

APPENDIX C: MITIGATION REQUIREMENTS

INTRODUCTION

Lessees will be required to develop their federal leases in compliance with all applicable federal, state, and local laws and regulations. These are considered to be in-place constraints to a lessee's activities. Therefore, enforceable statutes, performance standards, and other license requirements are considered part of proposed federal actions under all alternatives and are applicable to all coal tracts. (Refer to the "Legislation and Regulations" section of chapter 1 of this document for a discussion of the laws pertaining to federal coal leasing.)

In addition, through the land use planning and activity planning processes, the BLM has considered the practicable means to avoid or minimize environmental harm resulting from the alternative leasing actions, above and beyond the standards that are already required by existing regulations or laws. The following mitigating measures are considered to be real, committed, and legally enforceable. The general mitigating measures apply to all tracts under all leasing alternatives. The tract-specific measures apply only to particular tracts and the alternatives in which they occur. Additional mitigating measures, if warranted, may be identified as a result of the EIS process.

MEASURES APPLIED TO ALL TRACTS

Cultural Resources

- a. Before undertaking any activities that may disturb the surface of the leased lands, the lessee shall conduct a cultural resource intensive field inventory in a manner specified by the authorized officer of the appropriate surface management agency on portions of the mining plan area and adjacent areas, or exploration plan area, that may be adversely affected by lease related activities and which were not previously inventoried at such a level of intensity. The inventory shall be conducted by a qualified professional cultural resource specialist (i.e., archeologist, historian, or historical architect, as appropriate) approved by the authorized officer of the appropriate surface management agency, and a report of the inventory and recommendations for protecting any cultural resources identified shall be submitted to the Office of Surface Mining (OSM) and the authorized officer of the appropriate surface management agency (or only to the surface management agency if activities are associated with coal exploration outside an approved mining permit area). The lessee shall undertake measures, in accordance with instructions from OSM (or the surface management agency if activities are associated with coal exploration outside an approved mining permit area), to protect cultural resources on the leased land. The lessee shall not commence the surface-disturbing activities until permission to proceed is given by OSM (or the surface management agency if activities are associated with coal exploration outside of approved mining permit area.)
- b. The lessee shall protect all known cultural resource properties within the leased area from lease related activities until the cultural resource mitigating measures can be implemented as part of an approved mining and reclamation plan or exploration plan.
- c. The cost of conducting the inventory, preparing reports, and carrying out mitigating measures shall be borne by the lessee.
- d. If cultural resources are discovered during operations under a lease, the lessee shall immediately bring them to the attention of OSM, the appropriate state regulatory agency, or the authorized officer of the surface managing agency if OSM is not available. The lessee shall not disturb such resources except as may be subsequently authorized by OSM, the state regulatory agency, or the authorized officer of the appropriate surface management agency. Within two (2) working days of notification, OSM, the state regulatory agency, or the authorized officer of the appropriate surface management agency will examine or have examined any cultural resources discovered and will determine if any action may be required to protect or preserve such discoveries. The cost of data recovery for cultural resources discovered during lease operations shall be borne by the surface managing agency unless otherwise specified by the authorized officer of the surface managing agency.

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- e. All cultural resources shall remain under the jurisdiction of the United States until ownership is determined under applicable law.

Paleontological Resources

- a. Before undertaking any activities that may disturb the surface of any leased lands, the lessee shall contact the surface managing agency to determine whether the authorized officer will require the lessee to conduct a paleontological appraisal of the mining plan and adjacent areas, or exploration plan areas, that may be adversely affected by lease related activities. If the authorized officer determines that one is necessary, the paleontological appraisal shall be conducted by a qualified paleontologist approved by the authorized officer of the surface managing agency, using the published literature and, where appropriate, field appraisals for determining the possible existence of larger and more conspicuous fossils of significant scientific interest. A report of the appraisal and recommendations for protecting any larger and more conspicuous fossils of scientific interest on any leased lands so identified shall be submitted to the authorized officer (AO) of the surface managing agency (BLM, if the surface is privately owned). When necessary to protect and collect the larger and more conspicuous fossils of significant scientific interest on any leased lands, the lessee shall undertake the measures provided in the approval of the mining and reclamation plan or exploration plan.
- b. The lessee shall not knowingly disturb, alter, destroy, or take any larger and more conspicuous fossils of significant scientific interest and shall protect all such fossils with the measures included in the approval of the mining and reclamation plan or exploration plan.
- c. The lessee shall immediately bring any such fossils that might be altered or destroyed by his operation to the attention of OSM or the authorized officer of the surface managing agency, as appropriate. Operations may continue as long as the fossil specimen or specimens would not be seriously damaged or destroyed by the activity. OSM or the AO, as appropriate, shall evaluate or have evaluated such discoveries brought to his attention and, within five (5) working days, shall notify the lessee what action shall be taken with respect to such discoveries.

