

United States Department of the Interior

Fish and Wildlife Service



Ecological Services
Montana Field Office
585 Shepard Way, Suite 1
Helena, Montana 59601-6287
Phone: (406) 449-5225; Fax: (406) 449-5339



File: M19 Kootenai National Forest
Montanore Mine Project; 06E11000-2013-F-319

April 7, 2014

Pam Gardner, Acting Forest Supervisor
Kootenai National Forest
1101 Highway 2 West
Libby, Montana 59923

Dear Ms. Gardner:

This revised document transmits the U.S. Fish and Wildlife Service's (Service) FINAL biological opinions on the U.S. Forest Service's proposal to permit the Mines Management Corporation (MMC) (hereafter referred to as the Montanore Project) and its associated mining operations and its potential effects on several listed and proposed species. These are the grizzly bear (*Ursus arctos horribilis*), the Canada lynx (*Lynx canadensis*) and its designated critical habitat, the proposed wolverine (*Gulo gulo luscus*), the bull trout (*Salvelinus confluentus*) and its designated critical habitat and the Kootenai River white sturgeon (*Acipenser transmontanus*). In order to facilitate timely delivery of the Service's biological opinion, we are transmitting separate FINAL biological Opinions (BOs) under cover of one transmittal letter. The BOs describe effects of the proposed Montanore Project on the threatened grizzly bear, bull trout and its designated critical habitat. The BOs have been prepared in accordance with Section 7 of the Endangered Species Act of 1973, as amended (Act) (16 U.S.C. 1531 et seq.).

We received the Kootenai National Forest's (here after Forest or KNF) terrestrial biological assessment (addressing grizzly bear and other terrestrial species) and request for formal consultation on July 8, 2011. On October 12, 2012, we requested corrections, clarifications, and additional information from the Forest. We received the Forest's' revised biological assessment and complete response to our request in May 2013 and determined that the biological assessment was complete. We provided a draft terrestrial BO to the Forest on December 23, 2013 and received comments from you on January 24, 2014. Our responses to these are included in the FINAL BOs.

We received the Forest's aquatic biological assessment (addressing the bull trout and other aquatic species) and request for formal consultation on February 25, 2013. Although additional clarifications were made and discussions had throughout the Service's review, the analysis in the aquatic BO is based on information provided prior to that date. We provided a draft aquatic BO to the Forest on February 5, 2014, for review and comment and received comments from the

KNF on March 12, 2014. Our responses to these are included in the FINAL BOs. Section 7(b)(3)(A) of the ESA requires that the Secretary of Interior issue biological opinions on federal agency actions that may adversely affect listed species or critical habitat. Biological opinions determine if the action proposed by the action agency is likely to jeopardize the continued existence of a listed species or destroy or adversely modify critical habitat. Section 7(b)(3)(A) of the ESA also requires the Secretary to suggest reasonable and prudent alternatives to any action that is found likely to result in jeopardy to a listed species or adverse modification of critical habitat, if any has been designated. These biological opinions address only impacts to federally listed species and do not address the overall environmental acceptability of the proposed action.

The majority of the proposal is located on the east slope of the Cabinet Mountains on the Libby Ranger District, KNF. It is located approximately 15 air miles south of the town of Libby in Lincoln County, Montana. Potential effects occur on both the Libby and Cabinet Ranger Districts of the Kootenai National Forest. The above ground workings for the proposed mine would be located approximately 20 air miles south of Libby, MT. The project lies within Libby Creek and West Fisher Creek drainages. The proposed ventilation adit is located by Rock Lake and mitigation measures occur in the west side of the Cabinet Mountain Wilderness in both the East Fork Rock Creek and the East Fork Bull River. Rock Creek drainage is a tributary to Cabinet Gorge Reservoir on the lower Clark Fork River in Sanders County, Montana.

Summary of Impacts to Listed Species of the Proposed Montanore Project (as Described in the Attached Biological Opinions)

Grizzly Bear. The main impacts of the proposed Montanore mine project to grizzly bear are (1) a narrowing of the north-south movement corridor in the Cabinet Mountains; (2) an increase in risk from potential human-caused mortality; and (3) displacement from suitable habitat areas due to human activity or physical loss of habitat to construction of mine features.

Each of these impacts is addressed through project design elements, such as controlling the time when an activity may occur, and appropriate conservation items. Collectively, the conservation measures are reasonably expected to prevent the loss of multiple grizzly bear over the 30-year life of the mine, thus more than offsetting the loss we anticipate from the project (one grizzly bear).

To mitigate for the narrowing of the north-south corridor, the project includes acquisition of 1,274 acres that are at risk of development within this corridor. Those lands are then to be managed to the benefit of grizzly bear in perpetuity. In addition, motorized trail #935 (East Fork Rock Creek) will be converted to non-motorized, thus creating over 1,000 acres of new grizzly bear core habitat and expanding the distance (east-west) across the north-south corridor between project disturbance sites from 0.9 miles to 3.4 miles. See Appendix C of the BO for details.

