

May 16, 2015, Via EMail

*Objection against the Draft Decision Notice and Final Environmental Impact Statement for the Montanore Project, a proposed copper and silver underground mine 18 miles south of Libby, MT.*

**Identification of Objectors:**

Lead Objector: Michael Garrity, Director, Alliance for the Wild Rockies (AWR) PO Box 505, Helena, MT 59624; Phone [406-459-5936](tel:406-459-5936).

Signed for Objectors this 16<sup>th</sup> day of May, 2015

*/s/ Michael Garrity*

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Michael Garrity

**Name of the Responsible Official, National Forest, Ranger District where Project is Proposed:**

Chris Savage, Forest Supervisor, Kootenai National Forest.

The FEIS and DROD are contained in the USFS webpage at:

<http://www.fs.usda.gov/projects/kootenai/landmanagement/projects>.

Description of those aspects of the proposed project addressed by the objection, including specific issues related to the proposed project if applicable, how the objector believes the environmental analysis or draft decision specifically violates law, regulation, or policy:

This section is directly connected to objectors previous comments submitted on December 12, 2011 on the the Montanore

Supplemental DEIS (SDEIS). The objection process requires objectors to demonstrate a connection between prior specific written comments on the particular proposed project or activity and the content of the objection. To meet this requirement, we have cited the specific issue we are addressing as it was raised in our draft analysis comments, in order to clarify why specific issues are being carried forward into this objection.

Thank you for the opportunity to object.

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NOTICE IS HEREBY GIVEN that, pursuant to 36 CFR Part 218, AWR objects to the Draft Decision Notice and FEIS issued on or about April 1, 2015, including the Responsible Official's adoption of the preferred mine alternative, Alternative 3 and the Mitigated Poorman Impoundment Alternative and Transmission Line Alternative D-R, Miller Creek Transmission Line Alternative. AWR is objecting to this project on the grounds that implementation of the Selected Alternatives is not in accordance with the laws governing management of the national forests.

Forest Service approval of the Montanore Project would be in violation of the National Environmental Policy Act (NEPA), the National Forest Management Act (NFMA), the Endangered Species Act (ESA), the Clean Water Act (CWA) and the Organic Act. Approval of the Montanore Project by Montana DEQ would violate the CWA, the Montana State Anti-degradation Statute and Water Quality Standards, the Montana Environmental Policy Act (MEPA), and other Montana laws.

If the project is approved as proposed, individuals and members of the above-mentioned groups would be directly and significantly affected by the mining and associated activities. Objectors are conservation organizations working to ensure protection of biological diversity and ecosystem integrity in the Wild Rockies bioregion (including the Kootenai National Forest (KNF)). The

individuals and members use the project area for recreation and other forest related activities. The selected alternative would also further degrade the water quality, wildlife and fish habitat. These activities, if implemented, would adversely impact and irreparably harm the natural qualities of the Project Area, the surrounding area, and would further degrade the watersheds and wildlife habitat.

## THE PROPOSED PROJECT WOULD VIOLATE NUMEROUS FEDERAL

## LAWS AND CANNOT BE APPROVED AS PROPOSED IN THE DRAFT ROD and FEIS.

The Montanore mine would impact a minimum of eleven creeks and streams in the analysis area, nine of which currently provide habitat for bull trout.

We wrote the following in our comments.

### **“THE IMPACTS OF THE PROPOSED MONTANORE MINE ON FISH AND WATER QUALITY**

#### **Hydrology – Impacts on Fisheries and Water Quality**

The Montanore mine would impact a minimum of eleven creeks and streams in the analysis area, nine of which currently provide habitat for bull trout. In 2010 the USFWS revised the designation of bull trout critical habitat. The new rule designated bull trout critical habitat in five of the nine bull trout streams that would be affected by the Montanore project, including East Fork of Bull River, Rock Creek, East Fork Rock Creek, Libby Creek and West Fisher Creek. The mine would have significant impacts on the East Fork of Bull River, the most productive bull trout stream in the Clark Fork drainage. Impacts to several lakes within the Cabinet Mountains Wilderness, including Rock Lake and St. Paul Lake, also would occur.

According to the SDEIS, the impacts on streamflow in the East Fork Rock Creek and East Fork Bull River and on the volume and level of Rock Lake would be the same in *all* of the mine alternatives. All mine alternatives would reduce groundwater discharge to area streams and Rock Lake due to mine and adit inflows which would cause lowering of the groundwater table during all five mine phases (Evaluation, Construction, Operations,

Closure and Post-Closure). When the groundwater table reached steady-state conditions (projected to take 1300 years) after mining ceased, the effect would vary by drainage and without or with mitigation.

Under Alternative 2, which locates the plant and one adit in the Ramsey Creek drainage and instead of Libby Creek, stream flow reductions would be slightly greater in Ramsey Creek downstream of the CMW and would be slightly smaller in Libby Creek compared to Alternatives 3 and 4.” SDEIS at 273.

### **Dewatering: Impacts on Fisheries**

One of the most significant adverse impacts on fisheries and water quality from all Alternatives for the proposed Montanore mine is the inevitable diversion of ground water in the region of the mine into the mined out void. This alteration of the region’s hydrology would have serious consequences for alpine lakes and streams, including many inside the Cabinet Mountains Wilderness. It would result in dewatering that would impact aquatic habitat of bull trout, westslope cutthroat trout and redband trout. It is a violation of the Endangered Species Act to take bull trout habitat. It also would result in the introduction of pollutants (metals and nutrients) that would alter the chemistry of affected lakes and streams. If the mine void is created the groundwater in the region would begin flowing into the mined out cavity thus lowering the volume of water in affected streams and lakes. The impacts on the affected area’s hydrology would be enormous and irreversible and is a violation of NFMA and the Clean Water Act.

### **Sediment Impacts on Bull Trout**

All mine alternatives may affect bull trout and their habitat in analysis area streams during construction and operation of the mine. The sediment associated with road construction, reconstruction and mitigation would adversely affect bull trout by decreasing the food base, including terrestrial organisms of riparian origin, aquatic macroinvertebrates, and forage fish; and decreasing substrates of sufficient amount, size, and composition to ensure success of egg and embryo overwinter survival, fry emergence, and young-of-the-year and juvenile survival (USDA Forest Service 2011a). The sediment generated would fill interstitial spaces in the stream bed substrate reducing macroinvertebrate habitat and secondary productivity in the vicinity of bridge replacements on Bear Creek. Road use and reconstruction would contribute sediment to Libby and West Fisher Creeks with similar effects as well. SDEIS at 152.

### **Effects on Bull Trout Critical Habitat**

In 2010, the USFWS revised its designation of Bull Trout Critical Habitat. Currently Rock Creek, East Fork Bull River, Libby Creek, Bear Creek, and West Fisher Creek contain designated bull trout critical habitat. All mine alternatives would affect bull trout critical habitat in both the Clark Fork River and Kootenai River drainages. None of the mine alternatives, including Alternative 2, would affect designated critical habitat in West

Fisher Creek. However, Transmission Line Alternative E-R would potentially impact West Fisher critical habitat due to canopy removal and ground disturbing activities.

The Forest Service must first reconsult with the USFWS on PACFISH/INFISH in bull trout critical habitat since critical habitat was designated after PACFISH/INFISH was signed.

**Section 3.6.4.13 Irretrievable and Irreversible Commitments** states that the Little Cherry Creek diversion would reduce available habitat by 15,600 feet for the pure redband population in Little Cherry Creek in Alternatives 2 and 4. The agencies' Alternatives 2, 3, and 4 could result in an irreversible reduction of bull trout and westslope cutthroat trout habitat in the Rock Creek drainage due to decreases in flow. Mitigation would reduce the effects on streamflows in East Fork Rock Creek in Alternatives 3 and 4, but would result in permanent flow reductions in the East Fork Bull River. Loss of bull trout habitat in the East Fork Bull River in all alternatives could be detrimental to bull trout populations in the lower Clark Fork River because this stream is considered a primary spawning location in this system. SDEIS at 177, 178

**Section 3.6.4.14 Unavoidable Adverse Environmental Effects** states that “[b]ecause of the connection of surface water and groundwater in the analysis area, mining of the ore body would unavoidably reduce streamflow and spring flow, and affect lake levels in Rock Lake. Decreased streamflows would result in the loss of aquatic habitat.” SDEIS at 178.

**Alternative 3 – Agency Mitigated Poorman Impoundment Alternative**  
Alternative 3 would incorporate the agencies' proposed modifications and mitigating measures that would reduce or eliminate impacts to area streams. Four major mine facilities would be located in alternative locations, which would reduce effects on aquatic life. The tailings impoundment would be at the Poorman Impoundment Site, eliminating the need for a diversion of Little Cherry Creek. Additionally, the plant site would be located between Libby and Ramsey creeks, avoiding construction in a RHCA. Two additional adits would be constructed in the upper Libby Creek drainage, eliminating most construction in the Ramsey Creek watershed. The LAD Areas would not be used and all wastewater would be treated and discharged from the Water Treatment Plant.

