



United States Department of the Interior

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IN REPLY REFER TO:
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Mail Stop 65412

Memorandum

To: Assistant Regional Director for Ecological Services
Regional Office, Region 6, Lakewood, Colorado, 60140

From: Field Supervisor, Ecological Services,
Colorado Field Office, Lakewood, Colorado 

Subject: Intra-Service Section 7 consultation and Biological Opinion on Issuance of an
Incidental Take Permit to Lee J. Dahle for Development of a Single-Family
Residence at the Dahle Property, El Paso County, Colorado (ES/GJ-6-CO-02-F-014).

This document constitutes the Biological Opinion prepared pursuant to section 7 of the Endangered Species Act of 1973, as amended (Act), on the effects of issuing an incidental take permit to Lee J. Dahle (Applicant) for the federally threatened Preble's meadow jumping mouse (*Zapus hudsonius preblei*) (Preble's), pursuant to section 10(a)(1)(B) of the Act. The proposed action involves the construction of a single-family residence within habitat areas used by Preble's. The property is located at 17 El Dorado Lane, along Monument Creek in Section 6, Township 13S, Range 66W in El Paso County, Colorado. The incidental take would be in the form of potential disturbance to, and loss of, habitat used by Preble's.

This biological opinion is based on the project proposal as described in the Applicant's "Low-Effect Habitat Conservation Plan for the Issuance of an Incidental Take Permit under Section 10(a)(1)(B) of the Endangered Species Act for the Dahle Property" of April, 2002, and additional details provided by El Paso County and Greystone Environmental Consultants, Inc. (Consultant). The Service has determined that the proposed project may adversely affect the Preble's.

CONFERENCE/CONSULTATION HISTORY

On May 13, 1998, Preble's was listed as threatened under the Act. Full protection for Preble's became effective on June 12, 1998. The subject residential construction was determined by El Paso County to pose potential adverse impacts to Preble's. The Service began informal consultation with Lee J. Dahle in March, 2002. During the informal consultation stage, the Service determined that adverse impacts to the Preble's were likely to occur and that a Low-Effect Habitat Conservation Plan should be developed to cover incidental take of the Preble's.

BIOLOGICAL OPINION

This biological opinion is based on information regarding cumulative effects, conditions forming the environmental baseline, the status of the Preble's, and the importance of the project area to the survival and recovery of the species. The data used in this biological opinion constitutes the best scientific and commercial information currently available.

DESCRIPTION OF THE PROPOSED ACTION

The proposed action involves the construction of a single-family home in an area occupied by Preble's. The property is located within Section 6, Township 13S, Range 66W in El Paso County, Colorado. The incidental take would be in the form of potential disturbance to, and loss of, habitat used by Preble's. None of the proposed impacts occur within the riparian corridor. All of the proposed impacts are in upland areas inside the 100-year floodplain.

As part of this project, the following conservation measures were proposed by the Applicant in the draft HCP, to reduce and offset potential for impacts to Preble's at the site:

1. Locating the building within 90 feet of El Dorado Lane.
2. Preserving 0.50 acre of the lot in a native and unmowed condition, thereby preserving a corridor and habitat used by Preble's.
3. Locating spoil piles away from the back of the lot (closest to Monument Creek) during excavation.
4. Limit access to the construction area to only front and sides of the lot through the use of a temporary construction fence.
5. Construction will not occur in the platted drainage easement line located approximately 25 to 50 feet from the back of the lot.
6. The following restoration, enhancement, and mitigation measures will be undertaken by the Applicant:
 - a. Applicant will enhance 0.50 acre of habitat within the site that currently supports Preble's habitat.
 - b. Enhancement of 0.50 acres would consist mainly of weed control and sprigging willows within areas that currently do not support Preble's habitat.
 - c. A monitoring period will be in effect for three full growing seasons or until success is achieved in the willow planting and weed control.

STATUS OF THE PREBLE'S MEADOW JUMPING MOUSE

Preble's is a small rodent in the family Zapodidae and is 1 of 12 recognized subspecies of the species *Z. hudsonius*, the meadow jumping mouse. Preble's is native only to the Rocky Mountains-Great Plains interface of eastern Colorado and southeastern Wyoming. This shy, largely nocturnal mouse lives in moist lowlands with dense vegetation. It is 8 to 9 inches long (its tail accounts for 60 percent of its length) with hind feet adapted for jumping. Preble's hibernates underground from September to May.

Records for Preble's meadow jumping mouse define a range including Adams, Arapahoe, Boulder, Denver, El Paso, El Paso, Elbert, Jefferson, Larimer, and Weld counties in Colorado; and Albany, Laramie, Platte, Goshen, and Converse counties in Wyoming (Kruttsch 1954, Compton and Hugie 1993). Armstrong et al. (1997, p. 77) described typical Preble's meadow jumping mouse habitat as "well-developed plains riparian vegetation with relatively undisturbed grassland and a water source in close proximity." Also noted was a preference for "dense herbaceous vegetation consisting of a variety of grasses, forbs and thick shrubs."

