If geophysical activities occur, existing designated travel routes or portable techniques must be used.

Protecting areas to maintain backcountry characteristics would impact oil and gas exploration. Effects would range from increased costs of drilling, to loss of access to oil and gas resources, to the loss of some rental and royalty income. The magnitude of the loss would depend on the resources available in the particular area. Leaving the oil and gas in place usually preserves the resource for future use (except in drainage situations).

Alternative C has the most acres allocated to this management area, followed by Alternatives B, D, A, and E.

MA 3.4 National River System – Scenic Rivers, Designated and Eligible – NSO

All Alternatives have areas allocated to National River System-Scenic Rivers, Designated and Eligible, MA 3.4. In these areas oil and gas leasing is allowed, but no surface occupancy is permitted. This means the mineral estate may only be accessed from adjacent areas, and activities must maintain scenic river qualities.

In portions of this management area with a semi-primitive nonmotorized Recreation Opportunity Spectrum (ROS) classification, all motorized travel is prohibited. In areas with a semi-primitive motorized ROS classification, motorized travel is limited to designated routes. Road construction or reconstruction is prohibited. This means if geophysical activities occur, portable techniques must be used except in areas with semi-primitive motorized classification where motorized activities could occur on designated travel routes only.

Protecting areas to perpetuate designated and eligible Scenic River segments would impact oil and gas exploration. Effects would range from increased costs of drilling, to loss of access to oil and gas resources, to the loss of some rental and royalty income. The magnitude of the loss would depend on the resources available in the particular area. Leaving the oil and gas in place usually preserves the resource for future use (except in drainage situations). The magnitude of the loss is expected to be small because, for the most part, areas considered for Scenic River designation are relatively small and easily accessible from adjacent land.

Alternative A has the most acres allocated to MA 3.4, followed by Alternatives B, C, D, and E.

MA 3.5 Plant and Wildlife Habitat Management – NSO

Alternatives A, B, C, and D have areas allocated to Special Wildlife Areas, Limited Management, MA 3.54. In these areas oil and gas leasing is allowed, but no surface occupancy is permitted. This means the mineral estate may only be accessed from adjacent areas, and activities must minimize disturbance to wildlife.

The area is managed for semi-primitive non-motorized recreation opportunities. Motorized travel is permitted on a limited, case-by-case basis to facilitate management. This means, if geophysical activities occur, motorized uses could be authorized on a limited case-by-case basis; otherwise, portable techniques must be used.

Protecting areas to minimize disturbance to wildlife would impact oil and gas exploration. Effects would range from increased costs of drilling, to loss of access to oil and gas resources, to the loss of some rental and royalty income. The magnitude of the loss would depend on the resources available in the particular area. Leaving the oil and gas in place usually preserves the resource for future use (except in drainage situations).

Alternative B has the most area in this management area followed by Alternatives A, D, and C. Alternative E has no acreage allocated to MA 3.54.

MA 4.2 Scenery - CSU

All Alternatives have areas allocated to Scenery, MA 4.2. Use and occupancy is allowed (unless restricted by another stipulation), but identified resource values require special operational constraints that may modify the lease rights. CSU is used for operating guidance, not as a substitute for NSO or Timing stipulations.

Protecting Scenic Areas to maintain their consideration for designation would impact oil and gas exploration. Effects would range from increased costs of drilling, to loss of access to oil and gas resources, to the loss of some rental and royalty income. The magnitude of the loss would depend on the resources available in the particular area. Leaving the oil and gas in place usually preserves the resource for future use (except in drainage situations).

Alternative D has the most area in this management area followed by Alternatives B, C, A, and E.

MA 4.3 Dispersed Recreation - CSU

Alternatives B, C, D, and E have areas allocated to Dispersed Recreation, MA 4.3. Use and occupancy is allowed (unless restricted by another stipulation), but identified resource values require special operational constraints that may modify the lease rights. CSU is used for operating guidance, not as a substitute for NSO or Timing stipulations.

Protecting Dispersed Recreation Areas to maintain their consideration for designation would impact oil and gas exploration. Effects would range from increased costs of drilling, to loss of access to oil and gas resources, to the loss of some rental and royalty income. The magnitude of the loss would depend on the resources available in the particular area. Leaving the oil and gas in place usually preserves the resource for future use (except in drainage situations).

Alternative C has the most area in this management area followed by Alternatives B, D, and E. Alternative A has no acreage within this management area.

MA 4.4 National River System (Recreation) - CSU

Alternatives B, C, and D have areas allocated to National River System, MA 4.4. Use and occupancy is allowed (unless restricted by another stipulation), but identified resource values require special operational constraints that may modify the lease rights. CSU is used for operating guidance, not as a substitute for NSO or Timing stipulations.

In portions of this management area with a semi-primitive nonmotorized Recreation Opportunity Spectrum (ROS) classification, all motorized travel is prohibited. In areas with a semi-primitive motorized ROS classification, motorized travel is limited to designated routes. Road construction or reconstruction is prohibited. This means if geophysical activities occur, portable techniques must be used except in areas with semi-primitive motorized classification where motorized activities could occur on designated

travel routes only.

Protecting areas to perpetuate designated and eligible Scenic River segments would impact oil and gas exploration. Effects would range from increased costs of drilling, to loss of access to oil and gas resources, to the loss of some rental and royalty income. The magnitude of the loss would depend on the resources available in the particular area. Leaving the oil and gas in place usually preserves the resource for future use (except in drainage situations). The magnitude of the loss is expected to be small because, for the most part, areas considered for Scenic River designation are relatively small and easily accessible from adjacent land.