**Alternative 3 May Adversely Affect Bull Trout**  
Alternative 3, like Alternative 2, may affect bull trout and their habitat in analysis area streams during construction and operation of the mine due to additional sediment being discharged to streams as a result of road construction, reconstruction. As with Alternative 2, potential short-term impacts may result from increases in the amount of fine sediment. Sediment delivery would be reduced somewhat in Alternative 3 due to the location of the tailings impoundment in Poorman Creek which would eliminate the need to relocate the Little Cherry channel, and fewer disturbances in RHCAs would occur. SDEIS at 152. The

effects of Alternative 3 on aquatic life/ bull trout in the East Fork Rock Creek and East Fork Bull River would be the same as Alternative 2. SDEIS at 149.

According to the SDEIS, road closures associated with mitigation for impacts to grizzly bears would result in a long-term decrease in sediment in streams in the analysis area. Additionally, road closure mitigation would result in a substantial decrease in sediment yield to area streams and would improve habitat in bull trout habitat in Libby, Ramsey, Poorman, and Midas creeks.<sup>1</sup> All wastewater discharges would be treated at a water treatment plant before discharge, reducing the risk of nutrient and metal concentrations exceeding standards. SDEIS at 152.

### **Cumulative Effects on Bull Trout**

The Montanore SDEIS fails to disclose and analyze the cumulative impacts of the Rock Creek mine combined with adverse impacts from the Montanore project on bull trout and other native fish. The Rock Creek Mine will have severe adverse impacts on the bull trout population in Rock Creek and the lower Clark Fork River drainage. In the face of this threat, the Forest Service and other agencies are relying on the East Fork of Bull River to maintain the bull trout sub-population in the lower Clark Fork River drainage.

As indicated above, the Montanore SDEIS clearly states that all Mine Alternatives will adversely affect bull trout and bull trout critical habitat in the East Fork of Rock Creek and the East Fork of the Bull River. Considering the expected impacts from the Rock Creek Mine on bull trout in Rock Creek, the agencies cannot ignore the cumulative effects of the Rock Creek project on bull trout when combined with the habitat degradation in the East Fork of Bull River from the Montanore project. Dewatering as a result of the Montanore project would directly impact the East Fork and main stem of Rock Creek, both of which provide critical habitat for the bull trout in the lower Clark Fork River drainage.<sup>2</sup>

### **The Impacts of the Tailings Impoundment on Water Quality and Fisheries**

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<sup>1</sup> The SDEIS gives no assurance that grizzly bear mitigation-related road closures would be permanent or even long term. The Forest Service routinely closes and puts barriers on roads in order to increase core or compensate for reductions in core due to timber sale activities. What guarantee is there that the roads closed for grizzly bear mitigation in the Montanore project area will not be re-opened to provide access for other unrelated or related activities? Furthermore, decreases in sediment from closing (not using) roads are not instantaneous – it takes several years for sediment delivery to be reduced. Will culverts, which have the potential to fail and cause huge amounts of sediment to enter streams, be removed during road closure?

<sup>2</sup> Alternatives 2, 3, and 4 would reduce flow in East Fork Rock Creek and East Fork Bull River. These flow changes would affect aquatic habitat in the East Fork Rock Creek between Rock Lake and Rock Creek Meadows, a distance of about 0.75 mile. Trout habitat may be reduced during low flows from August to April. (DEIS, Summary, Page 39.)

The 20 million ton, 647 acre tailings pile that would be contained behind a 310-foot dam would have long term impacts, including impacts on water quality and fisheries due the seepage of toxins to groundwater. The tailings would contain arsenic, copper, cadmium, iron, lead, silver, manganese, aluminum, nitrates and ammonia which would discharge to and contaminate surface and ground water, perhaps in perpetuity. As discussed above, the massive accumulation of mine tailings would require the relocation of a major stretch of a significant stream (Little Cherry Creek) under Alternatives 2 and 4.

The tailings pile would be deposited on wetlands and springs, including an artesian spring which could potentially destabilize the 120 million tons of waste rock. DEIS, S-10. Artesian pressures at both impoundment sites (Little Cherry Creek and Poorman) were identified in some boreholes during the site investigations conducted by Noranda (Morrison-Knudsen Engineers, Inc. 1990). Noranda proposed to use a system of pressure relief wells to relieve artesian water pressures. In 1992 the agencies concluded an adequately designed pressure relief well system would relieve artesian pressure and ensure dam stability during all project phases. (MPDES Volume 1, page 405)

Have there been more recent efforts to determine the potential for destabilization of the tailings pile due to the artesian pressures? Both NEPA and the ESA require effects analyses to be based on the best available science. Is there new information since 1992 that might affect the conclusion that was reached at that time? The FEIS needs to address this issue.

The tailings impoundment proposal also includes discharging tailings into Little Cherry Creek, a perennial tributary to Libby Creek. DEIS Vol.1, Page 199. The fill would result in the relocation of Little Cherry Creek and would permanently destroy 16,000 feet of aquatic habitat for fish, including interior redband trout. The filling and diversion of a major stream in order to accommodate the volume of tailings should not be approved by the agencies. Moreover, the presence of sensitive and threatened fish species habitat should preclude any discharge of tailings into the Libby Creek drainage.

Part of the seepage (36,000 gallons per day) from the tailings will not be collected and will be allowed to enter groundwater. What will prevent the metals and nutrients in this discharge from entering adjacent creeks and streams, including Libby Creek? If and when they do seep how will that affect the fish? According to the DEIS, “[m]ost of the percolating water would be captured by the underdrain system, but some would seep into the underlying fractured bedrock aquifer. (DEIS, Vol.2, Page 448) “Some seepage from the tailings facility would continue in perpetuity.” (DEIS, Vol.2, Page 442)

### **Post Mining Water Quality Impacts**

After mine closure, water from the region would be diverted into the mine cavity. This water would contain nutrients (ammonia, nitrates), and dissolved metals including

copper, arsenic, cadmium, lead, cadmium, selenium, and others. The mine effluent would exit through seeps and springs into the region's surface water, it is likely that the discharge would be into ORW's in the wilderness area. This discharge may well become acidic over time. The DEIS suggests that this water would be allowed to exit the mine cavity and enter the Bull River without any long-term treatment. The quality of the water that would exit the mine cavity post-mining and enter the Bull River drainage cannot be predicted with any degree of certainty but it will definitely contain some level of the pollutants mentioned above. We believe the uncertainties associated with pollution levels in the water that will accumulate in the mine cavity and the risks associated with it being discharged to surface water are reason enough to not approve or permit this mine.

The flow would be significant enough to increase the volume of water in the East Fork of Bull River post mining. (DEIS Vol.1, Page 309) Once the mine cavity is created, it is highly questionable whether measures could ever be taken that would prevent water that collects in the cavity from leaking into the Bull River watershed and other water bodies within the wilderness, including Rock Lake.

### **Post-Operations Phases**

After mining and milling operations ceased, reclamation and closure activities would consist generally of two phases. **The First Phase** would involve the removal of underground and surface facilities, closure of underground workings, and reclamation of surface disturbances in accordance with the approved operating plan. Included in this would be the dewatering and capping of the tailings impoundment. The agencies estimate that the dewatering of the tailings impoundment may require from 5 to 20 years.

**The Second Phase** would involve long-term operations and maintenance of specific facilities, such as the Water Treatment Plant or the seepage collection system at the tailings impoundment. The SDEIS states that MMC would maintain and operate these facilities until water quality standards were met in all receiving waters from the specific discharge. MMC also would continue water monitoring as long as the MPDES permit is in effect. As long as post-closure water treatment operated, the agencies would require a bond for the operation and maintenance of the water treatment plant. The level of human activity associated with facility operation, maintenance, and monitoring is unknown, but has the potential of being a daily requirement and year-round in duration. *The length of time that the second phase of closure activities would occur is not known, but may be decades or more.* SDEIS at 114.”

The Remedy is to choose the No Action Alternative o to to Withdraw the Draft Decision and FEIS.

The project harms grizzly bears and violated the ESA, NEPA, the APA and NFMA.

We wrote the following in our comments:

**“THE IMPACTS OF THE PROPOSED MONTANORE MINE ON WILDLIFE**

**Threatened and Endangered Species - Grizzly Bear**

**The Condition and Recovery Status of the Cabinet-Yaak Grizzly Bear Population**

In 1999, the US fish and Wildlife (USFWS) found that due to habitat degradation and its small size, the Cabinet-Yaak grizzly population was warranted for uplisting from Threatened to Endangered under the Endangered Species Act (ESA). The uplisting was precluded by the FWS’s need to fulfill other obligations.

The Cabinet-Yaak (CY) grizzly population has been in decline for many years. In 2006 the probability that the CY grizzly population was in decline was 94%. Kasworm, et al. 2007. Researchers estimated that in 2009 the probability that the population was still in decline was 78% and that the Population Trend (% change annually) was a negative 3.8%. Kasworm, et al. 2010.