- d. All such fossils of significant scientific interest shall remain under the jurisdiction of the United States until ownership is determined under applicable law. Copies of all paleontological resource data generated as a result of any lease term requirements will be provided to OSM or the AO of the surface managing agency, as appropriate.
- e. The cost of any required salvage of such fossils shall be borne by the United States.
- f. These conditions apply to all such fossils of significant scientific interest discovered within any lease whether discovered in the overburden or in the coal seam or seams.

Existing Rights

The lease is subject to valid existing rights. Any negotiations for relocation or displacement are between the lessee and the existing right holder, except such negotiations must be approved by the authorized officer of the surface managing agency.

Soils

- a. It is required that the B horizon (where present) and soil that lies above it be segregated from the underlying material.
- b. It is required that B horizon material be handled only when it is dry.

Survey Markers

The lessee must protect all survey monuments, witness corners, reference monuments, and bearing trees against destruction, obliteration, or damage during operations on the lease areas. If any monuments, corners, or accessories are destroyed, obliterated, or damaged by this operation, the lessee will hire an appropriate county surveyor or registered land surveyor to reestablish or restore them at the same locations. Surveying procedures must be carried out in accordance with the *Manual of Surveying Instruction for the Survey of Public Lands in the United States*, and the surveyor will record the survey in the appropriate county records and send a copy to the authorized officer.

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MEASURES FOR WYOMING TRACTS

Youngs Creek

1. The lessee will be required to monitor and inventory the lease area for establishment of potential black-footed ferret habitat (i.e., prairie dog towns) and, if any such habitat is found, to conduct ferret inventories, all in accordance with the guidelines below. In the event that ferret occurrence is identified, the lessee will be required to adhere to any suggested modifications in the mining operation provided by the Fish and Wildlife Service and the BLM.

The following black-footed ferret inventory guidelines will be followed. Proposed developments such as coal lease lands, power plant sites, well fields, dam sites, and other major, block-type developments must be surveyed for prairie dog towns before the project is approved. If prairie dog towns are found on the proposed site, colonies must be mapped on topographic maps and each colony surveyed using recommended black-footed ferret survey procedures. Ferret searches must be scheduled as close to construction as is reasonable to minimize the possibility of missing ferrets that might move onto the area during the period between completion of surveys and the start of construction. Where project disturbance takes place over a long period of time, such as on a coal site, additional surveys for black-footed ferrets are recommended.

2. Youngs Creek and Ash Creek have been preliminarily identified as alluvial valley floors where they pass through the tract. AVFs may only be mined subject to mitigating measures for alluvial valley floor protection that are made a part of an approved mine plan. Final determination of existence, significance, and required mitigating measures (if possible) is made by the state of Wyoming and the Office of Surface Mining at the mine plan approval and permitting stage of development. If mitigation is not possible, the delineated AVFs will be unsuitable for mining. Floodplains associated with these streams must be protected and provided for in accordance with the law and current regulations.
3. No surface occupancy is permitted within 100 feet of the right-of-way boundary for

Wyoming Highway 338, which passes through the east side of the tract. This measure will become void in the event that the highway is relocated off the tract at a later date.

4. Land within the buffer area around the existing prairie falcon and bald eagle nesting sites is classified as unsuitable for coal mining. Land included within the Youngs Creek tract and within the buffer area is described as follows:

T58N, R83W

Section 19: Lots 1, 2, 3, 4, 5, 6, N $\frac{1}{2}$ NE $\frac{1}{4}$ SW $\frac{1}{4}$, N $\frac{1}{2}$ NW $\frac{1}{4}$ SE $\frac{1}{4}$, S $\frac{1}{2}$ NE $\frac{1}{4}$, SE $\frac{1}{4}$ NW $\frac{1}{4}$

Section 20: Lots 3, 4, SW $\frac{1}{4}$ NW $\frac{1}{4}$

Section 31: Lot 2

T58N, R84W

Section 24: Lot 1, E $\frac{1}{2}$ SE $\frac{1}{4}$ NE $\frac{1}{4}$, NE $\frac{1}{4}$ NE $\frac{1}{4}$ SE $\frac{1}{4}$

5. The lease area or land adjacent to the lease area is known to contain, or has a high likelihood of containing, important habitat for burrowing owl and Lewis' woodpecker, which are migratory birds of high federal interest. The lessee must survey the leased area and adjacent lands within $\frac{1}{2}$ mile of the lease area for occurrence of these species and for important habitat such as nesting sites, brooding areas, or staging areas essential for their maintenance.

If important habitat for these species is identified the lessee must develop a habitat recovery and replacement plan for protection or enhancement of populations of these species affected by habitat loss or displacement due to mine-related activities. The plan must be developed in consultation with, and approved by, the Bureau of Land Management, the U.S. Fish and Wildlife Service, the Office of Surface Mining, and the state of Wyoming.

