

DRAFT RECORD OF DECISION
Federal Coal Lease Modifications COC-1362 & COC-67232

Paonia Ranger District
Grand Mesa, Uncompahgre and Gunnison National Forests
Gunnison County, Colorado
Sections 10, 11, 14, 15, 22 and 23 of T. 14S., R. 90W., 6th PM



To remain unsigned until final

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Date

I. BACKGROUND

A Supplemental Final Environmental Impact Statement (SFEIS) for Federal Coal Lease Modifications COC-1362 & COC-67232 (including on-lease exploration plan) has been prepared by Grand Mesa, Uncompahgre and Gunnison National Forests (GMUG) in cooperation with:

- Uncompahgre Field Office of the Bureau of Land Management (BLM),
- Southwest District Office of the BLM
- Colorado State Office of the BLM,
- Western Region of the Office of Surface Mining, Reclamation and Enforcement (OSM), and
- Colorado Division of Reclamation, Mining and Safety (DRMS)

The SFEIS supplements the final EIS for coal lease modifications and incorporates and updates analysis from the BLM Environmental Assessment (EA) for the consideration of on-lease exploration. The EIS and EA were prepared in 2012 and 2013 respectively. Portions of the environmental analyses were found to be inadequate, *High Country Conservation Advocates v. United States Forest Service*, 52 F. Supp. 3d 1174 (D. Colo. 2014). The agency decisions, as well as the exception for temporary road building in the North Fork Coal Mining Area under the Colorado Roadless Rule, were vacated and enjoined by the Court. *High Country Conservation Advocates v. United States Forest Service*, 67 F. Supp. 3d 1262 (D. Colo. 2014). This SFEIS was prepared to address Court-identified deficiencies and to incorporate new information and policies since 2012. The SFEIS incorporates analysis and disclosure of proposed on-lease exploration and analyzes and discloses the impacts of modifying federal coal leases COC-1362 and COC-67232 in response to applications received by the BLM Colorado State Office.

On February 04, 2015, the Forest Service received a request from the BLM to resume analysis of proposed modifications and stipulations to COC-1362 containing about 800 acres, and COC-67232, containing about 920¹ acres. Coal in the existing leases is mined at the West Elk Mine near Somerset, Colorado. Lease COC-67232 is held by Ark Land LLC (Ark), and lease COC-1362 is held by Mountain Coal Company (MCC). The applications were made to ensure that compliant and super-compliant coal reserves are recovered and not bypassed. These applications are being processed according to procedures set forth in 43 CFR 3432.

The coal lease modification areas lie in portions of sections 10, 11, 14, 15, 22 and 23 of T. 14S., R. 90W., 6th PM in Gunnison County, Colorado. The modification areas are within National Forest System (NFS) lands managed by the GMUG. The coal estate is administered by the BLM.

The BLM is required by law to consider leasing Federally-owned minerals for economic recovery. With respect to NFS lands, the Forest Service considers whether or not to consent to the BLM leasing coal reserves underlying NFS lands and prescribes stipulations for the protection of non-mineral surface resources.

Within the lease modification areas, the coal would be accessed and recovered by underground longwall mining methods from the existing West Elk Mine. The coal would

¹ Certificates from Cadastral Land Description Reviews on 3/29/2012 and 5/10/2016 have revised this to 920 acres down from 921-922 acres.

be transported using the existing coal transportation system and surface facilities. At the leasing (or modification) stage, the federal agencies evaluate the effects of mining on non-mineral (surface) resources. This evaluation includes direct impacts resulting from expected subsidence (i.e. the elevation of the land surface over mined areas would slightly be reduced as a result of mining), and other foreseeable impacts to surface resources from mining related activities. Under a foreseeable mine plan scenario, surface impacts within these modification areas would include those from constructing methane drainage wells (MDWs) and associated access routes required to safely mine the coal resources. Methane gas is a byproduct of the process of mining coal using longwall systems. Methane concentrations in excess of 5% can be explosive, and thus it must be removed to levels of 1% or less to meet safety standards, most commonly through methane drainage wells (MDWs) or methane vent bores. Specific locations of the MDWs and roads are not known at the leasing stage, and will not be known until specific mine plans are approved by DRMS, BLM, OSM, and the Mine Safety and Health Administration (MSHA) during the mine permitting process, subsequent to leasing. The surface impacts associated with mining were estimated to consider cumulative effects of leasing and are based on similar impacts from recent mining.

On July 3, 2012, the Colorado Roadless Rule (CRR) was promulgated and codified at 36 CFR Part 294. The CRR is now the controlling law and the 2001 Roadless Area Conservation Rule (RACR) no longer applies. The State of Colorado and the Forest Service developed the CRR in partnership to create a balance between conserving roadless area characteristics for future generations and allowing limited management activities within roadless areas. The CRR includes an exception for temporary road construction within an area on the GMUG defined as the North Fork Coal Mining Area (NFCMA). This exemption was crafted to allow temporary roads needed for coal mining activities. These temporary roads would not have been allowed under the RACR, and the project proponent has said that absent these roads, coal mining would not occur. The portions of lease modification areas within the Sunset Colorado Roadless Area (CRA) are located within the NFCMA and are subject to the exception for temporary road construction. In 2014, the court severed and vacated the NFCMA exception. . *High Country Conservation Advocates v. United States Forest Service*, 67 F. Supp. 3d 1262 (D. Colo. 2014). Following this, a Supplemental Environmental Impact Statement was prepared, and rulemaking “Roadless Area Conservation; National Forest System Lands in Colorado,” was published in the *Federal Register* at 81 FR 91811 on December 19, 2016. This rule reinstated the NFCMA exception to the Colorado Roadless Rule and was effective April 17, 2017.

About 915 of the approximately 920 acres of the proposed modification to federal coal lease COC-67232, and about 786 of the approximately 800 acres of the proposed modification to federal coal lease COC-1362 are within the Sunset CRA. If the lease modifications are approved by BLM and coal mining is permitted by DRMS, temporary roads and tree cutting, as allowed by the CRR, will likely be used to construct, operate and maintain MDWs necessary for safety and incidental to underground mining.

The NFCMA direction was developed in the CRR (36 CFR Part 294). In compliance with these requirements, all coal leases containing NFS lands and respective subsequent lease modifications contain standard lease notice language in accordance with Forest Service Manual (FSM) 2820 (SFEIS, Table 2-1); “The permittee/lessee must comply with all the rules and regulations of the Secretary of Agriculture set forth at Title 36, Chapter II, of the Code of Federal Regulations governing the use and management of the National Forest System (NFS) when not inconsistent with the rights granted by the Secretary of

Interior in the permit." Lease stipulations have also been included that are specifically from the CRR. (SFEIS, Table 2-1)

It is important to understand that coal mining is a multi-staged process with multiple federal and state agencies involved. The consent to modifying leases does not authorize actual mining or surface disturbing activities. These activities, including lease modifications, mining operations and on-lease exploration, are handled in separate and sequential approval and permitting processes by appropriate state and federal agencies after the leases are modified.

With respect to modifying federal coal leases, the GMUG, as the surface managing agency, is responsible for:

- Deciding whether or not to consent to the BLM modifying existing Federal Coal Lease COC-1362 by adding 800 acres according to the Federal Coal Leasing Amendments Act of 1976;
- Deciding whether or not to consent to the BLM modifying existing Federal Coal Lease COC-67232 by adding 920 acres according to the Federal Coal Leasing Amendments Act of 1976; and
- If consent is provided, prescribing stipulations needed for the protection of non-mineral surface resources by determining if the existing stipulations on the respective parent leases are sufficient.
 - If they are sufficient, stipulations from the parent leases will be applied to lease modification areas.
 - If they are not sufficient, prescribe additional stipulations that will provide for the protection of non-mineral surface resources to comply with regulations, policy and Forest Plan direction (SFEIS, Table 2-1).

II. DECISION AND REASON FOR THE DECISION

I have decided to select Alternative 3, based on my consideration of: the purpose and need for the action; the issues; the LRMP and associated amendments; current policies and regulations; the analysis of alternatives contained in the SFEIS; public comments received and other information in the project record. I recognize that this is a complex decision, but it is one of many similar decisions made over decades of mining in the North Fork Valley. The vast amounts of technical information and analyses contained in the SFEIS can overshadow the relatively small scale of this decision. Many commenters continue to point out possible new ways to look at the decision, new types of analyses that should be used, new methods to mine, etc. At this point, I, as the decision maker must make a choice. I have been underground in the West Elk Mine. I have hiked and viewed areas where surface impacts and reclamation have occurred on parent leases and will occur under my decision. I have been responsible for overall Forest Management of the entire three million plus-acre Grand Mesa, Uncompahgre and Gunnison National Forests for over five years and have been involved in Public lands decision making for over 30 years. In making a decision such as this it would be easier if there were thresholds or confidence intervals involved that took away any uncertainty related to yet unknown locations for surface occupancy or related to greenhouse gas effects at the local, regional, national or global scales. That is simply not the case. I have reviewed the analysis and re-analysis conducted by agency specialists and have all the information necessary to make an informed decision. I am aware of the effects and potential impacts to the environment and have decided that these impacts are acceptable in light of their scope and scale and positive outcomes of this project.

Identification of the Environmental Documents Considered in Making Decision

This decision was made after carefully considering the contents of the SFEIS, public comments, agency response to comments, and the supporting project file. The GMUG Forest Plan acknowledges and allows for coal leasing and resource development in areas where such activities would be consistent with the Plan. Further, my decision follows the legal direction for coal resource management (SFEIS, Section 1.7). Other environmental documents (SFEIS, Section 1.11) prepared for activities in the immediate vicinity were also consulted. I have considered the court order and the resultant revised and additional analysis and clarifications in the SFEIS, with particular attention to greenhouse gas emissions, social cost of carbon, socioeconomics, and recreation. The additional analysis and clarifications did not compel me to make a decision dissimilar to my predecessor.

Scope of Decision

The scope of this decision is limited to whether or not to consent to the lease modifications and determining stipulations necessary for the use and protection of the non-mineral interests in those lands. BLM will make a subsequent decision determining whether or not to issue the lease modifications upon my consent. The decision regarding approval of the exploration plan will be made by the BLM. If the BLM decides to approve the exploration plan, they would request the GMUG to review the exploration plan and concur with approval terms and determine adequacy of the bond. I have no decision subject to administrative review to make with regard to exploration.

Decision

I have decided to select Alternative 3 as described in the SFEIS (Section 2.2.3) and summarized in Section III of this document. Selection of this Alternative provides the BLM-Colorado State Office my consent to lease the NFS lands included in federal coal lease modifications COC-1362 and COC-67232 as described in the SFEIS, Table 1.2 (legal descriptions) and shown on the map at Figure 2-1 in SFEIS and in Appendix A herein. My consent decision includes the application of terms and conditions, identified as stipulations, to protect surface resources on NFS lands (Appendix B of this document, SFEIS Tables 2-1 and 2-2).

My decision will be implemented through issuance of this Record of Decision (ROD), formal notification by letter of consent to BLM, followed by BLM's actions of: 1) making a subsequent decision on whether or not to approve lease modification(s), and 2) modifying the lease(s). The lessees would then be responsible to secure any local, State or Federal permits and approvals as applicable and required by law for future operations or development on the lease modifications.

In the event of any contradiction or conflict between descriptions or depictions of authorized actions, my decision is to be taken from the project documents in the following order of precedence:

- The description in this ROD,
- The representations on the Appendix A- Decision Map and Stipulations in Appendix B, and
- Descriptions in the SFEIS.

My decision to consent to the lease modifications under Alternative 3 and potential future uses of NFS lands which may result from consenting to the lease modifications, including the construction of temporary roads, would be consistent with the CRR.

Reasons for my Decision

Authorities

The primary authorities for issuing coal lease modifications are found in the SFEIS, Section 1.6 and restated below.