According to the 2011 Grizzly Bear 5-Year Status Review, the estimated CY population is currently 42 (citing Kasworm et al, 2010)<sup>3</sup> and the Population Trend (% change annually) is a negative 3.8%. USFWS estimates that there are approximately 12-15 grizzly bears in the Cabinet population and approximately 25-30 bears in the Yaak.

In a study co-authored by the USFWS grizzly bear recovery coordinator, scientists used biological models to estimate that isolated grizzly populations of 30 individuals are, on average, likely to become extinct in 69 years; populations of 40 persist for only an average of 79 years before vanishing completely.

Moreover, the numbers of annual human-caused female mortalities and total grizzly bear mortalities have exceeded recovery goals set in the 1993 Grizzly Bear Recovery Plan (USFWS, 1993) for the Cabinet Yaak Recovery Zone (CYRZ). The Recovery Plan goal

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<sup>3</sup> According to the 2009 USFWS Cabinet-Yaak Grizzly Bear Recovery Area Research and Monitoring Progress Report (Kasworm et al., 2010), the minimum number of grizzly bears during the 6 year period from 2004 to 2009 was estimated to be 42 individuals in the Cabinet-Yaak recovery zone - based on current and previous captures and sightings of unique individuals. This estimate assumes all other bears not known to be dead have survived the six year period. Kasworm et al., 2010, at 2.

set the maximum level of human-caused female mortality at 30% of total human-caused mortalities in any given year. The goal for the Cabinet-Yaak Ecosystem was less than 4 percent human-caused mortality, with no more than 30 percent of total mortality consisting of female bears (USFWS 1993). Due to the small population size in the CYRZ, the Grizzly Bear Recovery Plan established a human-caused mortality goal of zero for this recovery zone (USFWS 1993). SDEIS at 479.

For the 12 years from 2000-2011, the average total mortalities and female mortalities have exceeded the .04% and 30% goals. If mortalities in the Canadian Purcells had been counted, it would have been 10 of 12 years. During that time period, there were 22 confirmed human-caused mortalities in the CYRZ (an average of 1.83 per year). Twelve of these were females (an average of 1.0 per year). The 2010 CYRZ population estimate of 42 (x .04) translates into 1.68 allowable total mortalities per year and a maximum of 0.504 female mortalities. Thus the average total and female allowable mortalities have exceeded maximum mortalities for the past twelve years. W. Kasworm, Fall 2011 CYE Update for the Cabinet-Yaak / Selkirk IGBC Subcommittee.

They were also exceeded in 8 of the 14 years ending in 2006 in the CYRZ. In the CYRZ, female mortalities were 70.6% of the total mortalities -as opposed to 30% stipulated in the 1993 Grizzly Bear Recovery Plan. Kasworm, et al, 2007.

Other goals in the Recovery Plan that must be met in order for the CYRZ grizzlies to achieve recovery include: (1) confirmed sighting of an average of six females with cubs of the year (FCOY) annually; (2) 18 of 22 Bear Management Units (BMU's) occupied over a six year period in the CYRZ. These standards have not been met in the CYRZ in any year since USFWS started collecting and keeping track of such data.

The CYRZ is geographically divided into two portions. The southern portion is the Cabinet Mountains Range, encompassing approximately 978,000 acres. The northern portion is the Yaak area, which is 466,000 acres which has gentler topography and slightly lower elevations than the Cabinet portion. US Highway 2, a major east-west highway in NW Montana, lies between the northern and southern portions of the CYE. Hwy 2 is a major obstacle to grizzly bear travel between the Yaak and the Cabinets. There has been no documented grizzly bear movement between these areas or grizzly bear use within potential linkage zones between the Yaak and Cabinet portions of the CYRZ. Kasworm, et al. 2010 at 6.

Thus the Cabinet and Yaak grizzly populations are effectively isolated from one another, which increases the likelihood of extinction for both populations. The population in the Cabinets has been marginal since the USFWS started collaring and counting bears and keeping track of sightings in 1983. Although the Cabinet portion of the CYRZ is larger than the Yaak portion, it is estimated to currently support, at most, about a third of the entire population.

The BMUs impacted by the Montanore project – BMUs, 2, 5 and 6 – are in a relatively narrow section of the CYRZ, which is only 15 -20 miles wide. The narrow section extends to the southern boundary of the CYRZ. Road density and Core habitat standards are not applied beyond the borders of the CYRZ, thus security levels are inadequate for grizzly bear survival and the risk of mortality is higher in those areas.

The high peaks of the Cabinet Range run down the middle of this narrow strip.<sup>4</sup> Lower elevation spring/summer fall (non-denning) habitat on either side of the peaks is available, but not in the same proportion that occurs in the Yaak portion of the CYRZ, or in other much larger Grizzly Bear Recovery Areas, like the NCDE. The combination of being predominantly comprised of high elevation (denning-only) habitat and the narrow width of the RZ in this area, limits its viability as grizzly habitat. Due to the spatial and low elevation habitat limitations of the Cabinet portion of the CYRZ, the grizzly bears there are already at a disadvantage in terms of available secure habitat.

Plum Creek/Forest Service checkerboard lands lie to the east of the Cabinet portion of the CYRZ and the private ownership there eliminates any possibility of establishing habitat security levels that would be conducive to grizzly bear use and/or survival. Highway 200 and the Clark Fork River lie to the southwest on the edge of the CYRZ. Aside from the fact that the highway is a barrier to migration, grizzly bear security levels are sub-standard outside the CYRZ.

### **Grizzly Augmentation in Cabinets**

For many years the USFWS has been attempting to establish a viable and stable grizzly population in the Cabinets via a grizzly bear augmentation program. Many bears, mostly females have been transported from the Northern Continental Divide Ecosystem (NCDE) and Canada. The results have been questionable at best. Two of the four female grizzlies that have been transplanted into the Cabinets since 2005 were killed and the survival rate of earlier transplants was low. There have been a total of 13 grizzlies transplanted to the Cabinets augmentation bears since 1990. Of these, 4 are confirmed dead, and 4 returned home to the NCDE, leaving just 5, whose fate is unknown. Only one transplanted female (286) is known to have reproduced offspring, 2 of which were females who also reproduced. Kasworm, et al. 2010 at 39-44.<sup>5</sup>

### **KNF Grizzly Bear Standards**

The numeric standards currently in place for grizzly bear access management/security

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<sup>4</sup> “Inclusion in ‘core’ of unsuitable habitats inflates the apparent habitat quality of some BMUs, [e.g. high elevation “rocks and ice” in CYE BMUs 1,2,5,6].” Dr. Lee Metzgar, Comments on U.S Forest Service Draft Environmental Impact Statement On Forest Plan Amendments For Motorized Access Management Within The Selkirk And Cabinet-Yaak Grizzly Bear recovery Zones. (Metzgar, 2001).

<sup>5</sup> Bear 286 was killed in 2009 during an encounter with a hunter. Kasworm, et al. 2010 at 39.

habitat were informally adopted in 2006 in a KNF Forest Biologist's memo ("2006 Rule Set"). They include the 1987 KNF FP standard for Habitat Effectiveness; standards for core habitat (minimum 55% of a BMU), open motorized road density (OMRD) (no more than 33% of a BMU should have an open road density of over 1 mi/sqmi); and total road density (TMRD) (no more than 26% of a BMU should have a total road density of over 2 mi/sqmi). The standards for core, OMRD and TMRD were derived from a 1997 research report (Wakkinen, Kasworm 1997).<sup>6</sup> The 2006 Rule Set also includes the 1987 KNF Forest Plan (KNF FP) standard for Habitat Effectiveness (HE). The HE standard specifies that at least 70% of the land area in BMUs should be at least 0.25 mi. from open roads.

A major flaw in the Montanore SDEIS mitigation plan and grizzly bear analysis is the reliance on achieving standards set forth in the 2006 Rule Set to offset the impacts of the mine. The 2006 standards that purportedly will maintain adequate security for grizzly bears are not based on the best available science. Essentially they represent the status quo in terms of grizzly bear security, i.e., road densities and core. As discussed above, the CY grizzly population has been in decline as a result of these levels of security.

### **Impacts on Grizzly Bear Security and Habitat**

The SDEIS indicates that the proposed Montanore project will impact BMUs 2, 5, and 6 and the Cabinet Face BORZ. The boundary for the cumulative effects analysis and the effects determination is the Cabinet portion of the Cabinet-Yaak Ecosystem grizzly bear recovery zone (BMUs 1 through 8) and the Cabinet Face BORZ. SDEIS at 472.

As described above, the SDEIS includes Alternatives 3 and 4, which are preferred by the agencies, in addition to Alternative 2, the MMC preferred alternative. There are also 3 options for the revised Transmission Line ("TL") alternatives, in addition to Alt. B, MMC's original proposal: C-R, D-R and E-R.

### **Core Habitat**

Table 21 indicates that all Alternative 3 options for the Transmission Line (TL) would reduce core acres in BMU 5 by 242 acres and all Alternative 4 options would reduce core by 133 acres in BMU 5. Core in BMU 6 would not be affected by Mine Alternatives 3 or 4.