The plan may be submitted before or concurrently with the filing of the permit application package. However, because serious impacts can result from an inadequate plan, a minimum of 120 days must be allowed for the BLM, the FWS, the OSM, and the state of Wyoming to review the plan in order to resolve any conflicts or problem areas therein.

The final habitat recovery and replacement plan must indicate the methods that the lessee will employ to ensure that the productivity and species diversity of burrowing owls and Lewis' woodpeckers will not decline in the lease area.

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Hidden Water

1. The lessee will be required to monitor and inventory the lease area for establishment of potential black-footed ferret habitat (i.e., prairie dog towns) and, if any such habitat is found, to conduct ferret inventories, all in accordance with the guidelines below. In the event that ferret occurrence is identified, the lessee will be required to adhere to any suggested modifications in the mining operation provided by the Fish and Wildlife Service and the BLM.

The following black-footed ferret inventory guidelines will be followed. Proposed developments such as coal lease lands, power plant sites, well fields, dam sites, and other major, block-type developments must be surveyed for prairie dog towns before the project is approved. If prairie dog towns are found on the proposed site, colonies must be mapped on topographic maps and each colony surveyed using recommended black-footed ferret survey procedures. Ferret searches must be scheduled as close to construction as is reasonable to minimize the possibility of missing ferrets that might move onto the area during the period between completion of surveys and the start of construction. Where project disturbance takes place over a long period of time, such as on a coal site, additional surveys for black-footed ferrets are recommended.

2. Slater Creek has been preliminarily identified as an alluvial valley floor where it passes through the tract. AVFs may only be mined subject to mitigating measures for alluvial valley floor protection that are made a part of an approved mine plan. Final determination of existence, significance, and required mitigating measures (if possible) is made by the state of Wyoming and the Office of Surface Mining at the mine plan approval and permitting stage of development. If mitigation is not possible, the delineated AVF will be unsuitable for mining. Floodplains associated with Slater Creek must be protected and provided for in accordance with the law and current regulations.
3. Land within the buffer area around the golden eagle nesting sites is classified as unsuitable for coal mining. Land included within the Hidden Water tract and within the buffer area is described as follows.

T57N, R84W

Section 2: Lot 4

Section 3: Lots 1, 2, 3, NE $\frac{1}{4}$ NE $\frac{1}{4}$ SW $\frac{1}{4}$

4. The lease area or land adjacent to the lease area is known to contain, or has a high likelihood of containing, important habitat for burrowing owl and Lewis' woodpecker, which are migratory birds of high federal interest. The lessee must survey the leased area and adjacent lands within $\frac{1}{2}$ mile of the lease area for occurrence of these species and for important habitat such as nesting sites, brooding areas, or staging areas essential for their maintenance.

If important habitat for these species is identified, the lessee must develop a habitat recovery and replacement plan for protection or enhancement of populations of these species affected by habitat loss or displacement due to mine-related activities. The plan must be developed in consultation with, and approved by, the Bureau of Land Management, the U.S. Fish and Wildlife Service, the Office of Surface Mining, and the state of Wyoming.

The plan may be submitted before or concurrently with the filing of the mine permit application. However, because serious impacts can result from an inadequate plan, a minimum of 120 days must be allowed for the BLM, the FWS, the OSM, and the state of Wyoming to review the plan in order to resolve any conflicts or problem areas therein.

The final habitat recovery and replacement plan must indicate the methods that the lessee will employ to ensure that the productivity and species diversity of burrowing owls and Lewis' woodpeckers will not decline in the lease area.

Hay Creek

1. Hay Creek has been preliminarily identified as an alluvial valley floor where it passes through the tract. AVFs may only be mined subject to mitigating measures for alluvial valley floor protection that are made a part of an approved mine plan. Final determination of existence, significance, and required mitigating measures (if possible) is made by the state of Wyoming and the Office of Surface Mining at the mine plan approval and permitting stage of development. If mitigation is not possible, the delineated AVF will be unsuitable for mining. Floodplains associated with Hay Creek must be protected and provided for in accordance with the law and current regulations.

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2. The lease area or land adjacent to the lease area is known to contain, or has a high likelihood of containing, important habitat for burrowing owl and prairie falcon, which are migratory birds of high federal interest. The lessee must survey the leased area and adjacent lands within ½ mile of the lease area for occurrence of these species and for important habitat such as nesting sites, brooding areas, or staging areas essential for their maintenance.

If important habitat for these species is identified, the lessee must develop a habitat recovery and replacement plan for protection or enhancement of populations of these species affected by habitat loss or displacement due to mine-related activities. The plan must be developed in consultation with, and approved by, the Bureau of Land Management, the U.S. Fish and Wildlife Service, the Office of Surface Mining, and the state of Wyoming.