Mining and Minerals Policy Act of 1970 and Mineral Leasing Act of 1920, as amended

The Forest Service and BLM manage their minerals programs under law as specified in the Mining and Minerals Policy Act of 1970 which states in part that it is the “continuing policy of the federal government in the national interest to foster and encourage private enterprise in...(t)he development of economically sound and stable domestic mining minerals and mineral reclamation industries...(and) the orderly and economic development of domestic mineral resources....” Further, federal mineral leasing follows the Mineral Leasing Act of 1920 as amended by the Federal Coal Leasing Amendments Act of 1976 (MLA), and specific procedures set forth in 43 CFR 3400.

These lease modification applications are being processed according to procedures set forth in 43 CFR 3432. Lease modifications are non-competitive leasing actions. Since Ark Land applied for these modifications to add acreage to existing leases, other coal companies could not obtain the rights to the coal if it is approved.

Subsequent permitting actions to allow mining and changing of the approved mine permit boundary to include the modification areas would be evaluated by DRMS under procedures set forth in 30 CFR PART 906.30 Appendix B and the Regulations of the Colorado Mined Land Reclamation Board for Coal Mining. These modifications may also require approval from the United States Department of the Interior (USDI) through the OSM.

Surface Mining Control and Reclamation Act of 1977 (SMCRA)

The Surface Mining Control and Reclamation Act (SMCRA) principally applies to coal permitting. SMCRA balances the need to protect the environment from the adverse effects of surface coal mining with the Nation's need for coal as an essential energy source. It ensures that coal mining operations are conducted in an environmentally responsible manner and that the land is adequately reclaimed during and following the mining process. Most coal-mining states now have the primary responsibility to regulate surface coal mining on lands within their jurisdiction, with OSM performing an oversight role. SMCRA requires that all coal mining be conducted under a permit approved by the designated regulatory authority. The Colorado Division of Reclamation Mining and Safety is the regulatory authority for coal mining in the state.

Any applications submitted to the State of Colorado to revise the state mining and reclamation permit, including applications to allow mining and its related surface disturbances, reclamation, and the changing of the approved mine permit boundary to include the modification areas, would be reviewed by the Colorado Division of Reclamation, Mining and Safety (DRMS). This review would be conducted by DRMS as set forth in the Colorado Surface Coal Mining Reclamation Act (34-33-101 et seq., C.R.S. 1973 as amended) and the Regulations of the Colorado Mined Land Reclamation Board

for Coal Mining (2 CCR 407-2, August 30, 1980 as revised). Coordination between DRMS and appropriate federal agencies of the review of any applications for Permit Revisions that may be submitted by Mountain Coal Company in conjunction with these lease modifications will be overseen by DRMS in accordance with the Colorado Surface Coal Mining Reclamation Act, the Regulations of the Colorado Mined Land Reclamation Board for Coal Mining, and, as applicable, 30 CFR 906.30. These state permitting actions may also require issuance or modification of a federal mine plan (or plans) by the USDI through the Office of Surface Mining, Reclamation and Enforcement (OSM) under the MLA.

The extent to which SMCRA directly applies at the leasing stage is related to the need to conduct the Unsuitability Assessment under Section 522(e) of SMCRA. For the purposes the unsuitability assessment conducted at the leasing stage, the procedure is codified at 43 CFR 3461.

Energy Policy Act of 2005

The purpose of the Energy Policy Act of 2005 was to ensure jobs for the future with secure, affordable, and reliable energy.

This Act Amends 30 U.S.C. 203(c)(4)(A) to ``secure modifications of the original coal lease by including additional coal lands or coal deposits contiguous or cornering to those embraced in the lease...(3) In no case shall the total area added by modifications to an existing coal lease under paragraph (1)--(A) exceed 960 acres; or (B) add acreage larger than that in the original lease."

Applicable Laws, Regulations, and Policy

This decision is consistent with applicable laws, regulations, and policies (refer to Section V of this document and SFEIS, Chapter 1) and with Forest Plan direction (SFEIS Section 1.8.1 and for each resource section in Chapter 3).

How Issues Were Considered

Issues were identified by the interdisciplinary team (IDT) and through public involvement. Significant issues were identified in the SFEIS (Section 1.10, Table 1-3) and carried forward for analysis in the SFEIS in both the development of Alternatives and in the individual resource sections (Chapter 3). Other issues brought forward were reviewed and addressed in: Response to Comments (SFEIS, Appendices I-K), comments received are available on the project website, and in Alternatives Considered but Eliminated from Detailed Study (SFEIS, Section 2.3).

Cumulative Effects

Consenting to lease does not result in any direct effects on the ground. However, should future development of the leases occur, such actions would result in indirect and cumulative effects. Indirect and cumulative effects (SFEIS Chapter 3) were addressed based on a Reasonably Foreseeable Mine Plan (SFEIS Section 3.3) for each resource area.

Lease Stipulations

Specific lease stipulations (Appendix B herein, SFEIS, Table 2-1) are being prescribed for: cultural and paleontological resources; endangered or threatened species; Canada lynx; raptors; big game winter range; water depletions; breeding birds; geologic hazards; baseline information; monitoring program; riparian, wetland or floodplain; subsidence;

roadless; visuals; methane use or flaring and BLM's addenda and stipulation (SFEIS, Table 2-2) regarding methane flaring, capture or use or other alternatives to venting.

Mitigation Measures & Methane Venting

The lease stipulations which have been *adopted* are the mitigation measures identified to protect non-mineral surface resources in those lands. The analysis presented in the SFEIS considers the lease stipulations as part of the Proposed Action; therefore, they are analyzed in detail (CEQ describes this as having been "explained and committed"). Should mining activities be authorized, these stipulations will be monitored and enforced by the respective appropriate permitting agencies for mining and associated operations.

Mitigation is an important part of the environmental analysis and NEPA's hard look. Reasonable mitigation measures that can mitigate the impacts of the project are discussed in this environmental analysis. Mitigation measures are discussed even if those measures are outside the scope of my authority. Commenters have urged the Forest Service to analyze mitigation measures to reduce methane emissions released to the atmosphere anticipated from potential mining operations by capture, use or flaring. I recognize the public concern and potential climate impacts resulting from methane releases, and mitigation to address these concerns has been identified and further addressed in the SFEIS in Table 2-2 and Section 2.3. While I do not believe it is appropriate at the consent to lease stage to prescribe this level of specificity to mine plan operations, these stipulations are permissive of methane capture, use or flaring and do not preclude their inclusion in a subsequent mine plan. Further, these stipulations prescribe surface protections if methane mitigation does occur consistent with my role under the federal coal regulations. In addition, the parent leases have respective addenda added by BLM will also be carried forward to the lease modifications (language was modified slightly by BLM's Instruction Memo in 2017) which allow capture and/or use of methane as a by-product of mining coal, if it is economically feasible for MCC to do so. BLM further has identified a need for additional information as a stipulation subsequent to leasing related to methane mitigation.

Commenters further contend that the Forest Service should require MCC to capture, use or flare methane vented to the atmosphere to reduce the effects of global climate change. Methane is currently an unregulated constituent under the Clean Air Act as managed by the Environmental Protection Agency (EPA) and through their agent Colorado Department of Public Health and Environment (CDPHE). There is no established threshold of significance for methane. While the Forest Service does not have the authority to promulgate or enforce air quality regulations pursuant to the Clean Air Act, there are several options for reducing greenhouse gas emissions which may be implemented consistent with this decision and Forest Service lease stipulations identified in SFEIS Table 2-1. As the decision maker, I disagree with commenters' assertions that I am required to do so. Beyond quantified methane emissions which are identified in SFEIS in Section 3.4, there is no reasonable way of measuring global climate change effects at the local level from this particular action, which is the continuation of an existing activity at or below permitted air quality levels, and for which it was acknowledged (throughout Chapter 3 of SFEIS) that specific on-going climate change related-effects will continue to occur. Should methane mitigation be implemented in the future, monitoring and enforcement would be conducted by the respective appropriate permitting agencies for mining and associated operations.

Air Quality and Climate Change

The SFEIS (Section 3.4, Appendices F & G) addresses issues related to air quality standards and possible effects globally and locally from climate change. Trends in air quality and climate change impacts have been identified. A few commenters requested to see modeling impacts of criteria pollutants and climate change from this project. However, regulations at 40 CFR 1502.14-1502.16 describe that a comparison between the existing or baseline condition and the proposed activities be described “as is necessary to support the comparisons” and “provide a clear basis for choice by the decision maker.” The SFEIS shows that the existing air quality impacts are in compliance with the CAA permits (permit for Construction Emissions) issued to MCC (SFEIS Appendix F). MCC has also filed an application under Title V of the Clean Air Act (“Tailoring Rule”) as of July 1, 2012. Under the selected Alternative, the rate of mining and mining systems would not change. The change to air quality under the selected Alternative would be an extension of time over which the impacts would occur. The addition of the lease modification areas would add approximately 1.3 years to the permitted baseline on NFS lands, and an additional 1.4 years would be added due to probable associated activities on private lands and parent lease COC-1362 which would become accessible under this decision. Therefore, I find that the effects to air quality and climate change are adequately disclosed in SFEIS in Section 3.4 and Appendices F and G. The magnitude of the effect is compliant with the CAA permits, and it is projected that emissions are likely to occur at current annual rates for less than 3 additional years under the Proposed Action compared with the No Action Alternative.

I did not require methane capture/destruction as a mitigation measure because:

1. Lease mods methane is incremental when viewed in context of the alternatives available:
 - a. Alt 1- 9.38 MM tons CH₄ (CO₂e) over 8.2 years
 - b. Alt 3- 11.91 MM tons CH₄ (CO₂e) over 10.9 years
 - c. Alt 4- 11.82 MM tons CH₄ (CO₂e) over 10.8 years
2. The range of my decision space entails a maximum 11.91-9.38= 2.54 MM tons CH₄ CO₂e, an amount for which specific climate change effects are unable to be predicted.
3. Methane levels released at the West Elk Mine have decreased steadily since 2012 without the imposition of a methane mitigation measure as a lease stipulation (SFEIS, Figure 3-7)

I feel confident that the incremental increase of effects of burning coal (combustion) under the action alternatives have been addressed and compared in Section 3.4.

Several commenters have suggested that we use the Social Cost of Carbon (SCC) protocol to show a cost-benefit analysis that shows the global monetized costs of mining and burning coal on the global environment. The Colorado Roadless Rule (CRR) was the programmatic decision (rulemaking) to determine how to balance maintaining and preserving roadless area characteristics while addressing the State’s concern of not foreclosing coal mining opportunities in the North Fork Valley (81 FR 91816). The CRR SFEIS conducted a SCC analysis as part of that analysis. I am familiar with the SCC cost-benefit analysis done at the rule-making level. I believe that the analysis was conducted at the appropriate rulemaking level at that time, consistent with the intended use of the protocol. From comments received, I believe several commenters including members of the Interagency Working Group have also been well informed about the SCC analysis prepared for the CRR and the potential costs of greenhouse gas emissions. Although the

recent Executive Order 13783 disbanded the Interagency Working Group on Social Cost of Greenhouse Gases and withdrew technical supporting documents used for the SCC analysis, even if this Executive Order was not issued, and if GHGs were analyzed in a manner that monetized global costs, this type of analysis would not inform my decision at other scales. I acknowledge the potential adverse impacts of greenhouse gas release on the global climate, but current the lack of consensus on the appropriate discount rate to be used in any such cost-benefit analysis leads to significant variation in output. Specifically, the analysis at the rulemaking stage varied from -\$3,440 million to \$206 million when both SCC and methane impacts were incorporated into the cost/benefit analysis. While this tool demonstrates the potential cost of methane release, the tool does not measure the actual incremental environmental impacts of the project on the environment in a manner easily understood. Based on the extreme range of negative to positive values from CRR SCC analysis, I find it extremely unlikely that even a substantially narrower range would prove meaningful to my decision. Moreover, there are no established criteria identifying the monetized values that are to be considered significant for NEPA purposes. I acknowledge there are variations on the analysis which could be done today, and criticisms of the analysis done at the rule-making stage, but given the wide range in variability that comes out of such an analysis I do not believe any additional project level SCC analysis would improve my decision. A hard look at this issue has been taken and both I and the public have been informed by the analysis done to date.

