

APPENDIX E
AMENDED BIOLOGICAL ASSESSMENT
(The full Biological Assessment is presented as
Draft EIS Volume II Appendix G.
USACE submitted a revised Biological Assessment,
which is presented in this appendix)



REPLY TO
ATTENTION OF

DEPARTMENT OF THE ARMY
WALLA WALLA DISTRICT, CORPS OF ENGINEERS
201 NORTH THIRD AVENUE
WALLA WALLA, WASHINGTON 99362-1876

May 28, 2004

Regulatory Division

SUBJECT: NWW. No 981101710

Ms. Suzanne Audet
U.S. Fish and Wildlife Service
11103 East Montgomery Drive
Spokane, Washington 99206

Dear Ms. Audet:

We would like to re-initiate informal consultation on the effect the proposed Emerald Creek Garnet Mine may have on the bald eagle (*Haliaeetus leucocephalus*), as recommended in your April 14, 2004 letter. You concurred with our September 2003 determination of "may affect, but not likely to affect" on gray wolf, bull trout, and water howellia, but disagreed with our determination of "no effect" on bald eagle. Your letter also recommended that we include several conservation measures in an amended biological assessment and as stipulations in our permit.

The enclosed amendment to the original biological assessment addresses only bald eagle since you concurred with our determination for all other species. We have determined that the proposed action "may affect, but is not likely to adversely affect" bald eagle. The amendment also includes additional information on the proposed operation and mitigation measures that will reduce effects on the bald eagle.

If you have any questions or comments regarding this amendment, please contact me by telephone at 509-527-7153. A copy of this letter is being sent to Mr. Lindsay Gorrill, Emerald Creek Garnet, Ltd. 1301 West Lakewood Drive, Suite 201, Coeur d'Alene, Idaho 83814, Mr. Jack Mozingo, SAIC, 18706 North Creek parkway, Suite 110, Bothell, Washington 98011, Ms. June Bergquist, DEQ, 2110 Ironwood Parkway, Coeur d'Alene, Idaho 83814, and Mr. Ned Horner, Idaho Department of Fish and Game, 2750 West Kathleen Avenue, Coeur d'Alene, Idaho 83815-8414.

Sincerely,

Barbara C. Benge
Acting Chief, Regulatory Branch

Enclosure

Amendment to the Biological Assessment

Emerald Creek Garnet Mine

1. INTRODUCTION

Emerald Creek Garnet Ltd. (ECG) has been mining garnet in the Carpenter Creek and Emerald Creek basins near Fernwood, Idaho, since 1992, and continues to mine in these basins. ECG is now proposing to mine new areas along the St. Maries River immediately below the Emerald Creek basin. ECG must obtain a Department of the Army Permit under CWA §404, and the Army Corps of Engineers (USACE) has determined that issuance of the §404 permit would be a major federal action significantly affecting the quality of the human environment. In December 2003, the USACE published a draft Environmental Impact Statement (EIS) that identified and disclosed the expected environmental impacts of the proposed action and of reasonable and practical mining and reclamation alternatives that meet the purpose and need for the project.

Informal consultation under Section 7 of the Endangered Species Act was initiated for the proposed mining operation with the submittal to U.S. Fish and Wildlife Service (FWS) of a Biological Assessment (BA) dated September 2003. The USACE determined, and the FWS concurred, that the mining operation "may affect, but is not likely to adversely affect," gray wolf, bull trout, and water howellia. The USACE also determined that the mining operation would have "no effect" on bald eagles; FWS recommended a "may affect" determination based on knowledge of bald eagle use of the area, the loss of key habitat components associated with the project, and the potential for displacement in the project area. The FWS also recommended that several conservation measures be included in an amended BA and be included as stipulations in the USACE §404 permit. The USACE agrees that the project may affect the bald eagle, and has prepared this amended BA, which describes conservation and mitigation measures that minimize the potential for effects on the species.

2. PROPOSED ACTION

ECG proposes to dredge mine new areas of alluvial deposits of industrial garnet found in and near the floodplain of the St Maries River. ECG plans on mining annual units using various dredge mining techniques and equipment. Mining will involve clearing vegetation, constructing mining Best Management Practice's, constructing access roads, stripping and storing topsoil, and extracting garnet-bearing gravels. The extracted material will be taken to an on-site concentration facility. Washed rock from the concentration facility will be used as backfill, overburden will be replaced, and the site will be final graded with topsoil and seeded. The operation will leave an undisturbed buffer of at least 22.5 feet between mining operations and the river and perennial streams.

Mining will occur over a period of 20 years, with one to three mining units active at any one time. Mining units will be disturbed only when being prepared for mining, and will be reclaimed and restored immediately after mining. Within each mining unit, pre-mining and mining activities will occur during a 1-year period, and post-mining reclamation will occur over a 1- to 2-year period. Reclamation success will then be monitored by the USACE and other agencies.