Preble's has undergone a decline in range and populations within its remaining range have been lost. Habitat loss and fragmentation resulting from human land uses have adversely impacted Preble's populations. David Armstrong (University of Colorado, pers. com. 1998) concluded that the meadow jumping mouse, in this region as elsewhere, is a habitat specialist, and that its specialized habitat is declining.

Compton and Hugie (1993, 1994) cited human activities that have adversely impacted Preble's meadow jumping mouse including: conversion of grasslands to farms; livestock grazing; water development and management practices; and, residential and commercial development. Shenk (1998) linked potential threats to ecological requirements of Preble's meadow jumping mouse and suggested that factors which impacted vegetation composition and structure, riparian hydrology, habitat structure, distribution, geomorphology, and animal community composition must be addressed in any conservation strategy.

Residential and commercial development, accompanied by highway and bridge construction, and instream alterations to implement flood control, directly remove Preble's meadow jumping mouse habitat, or reduces, alters, fragments, and isolates habitat to the point where Preble's meadow jumping mouse can no longer persist. Corn et al. (1995) proposed that a 100 meter (328 foot) buffer of unaltered habitat be established to protect the floodplain of Monument Creek from a range of human activities that might adversely effect Preble's or its habitat. Roads, trails, or other linear development through Preble's habitat may act as barriers to movement. Shenk (1998) suggested that on a landscape scale, maintenance of acceptable dispersal corridors linking patches of Preble's habitat may be critical to its conservation.

Further information about the biology and status of the Preble's can be found in the "Conservation Assessment and Preliminary Conservation Strategy for Preble's Meadow Jumping Mouse (*Zapus hudsonius preblei*)" (Shenk, 1998, available upon request).

ENVIRONMENTAL BASELINE

In El Paso County, the Preble's meadow jumping mouse has been captured or has suitable habitat along portions of Monument Creek, Kettle Creek and Pine Creek, and their major tributaries. Additionally, Preble's have been found on West Monument Creek within the Air Force Academy grounds located northeast of the project site. Based on the availability of potentially suitable habitat and lack of trapping information, Preble's is assumed to occupy appropriate habitat within El Paso County.

EFFECTS OF ACTION

The proposed house construction will directly affect 0.15 acre of potential Preble's habitat within upland areas of Monument Creek. The riparian habitat at the project site is assumed to be utilized by Preble's as a corridor for movement between Kettle Creek, Pine Creek and the Air Force Academy grounds. The area to be impacted represents a small portion of the potential Preble's habitat present on the Dahle Property. The project will have little effect on the ability of Preble's to occupy or travel within the Monument Creek corridor on the project site.

CUMULATIVE EFFECTS

Cumulative effects include the effects of future State, tribal, local, or private actions that are reasonably certain to occur in the action area considered in this biological opinion. Future Federal actions in that area unrelated to the proposed action are not considered in this section because they require separate consultation pursuant to section 7 of the Act if there are adverse effects or potential for take of a federally-listed species.

There will be no significant adverse cumulative effects to resources due to the small area of disturbance and short period of construction. There may be indirect effects to Preble's or its potential habitat in the form of increased competition, increased predation, and other effects related to human presence.

CONCLUSIONS

It is the Service's biological opinion that neither the direct nor indirect effects of the proposed project (which includes the implementation of conservation measures agreed to during informal consultation and outlined in this biological opinion) will jeopardize the continued existence of the Preble's. Although the project may adversely affect the Preble's and its habitat along Monument Creek, the proposed action and conservation measures will avoid the likelihood of jeopardy to the species. Critical habitat was proposed for this species on July 17, 2002. The Service has made a determination that this project will not adversely modify proposed critical habitat.

INCIDENTAL TAKE STATEMENT

Section 9 of the Act and Federal regulation pursuant to 4(d) of the Act prohibit the take of endangered and threatened species, respectively, without special exemption. Take is defined as to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture or collect, or attempt to engage in any such conduct. Harm is further defined by the Service to include significant habitat modification or degradation that results in death or injury to listed species by significantly impairing essential behavioral patterns, including breeding, feeding or sheltering. Harass is defined by the Service as intentional or negligent actions that create the likelihood of injury to listed species to such an extent as to significantly disrupt normal behavioral patterns which include, but are not limited to, breeding, feeding, or sheltering. Incidental take is defined as take that is incidental to, and not the purpose of, the carrying out of otherwise lawful activity. Under the terms of section 7(b)(4) and section 7(o)(2), taking that is incidental to and not intended as part of the agency action is not considered to be prohibited taking under the Act provided that such taking is in compliance with the terms and conditions of this Incidental Take Statement.