Moreover, NEPA does not require a cost-benefit analysis. While the SFEIS contains quantified impacts, and while some of these quantified impacts are monetary, the SFEIS does not contain information that equates with the benefit side of a cost-benefit analysis per OMB Circular A-4. The SFEIS contains an analysis of environmental consequences (40 CFR 1502.16) that meets the qualitative requirements of NEPA (40 CFR 1502.23). If we set out to quantify climate impacts as monetized costs, it would be necessary to balance these costs by also quantifying the benefits of burning coal to generate electricity such as providing affordable, reliable electricity and the resultant benefits of having electricity in general such as human health from medical advancements, comfort, work efficiencies, etc. and other actions that are beyond the scope of my decision. A benefit-cost analysis would not substantively add to my ability to reach an informed decision in the matters before me.

I do not need a project-level SCC analysis to determine stipulations and whether non-mineral and surface resource impacts are acceptable or not. The SCC protocol describes the monetary impact at the global scale of increased carbon emissions and does not translate to site-specific surface resource impacts.

I know there are resource impacts caused by the effects of climate change and I know that greenhouse gas releases contribute to this change. My decision has been informed by the climate change analysis for each of the resources in Chapter 3 at the local, regional, global levels of the SFEIS and all other impact analyses contained within the SFEIS.

My decision space is whether to consent to a lease issued by the Department of the Interior and to determine conditions necessary for the use and protection of the non-mineral, or surface resources. It is made in the context of staged decision making. The GMUG LRMP at III-63 (1)(a) states “ Forest Service authorize...disposals under terms and conditions to prevent or control adverse impacts on surface resources and uses.” And under 1(b) “Recommendations for and consent to BLM...will include stipulations that may be necessary for specific surface resources.” This area was also identified as part of BLM’s known coal recovery area. In response to the State of Colorado, an exception to the

Colorado Roadless Rule was promulgated to allow for temporary road construction for coal mining purposes in this area. After my decision is made, there will be subsequent state and federal decisions determining whether it is in the public interest to mine coal in this area and grant the lease, as well as decisions identifying and specifying mine plans and mine operations if the decision is made to lease the coal. Specific mitigation measures which condition mine operations to reduce the emission of greenhouse gases are better made by federal and state agencies which will have the benefit of more specific information, mine plans, and mining operations.

Factors Other Than Environmental Effects Considered In Making the Decision

The purpose and need of this project is to consider consenting to and issuing coal lease modifications for federal coal lands immediately adjacent to existing federal coal leases COC-1362 and COC-67232. The purpose of the lease modifications is to ensure that compliant and super-compliant coal reserves are recovered.

The BLM, charged with administration of the mineral estate on these Federal lands, is required, by law, to consider leasing Federally-owned minerals for economic recovery. Under 43 CFR 3432 (as amended by the Energy Policy Act of 2005), the holder of a federal coal lease may apply to modify a lease by adding up to 960 acres. The federal agencies are responding to applications to modify existing leases.

The need is also linked to the GMUG Land and Resource Management Plan, as amended (Forest Plan), which emphasizes environmentally sound mineral and energy development (Forest Plan, page II-61). My decision supports the Purpose and Need for this project and is consistent with Forest Plan direction.

My decision fulfills the Federal Government's policy to foster and encourage mineral development (Mining and Mineral Policy Act of 1970), the Federal Land Policy and Management Act (FLPMA), and complies with GMUG Forest Plan direction.

I considered the Forest Service Strategic Plan, which calls for the Forests to "help meet energy resource needs," the Forest Service implementation of the National Energy Plan (2001) generally directing the agency to expedite federal actions necessary for energy-related project approvals, and Executive Order 13212 directing federal agencies to take steps to increase the energy supply to our nation.

I considered the CRR which made an exemption for temporary road construction in the North Fork coal mining area.

I considered all other laws pertaining to management of NFS including but not limited to the Multiple-Use Sustained Yield Act of 1960 and the National Forest Management Act of 1976.

How Considerations Were Weighed and Balanced In Arriving At the Decision

The resource effects analyses presented in Chapter 3 of the SFEIS (Table 2.3 and Chapter 3) describe potential impacts to surface resources from leasing. Stipulations and lease addenda were developed and/or carried forward from the parent leases specifically for: cultural and paleontological resources; threatened or endangered species; Canada lynx; raptors; big game winter range; water depletions; breeding birds; geologic hazards; riparian/wetland/floodplain, roadless; methane use; visuals and baseline information and monitoring program. Because of the surface protections in place (Appendix B and SFEIS

Tables 2-1 and 2-2), I chose to consent to lease modification parcels as requested by BLM.

My decision to consent to leasing included evaluating the role and responsibility of the Forest Service in meeting overall energy needs for the nation as well as evaluating the environmental consequences of the decision. This consideration, along with our legal responsibilities, led me to the consent to lease decision.

Roads and well pads for coal exploration and methane drainage have been constructed and reclaimed in the general area for over 20 years. While temporary displacement of some wildlife have undoubtedly occurred, and some recreational visitors may have chosen to avoid areas of construction and activity, all other valid uses of the area have occurred concurrently with all phases of above-ground mining operations. West Elk Mine's history of reclamation to return disturbed sites to ecological productivity is stellar. The most telling evidence of this may be that during the original development of the CRR, environmental organizations were insistent and successful at ensuring the inclusion of areas with existing temporary roads and well pads in what was then the West Elk Inventoried Roadless Area into the current adjacent Flatirons Colorado Roadless Area, as well as existing and near-term (already permitted) roads and well pads in the northern portion of the Sunset Colorado Roadless Area (See Figure 3-27, SFEIS).

To compare this alternative with the No Action Alternative, existing and currently permitted temporary roads and well pads (including those in Colorado Roadless Areas) can be seen in figure 3-27. The incremental addition of 2.7 years of operations, and 18-72 acres of additional disturbance are quite small in context of past and ongoing operations. In reviewing Chapter 3, I find that local interests are best served by consenting to the lease modifications to continue our long-standing community and stewardship collaboration with the mine under the applicable mineral leasing laws and regulations compared to impacts of the projected extended duration of mining coal and limited surface disturbance associated with underground mining.

As a steward of about 3.5 million acres of National Forest System lands, I am assigned the task of balancing uses, as well as appropriate scope and scale of disturbances to dynamic landscapes. While many commenters have suggested that the primarily aspen ecotype of the lease modifications area suggest that it is different from past disturbances which have been more in the oakbrush type, and will be evident on the landscape longer. In my trips to the area, what struck me about the disturbance and reclamation in both oakbrush and aspen was that the previous disturbances were desirable for providing increased species and seral diversity; however, they were at scales so small that they could not be deemed beneficial. E.G., when we treat oakbrush for seral diversity and stand regeneration on the GMUG, we often aim for a minimum size of 500-1000 acres per treatment. When we treat aspen stands to promote seral diversity and stand regeneration, we typically aim for a minimum treatment area of 100 acres. There is a long local history of treatment and successful self-regeneration of aspen and oakbrush. And vegetation treatments of these variety have occurred within this general vicinity. On a ranger district comprising over 450,000 acres, with ~40% of its land base in aspen and ~20% in oakbrush, the past, present and projected future surface disturbances above the West Elk mine are quite small.

Because mine-related temporary roads are not open to the public and have been successfully reclaimed in a timely manner through State permitting and bonding in the area, I do not find these disturbances in the Sunset CRA to be detrimental to future

generations' experiences as roadless areas or otherwise significant in context on the local, forest or state scale.

Consideration of Other Alternatives

Alternative 1- No Action Alternative (Environmentally Preferred Alternative)

I did not select Alternative 1, no action, primarily because it is only incrementally different from the selected alternative in environmental effects, and does not meet the purpose and need or the intent of minerals laws as well as the selected alternative. The purpose of ensuring recovery of high-quality coal reserves on lands adjacent to existing coal mine operations would not be met with this Alternative. Minerals laws direct the Agency to continue a policy of encouraging private enterprise to develop mineral resources and ensure jobs for the future with secure, affordable and reliable energy (Minerals Policy Act of 1970 and Energy Policy Act of 2005). Further, the Forest Plan supports environmentally sound energy and mineral development.

This Alternative was identified as the environmentally preferable Alternative.

Even though this is the No Action Alternative, currently permitted temporary road and pad construction and use would continue for about ten years under this alternative. Most of these uses are and would continue to be in the Sunset Roadless Area. The selected alternative would likely add less than 3 years to this progression, and add from 18-72 acres of additional temporary disturbance to the many which have been constructed, used and reclaimed concurrent with other valid uses of NFS lands in the area.

Alternative 2

Alternative 2 was moved to Section 2.3 Alternatives Considered, but Eliminated from Detailed Study due to the high likelihood of decreased operating periods, increased erosion potential, and safety concerns of cross country travel with no roads. Moreover, the RACR, which prevented road construction in Inventoried Roadless Areas has been replaced with the Colorado Roadless Rule.

Alternative 4

Alternative 4 was fully considered in this analysis. I compared: reasonably foreseeable surface disturbance; amount of expected coal to be recovered; and extension of mine life of the three action Alternatives. See Table 1 below.

Table 1. Summary of Reasonably Foreseeable Actions by Alternative

Action	Alternative 3	Alternative 4	Difference
Estimated Foreseeable Surface Disturbance (acres)	72	66	(6)
Estimated Coal (tons)	10,100,000	9,265,000	(835,000)
Estimated Foreseeable Extension of Mine Life (years)	1.6	1.4	(0.2)

I considered the relatively small environmental footprint difference between Alternatives, temporary nature of the expected post-lease disturbance and past reclamation success at the West Elk Mine when selecting Alternative 3. I determined that while both the

environmental impacts and coal recovery differences were very small between Alternatives 3 and 4, preventing the bypass of recoverable incompliance with the purpose and need of this decision is best served by Alternative 3. The 835,000-ton increase in coal recovery outweighs the environmental effects of disturbing 6 more acres of NFS lands for a short period of time as compared to Alternative 4.

Public Involvement Considerations

Public and agency comments were sought during preparation of the SFEIS (see Section IV). Responsive to some comments on the DEIS, the following changes were completed in development of the SFEIS with respect to Alternatives:

- Development of Alternative 4; analyzing and disclosing impacts of consenting to only one of the proposed lease modifications (COC-1362)

III. SUMMARY OF ALTERNATIVES CONSIDERED

A total of 15 Alternatives were considered in the SFEIS (Sections 2.2 through 2.3.12) with 3 carried forward for detailed analysis. Alternative 2 from the FEIS was eliminated from detailed study. I have selected Alternative 3, conditioned with stipulations. A summary of the Alternatives Considered in Detail in the SFEIS follows:

Alternative 1- No Action Alternative

Analysis of the No Action Alternative is required by CEQ, 40 CFR Part 1502.14(d). Under the No Action Alternative, consent for the lease modifications would not be granted, and no mining would occur in these specific areas. Impacts from mining coal under these areas would not occur on these lands, and the effects from on-going land uses could continue including coal mining activities such as exploration and monitoring related to mine activities, as well as continued recreation and grazing. The land would continue to be managed according to Forest Plan standards, goals and guidelines. This Alternative was the environmentally preferred, as it minimized ecological disturbance compared with the other two alternatives considered.

Common to All Action Alternatives

The proposed action is for the Forest Service to consent to and BLM leasing/modifying MCC's existing federal coal leases COC-67232 and/or COC-1362 and by adding 920 and 800 additional acres (respectively) to ensure that compliant and super-compliant coal reserves are recovered and not bypassed, and to identify stipulations for the protection of non-mineral (i.e. surface) resources.

Methane drainage well construction is essential for operating longwall operations in the North Fork Valley. Normal mine ventilation alone does not allow for safe longwall mining in the North Fork Valley. Without MDWs methane builds up quickly during the longwall mining process. The current use of MDWs is necessary to mitigate methane safety hazards making mine-air compliant with MSHA standards. For the West Elk Mine, MDWs are a required part of their MSHA approved ventilation Plan (see project record).