### **Open Motorized Road Density**

OMRD (percent of a BMU with open road density >1 mi/sqmi) is currently at 27% in BMU 5, which is lower than the 2006 Rule Set 33% standard currently in place. Alt. 2-B would raise OMRD in BMU 5 during Construction and Operations. All other alternatives

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<sup>6</sup> The 2006 Rule Set was informally adopted by the KNF after the 2002 FEIS and 2004 ROD for the 2004 Grizzly Bear Access Management Forest Plan Amendments had been set aside on December 13, 2006 by the Federal District Court of Montana. One of the major issues in that case was whether the access management standards were based on the best available science.

would raise it slightly during Construction and Operations but return it to slightly lower than current levels after Closure. SDEIS at S-40. OMRD in BMU 6 currently exceeds the 33% standard and would be higher than the current level under Alternatives 2-B, 3-CR and 4-CR. SDEIS at S-40.

### **Total Motorized Road Density**

Under MMC Alternative 2B TMRD would increase from 23% to 26% during construction and operations in BMU 5. Thus it would still meet the 25% standard but as discussed above the, the 2006 Rule Set standards represent the status quo and the CY grizzly population has been, and continues to be in decline as a result of status quo core, OMRD and TMRD levels. Furthermore, whether the standards are being met is irrelevant – all alternatives would reduce security levels in BMU 5, adversely impacting bears.

Under MMC Alternative 2B<sub>2</sub> TMRD would increase in BMU 6 from 33% to 34% during construction and operations. Under Alternative 3 D-R: TMRD would decrease from 33% to 32% during all phases. This minor improvement will not compensate for the negative impacts of reducing security otherwise.

### **Habitat Effectiveness (“HE”)**

In BMU 5 HE would drop from 72% to 61% during Construction and 66% during Operations if Alt. 2-B were implemented. It would drop slightly below 70% under Alternatives 3-CR and 4-CR during Construction but be maintained at or above 70% for all other alternatives in all phases.

At 66%, the HE in BMU 6 currently does not meet the standard, and it would drop to 60% in all alternatives except 2-B, and 3-CR under which would drop it to approximately 61% during construction; it would be maintained at 66% during all other phases.

Table 21 indicates that HE would be reduced by between 2,300 and 2,422 acres in BMU 5 under the Alt. 3 and 4 alternatives and by between 3,033 and 3,779 acres in BMU 6 under the Alt. 3 and 4 alternatives. SDEIS at 64.

### **Impacts of Reduction in HE on Seasonal components.**

Alternative C-R developments and activities would reduce habitat effectiveness of 1,944 acres of grizzly bear spring habitat in the Midas and Miller Creek drainages (Figure 92). Disturbance due to noise and the presence of humans and machinery would have the greatest impact on grizzly bears if conducted in the spring (April 1 to June 15). DSEIS at 491.

### **Displacement of Grizzly Bears from Secure (Preferred) Habitat**

During operations approximately 20,000 tons of ore will be hauled from the mine to Libby per day. The number of trips per day on the Bear Creek access road per day could be as high as 1000 trips per day (approximately 42/hour), 24 hours per day, for 16-19 years, if 20 ton trucks are used. This level of disturbance will create a wide swath of land within BMU 5, from which grizzly bears and other wildlife will be displaced.

The SDEIS does not disclose the levels of mine related traffic during mine operations or other phases. The FEIS should include estimates for how much traffic and industrial machinery disturbance there would be as a result of all active phases of the mine, including evaluation, construction and operation and the duration of those levels of traffic and disturbance. Disclosing this information for BMUs 5 and 6 is especially important to get a clear picture of the impacts of these factors on grizzly bears. This information is essential in order for the public and the regulatory agencies to assess the extent of the impacts from displacement of grizzlies and other wildlife from mine-related activities.

#### **Transmission Line Construction Displacement Impacts**

According to the Montanore SDEIS, Table 205, “new” displacement<sup>7</sup> from the Transmission Line (TL) alternatives would be between 4,335 acres and 5,802 acres depending on TL alternative. Additional displacement, which is “the additional effect of project activities in grizzly bear habitat currently affected by other activities, such as road use or activities on private land” (according to FN 4 of Table 205) would vary from 3,966 acres to 6,585 acres, depending on TL alternative, for a total of from 8,301 to 11,694 acres of grizzly bear displacement from secure and/or preferred habitat, as a result of the Transmission Line construction. This does not include displacement from actions associated with the mine during construction, operations, closing and post-closing.<sup>8</sup>

#### **Mine and Transmission Line Displacement Impacts**

According to the SDEIS, “...the analysis of habitat displacement estimates the extent of the displacement, or zone of influence, but also the degree to which suitable grizzly bear habitat is used. In all combined action alternatives, mine construction and operations, road construction and use, and helicopter use would *temporarily* increase displacement effects to bears inside the recovery zone. The zone of influence includes currently undisturbed areas as well as areas currently being affected by human activities. Most

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<sup>7</sup> The SDEIS defines “new displacement” as the effect of project activities in grizzly bear habitat not currently disturbed by human activity. Table 205, FN 1.

<sup>8</sup> The effects of activities potentially resulting in the displacement of bears from their habitat is calculated by applying influence zones and disturbance coefficients for point source and linear disturbances established in Christensen and Madel (1982), USDA Forest Service (1988a), IGBC (1990), Summerfield (2007), and USDA Forest Service and USFWS (2009). Methods used to evaluate displacement effects from the Montanore Project are described in the *Revised Analysis of Grizzly Bear Displacement Effects* (ERO Resources Corporation 2011b). Table 205, FN 2.

displacement effects *would be temporary* and would occur during construction, but some long-term displacement could occur during operations.” Emphasis added.

According to Table 208 - Grizzly Bear Displacement Effects of Combined Mine-Transmission Line Alternatives in the Analysis Area, within the CYRZ Alternative 2-B would result in 8860 acres of displacement from undisturbed areas and displacement from 7567 acres of disturbed areas, for a total of 16,427 acres. Table 208 indicates that habitat compensation for this amount of acres would be 10,182 acres. The agency combined Mine and Transmission Line alternatives would result in displacement from undisturbed and already disturbed areas as follows: Alt. 3 C-R, 6117 and 6385 acres for a total of 12,502 acres which would require 7275 acres of compensation; Alt. 3 D-R, 6250 and 7097 acres for a total of 13,347 acres, which would require 7366 acres of habitat compensation; Alt. 3 E-R, 6892 acres and 9,001 acres for a total of 15,893 acres, which would require 8614 acres of habitat compensation; Alt. 4 C-R, 6166 acres and 7152 acres for a total of 13,318 acres, which would require 7560 acres of habitat compensation; Alt. 4 D-R, 6299 acres and 7864 acres for a total of 14,163 acres, which would require 7651 acres of habitat compensation; Alt. 4 E-R, 6921 acres and 9769 acres for a total of 16,690 acres which would require 8881 acres of habitat compensation. SDEIS at 498.

This amount of displacement from preferred habitat cannot possibly be mitigated by MMC purchasing other undisturbed or disturbed property or closing roads.

First, properties that are currently undisturbed are likely to be utilized already by grizzly bears and thus would not provide additional areas that would compensate for mine related displacement. Secondly, areas that are already disturbed, while not currently being used by grizzlies, would have to be undisturbed for a long period of time before grizzlies would be inclined to utilize them. See Dr. Lee Metzgar’s comments on grizzly bear use of rehabilitated areas below.

To make matters worse, much of the habitat from which bears will be displaced is high value spring habitat.

### **Displacement from Spring Habitat**

Spring habitat is considered by grizzly bear biologists to be the most crucial seasonal habitat for bears. It is also generally less available as secure habitat for grizzlies bears due to high road densities at lower elevations as a result of timber sale activities on federal land and development on private land.

According to the SDEIS, “In all combined action alternatives, mine-related activities would occur continuously along the east Cabinet front during spring (April 1 to June 15) throughout the life of the project.” SDEIS at 503.

According to Table 210 of the SDEIS, displacement of grizzly bears from spring habitat in BMUs 5 and 6 for the Combined Mine-Transmission Line alternatives would be as follows: 3,861 acres for Alternative 2 B; between 2,403 and 2,806 acres for Alternatives 3 and 4 combined with TL alternatives C-R, D-R and E-R. SDEIS at 504.

Furthermore, as stated in the SDEIS under **Seasonal components**: “The combined action alternatives, in combination with reasonably foreseeable actions, would result in cumulative disturbance to grizzly bears during spring. The combined action alternatives and the Rock Creek Project would occur adjacent to, and on opposite sides of, the CMW and core habitat. The Miller-West Fisher Vegetation Management Project also would occur in grizzly bear spring habitat. Due to the magnitude and duration of the cumulative disturbances, and the limited amount of foraging options available to bears in the spring, changes in spring habitat use might have adverse consequences for bear survival.” SDEIS at 509.

The cumulative impacts on spring habitat along with all other impacts on grizzly bear security and habitat from the Montanore mine and other foreseeable projects, particularly the Rock Creek mine, that will occur simultaneously and/or sequentially in the Cabinet portion of the CYRZ will no doubt adversely affect grizzly bears, and are likely to jeopardize the Cabinet population and eliminate the possibility of recovery for the Cabinet-Yaak population.