The potential increase in risk from human-caused grizzly bear mortality is minimized by efforts that will inform and educate mine employees and the public about living in grizzly bear country. They will also improve public support for grizzly bear recovery. The major items include: (1) development of a detailed and enhanced information and education program; (2) hiring a grizzly bear specialist to work specifically in the CYE; (3) hiring a law enforcement officer to work specifically in the CYE; (4) making all garbage collection sites and Forest campgrounds in the

CYE bear resistant through fencing and new bear resistant garbage containers; and (5) providing the public with temporary electric fencing kits as needed to deter grizzly bear activity near residences. Details of these measures, along with several other items can be found in the project mitigation plan (Appendix C of the BO).

Displacement of grizzly bear from suitable habitat areas is minimized by (1) acquisition of an additional 4,928 acres of grizzly bear habitat that is at risk of development in or near the CYE and requiring those lands be managed to benefit grizzly bear in perpetuity; and (2) controlling the time when power line work may be conducted (outside the spring grizzly bear use period).

In addition, mitigation designed to offset cumulative effects by changing access conditions to create grizzly bear core habitat will also (a) contribute to reducing risk of human-caused bear mortality; (b) provide undisturbed habitat area for displaced bears; (c) improve habitat conditions in the north-south movement corridor; and (d) help meet Forest Plan standards for grizzly bear habitat conditions. A total of 7,030 acres (includes acres from Trail #935) of new core habitat will be created.

Implementation of the entire mitigation plan will result in an improved condition over the baseline. This improved condition is anticipated to offset and minimize the impacts of the incidental take anticipated as a result of mine development.

After reviewing the current status of the grizzly bear, the environmental baseline for the action area, the effects of the proposed Montanore Mine Project and the cumulative effects, it is the Service's biological opinion that the Montanore Project as proposed, is not likely to jeopardize the continued existence of the listed entity of grizzly bears. No critical habitat has been designated for this species, therefore none would be affected.

The Service anticipates take of grizzly bear will occur as a result of the previously outlined adverse effects. In the BO, the Service provided KNF with reasonable and prudent measures and terms and conditions that will minimize the impact of incidental take to grizzly bear and minimize adverse effects to its habitat. KNF must comply with the terms and conditions in order to be exempt from section 9 prohibitions in the Endangered Species Act (Act).

Bull trout and its designated critical habitat. Predicted adverse effects of the proposed Montanore mine project (hereafter referred as the Montanore Project) to bull trout (*Salvelinus confluentus*) and designated bull trout critical habitat include permanent reductions in stream flow in important bull trout streams and increased water temperature and sediment delivery. Disruption of groundwater inflow to streams that would occur due to development of the underground mine workings have been modeled to cause baseflow reductions in Libby Creek, Poorman Creek, and Ramsey Creek on the east side of the Cabinet Mountains, and East Fork Rock Creek, mainstem Rock Creek, and East Fork Bull River on the west side of the Cabinet Mountains. Rock Creek, East Fork Bull River, and Libby Creek are predicted to sustain permanent stream flow depletions. Adverse effects to bull trout and designated bull trout critical habitat are predicted to occur as water temperatures are increased by the discharge of mine and adit water into Libby Creek. Initial development of the mine and its access roads will cause temporary increases in sediment delivery to many streams in the project area; this in turn will cause adverse impacts to bull trout and designated bull trout critical habitat. Additionally, based on the modeled predictions of decreased stream flow, increased water temperatures

(Libby Creek), and increased sediment delivery to various streams, it is probable there will be indirect adverse impacts to bull trout from increased numbers of non-native fishes that result from degraded habitat conditions for native bull trout and conversely improved habitat conditions for non-native fish.

As part of the proposed action, KNF developed a Bull Trout Mitigation Plan (KNF biological assessment, Appendix A, 2013) which includes a number of minimization and mitigation actions that are proposed to offset adverse effects to bull trout caused by development of the mine. However, the Service has determined that the Bull Trout Mitigation Plan (Plan), as proposed, is unlikely to be implemented in its entirety and in a timely manner. Based on discussions with the KNF, the Service is uncertain that the Plan's minimization and mitigation measures would be fully implemented and well-timed due to the qualifying statements in the BA and the Plan that condition implementation of certain elements of the Plan on completion of a further hydrologic assessment that will determine the extent of predicted streamflow depletions. As a result of the uncertainty of timely implementation of the Plan in its entirety, the Service conducted its effects analysis only on those actions and associated minimization and mitigation measures of the proposed action that are reasonably certain to occur. However, the effects of implementing the Plan as proposed are analyzed and deficiencies in the Plan identified in this BO (Appendix A) because the Service views those uncertainties in the Plan, if modified, as having potential to reduce impacts to bull trout from the Mine's adverse effects.

The Service's BO is that the proposed action of construction and operation of the Montanore Project is not likely to jeopardize the continued existence of bull trout. The Service's opinion is based on the conclusions that implementation of the Montanore Project is not likely to appreciably reduce the reproduction, numbers, or distribution of bull trout at the scale of either the Lower Clark Fork River or Kootenai River core areas, and by extension not at the Clark Fork River Management Unit or Kootenai River Management Unit levels and larger scale of the Columbia River Interim Recovery Unit. Therefore, the Service concludes that the proposed Montanore Project will not jeopardize the bull trout at the scale of the coterminous U.S. population of bull trout.