Alternative 3 (Agency Preferred Alternative)

By selecting Alternative 3 the Forest Service consents to the lease modifications and BLM could modify the leases with stipulations/notices/addenda in Appendix B.

The majority of both lease modification areas are within the Sunset CRA, which is entirely within the NFCMA that provides an exception for post-lease surface-disturbing activities, including the construction and use of temporary roads (36 CFR 294.43 (c)(1)(ix)). 786 acres of the COC-1362 lease modification and 915 acres of the COC-67232 lease modification are within the Sunset CRA. Allowing temporary roads would facilitate MDW drilling and would therefore allow for mining the coal under the RFMP (described in Section 3.3).

Alternative 4

Many commenters expressed concerns regarding roadless area effects due to post-lease development. Similarly, in the original DEIS, some commenters suggested an Alternative requesting agencies' consent/leasing for proposed modification to COC-1362 only, while not consenting to proposed modification to lease COC-67232. In response to those comments, Alternative 4 was brought forward for further analysis from Alternatives Considered but Eliminated from Detailed Study in the DEIS.

Alternative 4 analyzed the effects of post-lease surface activities under The CRR and resultant NFCMA, similar to Alternative 3.

An RFMP was developed (Section 3.3.3) to address indirect and cumulative effects specific to the COC-1362 modification.

Stipulations for Action Alternatives

I am prescribing some additional stipulations to the existing stipulations on the parent leases to provide for the protection of non-mineral surface resources. All stipulations are listed in Appendix B corresponding to the respective applicability to lease modification(s).

IV. PUBLIC INVOLVEMENT

Extensive public involvement occurred during the preparation of an Environmental Assessment for this same EIS. During that comment period (April-May 2010), approximately 32,002 versions of email form letters were received from environmental groups (more detailed description in subsequent sections); 576 hardcopy/faxed form letters were received from local community members in four counties in support of mining in this area; 78 (mostly modified form letters) were received in response to this scoping effort. Issues ranged from support to opposition of coal mining, effects to Inventoried Roadless Areas, and global climate change. Most concerns dealt with post-leasing development. These issues led the agencies to develop the Proposed Action which has lease stipulations to protect surface resources including: cultural/paleontological resources, threatened/endangered species, Canada Lynx, raptors, big game winter range, water depletions, breeding birds, geological hazards, riparian/wetlands, subsidence, lease notices for presence of roadless areas, lease addendums for methane flaring/capture/use and new lease stipulations for visual resources. The decision was remanded to the forest over stipulations in February of 2012.

In late 2011 and early 2012 Colorado was in the middle of transitioning to new state-wide roadless area regulations, Environmental Protection Agency was considering greenhouse gas regulations, Council on Environmental Quality was considering significance thresholds for analysis of greenhouse gases and BLM was preparing their own leasing analysis for these modifications. All of these combined contributed to the decision to prepare an Environmental Impact Statement (EIS).

The Forest Service published a Notice of Intent to Prepare an EIS in the Federal Register on April 25, 2012. Approximately 830 copies of letters/emails informing interested parties (including state, federal, local agencies, tribes, environmental groups, and interested parties) of this intent were also sent out on April 25, 2012 inviting additional comments throughout the process. Additional notification was sent out with the Draft EIS to approximately 768 individuals; additional legal notices were published in the Grand Junction Daily Sentinel and Delta County Independent.

Approximately 24,680 comment letters were received on the Draft EIS. Of those, 67 were original comments. Responses to comments received during the 30 day period following the printing of the NOI and the 45 day comment period on the DEIS and other comments specifically included by reference can be found in Appendix I. Comments received during this time can be viewed in entirety in Appendix I (Volume II) of the 2012 Final EIS.

Previous GMUG and BLM decisions (available at: <https://www.fs.usda.gov/project/?project=32459>) were vacated in *High Country Conservation Advocates v. United States Forest Service*, 67 F. Supp. 3d 1262 (D. Colo. 2014)) on September 11, 2014. A Supplemental EIS is being prepared to correct Court-identified deficiencies and to update analysis, as needed, since the Final EIS in 2012 and BLM's Environmental Assessment (EA) for exploration in 2013. The leasing and exploration analyses will be combined into a single document for agency and public convenience.

Over 9,800 additional submissions (primarily form letters, groups of form letters and petitions) were received on the Notice of Intent to Prepare a Supplemental Environmental Impact Statement in 2016-2017 which was not an official comment period. Comments and responses can be found in Appendix J.

During the official comment period (June 2, 2017-July 24, 2017) on the Supplemental Draft Environmental Impact Statement we received approximately 127, 250 expressions of interest or comment letters. Issue topics are consistent with those raised in previous comment periods. Summarized substantive comments and responses are included in Appendix K.

V. FINDINGS REQUIRED BY OTHER LAWS AND REGULATIONS

To the best of my knowledge, this decision complies with all applicable laws and regulations. In the following, I have summarized the association of my decision to some pertinent legal requirements.

Executive Order 13212 of May 18, 2001

This Order called the federal agencies to expedite their review of permits for energy-related projects while maintaining safety, public health, and environmental protections. My decision is consistent with this Order.

Federal Land Policy and Management Act of 1976

The Federal Land Policy and Management Act of 1976 states that public lands are to be managed in a manner that recognizes the need for the domestic sources of minerals, including renewable and non-renewable resources. My decision is consistent with this act.

Multiple-Use Sustained-Yield Act of 1960

This act states that renewable resources are to be managed for the long term sustained yield. My decision is consistent with this act.

National Forest Management Act of 1976

The Forest Plan was approved in 1983 and amended in 1991, as required by this Act. This long-range land and resource management plan provides guidance for all resource management activities in the Forest. The National Forest Management Act requires all projects and activities to be consistent with the Forest Plan. The Forest Plan has been reviewed in consideration of this project (SFEIS, Section 1.8). Forest Plan compliance is also addressed in the final subsection of each resource section in Chapter 3 of the SFEIS. My decision is consistent with the Forest Plan.

Mining and Minerals Policy Act of 1970

This Act declared it would be the continuing policy of the Federal government and in the national interest to foster and encourage private enterprise in the development of economically sound and stable domestic mining industries, and the orderly and economic development of domestic mineral resources (SFEIS, Section 1.6).

My decision is consistent with this act.

Mineral Leasing Act of 1920 (MLA) as amended, Energy Policy Act of 2005

Federal coal leasing follows the Mineral Leasing Act of 1920 (MLA), as amended and specific procedures set forth in 43 CFR 3400. These lease modification applications are being processed according to procedures set forth in 43 CFR 3432.

The purpose of the Energy Policy Act of 2005 was to ensure jobs for the future with secure, affordable, and reliable energy.

The Energy Policy Act Amended MLA [30 U.S.C. 203(c)(4)(A)] to ``secure modifications of the original coal lease by including additional coal lands or coal deposits contiguous or cornering to those embraced in the lease...(3) In no case shall the total area added by modifications to an existing coal lease under paragraph (1)--(A) exceed 960 acres; or (B) add acreage larger than that in the original lease.'

Some commenters have suggested that the processing of proposed modifications is not in compliance with MLA, and suggest that due to total acreage of both modifications, they should have been submitted and reviewed as a lease by application instead of two lease modifications.

On January 26, 2009, the GMUG received a request from the BLM to analyze an application to modify and review stipulations for federal coal lease COC-67232, containing about 762 acres. On that same date the GMUG also received a request to modify and review stipulations for federal coal lease COC-1362, containing about 800 acres. COC-1362 currently contains approximately 4,996 acres, including about 160 acres from a lease modification approved October 15, 2001. COC-67232 currently contains approximately 1,517 acres.

On December 14, 2009, the GMUG received an amended request from the BLM regarding COC-67232, addressing acres which removed NFS Wilderness while adding other NFS lands, bringing the total requested modification to 920 acres.

On February 04, 2015, the Forest Service received a request from the BLM to resume analysis of proposed modifications and stipulations to COC-1362 containing about 800 acres, and COC-67232, containing about 920² acres. Coal in the existing leases is mined at the West Elk Mine near Somerset, Colorado. Lease COC-67232 is held by Ark Land LLC (Ark), and lease COC-1362 is held by Mountain Coal Company (MCC).

If BLM authorizes these lease modifications, the total modified acres for COC-1362 would be approximately 960 acres.

In summary, neither of the respective proposed lease modification areas exceeds 960 acres. Neither of the respective proposed lease modification areas exceeds acres within respective parent leases. Therefore, my decision is consistent with these Acts, and these lease modification applications are being processed according to procedures set forth in 43 CFR 3432.

Colorado Surface Coal Mining Reclamation Act (CRS. 34-33-101)

This Act and attendant regulations are consistent with the overarching federal regulations (30 CFR Part 906, Appendix B). Federal coal leaseholders in Colorado must hold a State-approved mining permit before performing mining and reclamation operations on Federal lands in the state. In accordance with Colorado's approved federal coal program procedures, during the mine permitting process the GMUG will review an applicant's submittal, including bond sufficiency to ensure that it provides for post-mining land use consistent with the Forest Plan and has adequate protections for NFS lands.

Clean Air Act of 1955, as amended 1977

This Clean Air Act (CAA) required States to develop plans to implement, maintain, and enforce primary and secondary ambient air quality standards for any criteria air pollutants, and called federal agencies to prevent deterioration of air quality. Effects on air quality as a result of this project were analyzed and showed that this project will have negligible effects on air quality. Further, MCC is required to hold and maintain state air quality permits for their activities under the CAA. MCC currently holds a valid permit from the Colorado Division of Public Health and Environment (CDPHE) for construction air emissions. MCC has also submitted an application to CDPHE for a permit in accordance with Title V of the Clean Air Act (Tailoring Rule). This decision is consistent with this Act.

Clean Water Act and Amendments of 1972

This Act requires State and Federal agencies to control and abate water pollution. This project was designed to comply with this Act (Appendix B and SFEIS Table 2-1 through the inclusion of stipulations for surface and ground water, water depletions, baseline data, and monitoring and compliance with all state and local laws, the GMUG Forest Plan, and

² ¹ Certificates from Cadastral Land Description Reviews on 3/29/2012 and 5/10/2016 have revised this to 920 acres down from 921-922 acres.

the Forest Service Watershed Conservation Practices Handbook (FSH 2509.25). This decision is consistent with this Act.

Executive Orders 11990 and 11988

The management of wetlands and floodplains are subject to Executive Orders 11990 and 11988, respectively. The purpose of the EOs are to avoid to the extent possible the long- and short-term adverse impacts associated with the destruction or modification of wetlands and floodplains and to avoid direct or indirect effects of new construction in wetlands wherever there is a practical Alternative. This order requires the Forest Service to take action to minimize destruction, loss or degradation of wetlands, and to preserve and enhance the natural and beneficial values of wetlands. In compliance with this order, Forest Service direction requires that an analysis be completed to determine whether adverse impacts would result (SFEIS, Chapter 2 and Appendix B). The project was designed to avoid impacts to wetlands and floodplains through the addition of lease stipulations. Permits currently held by MCC, including NPDES, SPCC and CWA section 404 remain valid until renewal is necessary. Therefore, my decision is consistent with these orders.

Executive Order 12898

Concern for environmental justice stems from Executive Order 12898, "Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations," signed February 11, 1994 by President Clinton. In this order (Section 1-101),

"each Federal agency shall make achieving environmental justice part of its mission by identifying and addressing, as appropriate, disproportionately high and adverse human health or environmental effects of its programs, policies, and activities on minority populations and low-income populations in the United States."

The population around the project area was reviewed (SFEIS Section 3.21.1.1). For this project, no disproportionately high adverse impacts are expected. This decision is consistent with this Order.