The plan may be submitted before or concurrently with the filing of the mine permit application. However, because serious impacts can result from an inadequate plan, a minimum of 120 days must be allowed for the BLM, the FWS, the OSM, and the state of Wyoming to review the plan in order to resolve any conflicts or problem areas therein.

The final habitat recovery and replacement plan must indicate the methods that the lessee will employ to ensure that the productivity and species diversity of burrowing owls and prairie falcons will not decline in the lease area.

3. The lessee will be required to monitor and inventory the lease area for establishment of potential black-footed ferret habitat (i.e., prairie dog towns) and, if any such habitat is found, to conduct ferret inventories, all in accordance with the guidelines below. In the event that ferret occurrence is identified, the lessee will be required to adhere to any suggested modifications in the mining operation provided by the Fish and Wildlife Service and the BLM.

The following black-footed ferret inventory guidelines will be followed. Proposed developments such as coal lease lands, power plant sites, well fields, dam sites, and other major, block-type developments must be surveyed for prairie dog towns before the project is approved. If prairie dog towns are found on the proposed site, colonies must be

mapped on topographic maps and each colony surveyed using recommended black-footed ferret survey procedures. Ferret searches must be scheduled as close to construction as is reasonable to minimize the possibility of missing ferrets that might move onto the area during the period between completion of surveys and the start of construction. Where project disturbance takes place over a long period of time, such as on a coal site, additional surveys for black-footed ferrets are recommended.

Calf Creek

1. Calf Creek has been preliminarily identified as an alluvial valley floor where it passes through the tract. AVFs may only be mined subject to mitigating measures for alluvial valley floor protection that are made a part of an approved mine plan. Final determination of existence, significance, and required mitigating measures (if possible) is made by the state of Wyoming and the Office of Surface Mining at the mine plan approval and permitting stage of development. If mitigation is not possible, the delineated AVF will be unsuitable for mining. Floodplains associated with Calf Creek must be protected and provided for in accordance with the law and current regulations.
2. The lease area or land adjacent to the lease area is known to contain, or has a high likelihood of containing, important habitat for ferruginous hawk and burrowing owl, which are migratory birds of high federal interest. The lessee must survey the leased area and adjacent lands within ½ mile of the lease area for occurrence of these species and for important habitat such as nesting sites, brooding areas, or staging areas essential for their maintenance.

If important habitat for these species is identified, the lessee must develop a habitat recovery and replacement plan for protection or enhancement of populations of these species affected by habitat loss or displacement due to mine-related activities. The plan must be developed in consultation with, and approved by, the Bureau of Land Management, the U.S. Fish and Wildlife Service, the Office of Surface Mining, and the state of Wyoming.

The plan may be submitted before or concurrently with the filing of the mine permit

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application. However, because serious impacts can result from an inadequate plan, a minimum of 120 days must be allowed for the BLM, the FWS, the OSM, and the state of Wyoming to review the plan in order to resolve any conflicts or problem areas therein.

The final habitat recovery and replacement plan must indicate the methods that the lessee will employ to ensure that the productivity and species diversity of ferruginous hawks and burrowing owls will not decline in the lease area.

3. The lessee will be required to monitor and inventory the lease area for establishment of potential black-footed ferret habitat (i.e., prairie dog towns) and, if any such habitat is found, to conduct ferret inventories, all in accordance with the guidelines below. In the event that ferret occurrence is identified, the lessee will be required to adhere to any suggested modifications in the mining operation provided by the Fish and Wildlife Service and the BLM.

The following black-footed ferret inventory guidelines will be followed. Proposed developments such as coal lease lands, power plant sites, well fields, dam sites, and other major, block-type developments must be surveyed for prairie dog towns before the project is approved. If prairie dog towns are found on the proposed site, colonies must be mapped on topographic maps and each colony surveyed using recommended black-footed ferret survey procedures. Ferret searches must be scheduled as close to construction as is reasonable to minimize the possibility of missing ferrets that might move onto the area during the period between completion of surveys and the start of construction. Where project disturbance takes place over a long period of time, such as on a coal site, additional surveys for black-footed ferrets are recommended.

Mount Logan

1. Portions of the Belle Fourche River passing near or through the Mount Logan tract have been identified as possible alluvial valley floors. AVFs may only be mined subject to mitigating measures for AVF protection that are made a part of an approved mine plan. Determination of existence, significance, and required mitigating measures (if possible)

is made by the state of Wyoming and the Office of Surface Mining at the mine plan approval and permitting stage of development.

