ES/TE/Eutrema penlandii Recovery Plan Mail Stop 60120

AUG 3 1 1993

GRAND JUNCTION

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Memorandum

To:

09/28/93

Director (AES/TE)

From:

Regional Director, Region 6

Subject: Recovery Outline for the Penland Alpine Fen Mustard

The subject document was prepared in accordance with your memorandum dated February 2, 1989. The Penland alpine fen mustard was listed in the $\underline{\text{Federal}}$ Register on July 28, 1993 (58 $\underline{\text{FR}}$ 40539).

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Attachment

cc: VFinn, WDC, DES
Fld Spvsr, ES, SLC w/attachment
St Spvsr, ES, Golden w/attachment
Suboffice Spvsr, ES, Grand Junction
OBray, ES, R6 w/attachment
PWorthing, ES, R6 w/attachment
MSchroeder, ES, R6 w/attachment
RD rf
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RECOVERY OUTLINE

Species Name

Common: Penland alpine fen mustard

Scientific: <u>Eutrema penlandii</u>

2. Date Listed: August 12, 1993

3. Recovery Priority Number: 110

4. Anticipated Recovery Actions: Protection of known habitat; survey of suitable habitat for other populations; completion of necessary biological and ecological research to determine life history and habitat parameters controlling the distribution and abundance of the species; development of management techniques to optimize the species' viability in its occupied habitat; and monitoring of naturally occurring populations.

Prepare Recovery Plan: A recovery plan will be developed by the Colorado State Office. A recovery advisory team should be assembled with representation from the Bureau of Land Management, the U.S. Forest Service, the Colorado Natural Areas Program, The Colorado Natural Heritage Program, The Nature Conservancy, the Center for Plant Conservation, and mining and recreation interests in the area.

Acquire Habitat: Habitat acquisition may be desirable since approximately half of the known occurrences occur, at least partially, on private land (patented mining claims).

Consult with Federal Agencies: The largest populations occur on Bureau of Land Management and U.S. Forest Service land. The Office of Surface Mining and Reclamation Enforcement, the Environmental Protection Agency, and possibly other agencies are responsible for activities that may affect this species and its habitat. The Fish and Wildlife Service will coordinate with these agencies to protect and recover the species.

Consult with State/Local Authorities: One population occurs on State land. The State of Colorado regulates mining activities. Local municipalities and organizations promote and direct recreation activities in the area. Appropriate State, county, and municipal agencies, and local organizations will be encouraged to assist in the conservation of this species.

Consult with Private Interests: Coordination with The Nature Conservancy, the Center for Plant Conservation, and mining and recreation interests is expected.

Development of Other Kinds of Agreements: Because of the highly specific habitat requirements and significant private ownership of habitat, it may be desirable to develop habitat management plans and conservation agreements with appropriate public and private habitat owners to guide habitat management and ensure conservation of populations.

Enforce Trade/Taking Restrictions: None presently anticipated other than general provisions under Section 9 of the Endangered Species Act. Some plants may be taken for research or educational purposes.

Undertake Research: General ecological characterization of the species population, biotic community, and obvious abiotic and biotic ecosystem interactions should be initiated. This will be useful in defining sites to search for new populations and providing conditions necessary for the long-term survival of the existing populations. This research may involve collection of whole plants or plant parts for voucher specimens, genetic analysis, artificial propagation, or various biological research purposes.

Other: None known at this time.

/s/ John L Spinks Jr.

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AUG 3 1 1993

Date