Executive Order 13045

Direction regarding protection of children is recognized in "Protection of Children from Environmental Health Risks and Safety Risks", April 21, 1997. Children are seldom present at coal mining facilities. On such occasions, the coal mining companies have taken and will continue to take precautions for the safety of children by using a number of means, including fencing, limitations on access to certain areas, and provision of adult supervision. (See SFEIS, Section 3.21.1.2). This decision is consistent with this Order.

Executive Order 13783

EO 13783 provides direction regarding promoting energy independence and economic growth. This Order disbanded the Interagency Working Group on Social Cost of /technical supporting documents for SCC analysis. My decision does not rely on the SCC protocol and technical documents and is therefore consistent with this Order.

National Historic Preservation Act

Three cultural resource inventories have occurred within the project area and no heritage resources were located. Therefore the lease modifications are found to have no potential

to affect cultural resources, as defined in regulations 36 CFR 800. The addition of the standard lease clause will protect currently undiscovered sites (SFEIS Section 3.31 and Project File). Site specific resource surveys have been completed for exploration disturbance, and must be conducted prior to any post-lease ground disturbing activities (Appendix B, SFEIS Table 2-1). Therefore, at this time, no additional inventories need to be completed, and consultation with the State Historic Preservation Office (SHPO) is not required. My decision is consistent with this and other acts protecting heritage resources.

Endangered Species Act

A Biological Assessment (BA) was prepared for this decision (SFEIS, Sections 3.9-3.10, Project File, and Internet). All known endangered or threatened species in the area were considered. Due to “may affect, likely to adversely affect” determinations for Canada Lynx and water depletions related to the four endangered Colorado River fish, formal consultation with the USFWS was completed on June 16, 2010 (ES/CO: FS/GMUG/Paonia RD; Tails 65413-2010-F-0109) USFWS had concurred with our findings. Further, consultation of June 2, 2016 for vegetation removal forest-wide (BO ES/LK-6-CO-08-F-024-GJ0t 6 and TAILS 06824t00-201 6-F -0132) included the earlier project consultation acreages and set acreage limits for disturbance within the lynx analysis units before consultation would again be required. There is over 6,000 additional acres beyond this project and previous disturbances of habitat in the Mount Gunnison Lynx Analysis Unit that may be removed before approaching a conservation limit in compliance with the Southern Rockies Lynx Amendment. Depletions are covered under the GMUG’s Programmatic Biological Opinion ES/GJ-6-CO-F-033-CP062. These are further included in the Gunnison Basin Programmatic Biological opinion (ES/GJ-6-CO-09-F-0001; TAILS 65413-2009-F-0044) and USFWS’s Sufficient Progress Memo dated December 20, 2016. If additional findings regarding threatened or endangered, proposed or sensitive species are discovered, a new biological assessment or evaluation will be written, and formal consultation reinitiated.

Compliance with terms and conditions of the Biological Opinion are addressed in lease stipulations for threatened and endangered species (Appendix B, SFEIS Tables 2-1 and 2-2). Therefore, my decision is consistent with this Act.

National Environmental Policy Act

All documentation in the project record in support of, and including the SFEIS and ROD have been developed to comply with this Act, CEQ regulations at 40 CFR 1500, Forest Service policies at Forest Service Handbook 1909.15 and 36 CFR 220, requirements that evolved through the practice of NEPA, and from case law.

Coal Unsuitability

Upon receipt of the applications to modify the leases, BLM completed tract delineation. I have reviewed the unsuitability criteria published in 43 CFR 3461 (SFEIS, Appendix B) and am recommending to the Secretary of Interior (or their delegated representative) that there are no significant recreational, timber, economic, or other values that are incompatible with modifying the leases within the analysis.

The criteria have also been reviewed for implications with all Alternatives in this analysis. My recommendation is consistent with 43 CFR 3461.

Colorado Roadless Rule, 36 CFR 294

Within portions of proposed lease modification areas within the Sunset CRA, in accordance with § 294.43(c)(2), “If proposed road construction/ reconstruction meets one of the exceptions, subject to the legal rights identified in § 294.43(c)(1), the responsible official must determine:

- (i) *Motorized access, without road construction is not feasible;”*

As described previously in this ROD, development of the lease modifications without roads (Alternative 2) is not feasible at this time. Therefore, motorized access via roads is necessary.

- (ii) *“When proposing to construct a forest road, that a temporary road would not provide reasonable access;”*

All roads that may be constructed would be temporary.

- (iii) *“Road construction is consistent with applicable land management plan direction;”*

The use of roads is consistent with the land management plan. During the permitting stage when the roads would be designed and approved, the Forest Service will work with the permitting agency to ensure compliance with the land management plan.

- (iv) *“Within a native cutthroat trout catchment or identified recovery watershed, road construction will not diminish, over the long term, conditions in the water influence zone and the extent of the occupied native cutthroat trout habitat;”*

The lease modification area is not within a native cutthroat trout catchment or identified recovery watershed (project file).

- “,and
(v) *That watershed conservation practices will be applied to all projects occurring in native cutthroat trout habitat.”*

The lease modification area is not within native cutthroat trout habitat. However, watershed conservation practices will be applied.

Stipulations have been developed to ensure compliance with CRR respecting temporary roads, pipelines and linear construction zones should the latter be needed at a future date for capture of methane incident to mining. My decision is consistent with the requirements of the CRR.

Other Permits Required

- DRMS mine permit

In addition to the mine permit process, other permitting processes not covered by DRMS authority may need to be analyzed (NEPA) and permitted. Examples of these types of permits include: 1) Road Use Permits; 2) Timber contract for harvest of merchantable timber; and 3) Special Use/Right-of-Way Authorizations for other surface disturbing activities not covered by or outside the area covered in the mine permit (e.g. pipelines and off-lease facilities for methane mitigation).

MCC will be required to obtain/update additional information specific to this leasing action including:

- BLM on-lease Exploration Plan
- Update Forest Service Road Use Permit for roads outside the mine permit area
- Forest Service timber contract for any merchantable timber removed
- Update Approved Pesticide Use and Weed Control Plan

Other permits currently held by MCC such as NPDES, SPCC, 404 Permits, Air Construction Permit, Spill Prevention, control, and Countermeasure Plan, etc. remain valid until renewal is necessary.

VII. IMPLEMENTATION DATE AND ADMINISTRATIVE REVIEW (OBJECTION) OPPORTUNITY

Implementation Date

The minimum period for concluding the objection period is 50 days (45 day objection period opportunity and five day implementation stay if no objection is received) following publication of the legal notice of objection in the *Grand Junction Daily Sentinel*. If an objection is filed, the reviewing officer's response is due within 45 days of the close of the objection period (can be extended up to 30 more days). In relation to the Forest Service role in this project as the federal surface land management agency, BLM decision making relating to leasing these lands could not occur until any objections on my decision have been resolved.

Administrative Review (Objection) Opportunities

This decision is subject to a pre-decisional objection process in accordance with the provision of 36 CFR § 218 subparts A and B. Objections must be filed with the reviewing officer in writing. All objections are available for public inspection during and after the objection process. Issues raised in objections must be based on previously submitted and timely, specific written comments regarding the proposed project or activity and attributed to the objector, unless the issue is based on new information that arose after the opportunities for comment.

At a minimum, an objection must include the following: (1) Objector's name and address as defined in 36 CFR § 218.2, with telephone number, if available; (2) Signature or other verification of authorship upon request (a scanned signature for electronic mail may be filed with the objection); (3) When multiple names are listed on an objection, identification of the lead objector as defined in 36 CFR § 218.2. Verification of the identity of the lead objector must be provided upon request or the reviewing officer will designate a lead objector as provided in 36 CFR § 218.5(d); (4) The name of the proposed project, the name and title of the responsible official, and the name(s) of the national forest(s) and/or ranger district(s) on which the proposed project will be implemented; (5) A description of those aspects of the proposed project addressed by the objection, including specific issues related to the project; if applicable, how the objector believes the environmental analysis or draft decision specifically violates law, regulation, or policy; suggested remedies that would resolve the objection; supporting reasons for the reviewing officer to consider; and (6) A statement that demonstrates the connection between prior specific written comments on the particular proposed project or activity and the content of the objection, unless the objection concerns an issue that arose after the last designated opportunity for comment (i.e., since July 24, 2017). Incorporation of documents by reference is permitted only as provided for at 36 CFR § 218.8(b).

Objections, including attachments, must be filed (regular mail, fax, email, hand-delivery, express delivery, or messenger service) with the reviewing officer (see 36 CFR § 218.3 and § 218.8) within 45 days of the publication of the legal notice in the *Grand Junction Daily Sentinel* (Grand Junction, CO). The publication date of the legal notices in the *Grand Junction Daily Sentinel* is the exclusive means for calculating the time to file an objection. Those wishing to object should not rely upon dates or time frame information provided by any other source. Evidence of timely filing is described in 36 CFR § 218.9. Please submit objections to the Reviewing Officer at:

Mail or hand delivery:

Jacqueline Buchanan, Reviewing Officer
U.S.D.A Forest Service
Rocky Mountain Region
1617 Cole Blvd. Building 17
Golden, CO 80401

Fax: 303-275-5134 to the attention of Objections

The office business hours for those submitting hand-delivered objection are 8:00 AM to 4:30 PM Monday through Friday, excluding federal holidays.

Electronic objections must be submitted in a format such as an e-mail message, plain text (.txt), rich text format (.rtf), or MS Word (.doc). In cases where no identifiable name is attached to an electronic message, a verification of identity will be required. A scanned signature is one way to provide verification.

Email: r02admin-review@fs.fed.us

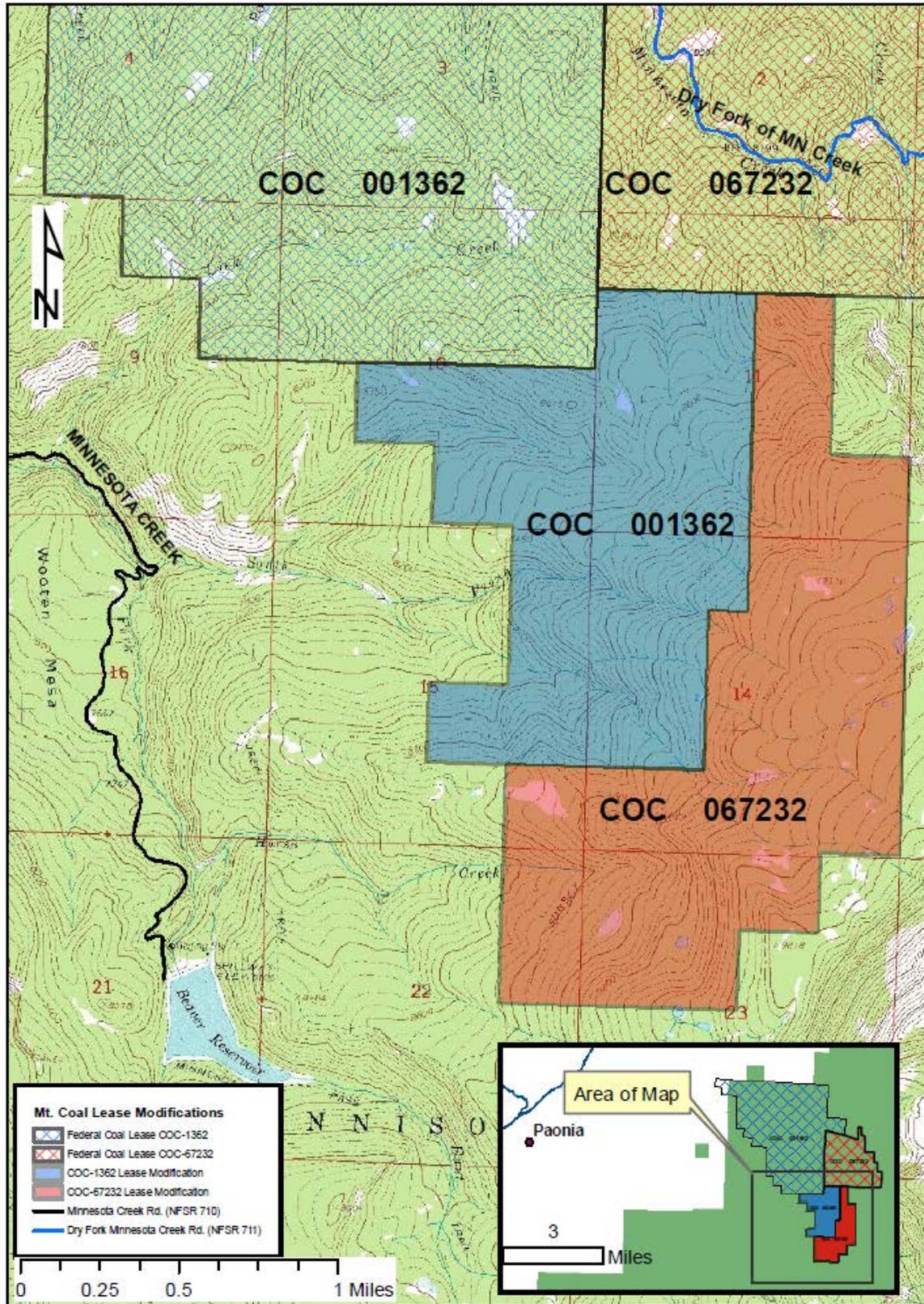
Contact

For more information about this project, contact either Niccole Mortenson phone 406-329-3163 or nmortenson@fs.fed.us or Levi Broyles at 970-527-4131 or lbroyles@fs.fed.us.