2. No surface occupancy is permitted within 100 feet of the right-of-way boundary for the Burlington Northern railroad, which passes through the tract.
3. One pair of nesting golden eagles has recently been moved onto the Mount Logan tract from an adjoining coal lease. A buffer area around this nest site will not be classified as unsuitable pending continued activation of the existing mitigation plan. U.S. Fish and Wildlife Service and the lessee should continue to monitor this situation and formulate modifications to the mitigation plan.

The pair of golden eagles previously nesting on the ground in T46N, R71W, Section 9, have constructed a tree nest in Section 10 of the same township and range. Land within the buffer area around the golden eagle nesting sites is classified unsuitable for coal mining. Land within the Mount Logan tract and within the buffer area is described as follows:

T46N, R71W

Section 10: SW $\frac{1}{4}$ NW $\frac{1}{4}$, E $\frac{1}{2}$ NW $\frac{1}{4}$ SW $\frac{1}{4}$,
NE $\frac{1}{4}$ SW $\frac{1}{4}$, NW $\frac{1}{4}$ SE $\frac{1}{4}$, W $\frac{1}{2}$ SE $\frac{1}{4}$ SE $\frac{1}{4}$,
SE $\frac{1}{4}$ SE $\frac{1}{4}$ SE $\frac{1}{4}$.

4. The lease area or land adjacent to the lease area is known to contain, or has a high likelihood of containing, important habitat for ferruginous hawk, which is a migratory bird of high federal interest. The lessee must survey the leased area and adjacent lands within $\frac{1}{2}$ mile of the lease area for occurrence of this species and for important habitat such as nesting sites, brooding areas, or staging areas essential for their maintenance.

If important habitat for this species is identified, the lessee must develop a habitat recovery and replacement plan for protection or enhancement of populations of this species affected by habitat loss or displacement due to mine-related activities. The plan must be developed in consultation with, and approved by, the Bureau of Land Management, the U.S. Fish and Wildlife Service, the Office of Surface Mining, and the state of Wyoming.

The plan may be submitted before or concurrently with the filing of the mine permit application. However, because serious im-

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pacts can result from an inadequate plan, a minimum of 120 days must be allowed for the BLM, the FWS, the OSM, and the state of Wyoming to review the plan in order to resolve any conflicts or problem areas therein.

The final habitat recovery and replacement plan must indicate the methods that the lessee will employ to ensure that the productivity and species diversity of ferruginous hawks will not decline in the lease area.

Kintz Creek

1. No surface occupancy is allowed within the Kintz Cemetery or a 100-foot buffer area adjoining the cemetery. The location of the cemetery is T45N, R70W, Section 20, NE $\frac{1}{4}$ NE $\frac{1}{4}$ SE $\frac{1}{4}$.
2. Kintz Creek has been preliminarily identified as an alluvial valley floor where it passes through the tract. AVFs may only be mined subject to mitigating measures for alluvial valley floor protection that are made a part of an approved mine plan. Final determination of existence, significance, and required mitigating measures (if possible) is made by the state of Wyoming and the Office of Surface Mining at the mine plan approval and permitting stage of development. If mitigation is not possible, the delineated AVF will be unsuitable for mining. Floodplains associated with Kintz Creek must be protected and provided for in accordance with the law and current regulations.
3. The lease area or land adjacent to the lease area is known to contain, or has a high likelihood of containing, important habitat for ferruginous hawks and golden eagles, which are migratory birds of high federal interest. The lessee must survey the leased area and adjacent lands within $\frac{1}{2}$ mile of the lease area for occurrence of these species and for important habitat such as nesting sites, brooding areas, or staging areas essential for their maintenance.

If important habitat for this species is identified, the lessee must develop a habitat recovery and replacement plan for protection or enhancement of populations of this species affected by habitat loss or displacement due to mine-related activities. The plan must be developed in consultation with, and approved

by, the Bureau of Land Management, the U.S. Fish and Wildlife Service, the Office of Surface Mining, and the state of Wyoming.

The plan may be submitted before or concurrently with the filing of the mine permit application. However, because serious impacts can result from an inadequate plan, a minimum of 120 days must be allowed for the BLM, the FWS, the OSM, and the state of Wyoming to review the plan in order to resolve any conflicts or problem areas therein.

The final habitat recovery and replacement plan must indicate the methods that the lessee will employ to ensure that the productivity and species diversity of ferruginous hawks and golden eagles will not decline in the lease area.

Donkey Creek

1. The lease area or land adjacent to the lease area is known to contain, or has a high likelihood of containing, important habitat for ferruginous hawk, which is a migratory bird of high federal interest. The lessee must survey the leased area and adjacent lands within $\frac{1}{2}$ mile of the lease area for occurrence of this species and for important habitat such as nesting sites, brooding areas, or staging areas essential for their maintenance.

