

Errata to the Final Environmental Impact Statement Montanore Project March 2015

Introduction

The Montanore Project was scoped and analyzed under the management direction of the 1987 Kootenai Forest Plan. Several of the issues identified during scoping reflect that management direction. The Montanore Draft Environmental Impact Statement (2009) and Supplemental Draft Environmental Impact Statement (2011) were all developed while the Kootenai National Forest followed 1987 Forest Plan management direction.

In January 2015 the Final Record of Decision (USDA Forest Service 2015c) approving the 2015 Revision of the Kootenai Forest Plan (USDA Forest Service 2015b) was signed. Following notice of approval published in the Federal Register, the effective date of the 2015 Kootenai Forest Plan was February 17, 2015. After the effective date of the Plan, any decision, such as the draft decision prepared for the Montanore Project, must demonstrate consistency with applicable 2015 Forest Plan management direction.

These errata explain how 1987 Forest Plan discussions in the March 2015 Montanore Final Environmental Impact Statement relate to the 2015 Forest Plan discussions. Although 1987 Forest Plan compliance information may not be currently relevant, the analysis in most cases is still relevant for comparing effects of the alternatives in response to public comments. In some cases, these errata include new analyses related to management direction new to the 2015 Forest Plan.

Project consistency requirements are described on page 3 and 4 of the 2015 Forest Plan. A full assessment of the Montanore Project as it relates to consistency with applicable 2015 Forest Plan direction can be found in the project record document: Kootenai National Forest 2015 Forest Plan Documentation for Montanore Project.

Summary

Page S-27–28: Forest Plan Amendment

Disregard the text in this section. The 2015 revision of the 1987 Forest Plan became effective as of February 17, 2015. The application of the revised forest plan direction was assessed as it relates to the Montanore Project and documented in the project record (Kootenai National Forest, 2015 Forest Plan Documentation for Montanore Project). No plan amendments were identified as needed for the 2015 Forest Plan.

The text references to 1987 Plan amendments within specific management areas (MAs) for accommodating mine and transmission line facilities throughout the FEIS are not applicable to the 2015 Plan. The mine facilities fall predominately within the 2015 Forest Plan's MA 6 – General Forest allocation with a 42-acre overlap in MA 5b—Backcountry (Motorized Year-round). No MA plan amendments are needed to accommodate the Montanore Project facilities.

The 2015 Forest Plan does not identify any corridor avoidance areas, nor does allocate a specific MA for transmission corridors. However, it does identify, at a programmatic level, existing and anticipated utility

corridors in Appendix D of the 2015 Forest Plan. The Montanore utility right-of-way corridor is described and a general location identified, with final authorization subject to the site-specific NEPA as is provided in the March 2015 Montanore Project FEIS.

See section 3.25.3 of these errata for the updated elk security and big game analysis relative to 2015 Plan direction

Page S-44–47: Issue 3: Fish and Other Aquatic Life and Their Habitats

The riparian habitat conservation area (RHCA) forest plan direction discussion is still valid as this direction was carried forward in the 2015 Plan.

Page S-47: Issue 4: Scenic Quality

The text references to 1987 Plan amendments within specific management areas (MAs) for accommodating mine facilities effects on scenic character are not applicable for the 2015 Plan. The visual quality objective analysis has been evaluated as it relates to the 2015 Forest Plan scenery management system and the effects are disclosed in Section 3.17.4 of the FEIS and the corresponding section of this errata document. These discussions also disclose the design criteria developed to minimize the impacts to the scenic character of the KNF scenic resources.

Page S-50–51: Issue 6: Other Wildlife and Key Habitats

The text references to 1987 Plan amendments within specific management areas (MAs) for accommodating mine facilities are not applicable to the 2015 Plan. However, the analysis of effects to old growth habitat is still relevant.

Page S-58: Compliance with Local, State, or Federal Management Plans

The 2015 revision of the 1987 Forest Plan became effective as of February 17, 2015. Although the FEIS speaks to evaluation of the Montanore Project under the 1987 Plan, the application of the revised forest plan direction (goals, desired condition, objectives, standards, and guideline) was assessed as it relates to the Montanore Project and documented in the project record (Kootenai National Forest, 2015 Forest Plan Documentation for Montanore Project).

Page S-63: Scenic Quality

The text references to plan amendments within MA 23 for accommodating the transmission line are no longer applicable. Appendix D of the 2015 Forest Plan identifies, at a programmatic level, existing and anticipated utility corridors. The Montanore utility right-of-way corridor is described and a general location identified, with final authorization subject to the site-specific NEPA as is provided in the March 2015 Montanore Project FEIS.

The visual quality objective analysis has been evaluated as it relates to the 2015 Forest Plan scenery management system and the effects are disclosed in Section 3.14.4 of the FEIS the corresponding section of this errata document. These discussions also disclose the design criteria developed to minimize the impacts to the scenic character of the KNF scenic resources.

Page S-64: Big Game Winter and Security Habitat

Replace with text under this italicized heading with the following:

Elk Security Habitat. All mine alternatives maintain/increase elk security and are consistent with FW-GDL-WL-10 in the 2015 Forest Plan. The transmission line alternatives have varied effects on elk security, ranging from no impacts, slight impacts, to decreased elk security during

construction due to public motorized access during the general elk hunting season on the roads used for construction of the line. For this analysis, elk security habitat is defined as areas that are larger than 250 contiguous acres and more than 0.5 mile from an open road.

Big Game Habitat: The transmission line alternatives would create and contribute forage habitat for native ungulates. The mine alternatives would also contribute forage habitat after reclamation and revegetation. During construction and operations big game may be disturbed and would be less likely to use areas adjacent to human activities, at least temporarily while those activities were ongoing. None of the alternatives would create barriers to connectivity. Timing restrictions on construction during the winter on winter range would avoid/minimize impacts to wintering big game. The Libby Creek road used to access the mine facilities passes through or adjacent to elk and deer winter range and may decrease big game use near the road.

Big game winter range is considered a sensitive area and, under the Environmental Specifications (see FEIS Appendix D), MMC would take all necessary actions to avoid adverse impacts on it. For all transmission line alternatives, effects on big game winter habitat from transmission line construction and decommissioning would be minimized through timing restrictions in elk, white tailed deer, or moose winter range. Land acquisition proposed by MMC and the agencies, especially where roads could be closed, also would mitigate impacts on big game. Additional mitigation measures included in Alternatives C-R, D-R, and E-R monitoring road-killed animals to determine if improved access results in increased wildlife mortality.

Page S-66–67: Old Growth Habitat

Although the MA 13 designation does not apply under the 2015 Plan, the areas identified as replacement old growth will be managed for old growth recruitment potential in the Kootenai National Forest's old growth inventory to manage for the FW-DC-VEG-03, the forestwide desired condition to increase old growth at the forestwide scale.

Page S-67: Pileated Woodpecker

The pileated woodpecker is not a management indicator species for the 2015 Forest Plan and the analysis of the effects to this species cannot be extrapolated to indicate viability for other cavity-dependent species. The FEIS for 2015 Forest Plan (USDA Forest Service 2013c) and supporting documentation for that analysis (Anderson 2014 and ERG 2012) explains how forest management provides for a broad range of species viability through the coarse filter/fine filter approach. However, the effects analysis to the pileated woodpecker is still a valid analysis in respect to issues raised in public comment.

Chapter 1. Purpose of and Need for Action

Page 13: Section 1.6.1.1 Applicable Laws and Regulations

Replace the first paragraph with the following:

Most of the proposed permit areas would be on National Forest System lands managed by the KNF. The KNF is obligated under certain laws and regulations to evaluate and take action on MMC's request to operate a mine, mill, and auxiliary facilities on National Forest System lands and associated private lands. The applicable major laws are summarized below:

Replace the 1976 National Forest Management Act bullet summary on page 14 with the following:

The National Forest Management Act (NFMA) requires the development, maintenance, and, as appropriate, the revision of land and resource management plans (forest plans) for units of the National Forest System. These forest plans provide for the multiple use and sustained yield of renewable resources in accordance with the Multiple-Use Sustained-Yield Act of 1960.

While mineral development, such as this Montanore project, is not regulated by NFMA, or by the Kootenai Forest Plan (KFP) which was developed and revised pursuant to NFMA (16 USC §528, 16 USC §1604(e), 36 CFR 219.1), per se, an approved plan of operations which authorizes mineral development cannot be inconsistent with applicable KFP standards and guidelines. However, 16 U.S.C. 478 bars the Forest Service from prohibiting locatable mineral operations on lands subject to the United States mining laws either directly or by regulation amounting to a prohibition. This means that if applicable KFP standards and guidelines would not unreasonably restrict mining operations conducted pursuant to the United States mining laws, the approved plan of operations must reflect that direction. If the KFP purports to prohibit locatable mineral operations on lands open to the United States mining laws, or if the KFP direction would effectively amount to a prohibition of operations conducted pursuant to those laws for reasons such as the technical impossibility of complying with that direction, or the prohibitive cost of complying with that direction, then the KFP standards and guidelines must give way in light of 16 U.S.C. 478.

Replace the 1987 Kootenai Forest Plan and EIS bullet on page 14 with the following:

2015 Kootenai Forest Plan and EIS—The KFP includes the forestwide desired condition to contribute to the economic strength and demands of the nation by supplying mineral and energy resources while assuring that the sustainability and resiliency of other resources are not compromised or degraded (FW-DC-MIN-01). The Montanore Project analysis tiers to the 2013 Forest Plan Final Environmental Impact Statement (USDA Forest Service 2013c) and the associated 2015 Errata for the Final EIS for KFP Land Management Plan (USDA Forest Service 2015a and b).

Chapter 2. Alternatives, Including the Proposed Action

Page 42–43: Section 2.1.2.1.4 Issue 4: Changes in the project area’s scenic quality

The visual quality objective analysis has been evaluated as it relates to the 2015 Forest Plan scenery management system and the effects are disclosed in Section 3.17.4 of the FEIS the corresponding section of this errata document.

Page 43–44: Section 2.1.2.1.6 Issue 6: Effects on wildlife and their habitats; Forest Management Indicator Species—Pileated Woodpecker

Disregard the Management Indicator Species (MIS) portion of the title as the pileated woodpecker is not an MIS in the 2015 Plan. However, the species analysis is still relevant in respect to effects of the action alternatives.

Page 44: Section 2.1.2.2 Analysis Issues

Disregard the MIS descriptor for white-tailed deer and mountain goat as neither are MIS for the 2015 Plan. However, the species analysis is still relevant in respect to effects of the action alternatives.

Page 46: Section 2.2 Development of Alternatives

Replace the first full paragraph on page 46 with the following text:

The KFP describes desired conditions, objectives, standards, guidelines, and land suitability for project and activity decision making on the Kootenai National Forest, guiding all resource management activity (USDA Forest Service 2015c). This direction applies either forestwide or specific to management or geographic area allocations. The Montanore was originally developed under the 1987 KFP, but has been carefully evaluated in light of the management direction in the newly revised 2015 Forest Plan.

In developing alternatives to the Proposed Action, the lead agencies considered the management direction of the 1987 KFP. The primary example would be the 1995 Inland Native Fish Strategy (INFISH) which establishes stream, wetland, and landslide-prone area protection zones called RHCAs and sets standards and guidelines for managing activities that potentially affect conditions within the RHCAs. An INFS standard for minerals management is to locate structures, support facilities, and roads outside of RHCAs. Where no alternative exists to siting facilities in RHCAs, the standard is to locate and construct facilities in ways that avoid impacts on RHCAs and streams, and adverse effects on inland native fish. Section 2.1.2.1, *Key Issues*, discusses that RHCAs were a key resource during the lead agencies' alternatives analysis. This management direction was carried forward in the 2015 Forest Plan so all alternative development and issue analysis is still relevant.

Although the FEIS indicates the lead agencies did not identify an alternative that would comply with all 1987 KFP standards, no plan amendments were identified as needed for the 2015 Forest Plan.

Page 200–201: Section 2.5.7.4.4 Key Habitats; Old Growth

Replace the text with following:

The KNF would designate effective or recruitment potential old growth on National Forest System lands within the affected PSUs (first priority) or adjacent PSUs (second priority) at a 2:1 ratio for old growth within the disturbance area of the mine Alternatives 3 or 4, or the clearing width of transmission line Alternatives C-R, D-R, or E-R (Table 32). Similarly, the KNF would designate effective or recruitment potential old growth on National Forest System lands at a 1:1 ratio for old growth affected by “edge effect” between the proposed mine facilities disturbance and permit area boundaries. Any private land acquisition for grizzly bear habitat mitigation could also be used to offset habitat loss, if old growth habitat characteristics were present on the acquired parcels.

Disregard the reference the row describing MA 31 changes in table 32.

Page 201: Section 2.5.7.4.5 Indicator Species

Change the title of this section to Mountain Goat and strike the text describing big game security mitigation.

Page 213: Section 2.8.1 Alignment and Structure Type

Disregard the last two sentences in the second paragraph of this section. No plan amendments are needed for the transmission line alignments.

Page 244–245: Section 2.12 Forest Plan Amendment (Including 2.12.1 through 2.12.2.2)

Disregard this section description. No forest plan amendments were identified as needed for the 2015 Forest Plan.

Page 246: Section 2.13.2.1 Inland Native Fish Strategy

The Inland Native Fish Strategy is a retained decision in the 2015 Forest Plan so all related FEIS analyses are still applicable.

Page 246–247: Section 2.13.2.2 Grizzly Bear

The access amendment is a retained decision in the 2015 Forest Plan so all related FEIS analyses are still applicable.

Page 247: Section 2.13.2.3 Lynx

The lynx amendment is a retained decision in the 2015 Forest Plan so all related FEIS analyses are still applicable.

Page 262–263: Section 2.13.13 Forest Plan Consistency

The first paragraph in 2.13.13.1 Mine Facilities is not applicable to the 2015 Forest Plan. No plan amendments to adjust MA allocations are required. The second paragraph related to INFISH direction is still relevant as the INFISH is retained in the 2015 Forest Plan.

No plan amendments are needed to adjust MA allocations for the transmission line as described in 2.13.13.2 Transmission Line Facilities. The 2015 Forest Plan does not identify any corridor avoidance areas, nor does allocate a specific MA for transmission corridors. However, it does identify, at a programmatic level, existing and anticipated utility corridors in Appendix D of the 2015 Forest Plan. The Montanore utility right-of-way corridor is described and a general location identified, with final authorization subject to the site-specific NEPA as is provided in the March 2015 Montanore Project FEIS.

Chapter 3. Affected Environment and Environmental Consequences

3.4 Air Quality

Page 280: Section 3.4.1.2.3 Kootenai Forest Plan

Replace the text in this section with the following:

The 2015 Forest Plan includes the desired condition to “meet applicable federal state, or tribal air quality standards” (FW-DC-AQ-01) and a guideline that “the forest should cooperate with federal, state, tribal, and local air quality agencies as appropriate in meeting applicable air quality requirements. The KNF will cooperate with the DEQ in meeting the State Implementation Plan and the Smoke Management Plan” (FW-GDL-AQ-01).

3.6 Aquatic Life and Fisheries

Page 310: Section 3.6.1.7 National Forest Management Act

Replace the first paragraph with the following:

The National Forest Management Act (NFMA) requires the development, maintenance, and, as appropriate, the revision of land and resource management plans (forest plans) for units of the National Forest System. These forest plans provide for the multiple use and sustained yield of renewable resources in accordance with the Multiple-Use Sustained-Yield Act of 1960. One of the goals of the 2015 Forest Plan is to “maintain or improve the distribution of native aquatic and riparian dependent species and contribute to the recovery of threatened and endangered aquatic species” (GOAL-AQS-01).

Page 311: Section 3.6.1.8 Kootenai Forest Plan

Replace the first paragraph text with the following:

The 1995 Inland Native Fish Strategy (INFS) has been incorporated in the 2015 Forest Plan. The concept of “priority watersheds” as described in INFS is further refined in the revised Forest Plan as “conservation” and “restoration” watersheds. Accordingly the 2015 Forest Plan includes the desired condition that “conservation watersheds provide habitats that can support population strongholds of federally listed and sensitive species. Conditions in restoration subwatersheds improve to support population strongholds” (FW-DC-AQH-03). The conservation watersheds in the analysis area are Upper Libby Creek, Big Cherry, West Fisher Creek, Cow Creek, Middle Bull River, Upper Bull River, Bull River Headwaters, and Granite Creek. The restoration watersheds are Lower Bull River, Lower Libby Creek, Lower Fisher River, and Upper Fisher River.

Disregard the reference to the 50-foot buffer exception for non-priority watersheds in the fourth row of table 62. The minimum width for all streams or waterbodies in this category is 100 feet.

Page 452–453: Section 3.6.4.11.4 National Forest Management Act/Kootenai Forest Plan

Disregard discussion related to compliance with timber management (TM-1) components. Montanore is a minerals management project, not a timber management project.

3.11 Surface Water Hydrology

Page 592: Section 3.11.1.1 Federal Requirements

Replace the first full paragraph on page 596 of this section with the following:

The 2015 KFP includes a desired condition for stream flows to “provide for channel and floodplain dimensions that mimic reference conditions ...” (FW-DC-WTR-03). A floodplain/wetland analysis will be made for all management actions involving wetlands, streams, or bodies of water. Projects involving significant vegetation removal will require a watershed cumulative effects feasibility analysis to ensure that water yield or sediment will not increase beyond acceptable limits.

Page 653: Section 3.11.4.10.4 Kootenai Forest Plan

Replace the text in this section with the following:

The agencies conducted a floodplain/wetland analysis on all mine and transmission line alternatives. The estimated peak flow increase in all mine and transmission line alternatives and all combined mine and transmission line alternatives would fall within reference conditions per FW-DC-WTR-03.

3.13 Water Quality

Page 666: Section 3.13.1.2.1 Federal Requirements

Replace the paragraph under the Kootenai Forest Plan heading on page 666 with the following text:

The 2015 KFP includes a desired condition that “water quality meets applicable state water quality standards and fully supports beneficial uses...” (FW-DC-WTR-02) and a guideline that “project-specific best management practices (BMPs) will be incorporated in all land use and project plans as a principle mechanism for controlling non-point pollution sources, meet soil and water goals, and protect beneficial uses. To the extent practicable, ditch and road surface runoff should be disconnected from streams and other water bodies” (FW-GDL-WTR-03).

Page 734–735: Section 3.13.4.11.3 Kootenai Forest Plan

Replace the text with the following:

Alternative 2 would have a greater risk of having a minor, adverse effect on movement toward achieving FW-DC-WTR-03 than Alternatives 3 or 4. The agencies’ analysis of MMC’s proposed plans for land application of excess water indicated they would result in water quality standard exceedances without additional pretreatment. The agencies’ analysis also indicated that tailings water in Alternative 2 would reach surface water without pumpback wells. Alternative 2 would have a greater risk of exceeding water quality standards than Alternatives 3 or 4. In Alternatives 3 and 4, all water would be treated at a water treatment plant before discharge and would be required to meet water quality standards. All mine and transmission line alternatives would comply with the KFP FW-GDL-WTR-03 to use soil and water conservation practices and BMPs to minimize nonpoint source pollution. The agencies’ alternatives would include more frequent BMP monitoring than MMC’s alternatives.

3.14 Geotechnical Engineering

Page 758: Section 3.14.3.5 Regulatory/Forest Plan Consistency

Replace the second sentence with the following:

The 2015 Forest Plan includes desired conditions, standards, and guidelines for the CMW. Goals can be found in the CMW Management Plan (2009).