### **Habitat Removal / Physical Habitat Disturbance**

The SDEIS calculates the physical removal of grizzly bear habitat separately from displacement from habitat.

#### **TL Alternatives**

Physical habitat disturbance resulting from Alternative D-R would be the same as Alternative C-R, except that Alternative D-R would clear 176 acres within BMUs 5 and 6 and physically remove 9 acres of grizzly bear habitat (Table 204). Physical habitat disturbance resulting from Alternative E-R would be similar to Alternative D-R, except that Alternative E-R would clear 202 acres within BMUs 5 and 6 and physically remove 7 acres of grizzly bear habitat (Table 204). SDEIS at 494.

#### **Combined Mine-Transmission Line Effects**

The SDEIS states that all combined action alternatives would remove grizzly bear habitat due to the construction of mine facilities and new or upgraded roads. According to Table 207, the physical loss of grizzly bear habitat for combined mine and TL alternatives would vary from about 2,600 acres for Alt. 2, TL-B, to about 1500 acres for Alt. 3, TLs C-R, D-R and E-R, and to about 1900 acres for Alt. 4, TLs C-R, D-R and E-R. For all combined mine/TL alternatives, construction and improvement of access roads during transmission line construction would **temporarily** remove habitat. SDEIS at 496.

### **Helicopter Impacts**

During and after construction of the TL the ongoing use of helicopters will adversely impact all wildlife within the affected area. Grizzly bears in particular would be adversely affected. Studies have shown that grizzlies are impacted, i.e., flee from areas that are within a mile of a helicopter flight path. Figure 92, Grizzly Bear Habitat indicates that the Alternative E-R alignment is further away from core habitat than the other alternatives. The last part of the alignment, which is the same for Alternatives D-R and E-R appears to run adjacent to core habitat but does not enter it. Alternatives B and C-R. appear directly impact core habitat. SDEIS, Figure 92.

### **Mitigation for TL Construction Impacts of Grizzly Bears**

According to the SDEIS, “[t]o mitigate effects on the grizzly bear, MMC would secure or protect replacement grizzly bear habitat on 24 acres of private lands and *enhance grizzly bear habitat on 11,324 acres of private lands*<sup>9</sup> in the Cabinet-Yaak Ecosystem. The KNF access would be restricted on 2.8 miles of NFS road #4725 in an unnamed tributary of Miller Creek in Alternative CR and 4.2 miles in Alternatives D-R and E-R.” SDEIS at S-15.

### **Impacts on Linkage Zones**

According to the SDEIS, none of the Alternative C-R components or activities would affect linkage zones identified by Servheen *et al.* (2003). However, grizzly bear movement in a wildlife approach zone outside of the recovery zone in the Fisher River valley would be *temporarily* affected. Alternative C-R would deter or eliminate grizzly bear use of habitat along the West Fisher Creek, Miller Creek, Howard Creek, and Libby Creek drainages. These displacement effects would occur during transmission line construction. SDEIS at 490-491.

The project would also severely limit grizzly bear movement between the northern and southern areas of the Cabinet portion of the CYRZ. **In order “to address habitat constriction that reduces the potential to achieve Cabinet-Yaak Ecosystem grizzly bear recovery goals and to avoid jeopardy, MMC would acquire 5 acres of mitigation habitat required that would “enhance the north-south corridor in the Cabinet Mountains.”** DEIS at 142. The parcel is described as “about 5 acres near Lake Meadows.” It seems unlikely that acquiring this 5 acre piece is going to offset the impacts of the Montanore project, especially when combined with the impacts from the Rock Creek project, on the north-south movement of grizzlies in the Cabinets.

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<sup>9</sup> The actions that would result in “enhanced” grizzly bear habitat on private lands are not clearly described in the SDEIS. Would they entail lowering road densities or increasing core by obliterating roads?

## **The Best Available Science was not Considered by MMC in its Impacts Analysis for Grizzly Bears**

One aspect of grizzly bear behavior that MMC is either unaware of or chooses to ignore is that when displaced from preferred, e.g., secure habitat by disturbance, bears are not likely to return and use it again for many years - possibly decades.

According to Dr. Lee Metzgar's December 24, 2001 comments on the U.S Forest Service Draft Environmental Impact Statement On Forest Plan Amendments For Motorized Access Management Within The Selkirk And Cabinet-Yaak Grizzly Bear recovery Zones. DEIS for the Grizzly Bear Access Amendments (Metzgar, 2001):

“Temporal Stability Core areas must remain secure sufficiently long for effective bear use [expressed in survival and effective reproduction] and, in the case of new core, long enough for recolonization and subsequent effective use.... Grizzly bears learn to utilize habitats from their mothers and displacements may persist beyond habitat restoration for unknown lengths of time, perhaps longer than 35 years [USFWS, 2000, pp.58, 60]. Similarly, USFWS [1998, p.33] states: “...Long-term displacement ....may persist for several generations of bears before grizzly bears again utilize habitat associated with closed roads. Because grizzly bear generation time approximates 10 years [Harris and Allendorf, 1989], effective core must remain secure on a time scale of several decades.” Metzgar, 2001 at 7. Dr. Metzgar's 2001 comments are attached hereto as **Attachment A**.

Thus the concepts of “temporarily removing habitat,” and “temporary displacement from habitat” which imply that the impacts would persist only during the time that the actions that cause the displacement are actually occurring, is not based on the best available science. The impacts on bears as a result of displacement from habitat and the physical loss of habitat, even when mitigated by closing roads or acquiring land, would be long term, perhaps over several generations of grizzlies, not short term, as assumed in the SDEIS.

The Montanore SDEIS does not discuss or reference any valid scientific evidence to support its conclusion that the proposed mitigation for the project's impacts on grizzly bears will succeed in reducing the project's impacts on the Cabinet population of grizzly bears and eliminate the probability of jeopardy, should both the Rock Creek and Montanore projects proceed simultaneously or sequentially.

### **Increased Mortality Risk**

The project will increase the mortality risk to grizzlies due to increased human presence in the area, displacement from disturbance to areas where the risk of mortality is high, creating new hunter and recreational access to grizzly habitat and project-wide reductions in security.

According to the DEIS, “[a]s a result of activity at the Ramsey Plant site and Libby Plant Site, bears may be displaced from important seasonal foraging areas during critical

periods, and may need to seek foraging sites in areas closer to human disturbance. Displacement into habitat less secure from humans can result in increased mortality for bears (USFWS 1993). DEIS at 878.

For example, according to the SDEIS, TL Alt. C-R (like Alt. B) would result in clearing in 0.5 mile (12 acres) of core habitat in the transmission line corridor which would provide improved access for forest users to the ridgeline between the Miller Creek and Midas Creek drainages, *increasing mortality risk in this area*. In addition to the bear specialist and law enforcement positions funded by MMC in Alternative B, Alternative C-R includes MMC funding of a habitat conservation biologist. Public education about grizzly bears, enforcement of laws protecting grizzly bears, and management of lands to benefit the grizzly bear would minimize mortality risks.”<sup>10</sup> SDEIS at 491. Emphasis added. This is but one small example of the actions associated with the project that will increase the risk of mortality.

### **Measures to Reduce Mortality Risks Grizzly Bears**

The Montanore project’s impacts on grizzly bear habitat and security will no doubt increase the risk of mortality to grizzlies that reside in or move through affected BMUs. The measures to reduce the risk of grizzly bear mortality include: making a plan to minimize traffic during construction and the operation of the mine; removing road-killed wildlife; funding a local FWP Enforcement officer; using bear resistant garbage containers on the mine site; providing funding for installation of electric fencing in garbage transfer stations and other problem areas in the CYRZ; requiring mine employees to attend training sessions related to living and working in grizzly bear occupied areas; prohibiting employees from carrying firearms, feeding wildlife and hunting within the project area. SDEIS at 59-62.

Though these are all worthwhile steps to take to avoid an increase in mortalities as a result of mine related actions and the huge increase in human intrusion into grizzly bear habitat, they would not guarantee that bears will not be killed as a direct or indirect result of mine related actions.

### **The impacts on grizzlies from mining activities in the area will continue long after mine closure**

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<sup>10</sup> One of the mitigations for the Rock Creek mine, already in place, is to hire a grizzly bear specialist to help protect the species from human-caused mortality. The position was filled in 2007. Two grizzly bears were transferred to the region in 2008 to augment the local population, but both were killed before the year was out. More recently, on November 13, 2011, a collared male grizzly was killed in Bear Creek in BMU 2, close to or within the project area. The Rock Creek mine has not even been built and the specialist position has already been shown to be ineffective. MMC cannot rely on its commitment to create positions and hire law enforcement, public education specialists to reduce the increased risk of mortality associated with implementation of the mine. In spite of several years of efforts to reduce such events by the Rock Creek “grizzly bear specialist,” those efforts failed to prevent the killing of a bear that was one of only 15 or so that reside in the Cabinets.