Alternatives B and C have the same amount of area with this designation, followed by Alternative D. Alternatives A and E do not have any acres allocated in this management area.

MA 5.4 Plant and Wildlife Habitat - CSU

Alternative E is the only alternative which has areas allocated to Plant and Wildlife Habitat, MA 5.4. Use and occupancy is allowed (unless restricted by another stipulation), but identified resource values require special operational constraints that may modify the lease rights. CSU is used for operating guidance, not as a substitute for NSO or Timing stipulations.

In portions of this management area with a semi-primitive nonmotorized Recreation Opportunity Spectrum (ROS) classification, all motorized travel is prohibited. In areas with a semi-primitive motorized ROS classification, motorized travel is limited to designated routes. Road construction or reconstruction is prohibited. This means if geophysical activities occur, portable techniques must be used except in areas with semi-primitive motorized classification where motorized activities could occur on designated travel routes only.

Protecting areas to perpetuate plant and wildlife habitat areas would impact oil and gas exploration. Effects would range from increased costs of drilling, to loss of access to oil and gas resources, to the loss of some rental and royalty income. The magnitude of the loss would depend on the resources available in the particular area. Leaving the oil and gas in place usually preserves the resource for future use (except in drainage situations).

MA 5.41 Deer and Elk Winter and Parturition Rangelands – TL

All Alternatives have areas allocated to Deer and Elk Winter and Parturition Rangelands, MA 5.41. In these areas oil and gas leasing is allowed subject to limitations to protect deer and elk during critical wintering and parturition periods.

The entire MA 5.41 prohibits surface-disturbing activities on winter deer and elk rangelands from November 15 through April 30 annually. Within MA 5.41 surface

disturbing activities are prohibited on identified parturition areas from May 1 to June 30 annually. This means the drilling activity may occur for only a limited time during the year. On winter rangelands not identified as parturition areas, access for oil and gas activities is from May 1 through November 14 each year. On rangelands with identified parturition areas, access for oil and gas activities is from July 1 through November 14. Activities must minimize disturbance to wildlife during critical periods (November 15 through April 1 on winter rangelands, and May 1 through June 30 on parturition areas). During time periods that are not critical to deer and elk wintering and parturition, roads can be used, constructed, or reconstructed for oil and gas activities including geophysical activities in accordance with Recreation Opportunity Spectrum (ROS) classification.

In portions of this management area with a semi-primitive nonmotorized ROS classification, all motorized travel is prohibited. In areas with a semi-primitive motorized ROS classification, motorized travel is limited to designated routes. In areas with roaded natural, roaded modified, and rural ROS classes, motorized travel is not restricted during the period when surface disturbing activities are permitted. In the semi-primitive non-motorized and semi-primitive motorized ROS classifications road construction or reconstruction is prohibited. This means if geophysical activities occur in areas with semi-primitive non-motorized ROS classification portable techniques must be used. If geophysical activities occur in areas with semi-primitive motorized ROS classification, motorized activities could occur on designated travel routes only, otherwise portable techniques must be used. In roaded natural, roaded modified, and rural ROS classes, motorized activities are allowed during the summer period when surface disturbing activities are permitted.

The combination of short operating season due to the TL stipulation and restricted motorized travel in the semi-primitive nonmotorized and semi-primitive motorized ROS classes, limit oil and gas activities to such an extent that they are unlikely to occur. Should drilling occur, the Forest Service would rely on standard lease terms (relocation up to 200 meters) to protect the values of semi-primitive ROS classifications within MA 5.41. This means there is a small chance that semi-primitive non-motorized and semi-primitive motorized values could be impacted in MA 5.41. If an APD was received proposing a location within one of the semi-primitive ROS classes, mitigation would include relocation up to 200 meters, allowing single purpose road construction with gated entry, reclamation to restoring the natural contour of the ground, and re-vegetation with native species.

Protecting areas to minimize disturbance to wildlife winter range would impact oil and gas. Exploration costs could increase because of the short amount of time available for drilling (4.5 months). If a well is not completed within required time limits, shutting a drilling operation down and leaving the equipment idle or moving the equipment to another site and moving it back increases costs. Requirements that cause delays or increase costs for the operator could also reduce revenues for the United States Government.

Alternative E has the most acres with the TL stipulation allocated to MA 5.41, followed by Alternatives D, B, A, and C.

MA 8.22 Ski-based Resorts, Existing and Potential – NSO

All Alternatives have areas allocated to Developed Recreation, MA 8.22. In these areas oil and gas leasing is allowed, but no surface occupancy is permitted. This means the mineral estate may only be accessed from adjacent areas, and activities must minimize disturbance to the recreating public. Since the area is managed for roaded natural recreation opportunities, and motorized travel is permitted, geophysical activities can occur as authorized on a case-by-case basis.

Protecting areas to minimize impacts to the recreating public would impact oil and gas exploration. Effects would range from increased costs of drilling, to loss of access to oil and gas resources, to the loss of some rental and royalty income. The magnitude of the loss would depend on the resources available in the particular area. Leaving the oil and gas in place usually preserves the resource for future use (except in drainage situations). The magnitude of the loss is expected to be small because, for the most part, areas considered for Developed Recreation designation are relatively small and easily accessible from adjacent land.

Alternatives B, C, D, and E have approximately the same amount of acreage allocated to MA 8.22. Alternative A has the least acres allocated to MA 8.21.