3.15 Land Use

Page 760: Section 3.15.1.1 Kootenai Forest Plan

Replace the text in this section with the following:

The KFP describes desired conditions, objectives, standards, guidelines, and land suitability for project and activity decision making on the Kootenai National Forest, guiding all resource management activity (USDA Forest Service 2015c). This direction applies either forestwide or specific to management or geographic area allocations. The Montanore Project was originally

developed under the 1987 KFP, but has been carefully evaluated in light of the management direction in the newly revised 2015 Forest Plan.

Page 760–761: Section 3.15.2.2 Methods

The text references to 1987 Plan amendments within specific management areas (MAs) for accommodating mine facilities are not applicable to the 2015 Plan. The mine facilities fall predominately within the 2015 Forest Plan’s MA 6–General Forest allocation with a 42-acre overlap in MA 5b–Backcountry (Motorized Year-round). No MA plan amendments are needed to accommodate the Montanore Mine facilities.

Appendix D of the 2015 Forest Plan identifies, at a programmatic level, existing and anticipated utility corridors. The Montanore utility right-of-way corridor is described and a general location identified, with final authorization subject to the site-specific NEPA as is provided in the March 2015 Montanore Project FEIS.

Page 763–769: Section 3.15.3.2 Kootenai National Forest Land Management Plan

The land management direction in this section (including 3.15.3.2.1) reflects the 1987 Forest Plan. Replace with this section with the following description for the 2015 Forest Plan:

Land management direction of the KNF is described in the following sections. The 2015 Plan provides a framework and text that guides resource management. It describes goals, desired conditions, objectives, standards, guidelines, and suitability for various resources including recreation, wildlife and fish, vegetation, soils, water, and air resources, minerals and geology, and land use. This direction applies at three scales, either forestwide, or within specific management or geographic areas. Only National Forest System lands are managed by the KFP.

3.15.3.2.1 Forestwide Goals, Desired Conditions, Objectives, Standards, Guidelines, and Suitability

Goals

Goals are concise statements that describe an overall desired condition the Forest will strive to achieve. It is normally expressed in broad, general terms and is timeless in that it has no specific date by which it is to be accomplished. Goal statements form the principal basis from which objectives are developed (36 CFR 219.3). There are no mineral-specific goals in the 2015 Forest Plan, but there is social and economic system goal that the KNF “contribute to the social and economic well-being of local communities by promoting sustainable use of renewable natural resources. Provide timber for commercial harvest, forage for livestock grazing, opportunities for gathering firewood and other special forest products, and settings for recreation consistent with goals for watershed health, sustainable ecosystems, biodiversity, and scenic/recreation opportunities” (GOAL-SES-01).

Desired Conditions

Desired conditions are the social, economic, and ecological attributes that will be used to guide management of the land and resources of the Plan area. Desired conditions are not commitments or final decisions approving projects and activities. The desired condition for some resources may currently exist, or for other resources may only be achievable over a long time period. The 2015 Forest Plan includes a desired condition for “the forest continues to contribute to the economic strength and demands of the nation by supplying mineral and energy resources while assuring that the sustainability and resiliency of other resources are not compromised or degraded. Mineral

materials are made available based upon public interest, material availability, in-service needs, and protection of other resource values, including consistency with desired conditions for other resources. Geologic features are conserved for their intrinsic values and characteristics. Reclamation of abandoned mine sites occurs where human health and environmental degradation risks should occur, with reclamation priority given to mine sites with human health risks” (FW-DC-MIN-01).

Standards

Standards are a limitation or requirement that is applied to project and activity decision making to help achieve goals and objectives. Standards can be developed for forestwide application or for specific areas and may be applied to all management activities or selected activities. The 2015 Forest Plan includes one new minerals-specific standard related to locatable minerals—that locatable mineral development is not allowed in areas withdrawn from mineral entry. The Montanore Project is not located in a withdrawn area. In addition, the retained Inland Native Fish Strategy (USDA Forest Service 1995) includes three mineral-related components the 2015 Forest Plan clarifies are considered forest plan standards. These include MM-3 regarding solid and sanitary facility locations, MM-4—a leasable minerals standard not applicable to the Montanore Project, and MM-5—a mineral materials standard not applicable to the Montanore Project.

Guidelines

Guidelines are an operational practice and procedure that is applied to project and activity decision making to achieve goals, desired conditions, and objectives. Guidelines can be developed for forestwide application or for specific areas and may be applied to all management activities or selected activities. For all other minerals management direction in the retained Inland Native Fish Strategy (USDA Forest Service 1995), the 2015 Forest Plan clarifies are considered forest plan guidelines (MM-1, MM-2, and MM-6). These include minimizing adverse effects to inland native fish species (MM-1), to locate and construct structures, support facilities, and minerals-related roads outside of RHCAs (MM-2), and to develop inspection, monitoring, and reporting requirements for mineral activities.

3.15.3.2.2 Management Area Goals and Standards

In addition to forestwide goals, desired conditions, standards, and guidelines, the 2015 Forest Plan includes geographic area- and management area-specific desired conditions and guidelines. The mine facility and transmission lines fall primarily in the Libby Geographic Area, MA 6—General Forest, and a 42-acre overlap within MA 5b-Backcountry Motorized Year-round (outside of an inventoried roadless area). There is no locatable mineral-specific management direction in MA 6 or MA 5, or any geographic area-specific direction specific to locatable mineral development in the Montanore Project

Page 768–770: Section 3.15.4.2 Alternative 2 – MMC’s Proposed Mine

Replace the first three sentences with the following text:

Most of the proposed mine facilities would be on National Forest System lands. Most of the lands are within MA 6—General Forest which consists of relatively large areas with roads, trails, and structures, as well as sign of past and ongoing activities designed to actively manage the forest vegetation.

Disregard the third paragraph on page 773 of this section as no management area allocation changes are necessary under the 2015 Forest Plan. Locatable mineral activities are suitable within affected management area allocations.

Page 770–772: Section 3.15.4.3 Alternative 3 – Agency Mitigated Poorman Impoundment Alternative

Replace the first sentence of this section with the following:

Like Alternative 2, most of the proposed mine facilities would be on National Forest System lands. Most of the lands are within MA 6–General Forest which consists of relatively large areas with roads, trails, and structures, as well as sign of past and ongoing activities designed to actively manage the forest vegetation.

Disregard table 140 on page 774 and the third paragraph on page 775 as no management area allocation changes are necessary under the 2015 Forest Plan. Locatable mineral activities are suitable within affected management area allocations.

Page 772–773: Section 3.15.4.4 Alternative 4 – Agency Mitigated Little Cherry Creek Impoundment Alternative

Like the other alternatives, most of the proposed mine facilities would be on National Forest System lands. Most of the lands are within MA 6–General Forest which consists of relatively large areas with roads, trails, and structures, as well as sign of past and ongoing activities designed to actively manage the forest vegetation.

Disregard the last paragraph on page 775 spanning to page 776 as no management area allocation changes are necessary under the 2015 Forest Plan. Locatable mineral activities are suitable within affected management area allocations.

Page 773–776: 3.15.4.6 Alternative B – MMC’s Proposed Transmission Line (North Miller Creek Alternative)

All proposed road construction described in the first two rows of table 143 on page 777 will occur within MA 6 of the 2015 Forest Plan. Road construction and reconstruction is allowed in the MA 6.

Disregard table 144 on page 778. No management area reallocations are required under the 2015 Forest Plan.

Replace the third and fourth paragraph on page 779 with the following:

The remaining 9.3 miles of North Miller Creek Alternative would be on National Forest System lands managed by the KNF. Fourteen residences are within 0.5 mile of this alignment (Figure 79), 11 of which are greater than 450 feet from the centerline of the right-of-way and the remaining three are within 450 feet. About 1,760 feet of this alternative would pass through the Libby Creek Recreational Gold Panning Area.

All transmission line alternatives would require construction of between 3 and 10 miles of new access roads or extensive upgrading of existing access roads. MMC proposes to restrict motorized activity associated with transmission line construction from April 1 to June 15 within bear habitat in the Miller Creek and Midas Creek drainages. MMC also would restrict transmission line construction during the winter in big-game winter range areas.

Page 776: Section 3.15.4.6.2 Forest Plan Amendment

Disregard this section. No forest plan amendments are needed for the 2015 Forest Plan.

Page 776–777: Section 3.15.4.7 Alternative C-R—Modified North Miller Creek Transmission Line

Replace the last sentence of the second paragraph on page 777 with the following:

About 1.4 miles of new road would be constructed on National Forest System lands.

Page 777: Section 3.15.4.7.2 Forest Plan Amendment

Disregard this section. No forest plan amendments are needed for the 2015 Forest Plan.

Page 777–778: Section 3.15.4.8 Alternative D-R – Miller Creek Transmission Line Alternative

Replace the last sentence in 3.15.4.8.1 Direct Effects on page 777 with the following:

About 3.4 miles of new road would be constructed on National Forest System lands.

Page 778: Section 3.15.4.8.2 Forest Plan Amendment

Disregard this section. No forest plan amendments are needed for the 2015 Forest Plan.

Page 778: Section 3.15.4.9 Alternative E-R – West Fisher Creek Transmission Line Alternative

Replace the last sentence in the third paragraph of section 3.15.4.9.1—Direct Effects with the following:

About 2.1 miles of new road would be constructed on National Forest System lands.

Page 778–779: Section 3.15.4.9.2 Forest Plan Amendment

Disregard this section. No forest plan amendments are needed for the 2015 Forest Plan.

Page 779: Section 3.15.4.10 Cumulative Effects

Replace the text with the following:

Past actions, such as past mining and road construction, have altered the existing land use. Areas disturbed by past mining and road construction do not provide for timber production or wildlife habitat. The Rock Creek Project and the Montanore Project would cumulatively increase the amount of National Forest System lands on the KNF managed for transmission line corridors and mineral development.

Page 779: Section 3.15.4.11 Regulatory/Forest Plan Consistency

Replace the text with the following:

The mine and transmission line alternatives would comply with the management area allocations of the 2015 KFP. Other sections of Chapter 3 discuss compliance with the KFP. If the selected transmission line were approved by the FWP, it would comply with the FWP-Plum Creek conservation easement.

3.16 Recreation

Page 780: Section 3.16.1.1 Kootenai Forest Plan

Replace the first paragraph text with the following:

The 2015 Forest Plan includes goals and desired conditions for recreation settings, experiences, and opportunities. Generally, the recreation-related plan direction calls for providing a range of recreational opportunities while minimizing impacts to wildlife, allowing responsible development of mineral resources, meeting domestic livestock grazing needs where feasible, and providing for legitimate special needs on National Forest land. FW-DC-AR-03 describes the forestwide desired distribution of settings within the Recreation Opportunity Spectrum (ROS). The Plan also includes desired conditions for the transportation system with regard to roads, trails, and motor vehicle use.

In addition to FW-DC-AR-03 to “provide opportunities for outdoor recreation, such as hunting , fishing, wildlife viewing”, and other recreation uses, Executive Order 12962 mandates disclosure of effects on recreational fishing as part of a nationwide effort to conserve, restore, and enhance aquatic systems and provide for increased recreational fishing opportunities.

Page 780–781: Section 3.16.2 Analysis Area and Methods

Replace the text in the second paragraph on page 781 with the following two paragraphs:

The 2015 Plan ROS provides a forest wide desired condition for a range of settings distributed across the forest. The 2015 Plan ROS desired conditions (FW-DC-AR-04) are based on mapping protocol (USDA Forest Service 2003c) using travel routes, digital elevation model, and Management Area direction. The 2015 Plan ROS reflect the desirable range of opportunities across the forest.

The analysis of potential changes in ROS classes for this project was based on ROS delineation procedures developed by the Forest Service (USDA Forest Service 2003c). The ROS procedure used for this site specific analysis included set buffer, instead of the digital elevation model used in the 2015 Plan. This included a 0.5-mile buffer around any road to be used by the project; any new road; and any road proposed for access changes. For roads near the CMW, the buffer was extended 3 miles into the CMW. The set buffer method was used to quantitatively display site specific changes in recreation opportunities within the analysis area. The analysis only considered National Forest System lands in the analysis area. Anticipated changes to ROS classes along existing and proposed road corridors, adjacent to proposed mine facilities, and along proposed transmission line corridors were mapped and quantified. The analysis considered changes during two mine phases: during construction when the maximum effect of motorized road use would occur and when all of the access changes would have been implemented; and during post-closure when all motorized activity associated with the project would cease.

Page 785–793: 3.16.4 Environmental Consequences

Across all action alternatives, acres in Rural ROS would increase between 9,439 to 6,950 acres, acres in Roaded Natural ROS would decrease between 1 to 7,855 acres, and acres in Semi-primitive Motorized ROS would decrease between 3,871 to 8,364 acres. Semi-primitive Non-motorized ROS acres range from a decrease of 431 acre to an increase of 9,704 acres. The changes analyzed at the project level reflect a shift in local recreation opportunities from motorized to non-motorized in the long term. Although the project-specific changes in the

recreation opportunity trend away from 2015 Plan Desired Condition (FW-DC-AR-04 increase in Semi-Primitive Motorized areas), the effects would be minor relative to forestwide recreation opportunities.

Page 793: 3.16.4.12 Regulatory/Forest Plan Consistency

Project activities would not contribute to making progress toward forestwide desired conditions, however in the context of forestwide recreation opportunities, the effects would be minor.

3.17 Scenery

Page 795: Section 3.17.1 Regulatory Framework

Replace the second and third paragraphs with the following:

The 2015 Plan updated scenery with national direction through implementation of Landscape Aesthetics Handbook for Scenery Management (Agricultural Handbook No. 701). The Scenery Management System (SMS) system evolved from and replaces the Visual Management System (VSM). The essence of the system remains intact, with terminology changes and the system has been expanded to incorporate updated research finding. Concepts in the SMS system recognizes natural disturbance processes, ecological processes, and the resulting landscape are dynamic ecosystem, and some man-made components of a landscape contribute to the landscape’s valued character.

Table 148-1. Terminology Changes

Visual Management System	Scenic Management System
Preservation	Very High Scenic Integrity
Retention	High Scenic Integrity
Partial Retention	Moderate Scenic Integrity
Modification	Low Scenic Integrity
Maximum Modification	Very Low Scenic Integrity
Concern Levels	Concern Levels
Sensitivity levels	Constituent information
Distance Zones	Distance zones
Variety class	Scenic attractiveness
Characteristic landscape	Landscape character
Landscape character type	Section
Visual quality objective (VQO)	Scenic integrity objective (SIO)
Travel ways and use areas	Travel ways and use areas
Unacceptable modification	Unacceptable Low
Existing visual condition	Existing scenic integrity
Visual absorption capability	Visual absorption capability

Landscape Aesthetics Handbook for Scenery Management (Agricultural Handbook No. 701), Appendix A

The visual inventories completed in 2005 and 2010 under the VMS, are consistent with the principles of both Visual and Scenery Management Systems. While the inventory processes for the two systems are similar, the terminology used in the analysis of this project is related primarily to the VSM system. Following are terminology changes from the VMS to the SMS.

The concept of scenic integrity can be used to describe varying degrees of wholeness or completeness and levels of the scenic condition. The VQO (or SIO) describes a degree of acceptable alteration of the Landscape Character. The terms used in the FEIS to describe the visual quality objectives are from the VMS, but can be cross-walked to SMS. Below is the cross-walk of the objectives between the two systems. The cross walk is not intended to indicate that the definitions of the scenic integrity is the same as the correlating visual quality. The table simply portrays the varying degrees of intactness measured in the two systems.

Table 148-2. Scenery cross-walk

Visual Quality Objective (VQO)	Degree of intactness between systems	Scenic Integrity or Objective (SIO)
Preservation	Postive attributes defined in the Landscape Character (LC) description are intact	Very High
Retention	Postive attributes in the landscape description appear intact	High
Partial Retention	There are slight deviations to the landscape; deviations are subordinate to the landscape	Moderate
Modification	Deviations begin to dominate the landscape	Low
Maximum Modification	Heavily altered landscape, deviations strongly dominate the landscape	Very Low (not an SIO)

Mine facilities and the transmission corridor in all action alternatives would have Low to Very Low Scenic Integrity. In transmission line Alternatives B, C-R, D-R, and E-R the 230-kV transmission line corridor would have a Low to Very Low Scenic Integrity along portions of the transmission line. The Scenic Integrity of the action alternatives would be lower than the mapped Scenic Integrity Objective of Low to High in the 2015 Plan. This would occur because of existing mineral rights and the designated utility corridor.

The Montanore Project was addressed in the 2015 Plan as a current mining operation (USDA 2015b pg. 531). The Forest Service’s locatable minerals regulations (36 CFR 228.8) require mine operators to minimize or, where practicable, eliminate damage to soil, water, and other surface resource values. All action alternatives would result in a scenic integrity of Low to Very Low in portions of the area. Mitigation measure identified would reduce to the extent possible adverse effects to scenery, while allowing for the mining operation.

The 2015 Plan designates the Montanore transmission line as a Designated Utility Corridor (KFP, Appendix D). Utility corridors represent a landscape modification that is maintained as long term effects on the landscape. The transmission line corridor as designated in the 2015 Plan, and approved in the final authorization, would result in a scenic integrity of Low to Very Low; the transmission line would deviate from and strongly dominate in places the landscape.

Page 799–800: Section 3.17.3.3 Visual Quality Objectives through 3.17.4.10 Effectiveness of Agencies’ Proposed Mitigation

Replace the section with the following:

Section 3.17.3.3 Visual Quality/ Scenic Integrity Objectives

Areas under the 1987 Plan and VMS, Visual Quality Objective of Partial Retention, Modification and Maximum Modification were used. Under the 2015 Plan the project area Scenic Integrity Objectives were mapped as High, Moderate, and Low. The Scenic Integrity of the action alternatives would lower than the mapped Scenic Integrity Objective (SIO) of Low to High in the 2015 Plan. This is will occur because of existing mineral rights and the designated utility corridor. The SIO for an area does not change, even though human-caused changes may alter the scenic integrity level.

The LAD areas, Poorman Impoundment Site and transmission line corridors primarily have a Scenic Integrity of Low. With a Scenic Integrity of Low management activities are evident and sometimes dominate the landscape character, but are designed to blend with surroundings (Table 149). Portions of the Ramsey Plant Site, Little Cherry Creek Impoundment Site, and the south side of Miller Creek along the transmission line corridors Scenic Integrity is Very Low.

Table 149. SIO definitions and cross-walk with VQO.

Visual Quality Objective (VQO)	Description of Scenic Integrity	Scenic Integrity or Objective
Preservation	Landscape is intact with only minor changes from the valued landscape character associated with significant scenic landscapes. This SIO is typically (but not exclusively) associated with specially designated areas such as wilderness or other designations that imply the landscape is natural appearing.	Very High
Retention	Management activities are unnoticed and the landscape character appears unaltered.	High
Partial Retention	Management activities are noticeable but are subordinate to the landscape character. The landscape appears slightly altered.	Moderate
Modification	Management activities are evident and sometimes dominate the landscape character but are designed to blend with surroundings by repeating line. Form, color, texture of landscape character attributes. The landscape appears altered.	Low
Maximum Modification	Management activities create a “heavily altered landscape”. Changes may strongly dominate the landscape. Note: This SIO is not a goal or objective in 2015 KFP.	Very Low

Page 800: 3.17.4 Environmental Consequences

Add the following text:

Terminology throughout this section references the VMS. Table 148-2 in section 3.17.1 *Regulatory Framework* of these errata provides a cross-walk for the terminology for the 2015 Plan SMS.

Page 801: Section 3.17.4.2.2 Ramsey Plant Site

Replace the third paragraph with the following:

Following the mine closure, regrading revegetation would create areas with similar landscape characteristics to the existing timber harvested areas. The entire plant site would have a Scenic Integrity of Very Low during construction, operations, and post-closure.