If important habitat for this species is identified, the lessee must develop a habitat recovery and replacement plan for protection or enhancement of populations of this species affected by habitat loss or displacement due to mine-related activities. The plan must be developed in consultation with, and approved by, the Bureau of Land Management, the U.S. Fish and Wildlife Service, the Office of Surface Mining, and the state of Wyoming.

The plan may be submitted before or concurrently with the filing of the mine permit application. However, because serious impacts can result from an inadequate plan, a minimum of 120 days must be allowed for the BLM, the FWS, the OSM, and the state of Wyoming to review the plan in order to resolve any conflicts or problem areas therein.

The final habitat recovery and replacement plan must indicate the methods that the lessee will employ to ensure that the productivity and species diversity of ferruginous hawks will not decline in the lease area.

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Timber Creek

1. The lease area or land adjacent to the lease area is known to contain, or has a high likelihood of containing, important habitat for ferruginous hawk, which is a migratory bird of high federal interest. The lessee must survey the leased area and adjacent lands within ½ mile of the lease area for occurrence of this species and for important habitat such as nesting sites, brooding areas, or staging areas essential for their maintenance.

If important habitat for this species is identified, the lessee must develop a habitat recovery and replacement plan for protection or enhancement of populations of this species affected by habitat loss or displacement due to mine-related activities. The plan must be developed in consultation with, and approved by, the Bureau of Land Management, the U.S. Fish and Wildlife Service, the Office of Surface Mining, and the state of Wyoming.

The plan may be submitted before or concurrently with the filing of the mine permit application. However, because serious impacts can result from an inadequate plan, a minimum of 120 days must be allowed for the BLM, the FWS, the OSM, and the state of Wyoming to review the plan in order to resolve any conflicts or problem areas therein.

The final habitat recovery and replacement plan must indicate the methods that the lessee will employ to ensure that the productivity and species diversity of ferruginous hawks will not decline in the lease area.

Porcupine

1. The buffer areas for golden eagle nests that are near the Porcupine tract fluctuate because the pair of golden eagles has nested in three different locations in different years. Land within the buffer areas will not be classified as unsuitable pending submission of an acceptable mitigation plan by the lessee and approval of such a plan by the Wyoming Game and Fish Department and the Fish and Wildlife Service.
2. Porcupine Creek has been preliminarily identified as an alluvial valley floor where it passes through the tract. AVFs may only be mined subject to mitigating measures for

alluvial valley floor protection that are made a part of an approved mine plan. Final determination of existence, significance, and required mitigating measures (if possible) is made by the state of Wyoming and the Office of Surface Mining at the mine plan approval and permitting stage of development. If mitigation is not possible, the delineated AVF will be unsuitable for mining. Floodplains associated with Porcupine Creek must be protected and provided for in accordance with the law and current regulations.

3. The lessee will be required to monitor and inventory the lease area for establishment of potential black-footed ferret habitat (i.e., prairie dog towns) and, if any such habitat is found, to conduct ferret inventories, all in accordance with the guidelines below. In the event that ferret occurrence is identified, the lessee will be required to adhere to any suggested modifications in the mining operation provided by the Fish and Wildlife Service and the FS.

The following black-footed ferret inventory guidelines will be followed. Proposed developments such as coal lease lands, power plant sites, well fields, dam sites, and other major, block-type developments must be surveyed for prairie dog towns before the project is approved. If prairie dog towns are found on the proposed site, colonies must be mapped on topographic maps and each colony surveyed using recommended black-footed ferret survey procedures. Ferret searches must be scheduled as close to construction as is reasonable to minimize the possibility of missing ferrets that might move onto the area during the period between completion of surveys and the start of construction. Where project disturbance takes place over a long period of time, such as on a coal site, additional surveys for black-footed ferrets are recommended.

Ridgerunner

1. The lessee will be required to monitor and inventory the lease area for establishment of potential black-footed ferret habitat (i.e., prairie dog towns) and, if any such habitat is found, to conduct ferret inventories, all in accordance with the guidelines below. In the event that ferret occurrence is identified, the lessee will be required to adhere to any

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suggested modifications in the mining operation provided by the Fish and Wildlife Service and the BLM.

The following black-footed ferret inventory guidelines will be followed. Proposed developments such as coal lease lands, power plant sites, well fields, dam sites, and other major, block-type developments must be surveyed for prairie dog towns before the project is approved. If prairie dog towns are found on the proposed site, colonies must be mapped on topographic maps and each colony surveyed using recommended black-footed ferret survey procedures. Ferret searches must be scheduled as close to construction as is reasonable to minimize the possibility of missing ferrets that might move onto the area during the period between completion of surveys and the start of construction. Where project disturbance takes place over a long period of time, such as on a coal site, additional surveys for black-footed ferrets are recommended.

2. Land within the buffer area around the golden eagle nest site is classified as unsuitable pending submission of an acceptable mitigation plan. Land included within the Ridgerunner tract and within the buffer area is described as follows.