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To file a complaint of discrimination, write to USDA, Director, Office of Civil Rights, 1400 Independence Avenue, S.W., Washington, DC 20250-9410, or for Forest Service issues please call, toll free, (866) 632-9992 (Voice). TDD users can contact USDA through local relay or the Federal Relay at (800) 877-8339 (TDD) or (866) 377-8642 (relay voice users). USDA is an equal opportunity provider and employer.

Appendix A- Decision Map



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Appendix B- Stipulations for National Forest System Lands Federal Coal Lease COC-1362 & COC-67232

Resource Area	Stipulations Carried Forward from Parent Lease COC-1362 Specific to Forest Service Lands	Stipulations Carried Forward from Parent Lease COC-67232 Specific to Forest Service Lands	Stipulations Specific to Lease Modifications
Cultural and Paleontological Resources	<p>The FS is responsible for assuring that the leased lands are examined to determine if cultural resources are present and to specify mitigation measures. Prior to undertaking any surface-disturbing activities on the lands covered by this lease, the lessee or operator, unless notified to the contrary by the FS, shall:</p> <ul style="list-style-type: none"> • Contact the FS to determine if a site specific cultural resource inventory is required. If a survey is required then: • Engage the services of a cultural resource specialist acceptable to the FS to conduct a cultural resource inventory of the area of proposed surface disturbance. The operator may elect to inventory an area larger than the area of proposed disturbance to cover possible site relocation which may result from environmental or other considerations. An acceptable inventory report is to be 	<p>The FS is responsible for assuring that the leased lands are examined to determine if cultural resources are present and to specify mitigation measures. Prior to undertaking any surface-disturbing activities on the lands covered by this lease, the lessee or operator, unless notified to the contrary by the FS, shall:</p> <ul style="list-style-type: none"> • Contact the FS to determine if a site specific cultural resource inventory is required. If a survey is required then: • Engage the services of a cultural resource specialist acceptable to the FS to conduct a cultural resource inventory of the area of proposed surface disturbance. The operator may elect to inventory an area larger than the area of proposed disturbance to cover possible site relocation which may result from environmental or other considerations. An acceptable inventory report is to be 	<p>Use language from parent leases (required Standard Notice for Lands under the Jurisdiction of the Department of Agriculture.)</p>

Resource Area	Stipulations Carried Forward from Parent Lease COC-1362 Specific to Forest Service Lands	Stipulations Carried Forward from Parent Lease COC-67232 Specific to Forest Service Lands	Stipulations Specific to Lease Modifications
	<p>submitted to the FS for review and approval at the time a surface disturbing plan of operation is submitted.</p> <ul style="list-style-type: none"> • Implement mitigation measures required by the FS and BLM to preserve or avoid destruction of cultural resource values. Mitigation may include relocation of proposed facilities, testing, salvage, and recordation or other protective measures. All costs of the inventory and mitigation will be borne by the lessee or operator, and all data and materials salvaged will remain under the jurisdiction of the U.S. Government as appropriate. • The lessee or operator shall immediately bring to the attention of the FS and BLM any cultural or paleontological resources or any other objects of scientific interest discovered as a result of surface operations under this license, and shall leave such discoveries intact 	<p>submitted to the FS for review and approval at the time a surface disturbing plan of operation is submitted.</p> <ul style="list-style-type: none"> • Implement mitigation measures required by the FS and BLM to preserve or avoid destruction of cultural resource values. Mitigation may include relocation of proposed facilities, testing, salvage, and recordation or other protective measures. All costs of the inventory and mitigation will be borne by the lessee or operator, and all data and materials salvaged will remain under the jurisdiction of the U.S. Government as appropriate. • The lessee or operator shall immediately bring to the attention of the FS and BLM any cultural or paleontological resources or any other objects of scientific interest discovered as a result of surface operations under this license, and shall leave such discoveries intact 	

Resource Area	Stipulations Carried Forward from Parent Lease COC-1362 Specific to Forest Service Lands	Stipulations Carried Forward from Parent Lease COC-67232 Specific to Forest Service Lands	Stipulations Specific to Lease Modifications
	until directed to proceed by FS and BLM.	until directed to proceed by FS and BLM.	
Endangered or Threatened Species	<p>The FS is responsible for assuring that the leased land is examined prior to undertaking any surface-disturbing activities to determine effects upon any plant or animal species listed or proposed for listing as endangered or threatened, or their habitats. The findings of this examination may result in some restrictions to the operator's plans or even disallow use and occupancy that would be in violation of the Endangered Species Act of 1973 by detrimentally affecting endangered or threatened species or their habitats.</p> <p>The lessee/operator may, unless notified by the FS that the examination is not necessary, conduct the examination on the leased lands at his discretion and cost. This examination must be done by or under the supervision of a qualified resource specialist approved by the FS. An acceptable report must be provided to the FS identifying the anticipated effects of a proposed action on endangered or threatened species or their habitats.</p>	<p>The FS is responsible for assuring that the leased land is examined prior to undertaking any surface-disturbing activities to determine effects upon any plant or animal species listed or proposed for listing as endangered or threatened, or their habitats. The findings of this examination may result in some restrictions to the operator's plans or even disallow use and occupancy that would be in violation of the Endangered Species Act of 1973 by detrimentally affecting endangered or threatened species or their habitats.</p> <p>The lessee/operator may, unless notified by the FS that the examination is not necessary, conduct the examination on the leased lands at his discretion and cost. This examination must be done by or under the supervision of a qualified resource specialist approved by the FS. An acceptable report must be provided to the FS identifying the anticipated effects of a proposed action on endangered or threatened species or their habitats.</p>	<p>Use language from parent leases, required Standard Notice for Lands under the Jurisdiction of the Department of Agriculture.</p>
	If there is reason to believe that Forest Service Sensitive species, Threatened or Endangered species of plants or animals, or migratory bird species of high Federal interest are present, or become present in the lease area, the Lessee/Operator	If there is reason to believe that Sensitive, Threatened or Endangered species of plants or animals, or migratory bird species of high Federal interest are present, or become present in the lease area, the Lessee/Operator shall be	Use language from parent leases, required Standard Notice for Lands under the Jurisdiction of the Department of Agriculture.

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	<p>shall be required to conduct an intensive field inventory of the area to be disturbed and/or impacted. The inventory shall include species or groups of species identified by the FS, and will be conducted to by a qualified specialist. A report of findings will be prepared and provided to the FS. A plan will be made that recommends protection for these species or action necessary to mitigate the disturbance consistent with the Forest Plan. The cost of conducting such inventory, preparing reports and carrying out mitigation measures shall be borne by the Lessee/Operator.</p>	<p>required to conduct an intensive field inventory of the area to be disturbed and/or impacted. The inventory shall be conducted by a qualified specialist, and a report of findings prepared. A plan will be made that recommends protection for these species or action necessary to mitigate the disturbance. The cost of conducting such inventory, preparing reports and carrying out mitigation measures shall be borne by the Lessee/Operator.</p>	
<p>Canada Lynx</p>	<p>To comply with the USDA Forest Service Conservation Agreement with Fish and Wildlife Service, to follow the conservation measures in the Canada Lynx Conservation Assessment and Strategy (Ruediger et al. 2000), the following special constraints will apply if surface use on the lease is proposed in lynx habitat:</p> <ul style="list-style-type: none"> • Winter access will be limited to designated routes. • Further, should surface disturbing operations be proposed on the lease in lynx habitat, the following special constraints may apply, depending on site-specific circumstances: 	<p>To comply with the Canada Lynx Assessment and Strategy (Ruediger et al. 2000), the following special constraints will apply if post-lease surface use is proposed in lynx habitat:</p> <ul style="list-style-type: none"> • Winter access will be limited to designated routes. <p>Further, should post-lease operations be proposed on the lease in lynx habitat, the following special constraints may apply, depending on site-specific circumstances:</p> <ul style="list-style-type: none"> • Remote monitoring of the development sites and facilities may be required to reduce snow compaction. 	<p>To comply with the GMUG Forest Plan 2008 amendment, the following special constraints will apply if surface use on the lease is proposed in lynx habitat:</p> <ul style="list-style-type: none"> • Winter access will be limited to designated routes. <p>Further, should surface disturbing operations be proposed on the lease in lynx habitat, the following special constraints will apply:</p> <ul style="list-style-type: none"> • Remote monitoring of the development sites and facilities will be required to reduce snow compaction. • A reclamation plan (e.g. road reclamation and vegetation

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	<ul style="list-style-type: none"> • Remote monitoring of the development sites and facilities may be required to reduce snow compaction. • A reclamation plan (e.g. road reclamation and vegetation rehabilitation) for sites and facilities that promotes the restoration of lynx habitat may be required. • Public motorized use on new roads constructed for project-specific purposes will be restricted. • Access roads will be designed to provide for effective closures and will be reclaimed or decommissioned at project completion if they are no longer needed for other management objectives. • New permanent roads will not be built on ridge tops or in saddles, or in areas identified as important for lynx habitat connectivity. New roads will be situated away from forested stringers. 	<ul style="list-style-type: none"> • A reclamation plan (e.g. road reclamation and vegetation rehabilitation) for sites and facilities that promotes the restoration of lynx habitat may be required. • Public motorized use on new roads constructed for project-specific purposes will be restricted. • Access roads will be designed to provide for effective closures and will be reclaimed or decommissioned at project completion if they are no longer needed for other management objectives. • New permanent roads will not be built on ridge tops or in saddles, or in areas identified as important for lynx habitat connectivity. New roads will be situated away from forested stringers. • If post lease surface use occurs in lynx habitat, the Lessee will be required to submit an annual report to the USDA-FS and USFWS of all activities having occurred in lynx habitat. 	<p>rehabilitation) for sites and facilities that promotes the restoration of lynx habitat will be required.</p> <ul style="list-style-type: none"> • Public motorized use on new roads constructed for project-specific purposes will be restricted. • Access roads will be designed to provide for effective closures and will be reclaimed or decommissioned at project completion if they are no longer needed for other management objectives. • New permanent roads will not be built on ridge tops or in saddles, if possible, or in areas identified as important for lynx habitat connectivity. New roads will be situated away from forested stringers, if possible.