Page 802: Section 3.17.4.2.3 LAD areas

Replace the third paragraph with the following:

The LAD areas would have a Scenic Integrity of Very Low.

Page 803: Section 3.17.4.2.4 Little Cherry Creek Impoundments Site

Replace the eighth paragraph with the following:

The Little Cherry Creek Impoundment site would have a Scenic Integrity of Very Low.

Page 803-804: Section 3.17.4.2.5 Change in VQO

Replace paragraph one and two with the following:

Section 3.17.4.2.5 Changes in VQO/ Scenic Integrity by alternative

References to 1987 forest plan amendment changes in VQOs, by changing MAs, no longer applies. As discussed in previous sections, the mine and transmission facilities would have Low to Very Low Scenic Integrity. In transmission line Alternatives B, C-R, D-R, and E-R, the 230-kV transmission line corridor would have a Low to Very Low Scenic Integrity along portions of the transmission line. The Scenic Integrity of the action alternatives would be lower than the mapped Scenic Integrity Objective of Low to High in the 2015 Plan. This occurs because of existing mineral rights and the designated utility corridor.

The changes by alternative in VQOs shown in Table 150, while no longer applicable, indicate the changes between alternatives, and is retained for as a measurable comparison only.

Page 805: Section 3.17.4.3.2 Libby Plant Site

Replace paragraph two with the following:

The landscape character would change due to the construction of the plant facilities, specifically to the vegetation pattern, landform, and land use. These changes would alter scenic integrity by introducing noticeable contrasts. The visual absorption capability of the plant site is low, indicating a small capacity to accommodate change. Following the mine closure, regrading and revegetation would potentially create areas with similar landscape characteristics to the existing timber harvested areas. The Libby Plant site would have a Scenic Integrity of Very Low.

Page 806: Section 3.17.4.3.3 Poorman Tailings Impoundment Site

Replace paragraph four with the following:

The Poorman Tailings Impoundment site would have a Scenic Integrity of Very Low.

Page 806: Section 3.17.4.3.4 Change in VQO

Replace section with the following:

References to 1987 forest plan amendment changes in VQO's, by changing MA's, no longer applies. As discussed in previous sections in mine Alternatives 2, 3, and 4 the project area would

include operating permit LAD Areas 1 and 2, portions of the plant site and tailings impoundment, and a road a facility corridor as Low to Very Low Scenic Integrity. In transmission line Alternatives B, C-R, D-R, and E-R, the 230-kV transmission line corridor would have a Low to Very Low Scenic Integrity along portions of the transmission line. The Scenic Integrity of the action alternatives is lower than the mapped Scenic Integrity Objective of Low to High in the 2015 Plan. This occurs because of existing mineral rights and the designated utility corridor.

Page 807: Section 3.17.4.6 Alternative B- MMC's Proposed Transmission Line (North Miller Creek Alternative)

Replace first paragraph on page 807 with the following:

... use roads with transmission line visibility would be the same as Alternative D-R. The North Miller Creek transmission line alternative would have a Scenic Integrity of Very Low.

Page 808: Section 3.17.4.7 Alternative C-R – Modified North Miller Creek Transmission Line Alternative

Replace third paragraph with the following:

This alternative would have visibility of the transmission line from the second most acres of CMW, and least miles of from high use roads (Table 152). Alternative C-R Modified North Miller Creek Transmission Line would have a Scenic Integrity of Very Low. The visual effect of BPA's Sedlak Park Substation would be the same as Alternative B.

Page 808: Section 3.17.4.8 Alternative D-R – Miller Creek Transmission Line Alternative

Replace second paragraph with the following:

This alternative would have visibility of the transmission line from the least acres of CMW, and the second most miles from high use roads (Table 152). Alternative D-R Miller Creek Transmission Line would have a Scenic Integrity of Very Low. The visual effect of BPA's Sedlak Park Substation would be the same as Alternative B.

Page 809: Section 3.17.4.9 Alternative E-R – West Fisher Creek Transmission Line Alternative

Replace second paragraph with the following:

This alternative would have visibility of the transmission line from the second least acres of CMW, and the most miles from high use roads (Table 152). Alternative E-R West Fisher Creek Transmission Line would have a Scenic Integrity of Very Low. The visual effect of BPA's Sedlak Park Substation would be the same as Alternative B.

Page 812: Section 3.17.4.12.2 Kootenai Forest Plan

Replace section with the following:

All mine and transmission line alternatives are consistent with the 2015 Forest Plan direction for scenic resources. The project-specific existing scenic integrity is lower than the mapped SIO, but was anticipated as foreseeable activity under the 2015 Forest Plan (current mining operation, designated utility corridor), subject to other law or regulation. SIOs are developed for broad landscapes. Within these landscapes, pre-existing features or landscape modifications (power lines, mines, roads, and vegetation treatments) may be inconsistent with the assigned SIO.

However at the landscape level, the action alternatives would be effective in meeting the intent of this guideline by minimize impacts to the scenic character to the extent possible, while allowing for mining operations. There are no visual regulatory requirements for BPA’s Sedlak Park Substation and loop line situated on private land.

3.18 Social/Economics

Page 813: Section 3.18.1.1 Forest Plan

Replace the text with the following:

The KFP describes desired conditions, objectives, standards, guidelines, and land suitability for project and activity decision making on the Kootenai National Forest, guiding all resource management activity (USDA Forest Service 2015c). This direction applies either forestwide or specific to management or geographic area allocations. The KFP includes the forestwide desired condition to “contribute to the economic strength and demands of the nation by supplying mineral and energy resources while assuring that the sustainability and resiliency of other resources are not compromised or degraded” (FW-DC-MIN-01). As well as desired conditions to generate outputs and values which contribute “to sustaining social and economic systems” (FW-DC-SES-01), “contribute to the local economy through the generation of jobs and income” (FW-DC-SES-02), and “contribute to community stability or growth, and the quality of lifestyles in the Plan area” (FW-DC-SES-03). The Montanore Project analysis tiers to the 2013 Forest Plan Final Environmental Impact Statement (USDA Forest Service 2013c) and the associated 2015 Errata for the Final EIS for KFP Land Management Plan (USDA Forest Service 2015a and b).

Page 835: Section 3.18.4.5 Regulatory/Forest Plan Consistency

Replace the text with the following:

The Montanore Project would contribute to progress toward FW-DC-MIN-01 and FW-DC-SES-01 through 03 of the KFP (USDA Forest Service 2015b). The project would be consistent with the Hard Rock Mining Impact Act following implementation of the approved Hard Rock Mining Impact Plan.

3.19 Soils and Reclamation

Page 837: Section 3.19.1.1 Federal Requirements

Replace the first two paragraphs with the following:

The 2015 Forest Plan requires project-specific best management practices (BMPs) to be incorporated into all land management activities as a principle mechanism for protecting soil resources (FW-GDL-SOIL-05 and FW-GDL-WTR-03)). In addition, the regional soil quality standards (FSM 2500 – Watershed and Air Management, R1 Supplement No. 2500-99-1) and Chapter 2550 – Soil Management contains soil management objectives and policies applicable to activities on the KNF. Soil quality standards apply to lands where vegetation and water resource management (*i.e.*, timber sales, grazing pastures or allotments, wildlife habitat, and riparian areas) are the principal objectives. The standards (such as the 15 percent disturbance standard) do not apply to intensively developed sites such as mines, developed recreation sites, administrative sites, or rock quarries as such sites have been or will be converted to non-forest sites. The standards are not intended to prohibit other resource management practices such as installing waterbars or preparing sites for planting, as long as such practices are consistent with long-term

sustainability of the soil resource. Permanent roads can affect soil-hydrologic function; their evaluation is more appropriately done on a watershed basis using models and other watershed analysis techniques (FSM 2554.1 R1 Supplement; USDA-ARS National Soil Erosion Research Laboratory 1995). The standards would apply once the mining was complete and the principal objective again became vegetation management. The reclamation plan for the project would include meeting the soil quality standards as one of the long-term reclamation goals. Additional guidance is included in USDA Forest Service's Region 1 NEPA guidance for soils (USDA Forest Service 2011e).

Page 874: Section 3.19.4.6.2 Kootenai Forest Plan

Replace the text with the following:

All mine and transmission line alternatives would comply with the KFP guideline to incorporate site-specific BMPs to protect soil resources, controlling non-point pollution sources and meet soil and water goals (FW-GDL-SOIL-03 and FW-GDL-WTR-03). The agencies' alternatives would include more frequent BMP monitoring than MMC's alternatives.

3.21 Transportation

Page 889: Section 3.21.1 Regulatory Framework

Replace first two paragraphs with the following:

The roads analysis complies with regulations governing the administration of the Forest Transportation System (36 CFR 212) and with the Forest Service Travel Management Policy FSM Chapter 7700 (2010c). The Forest Service regulations intended to help ensure that additions to the National Forest System road network are those deemed essential for resource management and use; that construction, reconstruction, and maintenance of roads minimize adverse environmental impacts; and that unneeded roads are decommissioned and restoration of ecological processes are initiated. Current Forest Service roads policy requires a science-based travel analysis (FSH 7709.55). The Forest Service's locatable minerals regulations (36 CFR 228.8) require mine operators to construct and maintain all roads so as to assure adequate drainage and to minimize or, where practicable, eliminate damage to soil, water, and other surface resource values.

FW-DC-AR-07 of the 2015 Forest Plan describes a transportation system "that provides safe and efficient public and administrative access to the Forest for recreation, special uses, forest resource management, and fire management activities. It is efficiently maintained, environmentally compatible, and responsive to public needs and desires. The transportation system and its use have minimal impacts on resources including threatened and endangered species, sensitive species, heritage and cultural sites, watersheds, and aquatic species. Newly constructed or reconstructed roads do not encroach into streams and riparian areas in ways that impact channel function, geometry, or sediment delivery. Roads in intermittent stored service pose minimal risks to water quality and aquatic ecosystems. Drainage structures have a minimal risk of failure, and provide adequate drainage that prevents accelerated runoff, erosion, and sediment delivery to streams. In addition, stream crossings provide for passage of aquatic organisms. Unauthorized roads and trails are no longer created." The KFP INFS standards establish stream, wetland, and landslide-prone area protection zones called RHCAs, and set standards and guidelines for managing activities that potentially affect conditions within the RHCAs. INFS standards applicable to roads are discussed in section 3.6, *Aquatic Life and Fisheries*.

Page 902: Section 3.21.4.4 Regulatory/Forest Plan Consistency

Replace the text with the following:

All action alternatives would contribute to the 2015 KFP FW-DC-AR-07 and regulations governing the administration of the forest transportation system (36 CFR 212). All roads to be built for the project would be constructed, maintained, and decommissioned to minimize adverse environmental impact, in accordance with the Forest Service locatable minerals regulations (36 CFR 228.8). Only the minimum number of roads would be constructed to the minimum standard necessary. Unneeded roads used during construction would be decommissioned. Compliance with 36 CFR 228.8(f) regarding roads management is discussed in section 3.6.4.11.4 *National Forest Management Act/Kootenai Forest Plan* (RF-2 through RF-5), beginning on page 456.

3.22 Vegetation

Page 903: Section 3.22.1.1 Regulatory Framework

Replace the second paragraph with the following text:

The National Forest Management Act (NFMA) requires the development, maintenance, and, as appropriate, the revision of land and resource management plans (forest plans) for units of the National Forest System. These forest plans provide for the multiple use and sustained yield of renewable resources in accordance with the Multiple-Use Sustained-Yield Act of 1960. The vegetation management approach in the 2015 KFP is one that provides ecological components, patterns, and processes at multiple scales on the landscape, and thereby provides the full spectrum of habitats and conditions needed for all of the biological organisms associated with the various ecosystems (USDA Forest Service 2013c).

That being said, the Montanore project is clearing forested lands for mineral development. Silvicultural standards and guidelines do not apply to intensively developed sites such as mines, developed recreation sites, administrative sites, or rock where lands have been or will be converted to non-forest sites. The Forest Service's locatable minerals regulations (36 CFR 228.8) require mine operators to minimize or, where practicable, eliminate damage to soil, water, and other surface resource values.

Pages 914–915: Section 3.22.1.4.12 Regulatory/Forest Plan Consistency and 3.22.1.4.13 Organic Administration Act and Forest Service Locatable Minerals Regulations

Replace the second paragraph:

As a minerals development project, KFP vegetation standards and guidelines do not apply. Where the land is being cleared for mine facility development, there would be no site-specific movement toward vegetation goals and desired conditions. Considering the footprint of the project in comparison to forestwide vegetation management practices and natural disturbance processes, the project would generally be neutral in regard to progress toward forestwide vegetation trends. The transmission line activities would change species size class (creating seedling/sap and early seral size classes) and patterns, but the footprint of activities would mean overall the project would generally be neutral in regard to progress toward forestwide vegetation desired conditions.

Over the long-term, reclaimed plant communities would eventually be re-established. Planting would follow silvicultural prescriptions designed to address forestwide desired conditions for species composition. Forest supervisor direction (Savage 2014) requires use of local native seed

from the Forest Service Coeur d'Alene Nursery or the Kootenai Seed Mix (defined in Savage 2014). Although initial vegetation diversity would be less than the original plant communities, use of local native seed mixes and KNF silvicultural prescriptions would aid restoration of the former facility locations consistent with 2015 Forest Plan goals and desired conditions.

Compliance with the INFS and RHCA standards and guidelines is discussed in section 3.6, *Aquatic Life and Fisheries*. Compliance with standards for old growth is discussed in section 3.21.2, *Old Growth Ecosystems*.

3.22.2 Old Growth Ecosystems

Page 915–916: Section 3.22.2 Old Growth Ecosystems

This section describes vegetative characteristics of old growth forests and features particularly important to wildlife. Old growth habitat is recognized for its unique ecological characteristics that serve as important habitat for both wildlife and some species of rare plants on the KNF. Although there are many wildlife species on the KNF that use habitat in old growth forest for breeding and/or feeding, there are no old growth obligate wildlife species that are solely dependent on this habitat on the KNF (Castaneda 2004), although there are species that utilize old growth habitats if available.

The 1987 KFP identified the pileated woodpecker as the management indicator species for old growth forest habitat and all associated wildlife species; however the 2015 Forest Plan does not. Pileated woodpeckers are not solely dependent on old growth. Pileated woodpecker habitat was modelled by Ecosystem Research Group (ERG) in 2012 (ERG 2012). The conclusion was that the existing amount of pileated habitat is within the historic range of variability and that it remains that way at the end of the next five decades with expected activities implemented per the 2015 Forest Plan. For the pileated woodpecker, as with wildlife on the forest in general, it is wildfire, insects and disease, in-growth, and stand succession that largely determine the amount and pattern of habitat on the forest rather than management activities (ERG 2012).

Project-specific effects to pileated woodpecker are analyzed in section 3.24, *Pileated Woodpecker*. Forest Service sensitive species and state species of concern (flammulated owl, fisher, and northern goshawk) are also discussed in section 3.25.7, *Other Species of Interest*.

Page 916: Section 3.22.2.1 Regulatory Framework

Replace the text in this section with the following:

The 2015 Forest Plan includes an old growth desired condition that “the amount of old growth increases at the forestwide scale. At the finer scale of the biophysical setting, old growth amounts increase for the Warm/Dry and Warm/Moist settings while staying close to the current level for the Subalpine setting. Relative to other tree species, there is a greater increase in old growth stands that contain substantial amounts (i.e., 30% or more of the total species composition) of one or more of the following tree species: ponderosa pine, western larch, western white pine, and whitebark pine. Old growth stands are more resistant and resilient to disturbances and stressors such as wildfires, droughts, insects and disease, and potential climate change effects. The size of old growth stands (or patches of multiple contiguous old growth stands) increase and they are well- distributed across the five Geographic Areas on the Forest (FW-DC-VEG-03).

As was described in the vegetation section, as a minerals development project silvicultural standards and guidelines, including those applying to old growth are not applicable to the project.

The MFSA directs the DEQ to approve a facility if, in conjunction with other findings, the DEQ finds and determines that the facility would minimize adverse environmental impact, considering the state of available technology and the nature and economics of the various alternatives. The MMRA does not specifically address effects on old growth habitat. The MMRA requires that lands affected by mining meet the post-mine land uses. The DEQ evaluates in its environmental documents whether the revegetation plans for mine facilities would adequately meet the post-mine land uses.

Page 917–918: Section 3.22.2.2 Analysis Area and Methods

The analysis area and methods still provide support effects analysis. However references to designated (MA 13) and undesignated old growth are not applicable under the 2015 Forest Plan. All stands meeting Green et al. criteria in the forest old growth spatial data are considered designated old growth inventory. Those stands formerly described as replacement in this analysis would meet the definition of recruitment potential under the 2015 Forest Plan. Mitigation descriptions of designating replacement old growth indicate stands that will be added to the forest old growth inventory to manage for old growth recruitment potential over the long term.

Page 918–922: Section 3.22.2.3.1 Existing Old Growth Stands on the KNF

Disregard the last sentence of the fourth paragraph on page 918. Although the descriptions of percent of lands meeting old growth criteria provides information to compare effects of the alternatives, the 2015 Forest Plan does not have a standard to maintain 10 percent of the land base in old growth.

Likewise disregard the fourth row of table 177 on page 920. The 2015 KFP does not have a minimum standard for old growth. In addition disregard the designated and undesignated references in table 177, the last paragraph on page 920 and table 178 on page 921, their acre summation represent the forest old growth inventory under the 2015 Forest Plan.

Page 922–933: Section 3.22.2.4 Environmental Consequences

Update the monitoring report reference to USDA Forest Service 2014 in the text under the 3.22.2.4.1 Alternative 1—No Mine heading on page 922.

Disregard the MA references in tables 179 through 182 on pages 923 through 925, and in table 182 on page 931 through 932. All old growth is managed as the forests' inventory regardless of MA allocation. Mitigation descriptions of designating replacement old growth indicate stands that will be added to the forest old growth inventory to manage for old growth recruitment potential over the long term.

Disregard the last sentence in the first paragraph on page 926 under heading 3.22.2.4.2 Alternative 2—MMC's Proposed Mine. Although the descriptions of percent of lands meeting old growth criteria provides information to compare effects of the alternatives, the 2015 Forest Plan does not have a standard to maintain 10 percent of the land base in old growth.

Disregard the last sentence in the first full paragraph on page 928 under heading 3.22.2.4.6 Alternative B—MMC's Proposed Transmission Line (North Miller Creek Alternative). Although the descriptions of percent of lands meeting old growth criteria provides information to compare effects of the alternatives, the 2015 Forest Plan does not have a standard to maintain 10 percent of the land base in old growth.

The discussion of designating replacement old growth on page 930 in section 3.22.2.4.11 Effectiveness of agencies' Proposed Mitigation would be accomplished by adding those acres identified in the FEIS analysis as replacement to the stands being managed for old growth recruitment potential in the forest old growth inventory (spatial data).

Disregard the reference in the second paragraph on page 930 under heading 3.22.2.4.12 Cumulative Effects to the 10 percent minimum standard. Although the descriptions of percent of lands meeting old growth criteria provides information to compare effects of the alternatives, the 2015 Forest Plan does not have a standard to maintain 10 percent of the land base in old growth.