As proposed, implementation of the Montanore Project is anticipated to negatively impact designated bull trout critical habitat in Libby Creek, Bear Creek, West Fisher Creek, Rock Creek and East Fork Bull River. Bull trout habitat (without the designation of "critical habitat") in a number of less significant bull trout streams will also be negatively impacted. Negative impacts to both critical and non-critical habitat will be caused by diminishing the function of important bull trout habitat characteristics due to baseflow depletions, increases in sedimentation, augmentation (addition) of warm water (Libby Creek), and degradation of habitat conditions that favors enhancement of nonnative fish populations. Based on the small extent of the Montanore Project effects in relation to the size of designated critical habitat for bull trout at the Columbia River Basin scale, it is the Service's biological opinion that the adverse effects of the Montanore Project are not likely to destroy or adversely modify bull trout critical habitat.

As previously stated, the Service has determined in this biological opinion that the proposed action will not jeopardize bull trout, and is not likely to destroy or adversely modify bull trout critical habitat because KNF has committed to implementation of Best Management Practices (BMPs) to control erosion and sediment delivery from road construction on all affected bull

trout streams within the project area. The Service anticipates take of bull trout will occur as a result of the previously outlined adverse effects. In the BO, the Service provided KNF with reasonable and prudent measures and terms and conditions that will minimize the impact of incidental take to bull trout and minimize adverse effects to primary constituent elements (PCEs) associated with bull trout critical habitat. KNF must comply with the terms and conditions in order to be exempt from section 9 prohibitions in the Endangered Species Act (Act).

In addition, the Service has reviewed the information provided on several other listed species. These include the Canada lynx and its designated critical habitat, the proposed wolverine and the Kootenai River white sturgeon. KNF has made “no-effect” determinations for both the Kootenai River white sturgeon in the action area as well as for designated critical habitat for the Canada lynx. The Service does not review or provide concurrence on no effect determinations but acknowledges the Forest Service’s analysis.

Regarding the Canada lynx (*Lynx Canadensis*), the Service has reviewed the biological assessment and additional information and concurs that the proposed action is not likely to adversely affect this threatened species. The proposed action is located within the Crazy (facilities and transmission line), West Fisher (transmission line) and Rock (Rock lake ventilation adit) lynx analysis units (LAUs). The action location is south of highway 2 so it is not located within designated lynx critical habitat, which on the Kootenai Forest is only located north of that highway (USFWS final designation of lynx critical habitat; February 25, 2009). During the construction phase, approximately 264 acres of snowshoe hare habitat will be impacted on Forest land within 2 LAUs. These acres would be impacted for the life of the mine or approximately 30 years. While the effects of treating such habitat would be long-term, the total amount of snowshoe hare habitat treated is small compared to the amount that will remain within the LAUs. Less than one percent of the snowshoe hare habitat within either LAU would be treated. The remaining acres of lynx habitat treated (areas not providing snowshoe hare habitat) are widely scattered and are not likely to hinder lynx movement in the Libby Creek and Miller Creek drainages. While den habitat may be slightly affected, coarse woody materials are not limited throughout the LAUs. Prior to initiating the construction phase, the action mitigation plan requires MMC to fund 552 acres of lynx habitat enhancement work, benefitting lynx. We agree that the amount of lynx habitat impacted in this proposed action is not likely to adversely affect lynx. The proposed action is consistent with all applicable standards and guidelines of the Northern Rockies Lynx Amendment, for which the Service issued a biological opinion on March 23, 2007. We agree with the Forest’s determination that the proposed action may affect but is not likely to adversely affect Canada lynx. As indicated previously, the KPF made a determination of no effect for designated critical habitat for the lynx. Therefore, pursuant to 50 CFR 402.13 (a), formal consultation on this species and critical habitat is not required.

Pursuant to the requirements of 7(a)(4) of the Act and CFR 402.10, the KNF assessed the effects of the Montanore Project on the proposed wolverine and made a not likely to jeopardize determination. Though Director (Service) concurrence is not required by 7(a)(4) or CFR 402.10, the inclusion of the determination in your BA creates a need under CFR 402.12(k) for the Service’s concurrence with your determination. After reviewing your BA, we concur with your determination, and pursuant to language at CFR 402.12(k), a conference is not required.

The Montanore Project should be re-analyzed if new information reveals effects of the action that

may affect listed or proposed species or designated or proposed critical habitat in a manner or to an extent not considered in this consultation; if the action is subsequently modified in a manner that causes an effect to a listed or proposed species or designated or proposed critical habitat that was not considered in this consultation; and/or, if a new species is listed or critical habitat is designated that may be affected by this Project.

A complete administrative record of this consultation is on file in the Montana Ecological Services Field Office in Helena. If you have any questions, please contact Jodi Bush at 406-449-5225, extension 205. Thank you for your efforts in conservation of these species.

Sincerely,



Jodi L. Bush
Field Supervisor

Enclosures (2)