T41N, R71W

Section 14: SW $\frac{1}{4}$ SW $\frac{1}{4}$ NE $\frac{1}{4}$, SE $\frac{1}{4}$ NW $\frac{1}{4}$, S $\frac{1}{2}$ NE $\frac{1}{4}$ NW $\frac{1}{4}$

3. The lease area or land adjacent to the lease area is known to contain, or has a high likelihood of containing, important habitat for ferruginous hawk and mountain plover, which are migratory birds of high federal interest. The lessee must survey the leased area and adjacent lands within $\frac{1}{2}$ mile of the lease area for occurrence of these species and for important habitat such as nesting sites, brooding areas, or staging areas essential for their maintenance.

If important habitat for these species is identified, the lessee must develop a habitat recovery and replacement plan for protection or enhancement of populations of these species affected by habitat loss or displacement due to mine-related activities. The plan must be developed in consultation with, and approved by, the Forest Service.

The plan may be submitted before or concurrently with the filing of the mine permit

application. However, because serious impacts can result from an inadequate plan, a minimum of 120 days must be allowed for the FS, the FWS, the OSM, and the state of Wyoming to review the plan in order to resolve any conflicts or problem areas therein.

The final habitat recovery and replacement plan must indicate the methods that the lessee will employ to ensure that the productivity and species diversity of ferruginous hawks and mountain plovers will not decline in the lease area.

Thundercloud

1. The lease area or land adjacent to the lease area is known to contain, or has a high likelihood of containing, important habitat for ferruginous hawk and burrowing owl, which are migratory birds of high federal interest. The lessee must survey the leased area and adjacent lands within $\frac{1}{2}$ mile of the lease area for occurrence of these species and for important habitat such as nesting sites, brooding areas, or staging areas essential for their maintenance.

If important habitat for these species is identified, the lessee must develop a habitat recovery and replacement plan for protection or enhancement of populations of these species affected by habitat loss or displacement due to mine-related activities. The plan must be developed in consultation with, and approved by, the Forest Service, the U. S. Fish and Wildlife Service, the Office of Surface Mining, and the state of Wyoming.

The plan may be submitted before or concurrently with the filing of the mine permit application. However, because serious impacts can result from an inadequate plan, a minimum of 120 days must be allowed for the FS, the FWS, the OSM, and the state of Wyoming to review the plan in order to resolve any conflicts or problem areas therein.

The final habitat recovery and replacement plan must indicate the methods that the lessee will employ to ensure that the productivity and species diversity of ferruginous hawks and burrowing owls will not decline in the lease area.

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MEASURES FOR MONTANA TRACTS

Ashland (Decker-Birney)

1. Otter Creek, Home Creek, and Threemile Creek have been preliminarily identified as alluvial valley floors where they pass through the tract. AVFs may only be mined subject to mitigating measures for alluvial valley floor protection that are made a part of an approved mine plan. Final determination of existence, significance, and required mitigating measures (if possible) is made by the state of Montana and the Office of Surface Mining at the mine plan approval and permitting stage of development. If mitigation is not possible, the delineated AVFs will be unsuitable for mining. Floodplains associated with these creeks must be protected and provided for in accordance with the law and current regulations.

Northwest Otter Creek

1. Otter Creek has been preliminarily identified as an alluvial valley floor where it passes through the tract. AVFs may only be mined subject to mitigating measures for alluvial valley floor protection that are made a part of an approved mine plan. Final determination of existence, extent, significance, and required mitigating measures (if possible) is made by the state of Montana and the Office of Surface Mining at the mine plan approval and permitting stage of development. If mitigation is not possible, the delineated AVF will be unsuitable for mining. Floodplains associated with Otter Creek must be protected and provided for in accordance with the law and current regulations.

Hanging Woman Creek

1. The lessee will be required to monitor and inventory all prairie dog towns in the lease area for black-footed ferrets. Colonies must be mapped on topographic maps, and each colony must be surveyed using black-footed ferret survey procedures recommended by the U. S. Fish and Wildlife Service. Ferret surveys must be scheduled as close to con-

struction as is reasonable to minimize the possibility of missing ferrets that might move into an area during the period between completion of surveys and the start land disturbance. Ferret surveys are considered valid for one year. In the event that ferret occurrence is identified, the lessee will be required to adhere to any suggested modifications in the mining operation provided by the Fish and Wildlife Service and the BLM.

2. If the mitigation plan covering the loss of two sage grouse leks, approved in 1982, is allowed to lapse, the leks and surrounding habitat will be designated unsuitable for mining unless another mitigation plan is developed and agreed upon by the state of Montana and the lessee.
3. Hanging Woman Creek, Trail Creek, and the East Fork of Trail Creek have been preliminarily identified as alluvial valley floors where they pass through the tract. AVFs may only be mined subject to mitigating measures for alluvial valley floor protection that are made a part of an approved mine plan. Final determination of existence, significance, and required mitigating measures (if possible) is made by the state of Montana and the Office of Surface Mining at the mine plan approval and permitting stage of development. If mitigation is not possible, the delineated AVFs will be unsuitable for mining.