3. THREATENED AND ENDANGERED SPECIES

This amendment to the BA addresses only the bald eagle (*Haliaeetus leucocephalus*), which is currently listed as threatened under the Endangered Species Act. Bald eagles are typically migratory and congregate along rivers and large water bodies. The BA indicates that nesting and roosting sites are of concern rather than sightings of individuals. In northern Idaho, confirmed nests exist near large lakes/river systems, such as Priest Lake, and the St. Joe and Kootenai Rivers. There are no confirmed nests within at least several miles of the project area. The project area is considered marginal bald eagle habitat due to lack of large water bodies. The BA states that individuals sighted in the area are likely migrants passing through, with non-existent to minimal habitat impacts expected from the proposed activity. Based on this, the USACE determined the project would have "no effect" on the species. Based on FWS's review, the USACE has reconsidered this determination, as reported below.

Although there are no known winter roost sites or nesting territories within the project area, the area may be suitable for roosting and nesting. The USACE now determines that the proposed action may affect, but it is not likely to adversely affect the bald eagle.

FWS recommended a number of conservation measures, in their April 14, 2004 letter. The following discussion covers each of the conservation measures and describes how the project will take them into account during operations.

1. FWS conservation measure recommended that mature cottonwood stands be excluded from mining.

USACE response: ECG completed an inventory in the visual corridor of the project area, and found a total of 1,064 hardwood trees, the vast majority of which would be cottonwoods. As noted above, there will be buffer zones and other undisturbed areas within the project area. Overall, a total of 388 hardwoods will be harvested over the 20-year mine life, while the remaining 676 will be unaffected by mining. The undisturbed cottonwoods will be available for use by bald eagles and other wildlife throughout the life of the mining operation and thereafter. In addition, ECG will plant cottonwoods (up to 18 per acre depending on the type of land). ECG has modified their plan of operations to show that 5 cottonwood poles will be planted per acre in the 38.2 acres of restored scrub-shrub wetlands (5 cottonwood poles per acre x 38.2 acres = 191 cottonwoods). Of these cottonwoods, 4.6 acres (23 trees) will be permanently protected. The plan of operations has also been modified to show that 18 cottonwood poles will be planted per acre in the 24.9 acres of restored forested wetlands (18 cottonwood poles per acre x 24.9 acres = 448 cottonwoods). Of these cottonwoods, 4.6 acres (23 trees) will be permanently protected. Of these, 9.5 acres (171 trees) will be permanently protected. Therefore, by the time the mining operation ends, there will be a significant number of newly planted cottonwoods, some up to 20 years old. All of these trees will be available to bald eagles and other wildlife, which will make it very unlikely that there will be an adverse effect.

2. FWS conservation measure recommended that restored sites be protected from livestock grazing until vegetation, particularly cottonwoods, is established and can withstand grazing.

USACE response: ECG will fence all restored areas for a minimum of 5 years, and will protect all planted cottonwoods until they are large enough to withstand grazing. In addition, ECG will protect in perpetuity 55 wetland and riparian acres in the project areas (some portion of these acres will be in buffer zones and will be unaffected by mining, and the remainder will be restored after mining). Existing and newly planted cottonwoods in these areas would be permanently protected.

3. FWS recommended that snags be protected from the mining operation.

USACE response: An inventory of snags in the project areas by ECG found a total of 50 snags, of which only 7 would be harvested. These 43 remaining snags should provide adequate roosting and nesting habitat pending maturation of restored vegetation. ECG will also be placing 3 to 5 snags per acre in restored wetlands, which will improve the snag count.

4. FWS recommends that mining units be restored to pre-project habitat conditions, and volunteered assistance in selecting alternate plant species.

USACE response: The species used by ECG are those that have been successfully used for the past decade. The USACE welcomes the assistance of FWS in further refining the species mix to enhance benefits to wildlife.

5. FWS recommended that sediment control structures be designed and located to prevent the delivery of sediment into the St. Maries River.

USACE response: The USACE will not issue the §404 permit until the Idaho Department of Environmental Quality certifies that the mining operation will not cause a violation of Idaho water quality standards. Because the St. Maries River is listed under Clean Water Act §303(d) as being impaired for sediment (and other pollutants), ECG will not be able to discharge any sediment to the river without a corresponding reduction in sediment load elsewhere in the watershed.

6. FWS recommended that additional restoration activities be required to maintain productive habitat in perpetuity if monitoring identifies deficiencies in the restoration effort.

USACE response: An interagency group that includes USACE, EPA, FWS, and several State agencies will review restoration success each year. As noted above, ECG will permanently protect 55 acres of wetland and riparian habitat.