“The Post-Closure Second Phase would involve long-term operations and maintenance of specific facilities, such as the Water Treatment Plant or the seepage collection system at the tailings impoundment. The SDEIS states that MMC would maintain and operate these facilities until water quality standards were met in all receiving waters from the specific discharge. MMC also would continue water monitoring as long as the MPDES permit is in effect. The level of human activity associated with facility operation, maintenance, and monitoring is unknown, but has the potential of being a daily requirement and year-round in duration. *The length of time that the second phase of closure activities would occur is not known, but may be decades or more.*” SDEIS at 114.

Though the levels of mine traffic and number of workers would be substantially reduced post-closure, the fact that the disturbance related to post-closure mining activities may go on for “decades or more” means that grizzly bears will avoid, e.g. be displaced from the area of impact in BMU 5 that much longer. As discussed above, it will take them many years to begin to use the area again once all mine-related activities in BMUs 2, 5 and 6 have ceased, but this will extend the impacts from displacement in BMU 5 for many more years.

#### **Impacts on grizzlies in the BORZ**

According to the SDEIS, helicopter use during construction of Alternative C-R is likely to increase disturbance to grizzly bears in the BORZ, potentially displacing them from suitable habitat. Temporary displacement effects in the BORZ would potentially occur on 9,148 acres of grizzly bear habitat, including 7,176 acres currently disturbed by existing activities (Table 205). SDEIS at 491, 492.

#### **Areas in the Cabinets Currently and Historically used by Grizzly Bears**

Many of the long term (20 -25 years -all phases) impacts on grizzly bears from the Montanore project will occur in BMU 5, which, according to available information, is the area most used by grizzlies in the southern Cabinets. Table 201 in the SDEIS indicates that credible grizzly bear sightings have been documented to the greatest degree in BMU 5. As of 2004 there had been 8 credible sightings in BMU 5, as opposed to 1 in BMU 2 and 0 in BMU 6. BMU 5 was also the only BMU with an unduplicated sighting of a female with cubs. SDEIS at 478.<sup>11</sup>

BMU 5 is one of the two BMU’s (5 and 6) that will impacted by both mines. For Montanore, the options for plant sites (Ramsey and Libby), adits (Libby and Upper Libby), tailings impoundments (Little Cherry Creek and Poorman Creek) and Alt. 2LADs are all located in BMU 5.

#### **The SDEIS Cumulative Effects Analysis is Inadequate**

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<sup>11</sup>Table 2 in Kasworm, et al. 2010 indicates that the number of sightings in BMUs 5 and 6 remained unchanged as of 2009.

If both the Rock Creek and Montanore projects are approved by the agencies and go forward within the same timeframe (simultaneously or sequentially), the combined impacts would likely jeopardize the grizzly population in the Cabinets. The Rock Creek (Revett) mine would impact BMUs 4, 5 and 6, thus compounding the negative impacts of the Montanore proposal on grizzly bear habitat and security in this portion of the CYRZ.

The only information offered in the SDEIS (and DEIS) regarding the Rock Creek Mine project's impacts on grizzly bears is that it "will disturb 482 acres, of which 140 acres will be National Forest System lands, and reduce grizzly bear habitat effectiveness on an estimated 7,044 acres during construction and 6,428 acres during operations." SDEIS at 115. The life of the Rock Creek Project is anticipated to be 35 years." SDEIS at 115.

The inclusion of this information does not qualify as an adequate cumulative effects analysis. In order to adequately address and analyze the cumulative impacts of the Rock Creek Mine proposal, combined with the Montanore proposal on grizzly bears, the agencies and MMC must disclose and consider the specific areas and types of impacts, i.e., acres of secure habitat from which grizzlies would be displaced, acres of grizzly bear habitat that would be removed and decreases in security due to reductions in core and increases in road densities, that would occur if both mines are implemented.

The information included in the SDEIS: that the proposed Rock Creek mine would impact 7,044 acres of grizzly bear habitat in addition to the approximately 27,000 acres of habitat impacted by Montanore, and that this habitat loss would be concentrated in an area of the Cabinets that is a prime area of use by grizzlies, is indicative of an unacceptable level of devastating impacts to the small number of grizzlies that inhabit the Cabinet portion of the CYRZ. The impacts from such a large reduction in secure habitat loss cannot be mitigated.

The proposed Montanore and Rock Creek Mines are the greatest potential threats to the grizzly bears in the Cabinet Mountains portion of the CYRZ. If either of the mines gets final approval and becomes operational, there will be enormous negative impacts on grizzly bears. If both mines get approved and are constructed concurrently or sequentially, the impacts would likely jeopardize the continued existence of grizzlies in the Cabinets, and therefore the CY population.

In its 2006 Biological Opinion on the Rock Creek Mine, the U.S. Fish and Wildlife Service noted that if both mines operate at the same time, their combined impacts would cut off 22 % of the ecosystem and 31% of its grizzlies, leaving too small of a population to remain viable (USFWS 2006). The SDEIS does not adequately address the cumulative impacts of the two mining projects should their implementation occur simultaneously, or sequentially.

### **The Grizzly Bear Habitat/ Mine Map is Inadequate**

The SDEIS (like the DEIS) includes only one Grizzly Bear Habitat map (Figure 92), that displays the BMU and BORZ boundaries in the area that will be impacted by the mine. Figure 92 indicates that all components of the mine are located within BMUs 5 and 6, with the exception of part of the main access road (Forest Service road #278) and portions of various alternatives for the transmission line which are located in the Cabinet Face BORZ. Existing roads and changes in access being proposed in the area of impact are not included. Maps of existing (open and closed) roads and proposed new roads should have been included for each alternative.

We request that the final EIS include detailed (pre-project, during and post-project) BMU maps that show the changes in access proposed for mitigation, and how the changes will affect core. Maps should also show the areas of displacement and habitat removal for each combined mine and TL alternative and indicate changes in core and OMRD and TMRD for each alternative and as a result of the mitigation in affected BMUs.”

The Remedy is to Choose the No Action Alternative.

The Regional Office must vacate and remand both the Draft Decision and FEIS order the correction of all errors noted herein. The USFS cannot approve any of the action alternatives described in the FEIS, or any action alternative at all that the applicant may propose, unless and until all laws, etc., noted herein are satisfied.

### **Impacts to Other Threatened Wildlife Species, Violation of the ESA, NEPA, NFMA and the APA.**

**We wrote the following in our comments:**

#### **“Lynx**

Lynx is a newly listed threatened species and long-term loss of lynx habitat from the Montanore mine is a concern. The tailings impoundment alone would impact over 400 acres of lynx habitat. DEIS Vol.1, Page 200. Lynx were listed as a threatened species in 2000. The Kootenai National Forest is within a core lynx area. Long-term losses of lynx habitat are expected to occur as a direct consequence of the Montanore mine. The impacts on lynx from the proposed mine include, but are not limited to, loss and degradation of habitat, degradation of habitat for a major food source, increased mortality from vehicular

collisions, and the risk of incidental take from trapping.

**Cumulative impacts from the Rock Creek mine** will have significant impacts on travel and dispersal capabilities because of a reduction in remote areas and a constriction of the Cabinet Mountains Wilderness. Rock Creek EIS Section 4, Page 172.

Lynx would lose considerable habitat as a result of the Montanore mine. Construction of the transmission lines and the tailings facility would impact approximately 629 acres of habitat, including denning habitat for the lynx. It is likely that the volume of lynx habitat impacted will be much greater due to displacement from suitable habitat due to the noise and high levels of human activity.

As a consequence of increased access into lynx habitat as a result of the project, it is expected that there will be an increase in incidental take of lynx by trapping.

Snowshoe hare habitat would be impacted by the construction of the mine, including transmission lines. It is estimated that the snowshoe hare, a primary food source of the lynx, could lose as much as 391 acres of habitat. DEIS Vol. 2, Page 893.

#### **Lynx Transmission Line Construction Impacts - Alt. B**

About 29 acres of old growth would be affected by Alternative B. Compared to the other transmission line alternatives, Alternative B would affect the most old growth habitat, but its effects on the proportion of old growth in the analysis area would be minor. SDEIS at 516.

**VEG S2:** In Alternative B, about 6 acres and 79 acres of regeneration harvest would occur in lynx habitat in 10 years in LAUs 14503 and 14504, respectively. The effects of Alternative B on the proportion of regeneration harvest in lynx habitat in 10 years would be minor. Alternative B would meet this standard.

**VEG S6:** Alternative B would affect about 6 acres of multistory or late-successional forest snowshoe hare habitat in LAU 14503, and 42 acres in LAU 14504. Alternative B would not meet the standard for VEG S6.

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

Impacts to lynx in LAU 14504 from Alternative C-R would be the same as Alternative B, with the exception of the following:

**ALL 01 and ALL S1:** More right-of-way and tree clearing, but fewer structures and access roads, would be required for Alternative C-R than Alternative B. In Alternative C-R, construction of the transmission line and access roads could affect lynx movement within LAUs 14503 and 14504 by removing forest cover in potential movement areas such as the Miller Creek and Howard Creek riparian corridors. Regeneration harvest

would occur on up to 5 acres of lynx habitat in LAU 14503, and up to 57 acres of lynx habitat in LAU 14504. The least regeneration harvest would occur with Alternative C-R, compared to the other transmission line alternatives. SDEIS at 518.