Mud Springs

1. The tract contains one occupied dwelling, an operating schoolhouse, and approximately 4 miles of a county road. The area within a 300-foot perimeter of the dwelling and the schoolhouse cannot be mined unless an agreement is reached between the affected parties and the lessee. The county road right-of-way, plus a buffer zone extending 100 feet outside of each edge of it, cannot be mined unless the Powder River County Commissioners and the lessee agree to a relocation plan.
2. The lessee will be required to monitor and inventory all prairie dog towns in the lease area for black-footed ferrets. Colonies must be mapped on topographic maps, and each colony must be surveyed using black-footed ferret survey procedures recommended by the U. S. Fish and Wildlife Service. Ferret surveys must be scheduled as close to con-

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struction as is reasonable to minimize the possibility of missing ferrets that might move into an area during the period between completion of surveys and the start land disturbance. Ferret surveys are considered valid for one year. In the event that ferret occurrence is identified, the lessee will be required to adhere to any suggested modifications in the mining operation provided by the Fish and Wildlife Service and the BLM.

3. Mud Springs and Bear creeks have been preliminarily identified as alluvial valley floors where they pass through the tract. AVFs may only be mined subject to mitigating measures for alluvial valley floor protection that are made a part of an approved mine plan. Final determination of existence, significance, and required mitigating measures (if possible) is made by the state of Montana and the Office of Surface Mining at the mine plan approval and permitting stage of development. If mitigation is not possible, the delineated AVFs will be unsuitable for mining.

Downey Coulee

1. Any successful bidder must show, to the satisfaction of the state of Montana, that the mitigation plan for the buffer around the identified sharp-tailed grouse lek on the Downey Coulee tract will ensure that all or stipulated methods of mining will not have significant long-term impact on the areawide population of this species. Reclamation and management of reclamation areas must also provide suitable post-mining habitat for sharp-tailed grouse. If the state of Montana does not agree that mitigation and reclamation are acceptable, the subject buffer zone will be dropped from the lease as unsuitable at the mine plan stage. This stipulation does not preclude the Montana Department of State Lands from enforcing its selective denial and unsuitability process.

Colstrip Area C

1. Approximately 2¼ miles of a county road lie within the tract. The road right-of-way, plus a buffer zone extending 100 feet outside each edge of the right-of-way, cannot be mined unless the lessee and the Rosebud County Commissioners agree to a relocation plan.

The county road is in portions of Section 32, T2N, R40E, and Section 6, T1N, R40E.

2. Any successful bidder must show, to the satisfaction of the state of Montana, that the mitigation plan for the buffer around the identified sharp-tailed grouse lek on the Colstrip C tract will ensure that all or stipulated methods of mining will not have significant long-term impacts on the areawide population of this species. Reclamation and management of reclamation areas must also provide suitable post-mining habitat for sharp-tailed grouse. If the state of Montana does not agree that mitigation and reclamation are acceptable, the subject lek will be dropped from the lease as unsuitable at the mine plan stage. This stipulation does not preclude the Montana Department of State Lands from enforcing its selective denial and unsuitability process.

Wolf Mountain Maintenance

1. Approximately ¾ mile of Montana State Route 314 lies across the southeast corner of the tract in Section 20, T9S, R40E. The road right-of-way, plus a buffer zone extending 100 feet outside each edge of the right-of-way, cannot be mined unless the lessee and the state of Montana agree to a relocation plan.
2. Squirrel Creek has been identified as an alluvial valley floor by the state of Montana and the Office of Surface Mining. The portions so identified are unsuitable for mining.

North Decker I

1. Approximately two miles of Montana State Route 314 and ½ mile of a railroad spur lie within the North Decker I tract. The portion of the highway right-of-way that crosses private surface, plus a buffer of 100 feet outside each edge of the right-of-way, is unsuitable for mining. For the portion of the highway on public surface, only the area within the right-of-way is unsuitable for mining. Mining can be allowed in this road right-of-way only if an agreement is reached between the lessee and the state of Montana. The area within the railroad right-of-way that crosses public surface is also unsuitable for mining unless the lessee reaches an agreement with the railroad owner.

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Montana State Route 314 lies in portions of Section 34, T8S, R40E, and Section 3, T9S, R40E. The railroad crosses public land in the SE $\frac{1}{4}$ SW $\frac{1}{4}$ of Section 34, T8S, R40E, and the NW $\frac{1}{4}$ SE $\frac{1}{4}$ of Section 3, T9S, R40E.