Page 933–934: Section 3.22.2.4.13 Regulatory/Forest Plan Consistency

Replace text with the following:

The forest plan desired condition is to increase old growth at the forestwide scale (FW-DC-VEG-03), although there will be site-specific reductions of old growth within the land clearing for mine facilities, the identification of stands to manage as recruitment old growth over time will contribute to progress toward this desired condition over the long term. As described in section 3.22.1.1 of these errata (Vegetation Regulatory Framework), the Montanore project is clearing forested lands for mineral development. Silvicultural standards and guidelines do not apply to intensively developed sites such as mines, developed recreation sites, administrative sites, or rock quarries where lands have been or will be converted to non-forest sites. The Forest Service's locatable minerals regulations (36 CFR 228.8) require mine operators to minimize or, where practicable, eliminate damage to soil, water, and other surface resource values. The analysis describes the mitigation requirements to minimize the effects to old growth resources.

3.22.4 Noxious Weeds

Page 939: Section 3.22.4.1 Regulatory Framework

Disregard the reference to R1 Supplement 2080 Noxious Weed management 2001 in the first full paragraph on page 939.

3.23 Wetlands and Other Waters of the U.S.

Page 946: Section 3.23.1 Regulatory Framework

Replace the third full paragraph on page 946 of this section with the following:

The 2015 Forest Plan includes the Inland Native Fish Strategy (INFS) (USDA Forest Service 1995), which establishes management direction for wetlands. INFS standards and guidelines apply to an area within 150 feet of a wetland greater than 1 acre in size. For a wetland less than 1 acre, INFS standards and guidelines apply to an area within 100 feet of a wetland.

3.24 Wilderness, Roadless Areas, and Wild and Scenic Rivers

Page 976: 3.24.1.1 Regulatory Framework

Replace the first full paragraph on page 976 with the following:

The 2015 KFP allocates the CMW to MA 1a. MA 1a is managed to protect wilderness character as defined in the Wilderness Act and as outlined in the Cabinet Mountains Wilderness Management Plan. Desired conditions are: to allow natural processes act as the primary forces affecting the composition, structure, and pattern of vegetation; provide non-motorized and non-mechanized opportunities for exploration, solitude, risk, challenge, and primitive recreation; and provide large remote areas with little human disturbance to contribute habitats for species with large home ranges such as grizzly bear and mountain goats. There is no specific locatable

minerals direction, but management direction in the KFP as a whole is subject to valid existing rights and defers to overarching applicable laws and regulations.

3.24.2 Roadless Areas

Page 986: Section 3.24.2.1 Regulatory Framework

Replace the text with the following:

The 2015 Forest Plan allocated most of the 43 IRAs on the KNF to MA 5 (backcountry). Within IRAs in the Montanore Project area, MA 5 direction defers to the requirements of 36 CFR 294 Subpart B 66 Fed Reg. 3244-3273 (2001 Roadless Area Conservation Rule).

The 2001 Roadless Area Conservation Rule (Roadless Rule) establishes prohibitions on road construction, road reconstruction, and timber harvesting on inventoried roadless areas (IRA) on NFS lands. The intent of the Roadless Rule is to provide lasting protection for inventoried roadless areas within the NFS in the context of multiple-use management. IRAs are identified in the set of inventoried roadless area maps contained in the Forest Service Roadless Area Conservation, Final Environmental Impact Statement Volume 2 dated November 2000 and in Appendix C of the 2013 FEIS for the Kootenai Land Management Plan (USDA Forest Service 2013c). Roadless areas provide opportunities for restoration of ecosystem function and improvement of threatened, endangered, proposed, and sensitive species habitat (Tidwell 2012).

Page 986: Section 3.24.2.2 Analysis Area and Methods

Replace the last sentence of the paragraph with the following:

Original FEIS analysis for data on the IRA capabilities were taken from the KFP Final EIS (USDA Forest Service 1987a), with updates per the 2015 Forest Plan's 2013 Final EIS (USDA Forest Service 2013c) and 2015 Errata to the FEIS (USDA Forest Service 2015a).

Page 986–987: Section 3.24.2.3 Affected Environment

Replace the text with the following:

The Cabinet Face East IRA lies just east of the CMW and extends about 36 miles south from Libby (Figure 88). The entire IRA consists of 50,200 acres of National Forest System lands and 800 acres of private lands. The average width is about 2 miles. This IRA provides attributes and recreational opportunity similar to those found in the CMW. Its wilderness capability rating is high. It was determined to be suitable for designated wilderness because of its adjacency to the CMW and it includes areas of underrepresented plant communities, although the south half is recognized to have high value mineral deposits. The 2015 Forest Plan allocated the Cabinet Face East IRA to MA 5b–Backcountry Motorized Year-round

The McKay Creek IRA includes sidehill and ridgetop features and steep-sided stream bottoms. Its wilderness capability rating is moderate to high, but it was not determined to be suitable for wilderness designation because of existing over-snow use, the need for vegetation restoration, the adjacent powerline, and high value mineral deposits. The 2015 Forest Plan allocated the McKay Creek IRA to MA 1b–Recommended Wilderness, MA 5a–Backcountry Non-motorized Year-round, and MA 5b–Backcountry Motorized Year-round.

The Rock Creek IRA is a steep and rugged area that is surrounded by the CMW on three sides. Its wilderness capability rating is high. It was determined to be suitable for wilderness designation.

The 2015 Forest Plan allocated the Rock Creek IRA to MA 1b–Recommended Wilderness, MA 5a–Backcountry Non-motorized Year-round, and MA 5b–Backcountry Motorized Year-round.

3.24.3 Wild and Scenic Rivers

Page 992: Section 3.24.3.1 Regulatory Framework

Replace the second paragraph with the following text:

The Forest Service’s land management policies require a comprehensive evaluation of the potential for rivers to be eligible for inclusion in the Wild and Scenic River System (USDA Forest Service 2015a, Appendix E). The 2015 KFP includes a desired condition that eligible wild, scenic, or recreational rivers and their adjacent areas retain their free-flowing status and preliminary classification, and conserve or enhance their outstandingly remarkable values (MA2-DC-AR-0). The KFP does not have any standard or guidelines specific to locatable mineral activities.

Page 993: Section 3.24.3.2 Analysis Area and Methods

Replace the second paragraph with the following text:

Data on the outstandingly remarkable values of the eligible wild and scenic segments were taken from the KNF’s 2014 process to identify and classify potentially eligible wild and scenic rivers (USDA Forest Service 2015a, Appendix E). None of the transmission line alternatives would affect free-flowing characteristics, water quantity, water quality, or outstandingly remarkable values of the eligible wild and scenic segments. Disclosure of effects on eligible segments is limited to the mine alternatives.

Page 997–998: Section 3.24.3.5 Regulatory/Forest Plan Consistency

Replace the second to last sentence in the fourth paragraph of section 3.24.3.5.1 Wilderness on page 997 with the following:

All mine and transmission line alternatives would comply with the Wilderness Act, meet the 2015 KFP MA 1b-Wilderness desired conditions, standards, and guidelines, and comply with the 2009 Cabinet Mountains Wilderness Management Plan.

Replace the text in section 3.24.3.53 Eligible Wild and Scenic River Segments on page 998 with the following:

None of the mine or transmission line alternatives would affect the free-flowing characteristics of the eligible portions of the Wild and Scenic River segments. Flow in the three eligible segments would remain in natural condition without impoundment, diversion, straightening, rip-rapping, or other modification of the stream. Mitigation measures identified in Chapter 2 for Alternatives 3 and 4 and monitoring required for Alternatives 3 and 4 (Appendix C) would be implemented to minimize changes in the water quality of the three eligible segments. Reductions in streamflow or changes in water quality would have no effect on the scenic values of the East Fork Bull River or Bull River and the free-flowing status of the rivers would remain. All alternatives would comply with the Wild and Scenic Rivers Act, Forest Service policy, and the KFP regarding eligible Wild and Scenic River segments.

3.25 Wildlife

Page 1000: Section 3.25.1 Introduction

Replace the second and third paragraph with the following text:

This section is comprised of six subsections: key habitats, elk security, big game (elk and deer) habitat, mountain goat, pileated woodpecker, Forest Service sensitive species, federal threatened and endangered species, migratory birds, and other species of interest, namely moose and Montana Species of Concern. Elk were chosen as a MIS (elk security) for the 2015 Forest Plan because elk security habitat could be affected by forest access management and they are an important hunted species. Effects on Forest Service sensitive species, which are designated by the Regional Forester, also are disclosed. The evaluation of wildlife effects in the analysis area is concurrent and interdependent with the ESA Section 7 consultation process. The effect of a proposed activity on any wildlife species is largely dependent on the duration of its effects. Three potential categories of effects are: (1) a short-term event whose effects are relaxed almost immediately (pulse effect), (2) a sustained, long-term, or chronic event whose effects are not relaxed (press effect), or (3) a permanent event that sets a new threshold for some feature of a species' environment (threshold effect) (USFWS and National Marine Fisheries Service 1998). For the wildlife subsections, short-term effects were considered to be 2 to 5 years, while long-term effects would last for the life of the mine (30 years) or longer. These definitions are not consistent with those provided in section 3.1.1, Direct, Indirect, and Cumulative Effects (p. 267), but are more appropriate for analysis of wildlife in general due to life history, reproductive cycles and population dynamics specific to each species. The evaluation of impacts on Montana Species of Concern is part of the MFSA transmission line certification process.

The analysis area for the sensitive species was determined based on viability analysis and concepts described by Ruggiero *et al.* 1994, which considers biological populations and ecological scale. Evaluation of species viability is based on concepts and direction provided in the KNF Conservation Plan (Anderson 2014), and the Wildlife Habitat Assessment for the Kootenai and Idaho Panhandle Plan Revision Zone (ERG 2012). The analysis area used for an individual species may vary from other resource sections, or between different species of wildlife, based on biological needs and/or direction provided for T&E species under the ESA.

Page 1001: Section 3.25.2 Key Habitats

Replace the last sentence of the text with the following:

Effects to wildlife regarding the availability of cavity habitat and down woody debris are evaluated within the analyses for species associated with these key habitats, such as pileated woodpecker discussed in section 3.25.3.5, *Pileated Woodpecker* and flammulated owl, fisher, and western toad discussed in section 3.25.4, *Forest-Sensitive Species*.

Page 1002: 3.25.2.1.2 National Forest Management Act/Kootenai Forest Plan

Replace the text in this section with the following:

The National Forest Management Act requires the Secretary of Agriculture to promulgate regulations specifying guidelines under the principles of the Multiple-Use Sustained Yield Act of 1960, to “provide for the diversity of plant and animal communities based on the suitability and capability of the specific land area in order to meet overall multiple-use objectives, and within the multiple-use objectives of a land management plan adopted pursuant to this section, provide,

where appropriate to the degree practicable, for steps to be taken to preserve the diversity of tree species similar to that existing in the region controlled by the Plan” (P.L. 94-588, Sec.5 (g)(s)B)). The 2015 Forest Plan was developed under the 1982 Planning Regulations (36 CFR 219.9, 1982) that also state that fish and wildlife habitat shall be managed to maintain viable populations of existing native and desired non-native vertebrate species in the planning area.

Accordingly, the vegetation management approach in the 2015 Forest Plan is one that provides for ecosystem diversity by providing the ecological components, patterns, and processes at multiple scales on the landscape, and thereby provides the full spectrum of habitats and conditions needed for all of the biological organisms associated with the various ecosystems (USDA Forest Service 2013c). This includes the goal that “the KNF manages wildlife habitat through a variety of methods (e.g., vegetation alteration, prescribed burning, invasive species treatments, etc.) to promote the diversity of species and communities and to contribute toward the recovery of threatened and endangered terrestrial wildlife species” (GOAL-WL-01).

In addition, the 2015 Forest Plan provides management direction in the form of vegetation and wildlife desired conditions, coarse woody debris and snag guidelines, and old growth standards and guidelines. The companion approach to ecosystem diversity (coarse filter) is the “fine filter” approach in which conservation strategies are used to for individual species or groups of species to contribute to species diversity. The fine filter approach narrows the focus to those species that require habitat that maybe outside the range of variation and are not covered under the coarse filter. The 2015 Forest Plan provides fine filter management direction in the form of grizzly bear, lynx, and other species-specific standards and guidelines.

Page 1002– Section 3.25.2.2 Snags and Woody Debris

Replace the first paragraph with the following:

The 2015 Forest Plan includes a desired condition that “down wood occurs throughout the forest in various amounts, sizes, species, and stages of decay. The larger down wood (i.e., coarse woody debris) provides habitat for wildlife species and other organisms, as well as serving important functions for soil productivity” (FW-DC-VEG-08). Table 3 of FW-GDL-VEG-03 describes the specific amounts of coarse woody debris that should be retained following vegetation management activities.

The 2015 Plan also includes a desired condition that “snags occur throughout the forest in an uneven pattern, provide a diversity of habitats for wildlife species, and contribute to the sustainability of snag dependent species. Snag numbers, sizes, and species vary by biophysical setting and dominance group. Table 1 displays the desired range of snag densities. Over time, the number of large-diameter snags (20 inches in DBH or greater) increases in all biophysical settings” (FW-DC-VEG-07). Table 4 of FW-GDL-VEG-04 describes the specific amounts of snags that should be retained following vegetation management activities. Additional snag guidelines include:

FW-GDL-VEG-05. Where vegetation management activities occur and snags (or live trees for future snags) are retained, the following direction should be followed:

- Group snags where possible;
- Retain snags far enough away from roads or other areas open to public access to reduce the potential for removal (generally more than 150 feet);

- Emphasize retention of the largest snags and live trees as well as those species that tend to be the most persistent, such as ponderosa pine, larch, and cedar;
- Favor snags or live trees with existing cavities or evidence of use by woodpeckers or other wildlife; and

FW-GDL-VEG-06. During vegetation management activities (e.g., timber harvest), and in the event that retained snags (or live trees being retained for future snags) fall over or are felled (for safety concerns), they should be left on site to provide coarse woody debris.

FW-GDL-VEG-07. Evaluate proposed management activities and project areas for the presence of occupied or suitable habitat for any plant species listed under the Endangered Species Act or on the regional sensitive species list. If needed, based on pre-field review, conduct field surveys and provide mitigation or protection to maintain occurrences or habitats that are important for species sustainability.

Page 1008: Section 3.25.2.2.2 Affected Environment

Replace the third paragraph on page 1008 with the following text:

Historically, wildfires have played a large role in the amount of down wood in the forests (Graham *et al.* 1994). Depending on the frequency, intensity, and magnitude of fires, ponderosa pine forests could have more than 45 tons per acre of down wood while western white pine forests could have more than 268 tons per acre of down wood. The longer period of time between fires, the longer the down wood would remain. During the last 100 years, the frequency of fires in the northern Rocky Mountains has been greatly reduced, potentially resulting in larger amounts of down wood. Vegetation management treatments, primarily timber harvest, before the KFP would have reduced the amount of down woody debris available within the treated stands whereas vegetation management occurring post-implementation of the KFP would have been designed to maintain the recommended tons per acre. Results of down wood surveys in the Crazy and Silverfish PSUs suggest that the KFP guidelines of down wood per acre are being met in old growth and past harvest areas. Surveyed old growth stands average over 23 tons per acre and past harvest units averaged 41 tons per acre in the Crazy PSU. These estimates only included materials greater than 10 inches dbh, which identified the larger material more beneficial for wildlife use. It is likely that smaller materials were also present, contributing to a higher level of down wood available across the landscape than what was estimated. Therefore, the National Forest System lands within the analysis area currently provide for a variety of species that utilize down woody habitat, including the pileated woodpecker (see pileated woodpecker discussed in section 3.25.3.5, *Pileated Woodpecker*), and the existing down wood habitat level in the analysis area is expected to provide adequate suitable habitat for other dependent species.

Page 1025–1026: Regulatory/Forest Plan Consistency; National Forest Management Act/Kootenai Forest Plan

Replace the text under this heading with the following:

Where applicable, the combined mine and transmission line action alternatives meet the intent of KFP guidelines as they apply to snag and down wood habitat on National Forest System land and include:

FW-DC-VEG-03 (coarse woody debris): Given the wide range of habitats and different successional stages and associated amounts of downed wood that would continue to be available

within the impacted PSUs, all combined mine and transmission line alternatives would be consistent with the KFP.

FW-GDL-VEG-04 (snags): Snag direction (sizes and number per acre) in the 2015 Forest Plan is based on historic snag ranges and distribution (p. 80-83 in USDA 2013). Management of snags under the 2015 Forest Plan is expected to result in FW-GDL-VEG 04 being met or exceeded (p. 103-104 in USDA 2013). Given the small amount of acres proposed to be impacted in the mine and transmission line alternatives compared to the overall size of the Crazy and Silverfish PSUs, Montanore is not expected to hinder the availability of snags across the landscape. The snag direction in the 2015 Forest Plan is based on historic snag amounts and distributions, and those are the conditions that native species that utilize snags evolved with on the KNF under natural disturbance processes. Providing those approximate amounts and distribution of snags across the analysis area would provide snag habitat amount and distribution similar to those found under natural disturbance processes and consequently provide adequate snag habitat into the future for those species that use that habitat.

National Forest System lands would not be impacted within the McElk and Riverview PSUs. In addition, under the agencies' alternatives (Mine Alternatives 3 and 4 and Transmission Line Alternatives C-R, D-R, and E-R) snags would be left within the disturbance and/or clearing acres unless required to be removed for safety reasons.

Section 3.25.3 Management Indicator Species

Replace the entirety of pages 1027–1093 (3.25.3 overview, 3.25.3.2, and 3.25.3.3) with the following:

3.25.3 Elk Security, Big Game Winter Range (Elk and Deer), and Pileated Woodpecker

3.25.3.2 Elk Security

Introduction

The supporting documentation for the 2015 Forest Plan for the Kootenai National Forest (KNF) (USDA Forest Service 2013c, 2014a) identified elk as a Management Indicator Species (MIS) for elk security. The 2015 Forest Plan (USDA Forest Service 2015a) contains two pieces of direction related to elk security (FW-GDL-WL-10 and FW-OBJ-WL-02). The following analysis documents the effects of the Montanore Mine alternatives on elk security relative to Forest Plan direction.

Regulatory Framework

The 2015 Forest Plan contains two pieces of direction related to elk security.

FW-GDL-WL-10. Elk. Management activities in planning subunits should maintain existing levels of elk security (see glossary). Where possible, management activities in high and medium emphasis planning subunits (determined in cooperation with Montana Fish, Wildlife, and Parks; see FW-DC-WL-16) should improve elk security.

FW-OBJ-WL-02. Elk. Over the life of the Plan, increase by 1 the number of planning subunits that provide at least 30 percent elk security (see glossary) and increase by 1 the number of high emphasis planning subunits (determined in cooperation with Montana

Fish, Wildlife, and Parks; see FW-DC-WL-16) that provide at least 50 percent elk security.

The definition of elk security from the glossary in the 2015 Forest Plan states:

Security Habitat (elk): Generally timbered stands on NFS lands at least 250 acres in size greater than 0.5 mile away from open motorized routes during the hunting season. Security is calculated for individual planning subunits. Roads not open to the public for motorized use during the hunting season are not included in this calculation. The effects of non-motorized use and/or administrative motorized use of closed or temporary roads during the hunting season are not included in this calculation and would instead be analyzed separately at the project level.

Each forest plan developed under the 1982 Planning Rule for the National Forest Management Act (NFMA) was required to identify certain vertebrate and/or invertebrate species as Management Indicator Species, or MIS, as one of various elements to address NFMA requirements related to diversity of plant and animal communities (36 CFR 219.19(a), 1982). The direction for MIS is related to forest plan development, forest project implementation, and forest plan monitoring. This direction is described in the 1982 implementing regulations for the National Forest Management Act (NFMA) of 1976.

Elk security was identified by the Kootenai-Idaho Panhandle Planning Zone (KIPZ) as a public concern due to the species' high profile and desirability as a big game animal. Elk was chosen as a MIS for elk security for the 2015 Forest Plan because forest access management during the hunting season influences elk security. Elk would fit the MIS selection category for a species commonly hunted [219.19(a)(1)].