**VEG S2:** In Alternative C-R, about 5 acres and 57 acres of regeneration harvest would occur in lynx habitat in 10 years in LAUs 14503 and 14504, respectively

**VEG S6:** Impacts from Alternative C-R on multistory or late-successional forest snowshoe hare habitat would consist of about 5 acres in LAU 14503 and 33 acres in LAU 14504 (Table 214). Alternative C-R would not meet this standard. Impacts to multistory or late-successional forest would be offset through enhancement of either 336 or 484 acres of lynx stem exclusion habitat, depending on the paired mine alternative, included in the agencies' alternatives.

**VEG G5 and G11:** About 6 acres of old growth would be impacted by Alternative C-R. According to the SDEIS, the designation of 36 acres of replacement old growth habitat included in Alternative C-R would offset its impacts on old growth forest. As discussed below, replacement old growth is not actually old growth and would require many years, perhaps centuries, to develop old growth characteristics. Compared to the other agency-mitigated transmission line alternatives, Alternative C-R would affect the most old growth habitat.

#### **Alternative D-R - Modified North Miller Creek Transmission Line**

##### **Alternative**

The impacts on lynx from Alternative D-R would be slightly less than Alternative C-R.

#### **Alternative E-R – West Fisher Creek Transmission Line Alternative**

*Effects on Lynx on National Forest System Lands* - Impacts to lynx in LAU 14504 from Alternative E-R would be similar to Alternative D-R, with the exception of the following.

**VEG S2:** In Alternative E-R, about 41 acres of regeneration harvest would occur in lynx habitat in 10 years in LAUs 14503.

**SDEIS Statement of Findings for lynx:** “[a]ll of the combined action alternatives may affect and would likely adversely affect the Canada lynx because they would affect multistory or late-successional forest snowshoe hare habitat.” SDEIS at 521.”

#### **Remedy:**

as detailed above and in previous comments submitted by the Objectors, the FEIS and DROD fail to fully comply with numerous federal and state laws, regulations, policies, and other

requirements. As such, the Regional Office must vacate and remand both documents and order the correction of all errors noted herein. The USFS cannot approve any of the action alternatives described in the FEIS, or any action alternative at all that the applicant may propose, unless and until all laws, etc., noted herein are satisfied.

The Draft Decision violates the KNF Forest Plan, NEPA, NFMA and the APA.

We wrote the following in our comments:

**“Mountain Goats**

The Mountain goat are a KNF Management Indicator Species (MIS). The direct impacts from the Montanore mine include but are not limited to displacement from habitat due to mine related activities such as blasting and road building. Actions associated with the mine in all phases will likely increase stress levels resulting in low mountain goat reproductive rates. The estimated long-term disturbance on 5,656 acres seems low due to the invasive nature of the activities within their habitat. It is likely that mountain goats would be forced to vacate their historic range.

The Montanore mine would have a direct impact on mountain goats. The goats use the head waters of Libby, Ramsey, West Fisher, and Poorman creek. These drainages are the population epicenter for the mountain goat in the southern Cabinet Mountains.

How do the agencies plan on protecting the mountain goat population from displacement as a result of the cumulative effects of the Montanore and Rock Creek mines? Other projects, such as the Wayup and Fourth of July mines, in the area would displace goats from an additional 4561 acres of habitat according to the Montanore DEIS (Vol.2 page 777).

NFMA requires the Forest Service to maintain viable populations of native species, and in particular MIS species. The potential extirpation of mountain goats would violate this requirement.

**Wolverine**

A forest sensitive species, the wolverine would also be affected by the combined impacts from the Montanore and Rock Creek mines. Impacts would include a reduction in travel and dispersal capabilities because of a reduction in remote areas and constriction of the Cabinet Mountains Wilderness. An increased trapping risk from both mines and an increase in local human populations would increase the risk that trapping that could

exceed the ability of the wolverine to maintain population numbers. (Rock Creek EIS 4-172)

The wolverine could become listed as a threatened species in the near future due to the fact that only small and isolated populations exist, due to degradation of habitat and due to their sensitivity to human disturbance. The cumulative impacts of both projects on the wolverine must be considered.

### **Impacts on Old Growth**

#### **3.22.2.4.10 Combined Mine-Transmission Line Effects**

Direct impacts of the mine alternatives in combination with the transmission line alternatives are shown in Table 158. Impacts to old growth from combined mine and transmission line alternatives before mitigation would be the greatest (395 acres of old growth removed) for MMC's proposed alternative 2B. Old growth removed for the agencies' alternatives (Alternatives 3C, 3D, 3E, 4C, 4D, and 4E), including private and state land, would range from 175 acres for Alternative 4E-R to 203 acres for Alternatives 3C-R. Agency alternatives 3 and 4 would include mitigation for impacts to old growth, such as the designation of additional forest as old growth shown in Table 158 on National Forest System lands. Replacement old growth (ROG) would not be actual old growth. The ROG areas would be managed to develop old growth characteristics. SDEIS at 393.

#### **Table 158. Summary of Impacts to Old Growth from Combined Mine and Transmission Line Alternatives.**

The portion of the table for the **Crazy PSU** indicates that Alt, 2-B would remove 205 acres of designated old growth and existing ROG and 188 acres of undesignated old growth; Alt. 3 C-R, D-R and E-R would remove 191 acres of designated old growth and ROG and 6 acres of undesignated old growth; Alt. 4 C-R, D-R and E-R would remove 46 acres of designated old growth and 129 acres of undesignated old growth.

The actual acreage impacted remains ambiguous because of the agencies decision to reallocate and reclassify designated old growth habitat (MA13) within areas of the operating permit to mineral development (MA31).

**Edge Effects:** Table 158 indicates that there are currently 194,541 feet (36.8 miles) of road in the project area that are in or adjacent to old growth stands in the Crazy PSU. Roads that are adjacent or through old growth create an undesirable edge effect. Under Alternative 2B an additional 2891 feet of road (.5+ mi.) would be placed adjacent to or through old growth; Alternatives 3 and 4, with all TL alternatives, would add 1231 feet (.25+ mi.) of road adjacent to or through old growth stands.

As a result of the increase in edge effects, interior old growth habitat would be reduced by 656 acres under Alternative 2-B, 444-445 acres in Alt 3 and 396-397 acres in Alternative 4. SDEIS at 394.

The portion of the table for the **Silver Fish PSU** indicates that the impacts on old growth from the combination mine and transmission line alternatives would be relatively negligible. Alt. 2-B would remove 0 acres of designated old growth; Alt. 3 C-R and D-R would remove 4 acres of designated old growth, Alt. 3 E-R would remove 0 acres of old growth; Alt. 4 C-R, D-R and E-R would be the same as Alt. 3 C-R, D-R and E-R.

**Edge Effects:** Table 158 for the **Silver Fish PSU** indicates that the impacts from increased edge effect would also be relatively negligible. As a result of the increase in edge effects, interior old growth habitat would be reduced by 28 acres in Alternative 2-B, and by 36, 2, or 0 acres as a result of Alt. 3 and Alt. 4 C-R, D-R and E-R respectively. SDEIS at 395.

Although both PSUs would still meet the KNF FP standard for the required amount of old growth in a PSU, the reduction in old growth may adversely impact old growth dependant species. Furthermore, the inclusion of ROG in the calculation for existing old growth raises the question of whether there is enough existing true old growth to support viable populations of old growth species in either PSU and whether the removal of true old growth, particularly in the Crazy PSU, will adversely impact old growth dependant species.

### **Mitigation**

The agencies' solution to mitigate for the loss of the old growth will not compensate for the destruction of this habitat. The Alternatives 3 and 4 propose to designate between 705 and 717 acres (depending on the TL alternative) elsewhere on the forest as old growth, which would be managed so that it would eventually develop old growth characteristics.

Several problems with this approach are apparent, including the fact that the classification as old growth (MA13) failed to protect the acreage of habitat that would be harvested as a direct result of the Montanore mine. The agency also recognizes that the 700+ acres will not replace the old growth that is lost because no new old growth will have been created. Depending on the stands selected, it could take centuries for the replacement old growth to become viable habitat for old growth dependant species. Given the recovery time for old growth, it also could take centuries following disturbance for the edge effects in the Crazy PSU to be eliminated.

### **Old Growth Dependent Species**

According to the SDEIS, in spite of the reductions in old growth during implementation, the Crazy PSU would still contain between 16.8 and 16.9 percent designated old growth

below 5,500 feet elevation and the Silverfish PSU would still contain 13.6 percent designated old growth below 5,500 feet elevation. This is above the KNF FP Old Growth standard, which states that maintaining 10 percent of old growth habitat is sufficient to support viable populations of old-growth dependent species (KFP Vol. 1, II-1 #7 and III-54; Vol. 2, A-17). SDEIS at 449.

