

3/10/88
R. M. Knab

2-21-88-F-56

March 9, 1988

Memorandum

To: District Manager, Phoenix District Office, Bureau of Land Management, Phoenix, Arizona

From: Acting Field Supervisor

Subject: Biological Opinion, MPO-88-K-10, Mohave County, Arizona

This responds to your January 29, 1988 request for formal consultation pursuant to Section 7 of the Endangered Species Act (Act) of 1973, as amended, for a Mining Plan of Operation (MPO) filed by Rex Tenney and GSA Resources to initiate a sample testing operation for a type of saponite clay found near Burro Creek, Mohave County, Arizona. The species of concern is the Arizona cliffrose, Cowania (Purshia) subintegra.

Consultation History

GSA Resources has been operating at mining claims in the Burro Creek area for several years. In 1984, while the Arizona cliffrose was proposed for listing as endangered, GSA Resources submitted to the Bureau of Land Management (Bureau) a Notice of Intent to do some exploratory drilling and bulk sample procurement on the claims near Burro Creek. During the course of their operations, individuals of the Arizona cliffrose were destroyed. As a result of that destruction and that the work done went beyond that described in the Notice of Intent, the Bureau requested that GSA submit an MPO for the work. This was done on April 16, 1984. The Fish and Wildlife Service (Service) reviewed the MPO with the Bureau and suggested several measures to protect the cliffrose to be included as stipulations in the approved MPO.

A new MPO for additional work on the Burro Creek claims was submitted to the Bureau on December 23, 1987. The MPO requested approval of a plan to remove a total of 300 tons of saponite clay from three small sites totalling 0.7 acres within the occupied habitat of the cliffrose. The Bureau determined that use of only one of the three sites, Site 2, would permit the necessary sampling while minimizing the adverse impacts to the cliffrose. The proposed action is to authorize removal of 300 tons of saponite clay from Site 2.

This biological opinion is based on information contained in the Bureau's assessment, data in our files and other sources of information.

BIOLOGICAL OPINION

It is my biological opinion that the authorization by the Bureau of the preferred action MPO would not jeopardize the continued existence of the Arizona cliffrose.

BACKGROUND INFORMATION: PROJECT DESCRIPTION

The proposed action would take place in T. 14N., R. 11W., Section 12 NW 1/4 NW 1/4. Site 2 consists of 0.07 acres southwest of an existing road. Extraction would be accomplished with a front end loader or similar equipment. Material would be immediately placed in trucks for hauling off-site. A 300 ton sample would remove 100 square feet of surface area and leave a pit approximately 10 feet deep. Some areas around the extraction pit would be disturbed by equipment and dust.

BACKGROUND INFORMATION: ARIZONA CLIFFROSE

The Arizona cliffrose is an evergreen shrub that reaches 2.5 feet tall that grows exclusively on white limestone based soils in central Arizona. It was listed as endangered on May 29, 1984. Four disjunct populations are known: Bylas in Graham County (the type location); vicinity of Dead Horse Ranch State Park in Yavapai County; Horseshoe Dam in Maricopa County; and Burro Creek in Mohave County. The total population is estimated at over 40,000 plants, however, a significant portion of those plants may be hybrids with the Mexican cliffrose (*C. (P.) stansburiana*), especially a large percentage of the 40,000 assumed to exist in the vicinity of Dead Horse Ranch State Park. Research on hybridization is ongoing to resolve this issue. The Burro Creek population occupies approximately 200 acres of montmorillonite clay soils and is estimated to contain 3,000 to 7,000 individual plants. Impacts to the species include grazing by livestock, burros and other wildlife species, and losses from off road vehicle use and mining activities including road and facilities construction.

IMPACTS OF THE ACTION

Implementation of the proposed action at Site 2 would result in the loss of 0.07 acres of cliffrose habitat and nine mature individual plants. Of the nine plants, the Bureau survey on January 12, 1988, reported that five were thriving and four were stable (showing some new growth). All had been browsed, five showing heavy use.

Site 2 is surrounded by previously disturbed areas that do not support the species, thus there would be no impacts to adjacent plants as could occur with other sites.

CONCLUSIONS

The loss of 0.07 acres of habitat and nine mature individuals is not sufficient to jeopardize either the Burro Creek population or the entire species of Arizona cliffrose. However, these losses follow other losses incurred by previous GSA Resources mining activities and right-of-way construction along the Southern Union Gas Company pipeline.

Although the granting of the MPO to extract 300 tons of clay from Site 2 would not significantly affect the overall Burro Creek population, if the material tests out suitably, GSA Resources will be requesting approval of another MPO to permit commercial development. Since the Burro Creek cliffrose population is located exclusively on soils containing the saponite clay and the entire habitat area is covered by mining claims, the initiation of a commercial operation could have extremely significant effects on the long term survival of the Burro Creek cliffrose population. Any additional MPO would be required to undergo Section 7 consultation prior to implementation. The magnitude and significance of impacts to the cliffrose would be assessed at that time.

CONSERVATION RECOMMENDATIONS

We recommend the following measures be implemented to minimize the adverse effects of the proposed action on the Arizona cliffrose:

1. The nine plants on Site 2 be salvaged for use in educational institutions or for research purposes aimed at clarifying the genetic status of the species.
2. Any modifications to the proposed action be considered as amendments to the MPO and not Notices of Intent.

We suggest that the Bureau and the Service begin to develop a long term plan to protect the Arizona cliffrose population at Burro Creek. Please contact our office as soon as possible to arrange a meeting.

Thank you for your efforts to minimize impacts of this MPO to the Arizona cliffrose. If we may be of further assistance, please contact Ms. Lesley Fitzpatrick or me (Telephone: 602/261-4720 or FTS 261-4720).

Ronald M. McKinstry

cc: Regional Director, Fish and Wildlife Service, Albuquerque, New Mexico
(Fish and Wildlife Enhancement)
Director, Arizona Game and Fish Department, Phoenix, Arizona

BC: FWS Wash D.C.