USDA Forest Service 2013c, 2014a, and Anderson 2014 identify elk as a MIS under the 2015 Forest Plan, and Chapter 5 in the 2015 Forest Plan (USDA Forest Service 2015a) and the 2015 KNF Monitoring Guide (USDA Forest Service 2015d) describe the Forest Plan level monitoring related to elk security levels across all planning subunits on the KNF.

Resource Indicators and Measures

The indicator for elk security is the percentage of National Forest System (NFS) lands within a planning subunit that provides security habitat for elk.

Methodology

Elk security is calculated by buffering the roads and trails open to public motorized use during the general elk hunting season by 0.5 mile. Security areas must be at least 250 acres in size. Although roads and trails open to motorized use during the hunting season on other ownerships are also buffered during this calculation to determine elk security on NFS lands, any elk security on those other ownerships are not included in the percentage because the KNF has no control over access on those lands. The effects of openings and non-motorized access on the integrity of security habitat is also discussed.

Information Sources

The approximated baseline elk security percentages in the Final Environmental Impact Statement (FEIS) (p. 329–330 in USDA 2013) for the 2015 KNF Forest Plan were used as the existing condition for elk security in the planning subunits potentially impacted by the mine and transmission line alternatives.

Affected Environment

Existing Condition

Resource Indicator 1

The table below displays the approximated baseline elk security percentages for the planning subunits (PSUs) potentially impacted by the mine and transmission line alternatives. Also displayed in the table are the emphasis levels for each of the planning subunits.

Table 1. Displayed are the approximated baseline elk security percentages for the PSUs potentially impacted by the mine and transmission line alternatives. Also displayed in the table are the emphasis levels for each of the planning subunits.

	Crazy	McElk	Riverview	Silverfish	Treasure
Percent elk security ¹	23%	29%	9%	46%	44%
Emphasis level ²	Medium	Medium	Medium	High	High

¹ – Approximated elk security baseline conditions are from p. 329-330 in USDA 2013.

² – Elk emphasis levels are from the elk emphasis layer in the KNF GIS library and on p. 319 in Anderson 2014.

Management Direction

Management direction in the 2015 Forest Plan (USDA 2015a) under FW-GDL-WL-10 states that management activities should maintain existing levels of elk security and, where possible, management activities in high and medium emphasis planning subunits should improve elk security. As directed in FW-OBJ-WL-02, over the life of the Forest Plan the objective is to increase by 1 the number of planning subunits that provide at least 30 percent elk security and increase by 1 the number of high emphasis planning subunits that provide at least 50 percent elk security.

Environmental Consequences

Mine Alternatives

Alternative 1 – No Mine

Resource Indicator 1

No effects to elk security would occur under this alternative. No motorized access changes would occur.

Alternative 2 – MMC’s Proposed Mine

Resource Indicator 1

A section of the 4781 road in the vicinity of Ramsey and Poorman Creeks would change from open to the public to mine access only. Because this road would no longer be open to motorized use by the public during the general elk hunting season, the buffer used to determine elk security would shift to the east and be based off the 231 road. This would result in an increase to elk security. Slight re-alignment of the 278 road and building small segments of new road in the vicinity of the tailings impoundment would push the buffer used in determining elk security in the Crazy PSU. The buffer would shift slightly west in this area toward the large block of elk security in the main Cabinet Mountains. This would result in a loss of a small amount of security habitat

in this vicinity due to that re-alignment of the 278 road. Other roads that are currently restricted yearlong would be used by mine traffic only. Because those roads are not open for motorized use to the public, particularly during the general elk season, there would not be a reduction in elk security due to changes in roads open to the public for motorized use. The net result of these changes would be a slight increase in elk security in the Crazy PSU and therefore this alternative is consistent with FW-GDL-WL-10. Elk security in other PSUs would not change as a result of road changes in this alternative.

Clearing of vegetation for the impoundment would only influence a small portion of security habitat. The Ramsey Plant site would clear vegetation in an area within existing elk security habitat. This reduced security habitat would be off-set by the increase in security with the change in road status on the 4781 road and the net result would still be slightly increased security.

Alternative 3 – Agency Mitigated Poorman Impoundment Alternative

Resource Indicator 1

A section of the 4781 road in the vicinity of Ramsey and Poorman Creeks would change from open to the public to mine access only. Because this road would no longer be open to motorized use by the public during the general elk hunting season the buffer used to determine elk security would shift to the east and be based off the 231 road. This would result in an increase to elk security, although a smaller amount than Alternative 2. Also similar to Alternative 2, Alternative 3 would have slight realignment of the 278 road in the vicinity of Little Cherry Creek. This would result in a small shift in the buffer to the west and a slight reduction in elk security in this area. Other wildlife mitigation road closures would not result in increases in elk security areas > 250 acres in size due to the proximity of other roads that remain open. The net result of all the access changes in Alternative 3 would be a slight increase in elk security in the Crazy PSU. This alternative would be consistent with FW-GDL-WL-10 because it results in an increase over existing levels of elk security. No other PSUs would be impacted by this alternative.

Clearing of vegetation for the impoundment would not influence security habitat as this area is not currently considered security habitat due to the proximity to open roads. The Libby Plant site would clear vegetation in an area within existing elk security habitat (slightly less than Alternative 2). This reduced security habitat would be off-set by the increase in security with the change in road status on the 4781 road and the net result would still be slightly increased security.

Alternative 4 – Agency Mitigated Little Cherry Creek Impoundment Alternative

Resource Indicator 1

Alternative 4 would be similar to Alternative 2 in the vicinity of Little Cherry Creek with slight realignment of the 278 road and therefore a slight decrease in security in this vicinity. Alternative 4 would be similar to Alternative 3 in the vicinity of Poorman and Ramsey Creeks with the change in the 4781 road from open to mine use only. As with Alternative 3, mitigation road closures in Alternative 4 would not result in increased elk security due to proximity of other roads that remain open. The net result is a slight increase in elk security, although less than Alternative 2 but more than Alternative 3. Due to the increase in elk security, this alternative would be consistent with FW-GDL-WL-10 because it results in an increase over existing levels of elk security. No other PSUs would be impacted by this alternative.

Clearing of vegetation for the impoundment would not influence security habitat as this area is not currently considered security habitat due to the proximity to open roads. The Libby Plant site would clear vegetation in an area within existing elk security habitat (slightly less than Alternative 2). This reduced security habitat would be off-set by the increase in security with the change in road status on the 4781 road and the net result would still be slightly increased security.

Transmission Line Alternatives

Alternative A – No Transmission Line

Resource Indicator 1

This alternative would not result in any motorized access changes and would not change elk security habitat.

Alternative B – MMC’s Proposed Transmission Line (North Miller Creek Alternative)

Resource Indicator 1

Alternative B would construct the transmission line through a large block of security habitat that overlaps both the Silverfish and Crazy PSUs. It would also go along Ramsey Creek along the road accessing the Ramsey Plant site. This activity would include the construction of new access roads and the use of existing gated and barriered roads. The public could have motorized access to these roads during construction during the general elk hunting season and this would result in a loss of elk security habitat in both PSUs. This would not be consistent with FW-GDL-WL-10 because it would not maintain existing security amounts. No other PSUs would be impacted by this alternative.

Removal of vegetation to construct and maintain the transmission line would also reduce the effectiveness of security habitat. Non-motorized use of the newly built access roads, if closed after construction, may also reduce the effectiveness of elk security habitat. However, forage would potentially be increased by the vegetation clearing and may aid in retaining elk within the security area by providing nearby forage. Hillis et al. (1991) stated that the arrangement of security habitat should provide for the habitat needs of elk through the hunting season (e.g. food and water) (p. 40 in Hillis et al. 1991).

The big game analysis in the FEIS for the Forest Plan indicates that the desired conditions for vegetation in the Plan would benefit big game by providing more forage. Fire suppression has impacted the amount of forage on the landscape, and given how quickly vegetation grows on the Forest the amount of cover is artificially high in places. The desired conditions for vegetation and fire in the Plan are based on natural disturbance processes and the vegetative historic range of variability (HRV). Species native to the Forest evolved with those disturbance processes and the types of habitats and pattern found under those conditions. As the Forest trends toward those desired conditions big game would find habitats similar to what they evolved with under natural disturbance processes (p. 361-363 in USDA 2013).

Alternative C-R – Modified North Miller Creek Transmission Line Alternative

Resource Indicator 1

Alternative C-R would cross through the same block of security habitat that is shared between the Crazy and Silverfish PSUs. Unlike Alternative B, it would not impact security habitat along

Ramsey Creek. Also unlike Alternative B, Alternative C-R would not allow motorized public access during the general hunting season along the roads built or on existing gated/barriered roads used during the construction of the transmission line. There would therefore be no changes in motorized access that would reduce elk security percentages for either the Crazy or Silverfish PSUs. The motorized access component of Alternative C-R would be consistent with FW-GDL-WL-10.

Removal of vegetation to construct and maintain the transmission line would potentially reduce the effectiveness of security habitat. However, not all the vegetation would be removed. In some locations vegetation would be retained and would continue to contribute cover. Non-motorized use of the newly built access roads may also reduce the effectiveness of elk security habitat. However, forage would potentially be increased by the vegetation clearing and may aid in retaining elk within the security area by providing nearby forage as described in Alternative B.

Alternative D-R – Miller Creek Transmission Line Alternative

Resource Indicator 1

Alternative D-R would only cross along the boundary of a block of security habitat between Miller and West Fisher Creeks within the Silverfish PSU. As with Alternative D-R, roads used to access the transmission line during construction would be closed to the public for motorized use during the general elk hunting season. There would therefore be no changes in motorized access that would reduce elk security percentages for the Silverfish PSU. The motorized access component of Alternative D-R would be consistent with FW-GDL-WL-10.

Removal of vegetation to construct and maintain the transmission line would potentially reduce the effectiveness of security habitat, but in Alternative D-R the effect would only occur along the edge of the security block rather than bisecting it. Potentially not all the vegetation would be removed. In some locations vegetation would be retained and would continue to contribute cover. The security block may not be impacted at all by vegetation clearing because the centerline of the transmission corridor may shift +/- 250 feet, and the mapped proposed centerline only slightly overlaps one edge of the security block. The effect may not be noticeable given the location and limited overlap.

Non-motorized use of the construction access roads may also reduce the effectiveness of elk security habitat, but again this would only occur along one edge of the security block rather than bisecting it. Non-motorized access would not be expected to greatly degrade effectiveness of security habitat for this alternative. Forage would potentially be increased by the vegetation clearing along the edge of this security block.

Alternative E-R – West Fisher Creek Transmission Line Alternative

Resource Indicator 1

Alternative E-R does not cross any blocks of elk security, no changes in motorized access would impact elk security, and this alternative would therefore not result in effects to elk security. Consequently, this alternative would be consistent with FW-GDL-WL-10 because it would maintain existing levels of security.

Combined Mine-Transmission Line Alternatives

Resource Indicator 1

All of the mine alternatives are consistent with FW-GDL-WL-10 and slightly increase security within the Crazy PSU. Alternative E-R is consistent with FW-GDL-WL-10 because it does not impact security and maintains the existing level of security. Any combination of mine alternatives and E-R would be consistent with FW-GDL-WL-10.

Alternative D-R does not change the motorized access component of FW-GDL-WL-10 and only slightly crosses two small pieces of security along one edge of a security block. Given that the centerline of the transmission line may shift +/-250 feet there may or may not be any vegetation clearing along that edge of the security block. If there is an overlap it may slightly reduce effectiveness in those small overlapped portions of that block, but the effect may not be noticeable given the location along one edge and the limited overlap. Any combination of mine alternative with D-R may slightly alter effectiveness along one edge of one security block.

Alternative C-R would not change the motorized access component of FW-GDL-WL-10. There is a large overlap with a large security block where there may be vegetation clearing that bisects that block. This may reduce the effectiveness of the security habitat near that clearing, although it may increase the amount of forage and help retain elk within the block. Any combination of mine alternative and C-R would have an impact on the integrity of one large security block due to the vegetation removal for the transmission line.

Alternative B would have the largest impact on security habitat due to motorized public access during the hunting season on the roads used to access the transmission line during construction. The clearing of vegetation would be along a similar path as Alternative C-R but the impacts on the integrity of the security block may be greater due to the motorized access by the public on the roads used to construct the transmission line. Any mine alternative combined the B would have the greatest impact on security habitat and would not be consistent with FW-GDL-WL-10 due to the public having motorized access during the hunting season on the roads used to construct the transmission line.

Cumulative Effects

Spatial and Temporal Context for Effects Analysis

The planning subunits that overlap the alternatives where security may be impacted were used as the analysis area. Project effects that potentially changed elk security were within the Crazy and Silverfish PSUs and did not impact security habitat in other PSUs. The timeframe for considering effects was the life of the mine project.

Past, Present, and Reasonably Foreseeable Activities Relevant to Cumulative Effects Analysis

Past impacts to elk security are incorporated into the existing condition discussion as they determine the current location and amount of elk security habitat. Past road construction and road closures on NFS lands and other ownerships determined the amount of security habitat available currently. Past fire suppression has led to a reduction in openings and early seral stage stands on NFS lands and consequently reduced the amount of forage compared to what would have been present historically under natural disturbance processes. The amount of hiding cover may be artificially high as a consequence of fire suppression. Past vegetation management and fires

contributed openings (forage) and reduced cover within these PSUs, but the amount of cover remains high.

Several Montanore alternatives would slightly increase security and contribute toward providing security in these PSUs. Alternative B would have the greatest adverse impact on security habitat and would have the greatest cumulative effect when combined with other cumulative actions. Road construction/reconstruction resulting from vegetation management and other activities on NFS lands that may occur within these PSUs may alter the location of elk security. FW-GDL-WL-10 states that security habitat should be maintained or increased, so as long as these other activities are consistent with that direction then security habitat would be provided for elk within these PSUs. Generally, barriered/gated roads used for vegetation management activities on NFS lands, or newly constructed roads, are not made available for public motorized use for a variety of reasons. Additionally, road closures are common within grizzly bear management units (BMUs) and bears outside recover zone polygons (BORZ) in order to maintain existing access levels or improve security for bears. This often results in increased security, or maintained security, for other species such as elk.

Road access on other ownerships would potentially limit security habitat for elk on those lands, but those acres are not included in FW-GDL-WL-10. However, access changes near the border with NFS lands may impact security habitat on NFS lands.

Regulatory Framework

National Forest Management Act

Elk was identified under the 2015 Forest Plan as a MIS for elk security to comply with the 1982 Planning Rule for the National Forest Management Act (NFMA). USDA Forest Service 2013c, 2014a, and Anderson 2014 identify elk as a MIS under the 2015 Forest Plan, and Chapter 5 in the 2015 Forest Plan (USDA 2015a) and the 2015 KNF Monitoring Guide (USDA 2015b) describe the Forest Plan level monitoring related to elk security levels across all planning subunits on the KNF.

2015 Kootenai Forest Plan

As stated earlier in this section, the 2015 Forest Plan contains FW-GDL-WL-10 and FW-OBJ-WL-02 that provide direction regarding elk security on the KNF. A definition of elk security is included in the glossary of the 2015 Forest Plan.

All mine alternatives are consistent with FW-GDL-WL-10 and slighting increase security habitat within the Crazy PSU. This slight increase would move the Crazy PSU closer to the 30% security threshold and potentially contributing eventually to FW-OBJ-WL-02. Alternative E-R is consistent with FW-GDL-WL-10 because it doesn't impact elk security and therefore maintains the existing levels of elk security. Alternatives C-R and D-R do not change motorized access for the public during the general elk hunting season and are therefore consistent with that component of FW-GDL-WL-10. The vegetation clearing in those alternatives may impact the effectiveness of elk security. In the case of D-R the potentially overlap of vegetation clearing and security habitat is small, perhaps even non-existent once the final location on the ground of the transmission line is determined. Alternative C-R bisects a large block of security. The vegetation clearing would contribute needed forage habitat, but non-motorized access may impact the integrity of the security area along the transmission line. Alternative B is not consistent with FW-GDL-WL-10 because the public may have motorized access to the roads used for construction of

the transmission line and consequently reduce elk security until those roads are gated or barriered after construction.

Summary

The mine alternatives maintain/increase elk security and are consistent with FW-GDL-WL-10. The transmission line alternatives have varied effects on elk security, ranging from no impacts, slight impacts, to decreased elk security during construction due to public motorized access during the general elk hunting season on the roads used for construction of the line.

3.25.3.3 Big Game (Elk/Deer) Habitat

Introduction

This analysis replaces the elk and white-tailed deer sections in the Montanore Final Environmental Impact Statement (FEIS). A separate elk security Management Indicator Species (MIS) analysis also replaces part of the elk section from the FEIS. Separate sections for mountain goat and moose are contained within the FEIS.

The Montanore alternatives would impact big game habitat, particularly cover/forage and winter range. The 2015 Forest Plan for the Kootenai National Forest (KNF) (USDA 2015a) provides direction for management activities that may impact big game habitat. The following analysis documents the effects of the Montanore alternatives on big game habitat.

The Montanore FEIS analyzes the effects of using the Bear Creek Road as the main access road from US 2 to the Libby Plant Site and Libby Adit Site. The Bear Creek Road reconstruction would not affect deer or elk winter range. One of the Terms and Conditions from the Biological Opinion from USFWS (USDI 2014a) for the Montanore project was the use of the Libby Creek road rather than the Bear Creek road for access to the mine. This analysis considers the effects of that Term and Condition.

Regulatory Framework

The 2015 Forest Plan contains the following direction related to big game habitats that may be relevant for the Montanore project.

FW-DC-WL-08. Habitat for native ungulates is available and well-distributed across the landscape to provide prey for carnivores.

FW-DC-WL-16. Habitat for native ungulates (elk, deer, moose, bighorn sheep, and mountain goat) is managed in coordination with state agencies. Cover and forage are managed according to FW-DC-VEG-01, FW-DC-VEG-02, FW-DC-VEG-04, FW-DC-VEG-05, and FW-DC-VEG-11.

FW-DC-WL-17. Forest management contributes to wildlife movement within and between national forest parcels. Movement between those parcels separated by other ownerships is facilitated by management of the NFS portions of linkage areas identified through interagency coordination. Federal ownership is consolidated at these approach areas to highway and road crossings to facilitate wildlife movement.

FW-DC-WL-19. By trending toward the desired conditions for vegetation, habitat is provided for native fauna adapted to open forests and early seral habitats, or whose life/natural history and ecology are partially provided by those habitats.

FW-GDL-WL-08. Big Game. Management activities should avoid or minimize disturbance to native ungulates on winter range between December 1 and April 30, with exception of routes identified on MVUM as open to motor vehicle use. Management activities that occur on winter range during the winter period should concentrate activities to reduce impacts to native ungulates.

FW-GDL-WL-09. Big Game. Management activities should be avoided on native ungulate winter range areas during the critical mid-winter period (January and February) when snow depths most likely influence movement and availability of forage.

FW-GDL-WL-11. Big Game. Management activities should avoid or minimize disturbance to native ungulates during the birthing/parturition period.

FW-GDL-WL-12. Connectivity. During construction or reconstruction of highways that cross national forest lands, or high use forest roads, wildlife crossing features should be included in the design where necessary to contribute to connectivity of wildlife populations.

FW-GDL-WL-13. Connectivity. Management activities within on-quarter mile of existing crossing features, and future crossing features developed through interagency coordination, should not prevent wildlife from using the crossing features. The vegetative and structural components of connectivity, including snags and downed wood, should be managed according to the desired conditions for vegetation.