### **Northern Goshawk**

According to the DEIS, the northern goshawk, an old growth dependent species, is listed as a State Species of Special Concern. Although the northern goshawk has been removed from the list of Forest Sensitive Species (McAllister 2007), the Forest Service is still required by NFMA to maintain viable populations. Furthermore the goshawk is considered to be an indicator species for the adequacy of old growth habitat. The fact that it is not on the KNF's list of Management Indicator Species for old growth does not eliminate its role as such. DEIS at 925.

According to the DEIS, two historical goshawk nesting territories are located in close proximity to the Little Cherry Creek Tailings Impoundment Site. Two nests, one in the Bear Creek drainage and the other in the Little Cherry Creek drainage, were documented in 1983, but have not been known to be active since that date. No goshawk responses were detected during MNHP surveys of the two historical nesting territories in 2005 or 2006 (MNHP 2006b). No goshawks were observed during formal surveys conducted by the Forest Service from 2004 to 2006 near the proposed mine facilities, although one fledgling goshawk was observed in 2005 during surveys conducted in the Midas Creek drainage. The Forest Service conducted formal goshawk surveys in and adjacent to the proposed Montanore transmission line alignments during the summer of 2005 but did not detect any goshawks. No known or historical nesting territories have been documented in the Silverfish PSU. One potential nesting territory was found in August 2002 in Iron Meadow Creek, when two goshawks were encountered during an old growth survey. No nest tree was located. DEIS at 925.

Based on potential habitat from Johnson (1999) and the average goshawk pair territory, the minimum the KNF could support 139 goshawk pairs. The Crazy PSU contains about 13,291 acres of potential goshawk habitat, while the Silverfish PSU contains about 12,852 acres of potential goshawk habitat, based on habitat modeling. DEIS at 925.

### **Pileated Woodpecker**

The pileated woodpecker is a Management Indicator Species (MIS) for cavity nesting species and old growth on the KNF.

No pileated woodpeckers were observed during breeding bird surveys conducted in 2005 at the Little Cherry Creek Tailings Impoundment Site, the Ramsey Plant Site, the LAD Areas, and MMC's proposed transmission line alignment. Searches for active pileated

woodpecker nest cavities also were conducted during old growth validation surveys in 2007, but none were found. DEIS at 780.

The absence of these species from the analysis area is indicative of a lack of adequate habitat and/or disturbance levels that preclude them from utilizing the habitat that is available. The Montanore project will reduce available old growth habitat and greatly increase disturbance levels.

#### **Black-backed woodpecker**

The black-backed woodpecker is a sensitive species. Several surveys conducted in the Crazy and Silverfish PSUs; no black-backed woodpecker nests were identified in the analysis area.

As specified in the Environmental Specifications (Appendix D), either tree removal would not occur during black-backed woodpecker breeding season, or surveys would be conducted in potential black-backed woodpecker habitat prior to project construction to identify potentially impacted nests. If an active nest is found in the project vicinity, tree removal would not occur in an avoidance area appropriate for the species until young have fledged.

#### **TL Mitigation**

MMC would complete surveys to locate any active nests in appropriate habitat of Forest sensitive species and State species of concern, such as the flammulated owl, black-backed woodpecker, and northern goshawk, *or would* not remove vegetation in the nesting season.” SDEIS at S-15. Emphasis added.

Avoiding clearing of vegetation during the nesting season would not eliminate the impacts to sensitive avian species. Surveys should be conducted to determine whether the areas impacted by the TL alternatives contain suitable species’ habitat for flammulated owl, black-backed woodpecker, and northern goshawk and other sensitive species. The surveys should determine which species are present and the existence and location of nesting sites. If surveys indicate that nesting sites are located within the areas of impact, those areas should be avoided. The potential for impacts to these and other sensitive species from the construction of the TL alternatives must be disclosed in the FEIS.

#### **National Forest Management Act**

KFP direction is to “maintain diverse age classes of vegetation for viable populations of all existing native, vertebrate, wildlife species, . . . in sufficient quality and quantity to maintain viable populations” (KFP Vol. 1, II-1 #7). This mandate is addressed in the KNF FP which requires the KNF “identify, protect, and manage” habitat for sensitive species in order to assist in maintaining viable populations. The KFP contains the following goals and direction for sensitive species: “determine the status of sensitive species and provide

for their environmental needs as necessary to prevent them from becoming threatened or endangered” (KFP Vol. 1, II-1 #6).

The absence of any evidence that the goshawk, flammulated owl and black-backed woodpecker exist or are nesting in suitable habitat in the project area brings into question the viability of these species in the project area. Under these circumstances, the Forest Service cannot approve actions that would further degrade suitable habitat for these species.

### **Wilderness and Roadless Area Impacts**

The mining operation would be located inside the Cabinet Mountains Wilderness, directly beneath Rock Lake. The Kootenai National Forest is 2.2 million acres; the 94,000 acre Cabinet Mountains Wilderness is the only designated wilderness in the KNF. As described above, severe impacts to wilderness lakes are likely, including Rock and St. Paul Lake and possibly even the high alpine chain of Libby Lakes. The mine cavity will divert groundwater that these lakes depend on for recharge. Once the cavity beneath the wilderness is created, the consequences will be irreversible.

Impacts to wilderness streams and creeks are also expected, including the East Fork of Bull River, which is essential for the survival of the threatened bull trout in the region. Most of the impacted tributaries in the Libby Creek drainage originate within the Cabinet Mountains Wilderness.

Subsidence and/or collapses in subsurface cavity and tunnels occur frequently in deep underground mines. If any such failure were to happen beneath the wilderness, surface impacts would be expected.

Numerous other mining interests have claims for the ore beneath the wilderness, including the proposed Rock Creek project. If one project is permitted, it will be difficult to deny other interests from accessing the ore. The consequence would be a wilderness that would be honeycombed from ore extraction, rimmed with the operating and abandoned mining infrastructure, and scarred by discarded tailings.

Noise and visual mine related impacts to the wilderness would further degrade the wilderness character of the region. Noise related impacts would be created by the constant operation of heavy equipment, the blasting of rock, generators, ventilation fans, and around the clock heavy truck traffic.

Visual impacts to the wilderness would also be significant and include a massive 647-acre, 318' high tailings pile, a 310' high dam to contain the tailings, as many as 16 miles of power line construction, the presence of industrial equipment and facilities, and a

ventilation adit adjacent to Rock Lake.

The proposed mine would also be located adjacent to Inventoried Roadless Areas, including the Cabinet Face East and Barren Peak IRA's. These areas include old growth and core grizzly bear habitat which will be impacted by the proposed mine and TL alternatives.

Air quality issues would include cumulative impacts associated with the neighboring Rock Creek mine. The wilderness has a Class One Airshed meriting the highest level of protection. Potential impacts include discharges of particulates (PM10), nitric oxides, and sulfur dioxides. The agency needs to evaluate the air quality impacts from proposed mining in the region cumulatively and not as individual projects.

### **Summary**

Clearly the Montanore project would have adverse impacts on all native wildlife and fish species that are present in the project area due to degradation of terrestrial and aquatic habitats. Among the most notable are the inevitable and devastating impacts on the Cabinet Yaak grizzly bears and the Lower Clark Fork bull trout that would occur if the Montanore project receives agency approval and goes forward. As discussed above, because the grizzly bear population is so small in the Cabinet portion of the CYRZ, the population is at risk of extinction even without the mine. The magnitude of impacts from the alternatives described in the SDEIS and DEIS will have dire consequences for these and other native species as discussed above. No amount of "mitigation" can offset the inevitable negative impacts of construction and operation of the mine on native species.

Before issuing decisions and permits, the Forest Service and Montana DEQ must take a hard look at the long term cumulative/combined effects of the Montanore and Rock Creek mining projects on native species, including threatened, sensitive and MIS species that inhabit the project area. Likewise, the US Fish and Wildlife Service must take a hard look at the cumulative impacts of both projects when determining whether the Montanore project would jeopardize the Cabinet grizzly bears and Lower Clark Fork bull trout."

The remedy is to prepare a legally valid EIS), comply with all ESA, NEPA and NFMA requirements noted herein, and, if meeting all legal requirements (which as shown herein it does not) choose the no action alternative.

### **CONCLUSION**

Pursuant to 36 CFR Part 218, and the APA, the Regional Office must respond to each of the above issues. As shown above, the Final EIS and Draft Decision Notice must be overturned and vacated and the project cannot be approved as currently reviewed and proposed.

As detailed above and in previous comments submitted by the Objectors, the FEIS and DROD fail to fully comply with numerous federal and state laws, regulations, policies, and other requirements. As such, the Regional Office must vacate and remand both documents and order the correction of all errors noted herein. The USFS cannot approve any of the action alternatives described in the FEIS, or any action alternative at all that the applicant may propose, unless and until all laws, etc., noted herein are satisfied.

Thank you.

Michael Garrity

/s/

Executive Director  
Alliance for the Wild Rockies P.O. Box 505  
Helena, MT 59624  
406 459-5936