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Raptors	<p>For raptors (except American kestrel) the Lessee will be required to:</p> <ul style="list-style-type: none"> • Conduct surveys for nesting raptors on the lease prior to development of any surface facilities, and • No surface activities will be allowed within ¼ mile radius of active nest sites between the dates of February 1 and August 15, unless authorized by the Forest Service on a site-specific basis. • No surface activities will be allowed within 1-mile radius of active bald eagle or peregrine falcon nest sites between the dates of February 1 and August 15, unless authorized by the Forest Service on a site-specific basis. 	<p>For raptors (except American kestrel) the Lessee will be required to:</p> <ul style="list-style-type: none"> • Conduct surveys for nesting raptors on the lease prior to development of any surface facilities, and • No surface activities will be allowed within ½-mile radius of active nest sites between the dates of February 1 and August 15, unless authorized by the Forest Service on a site-specific basis. 	<p>Use combined language from COC-67232 and COC-1362 which reflects Forest Plan standards as well as guidelines from the Biological Evaluation for this project:</p> <ul style="list-style-type: none"> • Conduct surveys for nesting raptors on the lease prior to development of any surface facilities, and • No surface activities will be allowed within ½-mile radius of active nest sites between the dates of February 1 and August 15, unless authorized by the Forest Service on a site-specific basis. • No surface activities will be allowed within 1-mile radius of active bald eagle or peregrine falcon nest sites * between the dates of February 1 and August 15, unless authorized by the Forest Service on a site-specific basis. <p>(* No bald eagle or peregrine falcon nest site habitat has been identified within the lease modifications as indicated in the Biological Evaluation prepared for this analysis.)</p>
Big game winter range	In order to protect big game wintering areas, elk calving areas, and other key	In order to protect big game wintering areas, elk calving areas, and other key	Use language from parent leases.

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	wildlife habitat and/or activities, specific surface use may be curtailed during specific times of year. Specific time restrictions for specific species will be evaluated by the Forest Service at the individual project stage, and any additional site specific conditions of use developed at that time.	wildlife habitat and/or activities, specific surface use may be curtailed during specific times of year. Specific time restrictions for specific species will be evaluated by the Forest Service at the individual project stage, and any additional site specific conditions of use developed at that time.	
Water depletions	In the future, if water to be used for mine related activities is taken from a source that is not considered to be non-tributary waters by the U.S. Fish and Wildlife Service, or which exceeds a depletion amount previously consulted upon, the permitting agency must enter into consultation with the U.S. Fish and Wildlife Service to determine appropriate conservation measures to offset effects to listed fish and critical habitat in the upper Colorado River Basin.	In the future, if water to be used for mine related activities is taken from a source that is not considered to be non-tributary waters by the U.S. Fish and Wildlife Service, or which exceeds a depletion amount previously consulted upon, the permitting agency must enter into consultation with the U.S. Fish and Wildlife Service to determine appropriate conservation measures to offset effects to listed fish and critical habitat in the upper Colorado River Basin.	<p>Based on the CRR Section 7 consultation effort for the CRR's NFCMA in 2016, the Forest Service took on the responsibility for reinitiating consultation if minor water depletion caps were exceeded. The Forest Service wants to ensure the lessee provides the necessary information from monitoring and reporting to determine if minor water depletion caps are exceeded, and, in the highly unlikely event that the depletion caps were exceeded, the lessee would meet any additional conservation measures the USFWS might require. This updated stipulation provides clarification to the process that has been occurring on the parent leases regarding water depletion. Changes to stipulation are in italics.</p> <p>In the future, if water to be used for mine related activities is taken from a source that is not considered to be non-tributary waters by the U.S. Fish and Wildlife Service, or which exceeds a depletion amount previously consulted upon, <i>the surface</i></p>

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			<p><i>management agency must enter into consultation with the U.S. Fish and Wildlife Service to determine appropriate conservation measures to offset effects to listed fish and critical habitat in the upper Colorado River Basin. The lessee shall monitor and report all depletions to the Forest Service. Notwithstanding the fact that the surface management agency has the obligation to consult, the Lessee has the obligation to comply with all appropriate conservation measures to offset effects to listed fish and critical habitat in the upper Colorado River Basin in the event the depletion threshold is exceeded and additional reasonable and prudent actions are required.</i></p>
Breeding birds	<p>If surface disturbance is proposed on the lease, the lessee/operators will be required to conduct breeding bird surveys prior to surface disturbance as prescribed by the Forest Service.</p>	<p>If surface disturbance is proposed on the lease, the lessee/operators will be required to conduct breeding bird surveys prior to surface disturbance.</p>	<p>Use language from COC-1362 parent lease on both modifications.</p>
Geologic hazards	<p>No surface occupancy would be allowed in areas of high geologic hazard or high erosion potential, or on slopes which exceed 60%.</p> <p>Special interdisciplinary team analysis and mitigation plans detailing construction and mitigation techniques would be required on areas where slopes range from 40-60 percent. The</p>	<p>No surface occupancy would be allowed in areas of high geologic hazard or high erosion potential.</p> <p>Special interdisciplinary team analysis and mitigation plans detailing construction and mitigation techniques would be required on areas where slopes range from 40-60 percent. The</p>	<p>Use language from parent lease COC-1362 on both modifications.</p> <p>Use language from parent leases.</p>

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	interdisciplinary team could include engineers, soil scientist, hydrologist, landscape architect, reclamation specialist and mining engineer.	interdisciplinary team could include engineers, soil scientist, hydrologist, landscape architect, reclamation specialist and mining engineer.	
Baseline Information	The operator/lessee would be required to perform adequate baseline studies to quantify existing surface and subsurface resources. Existing data can be used for baseline analyses provided that the data is adequate to locate, quantify, and demonstrate interrelationships between geology, topography, hydrogeology, and hydrology. Baseline studies are critical to the success of future observation and assessment of mining related effects on resources.	The operator/lessee would be required to perform adequate baseline studies to quantify existing surface and subsurface resources. Existing data can be used for baseline analyses provided that the data is adequate to locate, quantify, and demonstrate interrelationships between geology, topography, hydrogeology, and hydrology. Baseline studies are critical to the success of future observation and assessment of mining related effects on resources in the Dry Fork lease tract.	Use language from parent leases.
Monitoring Program	The operator/lessee would be required to establish or amend a monitoring program to be used as a continuing record of change over time of area resources in order to assess mining induced impacts. The monitoring program shall provide the procedures and methodologies to adequately assess interrelationships between geology, topography, hydrogeology, and hydrology identified in the baseline assessment to mining activities on the lease area. The monitoring program shall incorporate baseline data so as to provide a continuing record over time.	The operator/lessee of the lease tract would be required to establish or amend a monitoring program to be used as a continuing record of change over time of area resources in order to assess mining induced impacts. The monitoring program shall provide the procedures and methodologies to adequately assess interrelationships between geology, topography, hydrogeology, and hydrology identified in the baseline assessment to mining activities in the lease tract area. The monitoring program shall incorporate baseline data so as to provide a continuing record over time.	Use language from parent leases.
Riparian, wetland or floodplain	Surface use or disturbances (except for surface subsidence and resource	Surface use or disturbances (except for surface subsidence and resource	Use language from parent leases.

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	<p>monitoring purposes defined in the approved mining permit) will avoid riparian, wetland or floodplain areas, and a buffer zone surrounding these areas (the definition of riparian areas and appropriate buffer zone will be consistent with that defined in the Forest Service Manual and Water Conservation Practices Handbook. Wetland definition will follow Army Corps of Engineers guidelines) unless no practical alternatives exist.</p>	<p>monitoring purposes defined in the approved mining permit) will not be permitted in riparian, wetland or floodplain areas, or within a buffer zone surrounding these areas (the definition of riparian areas and appropriate buffer zone will be consistent with that defined in the Forest Service Manual and Water Conservation Practices Handbook. Wetland definition will follow Army Corps of Engineers guidelines) unless no practical alternatives exist.</p>	
<p>Subsidence</p>	<p>If subsidence adversely affects surface resources in any way (including, but not limited to a documented water loss), the Lessee, at their expense will be responsible to: restore stream channels, stock ponds, protect stream flow with earthwork or temporary culverts, restore affected roads, or provide other measures to repair damage or replace any surface water and/or developed ground water source, stock pond, water conveyance facilities, with water from an alternate source in sufficient quantity and quality to maintain existing riparian habitat, livestock and wildlife use, or other land uses as authorized by 36 CFR 251.</p> <p>The Lessee/Operator shall be responsible for monitoring, repairing and/or mitigating subsidence effects on existing facilities under Special Use Permit with the Forest Service. Monitoring, repair and/or mitigation, if needed, would be performed at the</p>	<p>If subsidence adversely affects surface resources in any way (including, but not limited to a documented water loss), the Lessee, at their expense will be responsible to: restore stream channels, stock ponds, protect stream flow with earthwork or temporary culverts, restore affected roads, or provide other measures to repair damage or replace any surface water and/or developed ground water source, stock pond, water conveyance facilities, with water from an alternate source in sufficient quantity and quality to maintain existing riparian habitat, livestock and wildlife use, or other land uses as authorized by 36 CFR 251.</p> <p>The Lessee/Operator shall be required to perform the following with respect to monitoring, repairing and/or mitigating subsidence effects on existing facilities under Special Use Permit with the Forest Service. Monitoring, repair and/or mitigation will be performed at the</p>	<p>Use language from parent leases.</p> <p>As parent lease for COC-67232 deals specifically with an irrigation ditch on that lease, use language from COC-1362 on both lease modifications.</p>

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	<p>Lessee's expense. These requirements will be coordinated with the District Ranger and the Special Use Permittee.</p>	<p>Lessee's expense. The Lessee may request variations on timing for surveys, monitoring and reporting. Approving such requests would be at the discretion of the District Ranger.</p> <p>a. Baseline condition surveys of existing facilities will be completed the Fall following award of lease. Reports of this survey will be deliverable to the Forest Service by December 1 of that same year.</p> <p>b. In consultation with the Special Use Permittee and the Forest Service, install equipment to monitor flow on water conveyance facilities during the Fall following award of lease. Flow monitoring shall commence the following spring and continue until one year post mining. Flow data shall be provided to the Forest Service annually by December 1.</p> <p>c. A Surface Facility Monitoring and Mitigation Plan (Plan) will be submitted to the Forest Service for review and approval not later than 12 months prior to scheduled undermining. The Plan will detail measures to be taken to monitor, repair and mitigate subsidence effects of the facilities during actual mining and for one year.</p>	
<p>Roadless</p>	<p>The permittee/lessee must comply with all the rules and regulations of the Secretary of Agriculture set forth at Title 36, Chapter II, of the Code of Federal Regulations governing the use and management of the National Forest System (NFS) when not inconsistent with</p>	<p>All or parts of the following lands encompassed in this lease are in the West Elk Inventoried Roadless Area and may be subject to restrictions on road-building pursuant to rules and regulations of the Secretary of Agriculture applicable</p>	<p>On the following lands within the Sunset CRA, surface operations incident to underground coal mining are subject to regulations in 36 CFR 294, subpart D:</p>

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	<p>the rights granted by the Secretary of Interior in the permit. The Secretary of Agriculture's rules and regulations must be complied with for (1) all use and occupancy of the NFS prior to approval of an exploration plan by the Secretary of the Interior, (2) uses of all existing improvements, such as forest development roads, within and outside the area permitted by the Secretary of the Interior, and (3) use and occupancy of the NFS not authorized by the permit/operation approved by the Secretary of the Interior.</p> <p>Federal Coal Lease C-1362, as modified October 2001</p> <p>All or parts of the following lands encompassed in this lease are in the West Elk Inventoried Roadless Area and may be subject to restrictions on road-building pursuant to rules and regulations of the Secretary of Agriculture applicable at the time any roads may be proposed on the lease.</p> <p>Legal descriptions are approximate. Locations of any proposed surface use would be verified for relationship to IRA boundaries using site-specific maps if/when surface operations are proposed.</p>	<p>at the time any roads may be proposed on the lease.</p> <p>All or parts of the following lands encompassed in this lease are in the West Elk Inventoried Roadless Area and may be subject to restrictions on road-building pursuant to rules and regulations of the Secretary of Agriculture applicable at the time any roads may be proposed on the lease.</p>	<ul style="list-style-type: none"> • All roads that may be constructed must be temporary. • All temporary road construction must be consistent with applicable land management plan direction • Road construction may only occur if motorized access has been deemed infeasible by the responsible official; unless a temporary road is needed to protect public health and safety in cases of an imminent threat of flood, fire or other catastrophic event that, without intervention, would cause the loss of life or property • Temporary road construction must be completed in a manner that reduces effects on surface resources, and prevents unnecessary or unreasonable surface disturbance • All temporary roads must be decommissioned and affected landscapes restored when it is determined that the road is no longer needed for the established purpose • All temporary roads must prohibit public motorized vehicles (including off-highway vehicles) except:

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			<p>I. Where specifically used for the purpose for which the road was established; or</p> <p>II. Motor vehicle use that is specifically authorized under a Federal law or regulation.</p> <p>For any linear construction zone (LCZ) over 50 inches wide used to install pipelines, the Regional Forester must determine that they are needed, and the responsible official must determine that motorized access without a linear construction zone is not feasible.</p> <ul style="list-style-type: none"> • Construction and use of linear construction zones must be consistent with the GMUG Forest Land and Resource Management Plan, and may be no wider than their respective intended uses. • Installation of linear construction zones will be done in a manner that minimizes ground disturbance. • Reclamation of a linear construction zone will not diminish, over the long-term, roadless area characteristics. All

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			<p>authorizations approving the installation of linear facilities through the use of a linear construction zone shall include a responsible official approved reclamation plan for reclaiming the affected landscape while conserving roadless area characteristics over the long-term. Upon completion of the installation of a linear facility via the use of a linear construction zone, all areas of surface disturbance shall be reclaimed as prescribed in the authorization and the approved reclamation plan and may not be waived.</p>
Visuals	n/a	n/a	<p>Within the lease modification areas, the lessee will work with the District Ranger and his/her representative to see that all mine operations are situated on the ground in such a manner that reasonably minimizes impacts to the scenic integrity of that landscape as prescribed in the Forest Plan.</p>
Methane use	n/a	n/a	<p>If flaring or other combustion is prescribed as part of any future mitigation measure, lessee will be required to submit a fire prevention and protection plan subject to responsible Forest Service official for approval.</p>

BLM-specific Lease Stipulations for Protection of Non-Mineral (Surface) Resources

Resource Area	Addendum Carried Forward from Parent Lease COC-1362 Specific to Forest Service Lands	Addendum Carried Forward from Parent Lease COC-67232 Specific to Forest Service Lands	Revised Addendum per BLM IM 2017-037 (January 20, 2017)
<p>Methane Flaring, Capture/Use or other alternatives to venting</p>	<p>Sec. 3. Notwithstanding the language in Sec.2 of this lease and subject to the terms and conditions below, lessee is authorized to drill for, extract, remove, develop, produce and capture for use or sale any or all of the coal mine methane from the above described lands that it would otherwise be required to vent or discharge for safety purposes by applicable laws and regulations. For purposes of this lease, “coal mine methane” means any combustible gas located in, over, under, or adjacent to the coal resources subject to this lease, that will or may infiltrate underground mining operations.</p> <p>Sec. 4. Notwithstanding any other provision of this lease, nothing herein shall, nor shall it be interpreted to, waive, alter or amend lessee’s right to vent, discharge or otherwise dispose of coal mine methane as necessary for mine safety or to mine the coal deposits consistent with permitted underground mining operations and federal and state law and regulation. Lessee shall not be obligated or required to capture for use or sale coal mine methane that would otherwise be vented or discharged if the capture of coal mine methane, independent of activities related to mining coal, is not economically feasible or if the coal mine methane must be vented in order</p>	<p>Sec. 3. Notwithstanding the language in Sec.2 of this lease and subject to the terms and conditions below, lessee is authorized to drill for, extract, remove, develop, produce and capture for use or sale any or all of the coal mine methane from the above described lands that it would otherwise be required to vent or discharge for safety purposes by applicable laws and regulations. For purposes of this lease, “coal mine methane” means any combustible gas located in, over, under, or adjacent to the coal resources subject to this lease, that will or may infiltrate underground mining operations.</p> <p>Sec. 4. Notwithstanding any other provision of this lease, nothing herein shall, nor shall it be interpreted to, waive, alter or amend lessee’s right to vent, discharge or otherwise dispose of coal mine methane as necessary for mine safety or to mine the coal deposits consistent with permitted underground mining operations and federal and state law and regulation. Lessee shall not be obligated or required to capture for use or sale coal mine methane that would otherwise be vented or discharged if the capture of coal mine methane, independent of activities related to mining coal, is not economically feasible or if the coal mine methane must be vented in order</p>	<p>“Section 3. Notwithstanding the language in Section 2 of the lease and subject to the terms and conditions below, lessee is authorized to drill for, extract, remove, develop, produce and capture for use or sale any or all of the waste mine methane from the above described lands that it would otherwise be required to vent or discharge for safety purposes by applicable laws and regulations. For purposes of this lease, “waste mine methane” means any combustible methane gas located in, over, under, or adjacent to the coal resources subject to this lease, that will or may infiltrate underground mining operations and that must be vented to protect the health and safety of the mine workers.</p> <p>Section 4. Notwithstanding any other provision of this lease, nothing herein waives, alters, or amends lessee’s right to vent, discharge or otherwise dispose of waste mine methane as necessary for mine safety or lessee’s obligation to mine the coal deposits consistent with Federal and state law and regulation and with safety requirements contained in permits applicable to underground mining operations subject to this lease. Lessee is not obligated or required to capture for use or sale waste mine methane that would otherwise be</p>

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	<p>to abate the potential hazard to the health or safety of the coal miners or coal mining activities. In the event of a dispute between lessor and lessee as to the economic or other feasibility of capturing for use or sale the coal mine methane, lessor's remedy as a prevailing party shall be limited to recovery of the compensatory royalties on coal mine methane not captured for use or sale by lessee. Lessee shall have the right to continue all mining activities under the lease, including venting coal mine methane, pending resolution of any dispute regarding the application of the terms of Sections 3 and 4.</p> <p>Sec. 2 (c) COAL MINE METHANE OPERATIONS AND ROYALTIES- Notwithstanding the language in Part II, Section 2 (a) of this lease, the royalty shall be 12.5 percent of the value of any coal mine methane that is captured for use or sale from this lease. For purposes of this lease, the term "capture for use or sale" shall not include and the royalty shall not apply to coal mine methane that is vented or discharged and not captured for the economic or safety reasons described in Part I, Section 4 of this lease. Lessee shall have no obligation to pay royalties on any coal mine methane that is used on or for the benefit of mineral extraction at the West Elk coal mine. When not inconsistent with any express provision of this lease, the</p>	<p>to abate the potential hazard to the health or safety of the coal miners or coal mining activities. In the event of a dispute between lessor and lessee as to the economic or other feasibility of capturing for use or sale the coal mine methane, lessor's remedy as a prevailing party shall be limited to recovery of the compensatory royalties on coal mine methane not captured for use or sale by lessee. Lessee shall have the right to continue all mining activities under the lease, including venting coal mine methane, pending resolution of any dispute regarding the application of the terms of Sections 3 and 4.</p> <p>Sec. 2 (c) COAL MINE METHANE OPERATIONS AND ROYALTIES- Notwithstanding the language in Part II, Section 2 (a) of this lease, the royalty shall be 12.5 percent of the value of any coal mine methane that is captured for use or sale from this lease. For purposes of this lease, the term "capture for use or sale" shall not include and the royalty shall not apply to coal mine methane that is vented or discharged and not captured for the economic or safety reasons described in Part I, Section 4 of this lease. Lessee shall have no obligation to pay royalties on any coal mine methane that is used on or for the benefit of mineral extraction at the West Elk coal mine. When not inconsistent with any express provision of this lease, the</p>	<p>vented or discharged if the capture of waste mine methane, independent of the activities related to mining coal, is not economically feasible, or if the waste mine methane must be vented in order to abate the potential hazard to the health or safety of the miners or mining activities. In the event of a dispute between the lessor and the lessee as to the economic or technical feasibility of capturing the waste mine methane for use or sale, lessor's remedy as a prevailing party is limited to recovery of compensatory royalties on the waste mine methane not captured for use or sale by the lessee. Lessee retains the right to continue all mining activities under the lease, including venting waste mine methane, pending resolution of any dispute regarding the application of the terms of Sections 3 and 4.</p> <p>PART II. TERMS AND CONDITIONS (c) WASTE MINE METHANE OPERATIONS AND ROYALTY – Notwithstanding the language in Part II, Sec.2(a) of this lease, the royalty will be 12.5 percent of the value of any waste mine methane that is captured for use or sale from this lease. For purposes of this lease, the term "capture for use or sale" does not include, and the royalty will not apply to, waste mine methane that is vented, or otherwise discharged and not captured, for the economic feasibility or safety reasons described in Part I,</p>

Resource Area	Addendum Carried Forward from Parent Lease COC-1362 Specific to Forest Service Lands	Addendum Carried Forward from Parent Lease COC-67232 Specific to Forest Service Lands	Revised Addendum per BLM IM 2017-037 (January 20, 2017)
	<p>lease is subject to all rules and regulations related to Federal gas royalty collection in Title 30 of the Code of Federal Regulations now or hereinafter in effect and lessor's rules and regulations related to applicable reporting and gas measurement now or hereinafter in effect</p> <p>SEVERABILITY- In the event any provision of this addendum is subject to a legal challenge or is held to be invalid, unenforceable or illegal in any respect, the validity, legality and enforceability of this lease will not in any way be affected or impaired thereby and lessee will retain, in accordance with the terms of this lease, the exclusive right and privilege to drill for, mine, extract, remove or otherwise process and dispose of the coal deposits ,upon, or under the lands described in this lease, including the right to vent or discharge coal mine methane for safety purposed as required by applicable laws and regulation.</p>	<p>lease is subject to all rules and regulations related to Federal gas royalty collection in Title 30 of the Code of Federal Regulations now or hereinafter in effect and lessor's rules and regulations related to applicable reporting and gas measurement now or hereinafter in effect</p> <p>SEVERABILITY- In the event any provision of this addendum is subject to a legal challenge or is held to be invalid, unenforceable or illegal in any respect, the validity, legality and enforceability of this lease will not in any way be affected or impaired thereby and lessee will retain, in accordance with the terms of this lease, the exclusive right and privilege to drill for, mine, extract, remove or otherwise process and dispose of the coal deposits ,upon, or under the lands described in this lease, including the right to vent or discharge coal mine methane for safety purposed as required by applicable laws and regulation.</p>	<p>Section 4 of this lease. Lessee will have no obligation to pay royalties on any waste mine methane that is used on or for the benefit of mineral extraction at the (insert mine name here) coal mine. When not inconsistent with any express provision of this lease, this lease is subject to all the rules and regulations related to Federal gas royalty collection in Title 30 of the Code of Federal Regulations now or hereinafter in effect and the lessor's rules, regulations, notices, and orders related to applicable reporting and gas measurement now or hereinafter in effect.</p> <p>SEVERABILITY – In the event any provision of this addendum is subject to a legal challenge or is held to be invalid, unenforceable, or illegal in any respect, the validity, legality, and enforceability of this lease will not in any way be affected or impaired thereby and lessee will retain, in accordance with the terms of this lease, the exclusive right and privilege to drill for, mine, extract, remove, or otherwise process and dispose of the coal deposits in, upon, or under the lands described in this lease, including the right to vent or otherwise discharge waste mine methane for safety purposes as required by applicable laws and regulations.</p>

Resource Area	Addendum Carried Forward from Parent Lease COC-1362 Specific to Forest Service Lands	Addendum Carried Forward from Parent Lease COC-67232 Specific to Forest Service Lands	Revised Addendum per BLM IM 2017-037 (January 20, 2017)
			West Elk Mine shall provide to BLM an updated report on the economic feasibility of capturing or flaring the mine's mine methane for beneficial use or abatement, and should provide it to BLM no later than 1 year after the modification is approved.