FW-GDL-WL-14. Connectivity. In wildlife linkage areas identified through interagency coordination, federal ownership should be maintained.

GA-DC-WL-FSH-01. NFS lands, in particular those lands in the Miller Creek, Fritz Mountain, Calx Mountain, and Syrup Redemption areas, provide for wildlife movement between the larger blocks of forested lands in these areas and for movement between the Cabinet Yaak and Northern Continental Divide ecosystems. This includes movement for big game between the Cabinet Mountains and Fisher River. Wildlife also move between the Fisher River, Wolf Creek, and areas east of Koocanusa Reservoir, the Blue Mountain vicinity north of the Kootenai River, and north-south through the Cabinet Mountains.

GA-DC-WL-FSH-02. Habitat conditions for elk and mule deer are retained or enhanced in areas of intermixed ownership.

GA-DC-WL-FSH-03. Forage quality and quantity are improved on big game winter range as a result of restoration activities, such as reduction of noxious weeds.

GA-DC-WL-LIB-04. Wildlife move between the Cabinet Mountains and the Fisher River, as well as north-south through the Cabinet Mountains.

Note that the 2015 Forest Plan contains direction on elk security habitat, but that analysis is contained in a separate elk analysis as a Management Indicator Species (MIS) for elk security.

Resource Indicators and Measures

The table below describes the indicators and measures tied to big game habitat for this analysis.

Table 1. Resource Indicators and Measures for Assessing Effects.

Resource Element	Resource Indicator	Measure	Source
Cover/forage	Amount of cover relative to forage	Cover/forage percentages	FW-DC-WL-16 FW-DC-WL-19
Winter range	Management activities on winter range that may impact big game	Overlap of activities and winter range	FW-GDL-WL-08 FW-GDL-WL-09
Special habitats	Management activities in special habitats such as birth/parturition areas and wallows	Acres of activities in birthing/parturition areas and wallows	FW-GDL-WL-11
Connectivity	Management activities in connectivity areas	Overlap of activities and connectivity areas	FW-DC-WL-17 FW-GDL-WL-12 FW-GDL-WL-13 FW-GDL-WL-14 GA-DC-WL-FSH-01 GA-DC-WL-LIB-04

Methodology

The following methodology is used to analyze effects.

- The effects to cover/forage are assessed based on the percentage of cover and forage as a result of project activities.
- The effects on winter range are assessed based on the overlap of project activities with winter range.
- The effects on special habitats are assessed based on the acres of project activities within special habitats.
- The effects on connectivity are assessed based on overlap of project activities with connectivity areas.

Information Sources

Cover/forage information is based on vegetation GIS layers available from the KNF and the overlap with project activities that would reduce cover or increase forage.

Winter range GIS layers used for the 2015 Forest Plan analysis will be used to determine overlap between winter range and project activities. The winter range layers are a compilation of winter range data available from the State and KNF information.

The location of special habitats (e.g. calving areas, wallows) is based on KNF and/or State information.

Connectivity habitat is based on KNF and/or State information and the overlap with project activities.

Affected Environment

Existing Condition

Resource Indicator 1

The current amount of cover is generally high across the KNF, which is reflected in the desire to create more open stands and openings in FW-DC-VEG-04, FW-DC-VEG-05, and FW-DC-WL-19 in the 2015 Forest Plan. Natural disturbance processes across the forest would have historically created and maintained openings (i.e. forage). The FEIS for the Forest Plan (p. 361-363 in USDA 2013c) described how the amount of cover is artificially high due to fire suppression and that the direction in the 2015 Forest Plan (USDA 2015b) would increase the amount of forage and reduce cover to levels nearer to those found historically under natural disturbance processes (i.e. conditions that native ungulates on the KNF would have evolved with). The FEIS for the Forest Plan (p. 101 in USDA 2013c) also described how the amount of seedling/sapling size class (recent openings and therefore forage for big game) is expected to decrease over time due to the limited amount of active vegetation management and the few acres expected to burn on the Forest. This may eventually push the acreage in this seedling/sapling size class down to the lower edge of the historic range of variation, and potentially below that threshold. This illustrates the need to maintain and create as much forage (openings) as possible to keep the amount within or near what would have been expected under natural disturbance processes.

Within the Crazy PSU cover is approximately 82-96% and forage at 4-18%. Within the Silverfish PSU cover is approximately 97-99% and forage 1-3%.

Resource Indicator 2

Winter range for elk, white-tailed deer, and mule deer is found within all the PSUs overlapped by this project. Most of this habitat is at the lower elevations within the PSUs nearer to US 2.

Resource Indicator 3

Wallows, found near springs and other wet areas, are important habitat features for elk. See the Wetlands and Other Waters of the U.S. section in the FEIS for more information regarding the extent of wetlands and effects of the alternatives.

No known concentrated fawning/calving sites lie within the analysis area, although these activities likely occur.

Resource Indicator 4

Potential connectivity areas (movement areas) for big game were determined to be ridgetops (3rd order or larger drainages) or drainages. As discussed in the cover/forage portion of this analysis, the amount of cover is high compared to openings (forage) and therefore openings are not considered limiting for big game movement through these PSUs.

Elk and deer cross US 2 in the vicinity of Raven and Brulee Creeks in the McElk PSU (moving between Barren/Teeters Peaks and Kenelty/Fritz Mountains) as they move between summer and winter ranges. This area is near the boundary of the McElk PSU and Silverfish PSUs, with a portion of the Riverside PSU as well. Much of the land near US 2 in this vicinity is either corporate or private ownership.

Environmental Consequences

Mine Alternatives

Alternative 1 – No Mine

Resource Indicator 1

There would be no changes to cover/forage under this alternative. Within the Crazy PSU cover would remain at approximately 82-96% and forage at 4-18%.

Resource Indicator 2

There would be no impacts to winter range under this alternative.

Resource Indicator 3

There would be no impacts to wallows or wetlands under this alternative, or to birthing/parturition areas.

Resource Indicator 4

There would be no impacts to connectivity (movement areas) under this alternative.

Alternative 2 – MMC's Proposed Mine

Resource Indicator 1

Mine facilities would reduce cover but would not necessarily contribute to forage until after mining operations and reclamation has occurred. Within the Crazy PSU cover would change to approximately 82-92% and forage to 8-18%.

Resource Indicator 2

None of the facilities for Alternative 2 overlap with the State's winter range GIS layers for elk and deer. Habitat would be removed or altered at the tailings impoundment and land application disposal (LAD) sites, but none of these areas are mapped as winter range for elk or deer. Because of the location of the mining facilities outside of elk and deer winter range, effects due to human disturbance during winter are not anticipated. The Libby Creek road, which is open to motorized use on the Motor Vehicle Use Map (MVUM), passes through or adjacent to winter range for deer and elk. Increased use on this road may add additional impacts to wintering elk and deer in this vicinity and potentially cause them to decrease use near the road.

Resource Indicator 3

In the Crazy PSU there would be approximately 39 acres of wetlands (potential wallows) impacted, with an additional 3 acres or more potentially impacted by the pumpback well system. See the Wetlands and other Waters of the U.S. section in the FEIS for information regarding wetland impacts and mitigation.

No known concentrated fawning/calving sites occur within the analysis area, although project activities associated with Alternative 2 may remove habitat that could be used for these activities. Human disturbance around the mine facilities may also reduce big game use in the immediate vicinity. Much of the PSUs in the analysis area would not be impacted by project activities and would remain available for fawning and calving.

Resource Indicator 4

Alternative 2 may impact potential big game connectivity in the Little Cherry, Poorman, and Ramsey creek drainages where the tailings impoundment, plant site, and LAD Areas would be constructed, and where other mine-related activities would occur. Facilities associated with Alternative 2 would not occur on ridgetops and would not likely directly interfere with big game connectivity in these areas. Individual animals may have to adjust their localized movement patterns, but no connectivity barriers would be created by Alternative 2. Use of the Libby Creek road to access the mine is within or adjacent to winter range for deer and elk, but it is not expected that the increased traffic on the road would create a barrier to movement.

Alternative 3 – Agency Mitigated Poorman Impoundment Alternative

Resource Indicator 1

Similar to Alternative 2, Alternative 3 mine facilities would reduce cover but would not necessarily contribute to forage until after mining operations and reclamation has occurred. Within the Crazy PSU cover would change to approximately 82-93% and forage to 7-18%.

Resource Indicator 2

The effects on winter range would be similar to Alternative 2. The same road (Libby Creek road) would be used for access due to the Terms and Conditions in the Biological Opinion from USFWS (USDI 2014).

Resource Indicator 3

In the Crazy PSU there would be approximately 13 acres of wetlands (potential wallows) impacted, with an additional 16 acres or more potentially impacted by the pumpback well system. See the Wetlands and other Waters of the U.S. section in the FEIS for information regarding wetland mitigation.

No known concentrated fawning/calving sites occur within the analysis area, although project activities associated with Alternative 3 may remove habitat that could be used for these activities. Human disturbance around the mine facilities may also reduce big game use in the immediate vicinity. Much of the PSUs in the analysis area would not be impacted by project activities and would remain available for fawning and calving.

Resource Indicator 4

Alternative 3 may impact potential big game connectivity in the Little Cherry, Poorman, and Libby creek drainages where the tailings impoundment and plant site would be constructed, and where other mine-related activities would occur. Alternative 3 would impact fewer riparian corridors than Alternative 2 because disturbance from the plant and adits would be concentrated in the Libby Creek drainage. Also, the Alternative 3 impoundment would occupy less of the Little Cherry Creek riparian corridor than the Alternative 2 impoundment. Facilities associated with Alternative 3 would not occur on ridgetops and would not directly interfere with big game connectivity in these areas. Individual animals may have to adjust their localized movement patterns, but no connectivity barriers would be created by Alternative 3.

Alternative 4 – Agency Mitigated Little Cherry Creek Impoundment Alternative

Resource Indicator 1

Similar to other alternatives, Alternative 4 mine facilities would reduce cover but would not necessarily contribute to forage until after mining operations and reclamation has occurred. Within the Crazy PSU cover would change to approximately 82-93% and forage to 7-18%.

Resource Indicator 2

The effects on winter range would be similar to Alternative 3 with the same access road (Libby Creek road) being used due to the Terms and Conditions in the Biological Opinion from USFWS (USDI 2014).

Resource Indicator 3

In the Crazy PSU there would be approximately 43 acres of wetlands (potential wallows) impacted. See the Wetlands and other Waters of the U.S. section in the FEIS for information regarding wetland mitigation.

No known concentrated fawning/calving sites occur within the analysis area, although project activities associated with Alternative 4 may remove habitat that could be used for these activities. Human disturbance around the mine facilities may also reduce big game use in the immediate vicinity. Much of the PSUs in the analysis area would not be impacted by project activities and would remain available for fawning and calving.

Resource Indicator 4

Impacts to big game connectivity from Alternative 4 would be similar to Alternative 3.

Transmission Line Alternatives

Alternative A – No Transmission Line

Resource Indicator 1

This alternative would not change the amount of cover/forage within the PSUs. Within the Crazy PSU cover would remain at approximately 82-96% and forage at 4-18%. Within the Silverfish PSU cover would remain approximately 97-99% and forage 1-3%.

Resource Indicator 2

There would be no impacts to winter range under this alternative.

Resource Indicator 3

There would be no impacts to wetlands and potential wallows under this alternative, or impacts to birthing/parturition areas.

Resource Indicator 4

There would be no impact to connectivity (movement areas) under this alternative.

Alternative B – MMC’s Proposed Transmission Line (North Miller Creek Alternative)

Resource Indicator 1

Alternative B would remove vegetation along the transmission line corridor and consequently reduce cover and increase forage. Most of the change would occur within the Silverfish PSU. Within the Crazy PSU cover would remain at approximately 82-96% and forage at 4-18%. Within the Silverfish PSU cover would change to approximately 96-99% and forage to 1-4%.

Resource Indicator 2

The eastern extent of the transmission line in Alternative B overlaps winter range (elk, white-tailed deer, and mule deer). Construction would not occur during the winter on winter range and therefore the impacts during that timeframe would be avoided. After construction there would be relatively little mine related activity along the transmission line and therefore few effects would be anticipated to wintering big game.

Resource Indicator 3

Approximately 4 acres of wetlands (potential wallow site) would be impacted by Alternative B. The wetlands would still remain, but the vegetation near the wetlands may be cleared for the transmission line and thereby change potential elk use of these sites.

No known concentrated fawning/calving sites occur within the analysis area, although project activities associated with Alternative B may remove habitat that could be used for these activities. Human disturbance around the transmission line may also reduce big game use in the immediate vicinity. Much of the PSUs in the analysis area would not be impacted by project activities and would remain available for fawning and calving.

Resource Indicator 4

Potential big game connectivity in the Crazy PSU may be affected where the Alternative B transmission line traversed or crossed the Howard, Libby, and Ramsey creek drainages. Alternative B may also impact big game connectivity in the Crazy PSU where it followed the ridge between Midas Creek and Howard Creek. Big game may temporarily avoid using these areas during transmission line construction due to increased noise and the presence of humans and machinery, but these effects would be short-term, and would be minimized through construction timing restrictions. The width of clearing area would not likely be great enough to affect big game movement in this area after the construction phase because some cover would remain and the width of the clearing area is not large. Individual animals may have to adjust their localized movement patterns in the short term, but no barriers to connectivity would likely be created by Alternative B.

Alternative B would potentially impact big game connectivity in the Silverfish PSU where it followed the ridges between Midas Creek and Howard Creek, and Midas Creek and the unnamed tributary to Miller Creek. Big game may potentially use these areas less compared to existing conditions during transmission line construction due to increased noise from helicopters and machinery and the presence of humans, but these effects would be short-term. The width of clearing area would not likely be great enough to effect big game movement in this area after the construction phase because cover would remain and the width of the clearing area is not large.

The eastern segment of the Alternative B transmission line alignment would occur within the connectivity area of US 2 in the Fisher River valley described in the existing condition section.

The proximity of this alignment to US 2 would result in a widening of disturbed area and could potentially impact big game movement by decreasing cover (primarily corporate/private lands in Silverfish, Riverview and McElk PSUs). Transmission line construction activities may potentially cause big game to change their movement patterns within this area, but these effects would be short-term because human-caused disturbance directly related to the project would decrease when the transmission line construction were completed. Once revegetated, cleared areas could provide additional forage habitat. Some shrub and tree cover would be maintained in the transmission line right-of-way because only the largest trees would be removed, and remaining vegetation would continue to provide cover. Given that most of the connectivity area potentially affected by Alternative B is generally heavily roaded and has been logged in the past 20 to 30 years (mainly corporate/private lands), and because of the short-term nature of human-caused disturbance, it is not likely that big game movement within the connectivity area would be greatly affected by Alternative B.

Alternative C-R – Modified North Miller Creek Transmission Line Alternative

Resource Indicator 1

Alternative C-R would also remove vegetation along the transmission line corridor and consequently reduce cover and increase forage. Most of the change would occur within the Silverfish PSU. Within the Crazy PSU cover would remain at approximately 82-96% and forage at 4-18%. Within the Silverfish PSU cover would change to approximately 96-99% and forage to 1-4%.

Resource Indicator 2

Similar to Alternative B, the eastern extent of Alternative C-R overlaps winter range (elk, white-tailed deer, and mule deer). Construction would not occur during the winter on winter range and therefore the impacts during that timeframe would be avoided. After construction there would be relatively little mine related activity along the transmission line and therefore few effects would be anticipated to wintering big game.

Resource Indicator 3

Approximately 2 acres of wetlands (potential wallow site) would be within the clearing area of Alternative C-R. The wetlands would still remain, but the vegetation near the wetlands may be cleared for the transmission line and thereby change potential elk use of these sites.

No known concentrated fawning/calving sites occur within the analysis area, although project activities associated with Alternative C-R may remove habitat that could be used for these activities. Human disturbance around the transmission line may also reduce big game use in the immediate vicinity. Much of the PSUs in the analysis area would not be impacted by project activities and would remain available for fawning and calving.

Resource Indicator 4

In the Crazy PSU, impacts from Alternative C-R on connectivity would be similar to Alternative B.

Alternative C-R may impact big game connectivity in the Silverfish PSU where it would follow the ridges between Midas Creek and Howard Creek, Midas Creek and the unnamed tributary to Miller Creek, and Miller Creek and West Fisher Creek and the east-facing ridge north of the Sedlak Park Substation. Big game may potentially use these areas less during transmission line

construction due to increased noise from helicopters and machinery and the presence of humans, but these effects would be short-term. The width of clearing area would not likely be great enough to affect big game connectivity in this area after the construction phase because some cover would remain and the width of the clearing area is not large.

A relatively small segment of the Alternative C-R transmission line would cross the Fisher River valley in the wildlife connectivity area near US 2 (as described in the existing condition), potentially impacting big game movement in a localized area due to transmission line construction activities. These effects would be short-term because human-caused disturbance directly related to Alternative C-R would decrease when the transmission line construction was completed. Given that the area of the connectivity area potentially affected by Alternative C-R is generally heavily roaded and has been logged in the past 20 to 30 years (mainly corporate/private lands), and because of the short-term nature of human-caused disturbance, it is not likely that this alternative would greatly affect big game movement within the connectivity area

Alternative D-R – Miller Creek Transmission Line Alternative

Resource Indicator 1

Alternative D-R would also remove vegetation along the transmission line corridor and consequently reduce cover and increase forage. Most of the change would occur within the Silverfish PSU. Within the Crazy PSU cover would remain at approximately 82–96% and forage at 4–18%. Within the Silverfish PSU cover would change to approximately 96–99% and forage to 1–4%.

Resource Indicator 2

Similar to other alternatives, the eastern extent of Alternative D-R overlaps winter range (elk, white-tailed deer, and mule deer). Construction would not occur during the winter on winter range and therefore the impacts during that timeframe would be avoided. After construction there would be relatively little mine related activity along the transmission line and therefore few effects would be anticipated to wintering big game.

Resource Indicator 3

Approximately 2 acres of wetlands (potential wallow site) would be within the clearing area of Alternative D-R, the same as Alternative C-R. The wetlands would still remain, but the vegetation near the wetlands may be cleared for the transmission line and thereby change potential elk use of these sites.

No known concentrated fawning/calving sites occur within the analysis area, although project activities associated with Alternative D-R may remove habitat that could be used for these activities. Human disturbance around the transmission line may also reduce big game use in the immediate vicinity. Much of the PSUs in the analysis area would not be impacted by project activities and would remain available for fawning and calving.

Resource Indicator 4

In the Crazy PSU, Alternative D-R impacts to connectivity would be similar to Alternatives B and C-R.

Like Alternative C-R, Alternative D-R may potentially impact big game connectivity in the Silverfish PSU where it followed the east-facing ridge north of the Sedlak Park Substation and crosses the ridges between Miller Creek and West Fisher Creek, and Miller Creek and Howard

Creek. Big game connectivity may potentially be impacted in these areas during transmission line construction due to increased noise from helicopters and machinery and the presence of humans, but these effects would be short-term. The width of clearing area would not likely be great enough to affect big game connectivity in this area after the construction phase because some cover would remain and the width of the clearing area is not large.

Potential effects of Alternative D-R on big game connectivity in the area around US 2 described earlier would be the same as Alternative C-R.

Alternative E-R – West Fisher Creek Transmission Line Alternative

Resource Indicator 1

Alternative E-R would also remove vegetation along the transmission line corridor and consequently reduce cover and increase forage. Most of the change would occur within the Silverfish PSU. Within the Crazy PSU cover would remain at approximately 82-96% and forage at 4-18%. Within the Silverfish PSU cover would change to approximately 95-99% and forage to 1-5%.