The measures described below are non-discretionary, and must be undertaken by the Service so that they become binding conditions of any grant or section 10(a) permit issued to the Applicant, as appropriate, for the exemption in section 7(o)(2) to apply. The Service has the continuing duty to regulate the activity covered by this incidental take statement. The Service must ensure that the Applicant is required (1) to assume and implement the terms and conditions and (2) to adhere to the terms and conditions of the incidental take statement through enforceable terms that are added to the section 10(a) permit or grant document, or the protective coverage of section 7(o)(2) may lapse. In order to monitor the impact of incidental take, the Service will require the Applicant to report the progress of the action or its impact on the species as specified in the Incidental Take Statement.

The Service anticipates incidental take of Preble's through direct killing will be difficult to detect due to their small size and secretive nature. However, the following level of take can be anticipated by the loss of food, cover, and other essential habitat elements. The Service anticipates that the proposed action will result in incidental take of an undetermined number of Preble's through loss of approximately 0.15 acre of suitable habitat. In this biological opinion, the Service determined that this level of anticipated take is not likely to result in jeopardy to the species or destruction or adverse modification of critical habitat.

REASONABLE AND PRUDENT MEASURES

The Service does not propose any additional measures or conditions to be added to the section 10(a) permit requirements.

TERMS AND CONDITIONS

In order to be exempt from the prohibitions of section 9 of the Act, the Service must ensure that the Applicant complies with the following terms and conditions which implement the reasonable and prudent measures described above. These terms and conditions are non-discretionary:

1. The section 10(a)(1)(B) permit, as evaluated in this Biological Opinion, will include permit conditions which require that the mitigation measures provided in the Project Description section to avoid, minimize, and compensate for adverse impacts to the Preble's and its habitat be completed.
2. The Service will include, as a permit condition, that any incidental take of Preble's must comply with all terms and conditions of said section 10(a)(1)(B) permit.
3. The Service will include, as a permit condition, that workers onsite will be informed by the Applicant or its designated contractor as to the reason for and importance of limiting impacts to vegetated habitat outside the fenced work area.
4. The Service will include, as a permit condition, that the permittee must provide a report to the Service, which includes photographic documentation of site conditions prior to construction and at completion of construction.
5. The Service will include, as a permit condition, that the permittee conduct annual monitoring of the on-site enhancement efforts. Monitoring will extend for at least three growing seasons (or until such time as the Service determines that proposed revegetation and mitigation has been successfully completed). Monitoring reports shall be forwarded to the Service after each growing season and prior to December 1 of each calendar year.
6. In the unlikely event that a Preble's mouse (dead, injured, or hibernating) is located during construction, the Colorado Field Office of the Service (303)275-2370 or the Service's Law Enforcement Office (303)274-3560 will be contacted immediately.

The reasonable and prudent measures, with their implementing terms and conditions, are designed to minimize the impact of incidental take that might otherwise result from the proposed action. If, during the course of the action, this level of incidental take (loss of approximately 0.15 acres of riparian habitat) is exceeded, such incidental take represents new information requiring reinitiation of consultation and review of the reasonable and prudent measures provided. The Service will include, as a permit condition, that the Applicant shall immediately provide an explanation of the causes of the taking and review with the Service the need for possible modification of the reasonable and prudent measures.

CONSERVATION RECOMMENDATIONS

Section 7(a)(1) of the Act directs Federal agencies to utilize their authorities to further the purposes of the Act by carrying out conservation programs for the benefit of endangered and threatened species. Conservation recommendations are discretionary agency activities that may be used to minimize or avoid adverse effects of a proposed action on listed species or critical habitat, to help implement recovery plans, or to develop information.

The Service has no additional conservation measure recommendations.

REINITIATION NOTICE

This concludes formal consultation on the proposed action of section 10(a)(1)(B) permit issuance to Lee J. Dahle for the development of a single-family home on the Dahle Property. As required by 50 CFR 402.16, reinitiation of formal consultation is required where discretionary Federal agency involvement or control over the action has been retained (or is authorized by law) and if: (1) the amount or extent of incidental take is exceeded; (2) new information reveals effects of the action that may affect listed species or critical habitat in a manner or to an extent not considered in this biological opinion; (3) the agency action is subsequently modified in a manner that causes an effect to the listed species or critical habitat not considered in this biological opinion; (4) a new species not covered by this opinion is listed or critical habitat designated that may be

affected by this action. In instances where the amount or extent of incidental take is exceeded, and operations causing such take should cease pending reinitiation.

If you have any questions concerning this Biological Opinion, please contact Lee Carlson, Field Supervisor of the Service's Colorado Field Office at (303) 275-2370.

cc: FWS:GJ (L. Bjornestad)
FWS:Regional Office (B. McCue)
El Paso County (M. Bonar)
City of Colorado Springs (K. Schneff-Norris & C. Emmons)
Spagnuolo

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