Resource Indicator 2

Similar to other alternatives, the eastern extent of Alternative E-R overlaps winter range (elk, white-tailed deer, and mule deer). Construction would not occur during the winter on winter range and therefore the impacts during that timeframe would be avoided. After construction there would be relatively little mine related activity along the transmission line and therefore few effects would be anticipated to wintering big game.

Resource Indicator 3

Approximately 2 acres of wetlands (potential wallow site) would be within the clearing area of Alternative E-R, the same as Alternatives C-R and D-R. The wetlands would still remain, but the vegetation near the wetlands may be cleared for the transmission line and thereby change potential elk use of these sites.

No known concentrated fawning/calving sites occur within the analysis area, although project activities associated with Alternative E-R may remove habitat that could be used for these activities. Human disturbance around the transmission line may also reduce big game use in the immediate vicinity. Much of the PSUs in the analysis area would not be impacted by project activities and would remain available for fawning and calving.

Resource Indicator 4

In the Crazy PSU, Alternative E-R would potentially impact connectivity in the Howard and Libby Creek drainages but would otherwise be similar to the other transmission line alternatives.

Alternative E-R may potentially impact big game connectivity in the Silverfish PSU where it followed the east-facing ridge north of the Sedlak Park Substation and crossed the ridge between West Fisher and Howard creeks. Big game connectivity may be impacted in these areas during transmission line construction due to increased noise from helicopters and machinery and the presence of humans, but these effects would be short-term. The width of clearing area would not likely be great enough to affect big game connectivity in this area after the construction phase because some cover would remain and the width of the clearing area is not large.

Potential effects of Alternative E-R on big game connectivity in the US 2 area described earlier would be the same as Alternatives C-R and D-R.

Combined Mine-Transmission Line Alternatives

Resource Indicator 1

The combined alternatives would only overlap in effects for cover/forage in the Crazy PSU. The combined result would still drop the upper end of the percentage range for cover slightly and raise the lower end of the range for forage slightly compared to individual alternatives. Overall, the result is still abundant cover and limited forage within the Crazy and Silverfish PSUs.

Resource Indicator 2

Due to the timing restriction in the mine and transmission line alternatives during the winter for construction activities, impacts on wintering big game during the construction phase would be avoided. Activities during the operation phase would mainly impact wintering big game in the Crazy PSU due to the Libby Creek road passing through or adjacent to winter range for elk and deer. Effects would be similar among the alternative combinations because the Libby Creek road is the route set in the Terms and Conditions from the Biological Opinion from USFWS (USDI 2014).

Resource Indicator 3

The mine alternatives have a greater impact on wetlands (potential wallows) compared to the transmission line alternatives. There is not much difference in effects among the transmission line alternatives. Alternatives 2 and 4 would have more impacts on wetlands than Alternative 3 and therefore any combination with those two alternatives and a transmission line alternative would have greater impacts compared to Alternative 3 combinations.

Resource Indicator 4

All of the mine and transmission line alternatives potentially impact big game connectivity at least temporarily during construction activities, although none of them were identified as creating a barrier to movement.

Cumulative Effects

Spatial and Temporal Context for Effects Analysis

The planning subunits that overlap the alternatives where big game may be impacted were used as the analysis area. The timeframe for considering effects was the life of the mine project.

Past, Present, and Reasonably Foreseeable Activities Relevant to Cumulative Effects Analysis

Resource Indicator 1

Past impacts to cover and forage are incorporated into the existing condition discussion as they determine the current amount of cover and forage. Past fire suppression has had the largest impact on the amount of cover and forage. In many areas of the KNF the amount of cover is artificially high compared to what would have been present under natural disturbance processes. On other land ownerships, particularly corporate and private lands, the amount of forage may be greater than on NFS lands. It is expected that vegetation management on NFS lands that create more forage and move vegetative conditions nearer to the Desired Conditions in the 2015 Forest Plan

will provide the amounts of cover and forage and the pattern similar to what big game would have found on the KNF historically under natural disturbance processes. Although Montanore is not a vegetation management project, it would contribute toward increasing forage, especially along the clearing for the transmission line. Mine facilities that are reclaimed and revegetated would eventually contribute forage as well.

Resource Indicator 2

Past impacts to winter range include the conversion of winter range to subdivisions and residences on private lands, as well as road construction on all land ownerships. Fire suppression and past vegetation management has also altered the amount of cover and forage available for wintering big game on all land ownerships. As discussed under Resource Indicator 1, NFS lands may be providing less forage than big game would have found historically under natural disturbance processes. Human presence on winter range on all land ownerships may contribute toward shifting big game use away from those areas immediately adjacent to the human disturbance, at least temporarily. The Montanore alternatives contain timing restrictions on construction during the winter that would minimize or avoid impacts to wintering big game, particularly along the transmission line. Operation of the mine during the winter may contribute human disturbance that may cause wintering big game to avoid the areas immediately adjacent to the Libby Creek road (access route).

Resource Indicator 3

Past activities on all land ownerships may have impacted special habitat features such as wallows and birthing/parturition areas. The amount of wetlands impacted by the Montanore alternatives is relatively small compared to the overall size of the PSUs in the analysis area. However, those acres impacted have the potential to provide wallows and would be lost or their use by big game potentially diminished under these alternatives. Wetland mitigation would potentially offset these losses. On other land ownerships, particularly private lands, big game use of potential wallows may have been impacted due to loss of wetlands or simply due to human presence that may discourage big game use.

No concentrated areas of birthing/parturition have been identified in these PSUs. However, these activities may occur throughout the PSUs and the mine/transmission line alternatives may impact some individuals and cause them to use other sites. Given the size of the PSUs and the availability of habitat elsewhere, the potential effects on birthing/parturition activities for big game is expected to be minimal. Development of private lands may have caused the loss of potential birthing/parturition sites for the similar reasons described above for impacts to wallows. Also, vegetation management and fire suppression may have altered habitat and changed the specific location of birthing/parturition within the PSUs over time.

Resource Indicator 4

Likely the biggest impact on connectivity for big game has occurred on private lands as those lands were subdivided and developed over time. This is particularly true near US 2 where the private land is concentrated and most of the development has occurred. Vegetation management on all land ownerships may have changed the pattern of cover/forage and therefore potentially impacted connectivity in some locations. Fire suppression, particularly on NFS lands, likely has increased the amount of cover compared to what would have been present under natural disturbance processes. Road construction on all land ownerships also may have impacted big game connectivity, particularly those roads that receive greater human use. The Montanore alternatives may have limited impacts on connectivity, but these are not anticipated to rise to the

level of becoming a barrier to movement. The transmission line, for example, is not likely to have much human presence after construction is completed. The access roads for the mine would see an increase in traffic, but no locations along those roads is expected to become a barrier to movement for big game.

Regulatory Framework

National Forest Management Act

The National Forest Management Act (NFMA) directs the Forest Service to “provide for diversity of plant and animal communities based on the suitability and capability of the specific land area in order to meet overall multiple-use objectives.” The direction in the 2015 Forest Plan provides for the diversity of plants and animals across the KNF and was developed under the 1982 Planning Rule for NFMA.

Land and Resource Management Plan

As described earlier in this section, the 2015 Forest Plan contains direction related to cover/forage, winter range, special habitats (e.g. birthing/parturition), and connectivity.

Consistency with that direction is described below.

FW-DC-WL-08: The alternatives contribute in a minor way to progress toward this desired condition. The transmission line alternatives contribute toward the creation of forage for big game. The mine alternatives do so in a minor way as well, although it would not occur until after reclamation and revegetation has occurred.

FW-DC-WL-16: All mine and transmission line alternatives utilized information provided by the State (e.g. winter range GIS layers). Although this is not a vegetation management project and not designed specifically to move vegetation toward the desired conditions in the 2015 Forest Plan, the transmission line alternatives do create and maintain openings that would provide forage for big game. Therefore this project contributes in a minor way to progress toward this desired condition.

FW-DC-WL-17: The mine and transmission line alternatives do not create barriers to movement and are neutral or do not hinder the long-term attainment of this desired condition.

FW-DC-WL-19: The mine alternatives are neutral to this desired condition or contribute to early seral habitats in the long-term after reclamation and revegetation is completed. The transmission line alternatives create openings and early seral habitats, which contributes to progress toward this desired condition.

FW-GDL-WL-08: Alternatives limit construction during the winter on winter range, and the routes used in winter range during the winter during operation of the mine are on the MVUM as open to motor vehicle use. Transmission line alternatives limit construction during the winter on winter range, and during operation very little activity would occur and would be concentrated along the transmission line. All alternatives are designed in accordance with this guideline.

FW-GDL-WL-09: Although access to the mine via the Libby Creek road would not avoid the mid-winter period (January and February) through winter range during the operation phase, the route is currently open to motorized use on the MVUM as allowed

under FW-GDL-WL-08. All alternatives would not allow construction activities (including reconstruction of the road) to occur on winter range during the winter. Therefore this project has been designed in accordance with this guideline.

FW-GDL-WL-11: No areas of concentrated use for birthing or parturition are known within these PSUs. Therefore, the project is designed in accordance with this guideline.

FW-GDL-WL-12: There are no sites along routes used for these alternatives where project activities are expected to create a connectivity or movement barrier. No crossing features are warranted for inclusion in the project design. Therefore, the project is designed in accordance with this guideline.

FW-GDL-WL-13: There are no existing crossing features or any crossing features under development. Therefore, the project is designed in accordance with this guideline. The locations where the transmission lines would be nearest to US 2 are not NFS lands.

FW-GDL-WL-14: Mitigation lands purchased and given to the KNF for management (see grizzly bear analysis) may contribute toward NFS lands near US 2 and consequently contribute toward connectivity. Therefore, the project is designed in accordance with this guideline.

GA-DC-WL-FSH-01: Depending on the location of the mitigation lands purchased, those lands may contribute toward this desired condition.

GA-DC-WL-FSH-02: Depending on the location of the mitigation lands purchased, those lands may contribute toward this desired condition.

GA-DC-WL-FSH-03: The transmission line alternatives may contribute toward increasing forage on winter range, but the purpose is not a “restoration activity.” Generally, the project is neutral to progress toward this desired condition.

GA-DC-WL-LIB-04: Depending on the location of the mitigation lands purchased, those lands may contribute to progress toward this desired condition.

Summary

The transmission line alternatives would create and contribute forage habitat. The mine alternatives would also contribute forage habitat after reclamation and revegetation. During construction and operations big game may be disturbed and would be less likely to use areas adjacent to human activities, at least temporarily while those activities were ongoing. None of the alternatives would create barriers to connectivity. Timing restrictions on construction during the winter on winter range would avoid/minimize impacts to wintering big game. The Libby Creek road used to access the mine facilities passes through or adjacent to elk and deer winter range and may decrease big game use near the road.

3.25.3.4 Mountain Goat

Page 1093: 3.25.3.4.1 Analysis Area and Methods

Disregard the first sentence. The mountain goat is not an MIS for the 2015 Forest Plan. However the analysis information is still relevant information for comparing effects of the alternatives in response to Issue 6.

Page 1102–1103: National Forest Management Act/Kootenai Forest Plan

Replace text under this heading with the following:

In all combined mine-transmission line alternatives, adequate amounts of mountain goat habitat would continue to be provided for mountain goats. The following discusses project consistency with the 2015 Forest Plan.

FW-DC-WL-08: Alternatives 2, 3, 4, and B would remove mountain goat habitat (summer and/or winter habitat) through construction of mine or transmission line facilities. Additionally, construction and operation of these facilities would potentially disturb and displace mountain goats in the vicinity and cause them to underutilize available habitat. The other transmission line alternatives may also displace mountain goats during the construction phase temporarily. However, forestwide, adequate amounts of mountain goat habitat would continue to be provided. Therefore the project has a minor, adverse impact to progress toward achieving this desired condition.

FW-DC-WL-16: All mine and transmission line alternatives utilized information provided by the State (e.g. winter range information). Therefore this project contributes toward this desired condition.

FW-DC-WL-17: The mine and transmission line alternatives do not create barriers to movement and are neutral toward this desired condition.

FW-GDL-WL-08: Alternatives limit construction during the winter on winter range. The impacts during the operation phase of the agencies' alternatives would be lessened by using monitoring. If mine disturbance were found to have a substantial impact on goat populations, MMC would develop, fund, and implement mitigation measures to reduce the impacts of mine disturbance. All alternatives are designed in accordance with this guideline.

FW-GDL-WL-09: Alternatives limit construction during the winter on winter range. The impacts during the operation phase of the agencies' alternatives would be lessened by using monitoring. If mine disturbance were found to have a substantial impact on goat populations, MMC would develop, fund, and implement mitigation measures to reduce the impacts of mine disturbance. All alternatives are designed in accordance with this guideline.

FW-GDL-WL-11: In the agencies' alternatives, impacts to mountain goat birthing/parturition areas would be minimized through timing restrictions during the construction phase (blasting) when disturbance is most likely. Therefore, the project is designed in accordance with this guideline.

FW-GDL-WL-12: There are no sites along routes used for these alternatives where project activities are expected to create a connectivity or movement barrier. No crossing features are warranted for inclusion in the project design. Therefore, the project is designed in accordance with this guideline.

FW-GDL-WL-13: There are no existing crossing features or any crossing features under development. Therefore, the project is designed in accordance with this guideline.

FW-GDL-WL-14: No wildlife linkage areas have been identified for mountain goats in the analysis area and connectivity would not be impacted. Therefore, the project is designed in accordance with this guideline.

GA-DC-WL-LIB-04: The alternatives are not expected to impact mountain goat connectivity north-south through the Cabinet Mountains. Therefore this project is neutral to progress toward achieving this desired condition.

Page 1103: Forest Service Management Indicator Species Statement of Findings

Disregard reference to MIS in this heading. Change to:

Mountain Goat Statement of Findings

3.25.3.5 Pileated Woodpecker

Pages 1103–1116: All text

Although pileated woodpecker is not a MIS under the 2015 Forest Plan, the analysis information is still relevant information for comparing effects of the alternatives in response to Issue 6. Disregard references to the pileated as an MIS and references to designated, undesignated, and replacement old growth as described in section 3.22.2 Old Growth Ecosystems of this errata. In addition disregard 1987 Forest Plan direction description on pages 1114 through 1116. The 2012 ERG report for the 2013 Forest Plan FEIS and associated 2015 Errata to the FEIS (USDA Forest Service 2013c and 2015a) found the existing forestwide vegetation conditions and expected management under the 2015 Forest Plan provided for the pileated woodpecker viability (ERG 2012).

3.25.4 Forest Service Sensitive Species

Page 1117: Section 3.25.4.1 Regulatory Framework

Replace the last sentence in the second paragraph with the following:

The 2015 KFP includes two goals related to sensitive wildlife species including GOAL-WL-0: “The KNF manages “wildlife habitat through a variety of methods (e.g., vegetation alteration, prescribed burning, invasive species treatments, etc.) to promote the diversity of species and communities and to contribute toward the recovery of threatened and endangered terrestrial wildlife species.” And GOAL-WL-02: “The KNF manages and schedules activities to avoid or minimize disturbance to sensitive species and manages habitat to promote their perpetuation into the future.”

FW-GDL-WL-21 directs that “management activities on NFS lands should avoid/minimize disturbance at known active nesting or denning sites for other sensitive, threatened, or endangered species not covered under other forestwide guidelines. Use the best available information to set a timeframe and a distance buffer around active nests or dens. Individual animals that establish nests and den sites near areas of pre-existing human use, inconsistent with the timeframes and distances in the other forestwide wildlife guidelines or in the best available information, are assumed to be accepting of that existing higher level of human use at the time the animals established occupancy. In those instances, as long as the individual animals continue to use the site, the higher intensity, duration, and extent of disturbance could continue but would not be increased beyond the level existing at the time the animals established occupancy.”

3.25.4.2 Bald Eagle

Page 1125–1126: National Forest Management Act/Kootenai Forest Plan

Replace the text under this heading with the following:

Activity timing restrictions and snag retention described in section 3.25.2.2 Snags and Woody Debris of these errata and the FEIS meet the intent for following 2015 Forest Plan bald eagle guidelines:

FW-GDL-WL-02. Bald Eagle. Management activities should avoid or minimize impacts to bald eagles on known occupied nest sites and roost sites, including known winter communal night roost areas, with timing and distance buffers based on the best available information.

FW-GDL-WL-03. Bald Eagle. Management activities should not result in the loss of existing nest trees or established roost sites.

FW-GDL-WL-04. Bald Eagle. Management activities should maintain or enhance nest site habitat suitability within existing nest territories (refer to FW-DC-VEG-03, FW-DC-VEG-07, FW-STD-VEG-01, FW-GDL-VEG-01, FW-GDL-VEG-02, FW-GDL-VEG-04, FW-GDL-VEG-05, and FW-DC-WL-13

3.25.4.3 Black-backed Woodpecker

Page 1134–1135: National Forest Management Act/Kootenai Forest Plan

Replace the text in this section with the following:

As described in section 3.25.2.2 Snags and Woody Debris of these errata and the FEIS, all action alternatives would be consistent with KFP direction for snags and down wood. In all combined mine-transmission line alternatives, a wide range of successional habitats, and associated amounts of down wood would be available.

3.25.4.4 Coeur D'Alene Salamander

Page 1137: National Forest Management Act/Kootenai Forest Plan

Replace the text under this heading with the following:

Coeur d'Alene salamanders have not been documented in areas potentially affected by any of the mine or transmission line alternatives since 1990. The site above and below the Bear Creek Road (NFS road #278) where they were documented prior to 1990 does not appear to provide sufficient canopy cover or other conditions to ensure moist conditions required by Coeur d'Alene salamanders. The agencies' alternatives would include implementation of several measures that would further reduce any effects on the Coeur d'Alene salamander, specifically: 1) implementation of a final Road Management Plan and a Vegetation Removal and Disposition Plan, 2) the use of either a chemical stabilization, groundwater, or segregated mine or adit water with nitrate concentrations of 1 mg/L or less and with concentrations of all other parameters below the mine drainage ELG to control dust on mine access roads, and 3) as described in section 3.23, *Wetlands and Other Waters of the U.S.*, compliance with INFS standards and guidelines for any work in a RHCA along an access road.

Compliance with INFISH, including RHCA standards and guidelines are discussed in detail in section 3.6 Aquatic Life and Fisheries.

3.25.4.5 Fisher

Page 1148: National Forest Management Act/Kootenai Forest Plan

Disregard the text regarding 1987 Forest Plan standards p.II-1#6 and #7 and p.II-22 and 23. Section 3.22.2 Old Growth Ecosystems and Section 3.26 Aquatic Life and Fisheries in these errata and the FEIS describe forest plan consistency with 2015 Forest Plan regarding old growth and riparian habitat components that benefit fisher.

Page 1148: Forest Service Sensitive Species Statement of Findings

Disregard the last full sentence on page 1148 of this section where it describes KPF direction for a 10 percent minimum. See section 3.22.2 Old Growth Ecosystems of these errata for description of 2015 Forest Plan old growth direction.

3.25.4.6 Flammulated Owl

Page 1155: National Forest Management Act/Kootenai Forest Plan

Replace the text with the following:

As described in section 3.25.2.2 Snags and Woody Debris of these errata and the FEIS, all action alternatives would be consistent with KFP direction for snags and down wood. In all combined mine-transmission line alternatives, a wide range of successional habitats, and associated amounts of down wood would be available.

Page 1155-1156: Forest Service Management Sensitive Species Statement of Findings

Disregard the number 7) on page 1156 of this section where it describes KPF direction for a 10 percent minimum. See section 3.22.2 Old Growth Ecosystems of these errata for description of 2015 Forest Plan old growth direction.

3.25.4.7 Gray Wolf

Page 1171: National Forest Management Act/Kootenai Forest Plan

Replace the text under this heading with the following:

The agencies' alternatives would include measures to minimize effects on wolves and big game prey species per FW-GDL-WL-21, FW-GDL-WL-09, 10, and 11 as described in these errata and the FEIS. All alternatives may affect individual wolves and their habitat within the analysis area, but would not contribute to a trend toward federal listing or cause a loss of viability to the population or species.

3.25.4.8 Harlequin Duck

Page 1175: National Forest Management Act/Kootenai Forest Plan

Replace the text under this heading with the following:

All action alternatives would have minor effect on streamflow in Rock Creek and East Fork Rock Creek during breeding season. All action alternatives would have no effect on vegetation in Rock Creek and East Fork Rock Creek during breeding season. Therefore, project activities meet the intent of FW-GDL-WL-19 where it directs “management activities should avoid or minimize disturbance near known active nesting and rearing areas based on the best available information” for the harlequin duck.

3.25.4.9 North American Wolverine

Page 1176: Section 3.25.4.9.1 Regulatory Framework

Replace the last two paragraphs of this section with the following:

The 2015 KFP includes two goals related to sensitive wildlife species including GOAL-WL-0: “The KNF manages “wildlife habitat through a variety of methods (e.g., vegetation alteration, prescribed burning, invasive species treatments, etc.) to promote the diversity of species and communities and to contribute toward the recovery of threatened and endangered terrestrial wildlife species.” And GOAL-WL-02: “The KNF manages and schedules activities to avoid or minimize disturbance to sensitive species and manages habitat to promote their perpetuation into the future.”

FW-GDL-WL-21 directs that “management activities on NFS lands should avoid/minimize disturbance at known active nesting or denning sites for other sensitive, threatened, or endangered species not covered under other forestwide guidelines. Use the best available information to set a timeframe and a distance buffer around active nests or dens. Individual animals that establish nests and den sites near areas of pre-existing human use, inconsistent with the timeframes and distances in the other forestwide wildlife guidelines or in the best available information, are assumed to be accepting of that existing higher level of human use at the time the animals established occupancy. In those instances, as long as the individual animals continue to use the site, the higher intensity, duration, and extent of disturbance could continue but would not be increased beyond the level existing at the time the animals established occupancy.”

Page 1190: National Forest Management Act/Kootenai Forest Plan

Replace the text under this heading with the following:

As discussed in the above analysis, wolverines are generalists that are not tied to a specific vegetation type. The footprint of some of the mine facilities (*e.g.*, adits, mine buildings, processing/mill site, impoundment) would remove vegetation and convert it to a nonvegetated condition during the life of the mine (well under one tenth of a percent of the Cabinet Mountains block of persistent spring snow overlaps project activities). The transmission line would generally convert forested types to open habitat conditions that may still provide foraging opportunities for a generalist such as a wolverine.

The analysis area has very little overlap with persistent spring snow areas, and there is a large patch of higher quality habitat (persistent spring snow in an average of at least 6 out of 7 years), as well as a large amount of low quality habitat (persistent spring snow in an average of 1-5 years out of 7) adjacent to the analysis area within the Cabinet Mountains that would not be impacted by the action alternatives and would provide habitat for wolverines. therefore the project is consistent with FW-GDL-WL-21.

3.25.4.10 Townsend's Big-Eared Bat

References in this full section regarding old growth ecosystems and section 3.25.3 Management Indicator Species have been corrected in these errata to describe 2015 Forest Plan management direction. Please see relevant erratum.

Page 1198: National Forest Management Act/Kootenai Forest Plan

Replace the text under this heading with the following:

None of the combined mine transmission line alternatives would affect key roosting habitat or potential hibernacula such as caves, mines, or buildings. Although timber harvest activities associated with the combined action alternatives would reduce potential summer roosting sites for the Townsend's big-eared bat, impacts would be small. Therefore, project activities are consistent with the intent of FW-GDL-WL-17 which guides management to "Avoid or minimize disturbance at known active roosts and hibernacula in caves, abandoned mines, or rock outcrops using the best available information" for Townsend's big-eared bat.

3.25.4.11 Western Toad

Page 1209: National Forest Management Act/Kootenai Forest Plan

Replace the text under this heading with the following:

Less than 1 percent of the high quality habitat available would be impacted by the mine and transmission line alternatives and minimal other potential habitat would be impacted. The agencies' alternatives would include implementation of several measures that would further reduce any effects on the western toad, specifically: 1) reduced mine disturbance areas; 2) implementation of a wetland mitigation plan more likely to provide high-quality toad habitat; 3) implementation of access and design changes that minimize sedimentation of toad habitat; 4) revised water management that would reduce the potential for contaminant uptake; 5) and as described in section 3.6, *Aquatic Life and Fisheries*, compliance with INFS standards and guidelines for any work in a RHCA along an access road.

3.25.5 Threatened, Endangered, and Proposed Species

Both the Northern Rockies Lynx Management direction (USDA Forest Service 2007a) and the Grizzly Bear Access Amendment (USDA Forest Service 2011b) are retained decisions in the 2015 Forest Plan. In the grizzly bear analysis, replace "1987 KFP, as amended by the Access Amendment" or "Appendix 8" references or citations with 2015 Forest Plan. Disregard specific references to guidelines regarding movement corridors in MA 14. However, the habitat connectivity analysis is still valid. Also, disregard discussions related to MA12 and ORD standards. See instead section 3.25.3 of these errata.

Similarly, replace references to the NRLMD amending the 1987 Plan with just NRLMD as direction incorporated in the 2015 Forest Plan. Disregard references to 10 percent minimum old growth standards as described on section 3.22.2 of these errata.

3.25.6 Migratory Birds

Page 1399: 3.25.6.1 Regulatory Framework

Replace the second paragraph with the following:

As described in section 3.25 of these errata, the 2015 Forest Plan includes the goal that “the KNF manages wildlife habitat through a variety of methods (e.g., vegetation alteration, prescribed burning, invasive species treatments, etc.) to promote the diversity of species and communities and to contribute toward the recovery of threatened and endangered terrestrial wildlife species” (GOAL-WL-01). FW-DC-WL-19 states that “by trending toward the desired conditions for vegetation, habitat is provided for native fauna adapted to open forests and early seral habitats, or whose life/natural history and ecology are partially provided by those habitats.” And FW-GDL-WL-16 provides the following guidance for raptors: Management activities on NFS lands should avoid/minimize disturbance at known active raptor nests, including owls. Timing restrictions and distance buffers should be based on the best available information, as well as site-specific factors (e.g., topography, available habitat, etc.). Birds that establish nests near pre-existing human activities are assumed to be tolerant of that level of activity.

Page 1422: Section 3.25.6.4.12 Regulatory/Forest Plan Consistency

Replace the text under the national Forest Management Act/Kootenai Forest Plan with the following text:

The Montanore Project is not a habitat management activity designed to trend vegetation toward desired conditions so remains neutral to progress toward GOAL-WL-01 and FW-DC-WL-19. The survey requirements and timing restrictions described in section 3.25.4.2 Bald Eagles would address all raptor nests and meet the intent of FW-GDL-WL-16.

3.25.7 Other Species of Interest

Page 1423: Regulatory Framework

Replace the first paragraph with the following:

The 2015 Forest Plan (USDA 2015b) provides direction for management activities that may impact big game habitat including the goal to manage “wildlife habitat through a variety of methods (e.g., vegetation alteration, prescribed burning, invasive species treatments, etc.) to promote the diversity of species and communities and to contribute toward the recovery of threatened and endangered terrestrial wildlife species (GOAL-WL-01).

Additional desired conditions and guidelines that apply to moose are described in section 3.25.3.3 of these errata.

Page 1423–1442: Section 3.25.7.2 Moose

Disregard references to 1987 Forest Plan MAs, cover/forage standards for white-tailed deer, habitat effectiveness standards, and ORD standards throughout this section. Disregard references to decreased elk security (see 3.25.3.2 of these errata). These errata replace analysis for 3.25.3 Management Indicator Species as 3.25.3.2 Elk Security and 3.25.3.3 Big Game Winter Range (Elk/Deer).

Although the 1987 Forest Plan references are not relevant to 2015 Forest Plan compliance, the analysis information still provides information comparing effects of the alternatives in response to Issue 6.

Page 1440: National Forest Management Act/Kootenai Forest Plan

Replace the text under this heading with the following:

FW-DC-WL-08: All alternatives would remove moose winter range habitat through construction of mine or transmission line facilities. However forestwide, adequate

amounts of moose habitat would continue to be provided. Therefore the project has a minor, adverse impact to progress toward achieving this desired condition.

FW-DC-WL-16: All mine and transmission line alternatives utilized information provided by the State (e.g. winter range information). Therefore this project contributes toward this desired condition.

FW-DC-WL-17: The mine and transmission line alternatives do not create barriers to movement and are neutral toward this desired condition.

FW-GDL-WL-08: Alternatives limit transmission line construction during the winter on winter range through seasonal activity restrictions. Once land is cleared for facilities and impoundments, winter range will be eliminated in those locations and the guideline is not relevant.

FW-GDL-WL-09: Alternatives limit transmission line construction during the winter on winter range through seasonal activity restrictions. Once land is cleared for facilities and impoundments, winter range will be eliminated in those locations and the guideline is not relevant.

FW-GDL-WL-11: In the agencies' alternatives, impacts to moose birthing/parturition areas would be minimized through timing restrictions during the construction phase (blasting) when disturbance is most likely. Therefore, the project is designed in accordance with this guideline.

FW-GDL-WL-12: There are no sites along routes used for these alternatives where project activities are expected to create a connectivity or movement barrier. No crossing features are warranted for inclusion in the project design. Therefore, the project is designed in accordance with this guideline.

FW-GDL-WL-13: There are no existing crossing features or any crossing features under development. Therefore, the project is designed in accordance with this guideline.

FW-GDL-WL-14: No wildlife linkage areas have been identified for moose in the analysis area and connectivity would not be impacted. Therefore, the project is designed in accordance with this guideline.

GA-DC-WL-LIB-04: The alternatives are not expected to impact moose connectivity north-south through the Cabinet Mountains. Therefore this project is neutral to progress toward achieving this desired condition.

Glossary

The following glossary terms have been added or updated in the 2015 Forest Plan:

Term	Updated Definition
Best Management Practices (BMPs)	Practice or set of practices that enable a planned activity to occur while still protecting the resource managed, normally implemented and applied during the activity rather than after the activity.

Term	Updated Definition
Best Management Practices (BMPs) (Watershed)	A practice or a combination of practices, that is determined by the state (or designated area-wide planning agency) after problem assessment, examination of alternative practices, and appropriate public participation to be the most effective, practicable (including technological, economic, and institutional considerations) means of preventing, or reducing the amount of pollution generated by nonpoint sources to a level compatible with water quality goals.
Coarse Woody Debris (CWD)	Coarse woody debris consists of dead woody material larger than 3 inches in diameter and derived from tree limbs, boles, and roots. (Note: the Montanore FEIS definition of “sound and rotting logs and stumps that provide habitat for plants, animals, and insects and a source of nutrients for soil development” reflects the 2015 Forest Plan intent for requiring minimum CWD.)
Corridor (development)	A linear strip of land identified for the present or future location of transportation or utility rights-of-way within its boundaries. (36 CFR 219.3)
Corridors (wildlife)	Avenues along which wide ranging animals can travel, plants can propagate, genetic interchange can occur, populations can move in response to environmental changes and natural disasters, and threatened species can be replenished from other areas.
Grizzly Bear Core Habitat (to replace Core grizzly bear habitat)	An area of secure habitat within a BMU that contains no motorized travel routes or high use non-motorized trails during the non-denning season and is more than 0.31 miles (500 meters) from a drivable road. Core areas do not include any gated roads but may contain roads that are impassible due to vegetation or constructed barriers. Core areas strive to contain the full range of seasonal habitats that are available in the BMU.
Fragmentation	A condition in which a continuous area is reduced and divided into smaller sections. Habitat can be fragmented by natural events or development activities.
Management Area	A land area identified within a planning area that has the same set of applicable plan components. A management area does not have to be spatially contiguous (36 CFR 219.19).

Term	Updated Definition
<p>Management Indicator Species (to replace “indicator species” and “management indicator species” in the Montanore FEIS)</p>	<p>Each forest plan developed under the 1982 Planning Rule for the National Forest Management Act (NFMA) was required to identify certain vertebrate and/or invertebrate species as Management Indicator Species, or MIS, as one of various elements to address NFMA requirements related to diversity of plant and animal communities (36 CFR 219.19(a), 1982). The direction for MIS is related to forest plan development, forest project implementation, and forest plan monitoring.</p> <p>Management indicator species for the 2015 plan are elk, a specific landbird assemblage, and a specific macroinvertebrate assemblage. These MIS were chosen to compare alternatives in the 2015 Forest Plan FEIS. Elk are a commonly hunted species and secure elk habitat is an issue of public concern. Land bird assemblage (insectivores) are expected to respond to progress made toward desired conditions for vegetation. Given the restoration emphasis of the 2015 Plan, use of the macroinvertebrate assemblage to evaluate water quality trends across the entire planning area will validate the assumptions of plan implementation or help to change management strategies in the event that water quality benefits are not realized.</p> <p>None of the 2015 Plan MIS were chosen due viability concerns and viability of these MIS are not analyzed at the project level.</p>
<p>Noxious Weeds</p>	<p>Any plant or plant product that can directly or indirectly injure or cause damage to crops (including nursery stock or plant products), livestock, poultry, or other interests of agriculture, irrigation, navigation, the natural resources of the United States, the public health, or the environment. The term typically describes species of plants that have been determined to be undesirable or injurious in some capacity. Federal noxious weeds are regulated by USDA-Animal and Plant Health Inspection Service under the Plant Protection Act of 2000, which superseded the Federal Noxious Weed Act of 1974. State statues for noxious weeds vary widely, with some States lacking any laws defining or regulating noxious weeds. Depending on the individual State law, some plants listed by a State statute as “noxious” may be native plants which that State has determined to be undesirable. When the species are native, they are not considered invasive species by the Federal Government. However, in most cases, State noxious weed lists include only exotic (non-native) species.</p>

Term	Updated Definition
Old Growth (to replace “effective old growth” and “old growth managed by the KNF Forest Plan” in Montanore FEIS)	Old growth stands are defined as those that meet the definitions in Green et al. 1992 (errata corrected 12/11). Those definitions include the discussion in that document titled “USE OF OLD GROWTH TYPE DESCRIPTIONS” (see pages 11 and 12). If that document is revised or replaced by the Northern Region, the updated version will be used.
Recruitment Potential Old Growth (to replace “replacement old growth” in the Montanore FEIS)	Forest stands that do not meet the definition of old growth in Green et al. 1992 (errata corrected 12/11) but are being managed with the goal of meeting that definition in the future.
Security Habitat	An area with low levels of human disturbance. This general definition covers most uses of the term security habitat, except for elk, which has a specific definition.
Security Habitat (elk)	Generally timbered stands on NFS lands at least 250 acres in size greater than 0.5 mile away from open motorized routes during the hunting season. Security is calculated for individual planning subunits. Roads not open to the public for motorized uses during the hunting season are not included in this calculation. The effects of non-motorized use and/or administrative motorized use of closed or temporary roads during the hunting season are not included in this calculation and would instead be analyzed separately at the project level.

Term	Updated Definition
<p>Scenic Integrity</p>	<p>The highest scenic integrity ratings are given to those landscapes where the valued landscape attributes appear complete and little or no visible deviations are evident. Scenic Integrity is used to describe both existing (Existing Scenic Integrity) and desired (Scenic Integrity Objective) conditions. (<i>Landscape Aesthetics, A Handbook for Scenery Management, USDA, FS HB 701, page 2-1</i>).</p> <p>Very High: Landscape is intact with only minor changes from the valued landscape character associated with significant scenic landscapes. This SIO is typically (but not exclusively) associated with specially designated areas such as wilderness or other designations that imply the landscape is natural appearing.</p> <p>High: Management activities are unnoticed and the landscape character <i>appears</i> unaltered.</p> <p>Moderate: Management activities are noticeable but are subordinate to the landscape character. The landscape appears slightly altered.</p> <p>Low: Management activities are evident and sometimes dominate the landscape character but are designed to blend with surroundings by repeating line, form, color, texture of landscape character attributes. The landscape appears altered.</p> <p>Very Low: Management activities create a “heavily altered landscape”. Changes may strongly dominate the landscape. Note: This SIO is not a goal or objective.</p>
<p>Wetlands</p>	<p>Those areas that are inundated by surface or ground water with a frequency sufficient to support, and under normal circumstances do or would support a prevalence of vegetation or aquatic life that requires saturated or seasonally saturated soil conditions for growth and reproduction. Wetlands generally include swamps, marshes, bogs, peatlands, and similar areas such as sloughs, potholes, wet meadows, river overflows, mud flats, and natural ponds.</p>

Maps

Disregard the Corridor Exclusion Management Areas and the Corridor Avoidance Management Areas shown on Figure 79. Residences, Corridor Exclusion Management Areas, and Corridor Avoidance Management Areas Along Transmission Line Alternatives

Disregard Figure 89. Elk and White-tailed Deer Habitat in the Analysis Area. See the project file for the updated map reflecting 2015 Forest Plan baseline data.

Chapter 8. References

Replace USDA Forest Service 2006a with the following:

USDA Forest Service. 2006a (1982). Forest Service Handbook. FSH 1909.12, chapter 80 per 1982 Planning Regulations.

Add the following references:

- Anderson, Jeremy. 2014. USDA Forest Service. Specialist Report Kootenai National Forest Plan Revision Wildlife. Kootenai National Forest. Libby, MT. 475 pages.
- Castaneda, B. 2004. Old Growth Management. 1900/2600 letter, April 26. USDA Forest Service, KNF, Libby, MT. 1 pg. + 61 pp attachment: “KNF Considerations for the Management of Old-Growth.”
- Savage. C. 2014. Revised Kootenai National Forest seed mix guidelines interim direction. 2070 letter. October 3. USDA Forest Service, KNF, Libby, MT. 1 pg. + attachment
- USDA Forest Service. 2009b. Forest Service Handbook. FSH 7709.5. Available at: <http://www.fs.fed.us/im/directives/fsh/7709.5/>
- USDA Forest Service. 2009c. Forest Service Manual. FSM 7700. Available at: <http://www.fs.fed.us/im/directives/dughtml/fsm7000.html>
- USDA Forest Service. 2014. Forest Plan Monitoring and Evaluation Report Fiscal Year 2013. KNF, Libby, MT. 59 pp. Available at: <http://www.fs.usda.gov/main/kootenai/landmanagement/planning>
- USDA Forest Service. 2014a. KIPZ Management Indicator Species Selection Documentation. 21 pp.
- USDA Forest Service 2015a. 2015 Errata to the 2013 Final Environmental Impact Statement For the Revised Land Management Plan, Kootenai National Forest, Available at: <http://www.fs.usda.gov/detail/kootenai/landmanagement/planning>.
- USDA Forest Service 2015b. Land Management Plan 2015 Revision Kootenai National Forest. Libby, MT. Available at: <http://www.fs.usda.gov/detail/kootenai/landmanagement/planning>.
- USDA Forest Service 2015c. Final Record of Decision for the Final Environmental Impact Statement and Kootenai National Forest Land Management Plan. Available at: <http://www.fs.usda.gov/detail/kootenai/landmanagement/planning>.
- USDA Forest Service. 2015d. Monitoring Guide, 2015 Revision Monitoring Plan, Kootenai National Forest. 127 pp.

