



# United States Department of the Interior

FISH AND WILDLIFE SERVICE  
Ecological Services  
Colorado Field Office  
755 Parfet Street, Suite 361  
Lakewood, Colorado 80215

IN REPLY REFER TO:

ES/CO: ES/GJ-6-CO-03-F-011  
Permit Number: TE-068418-0  
Mail Stop 65412

**FINDING OF NO SIGNIFICANT IMPACT  
FOR ISSUANCE OF AN INCIDENTAL TAKE PERMIT  
FOR THE PREBLE'S MEADOW JUMPING MOUSE  
TO CITY AND COUNTY OF DENVER'S BOARD OF WATER COMMISSIONERS  
BOULDER, JEFFERSON, AND DOUGLAS COUNTIES, COLORADO**

The U.S. Fish and Wildlife Service (Service) is proposing to issue a section 10(a)(1)(B) Incidental Take Permit (ITP) under the Endangered Species Act of 1973 (16 U.S.C. 1531-1544, 87 Stat. 884), as amended (Act), to the City and County of Denver, acting by and through its Board of Water Commissioners (Denver Water, the Applicant). The ITP would authorize the incidental take of the federally threatened Preble's meadow jumping mouse, *Zapus hudsonius preblei* (Preble's), in association with the activities necessary for Denver Water to operate and maintain its water system. The properties within the Permit Boundary are located in portions of Boulder, Douglas, and Jefferson Counties, Colorado. The duration of the proposed ITP is 30 years. The Environmental Assessment (EA) evaluates the potential environmental effects associated with the activities necessary for Denver Water to operate and maintain its water system during these 30 years, and implementing a Habitat Conservation Plan (HCP) to cover these activities. Approximately 75 of the 6,143 acres of potential and occupied Preble's habitat (as defined in the HCP and section 6.0 of the EA) may be impacted by these activities. Denver Water anticipates a best-case scenario of only one acre of permanent impact and 74 acres of temporary impact would occur and a worst-case scenario with a maximum of 10 acres of permanent disturbance to Preble's habitat.

The Applicant has prepared an HCP which describes minimization and mitigation measures to be implemented to reduce and offset the effects of the proposed project on Preble's and its habitat. The implementation of the HCP is intended to contribute to the conservation of Preble's. The primary mitigation measures of the HCP are enhancement, restoration, and creation of habitat using the following ratios:

**Mitigation to Offset Temporary Take.** During the term of the HCP, no more than 25 acres of temporary impact would occur at any one time and not more than 74 acres would be temporarily affected over the life of the ITP. To offset this impact, Denver Water would restore temporarily disturbed vegetation in occupied and potential habitat according to the following conditions:

- Impact areas and successful restoration would be tracked in a project database;
- Once an impact area is successfully restored according to the Success Criteria (Denver Water 2003), that area would be deducted from the total impact area;
- The total impact area would not exceed 25 acres at any one time; and
- If impacts are anticipated to exceed 25 acres at any one time, Denver Water would consult with the Service to determine appropriate mitigation to offset additional impacts. Measures may include enhancements or preservation on properties containing occupied or potential habitat (Denver Water 2003).

**Mitigation to Offset Permanent Take.** Denver Water estimates that approximately one acre of permanent impact is likely to occur from the foreseeable and planned activities during the term of the ITP. To offset the foreseeable 1-acre impact, Denver Water would:

- Create up to 0.25 acre of riparian shrub and 2 acres of upland habitat at Lehow Lake;
- Revegetate social trails and dirt roads at Kassler that are no longer in use; and
- Create up to 0.25 acre of upland potential habitat at Long Lake Feeder Ditch.

It should be noted that the ITP and HCP would allow up to a maximum of 10 acres of permanent impacts. In the event that permanent take exceeds the estimated one acre, the amount of temporary take permitted would be reduced so that no more than 75 total acres are impacted during the 30-year term of the ITP (i.e., if three acres are permanently lost, then only 72 acres of temporary impacts would be permitted, but no more than 25 acres at any one time). The additional impacts would be offset by dedicating a conservation easement at a preservation ratio of 8:1 (i.e., if one additional acre of take occurs, Denver Water would dedicate 8 acres of an easement for Preble's and its habitat), by enhancements at a ratio of 2:1, or a combination of preservation (6:1) and enhancements (1:1), as defined by the HCP (Denver Water 2003).

The Preferred Alternative was selected over the other alternatives because: 1) it offers the best opportunity for Denver Water to achieve their goal of operating and maintaining their water supply system efficiently, while promoting the conservation, enhancement, and creation of Preble's habitat; and 2) this alternative meets the stated purpose and need of the EA by complying with the provisions of the Act.

Documents used in the preparation of this finding of no significant impact include: the HCP (Denver Water 2003) and the EA for the HCP (engineering-environmental Management, Inc. 2003), the biological opinion on the Denver Water permit application (Service 2003a), and the recommendations and findings for the Denver Water activities (Service 2003b). All documents are incorporated by reference, as described in 40 CFR 1508.13.

The proposed ITP would authorize the incidental take of an unquantifiable number of Preble's because of the temporary loss of up to 74 acres (no more than 25 acres at any one time), and permanent loss of up to 10 acres, of riparian and upland habitat on Denver Water properties. These areas provide potential foraging, nesting, and hibernating habitat for Preble's. The Service is unable to determine the specific number of individuals of Preble's that would be taken because of their small size, secretive nature, and the numbers of individuals present on a site may vary from year to year. Although take of individuals cannot be quantified, proper implementation of the HCP, which requires meeting identified performance standards, should ensure that Preble's will be maintained on the site.

The Service has determined that the permanent loss of up to 10 acres, and temporary disturbance of 64 to 74 acres (depending on the amount of permanent loss), of occupied and potential habitat associated with issuance of the ITP to Denver Water would not compromise the status of Preble's or its recovery needs for several reasons, the total mitigation area, as described in detail in the HCP, includes land that will be created, preserved, and/or enhanced as Preble's habitat. In addition to mitigation measures, the HCP describes avoidance, minimization, and Best Management Practices to offset or eliminate impacts to Preble's. These measures should produce a net benefit to Preble's.

The EA considered environmental effects of the Preferred Alternative on other aspects of the human environment, such as cultural resources; wetland, riparian, and aquatic resources; floodplains; threatened and endangered species and species of special concern; geology and soils; water resources; federally-listed species in the central Platte River ecosystem (a unique impact topic dealing with depletion of water in the Platte River ecosystem that could affect federally-listed species in Nebraska); general wildlife; air quality; prime and unique farmlands; ecologically critical areas, Wild and Scenic Rivers, and other unique areas; Indian Trust resources; ethnographic resources; the socioeconomic environment; and environmental justice. A summary of these issues and impacts is included in the EA; however for those resource areas where impacts were identified, a summary is provided here as well.

The Preferred Alternative would have short- and long-term, moderate, beneficial effects on Denver Water operations from streamlining the ITP permitting process. The issuance of the single ITP for all covered activities would take three to six months, whereas, the issuance of multiple ITPs, to cover each of the activities separately (No Action Alternative), would result in delays of four to six years for the combined effect of foreseeable activities, and three months to a year for operations and maintenance activities (Denver Water 2003).

Under the best case scenario of the Preferred Alternative (no more than one acre of permanent disturbance), short-term, negligible, adverse impacts to wetland, riparian, and aquatic resources are anticipated from the temporary disturbances associated with the covered activities, while long-term, minor, beneficial effects would occur from the mitigation of permanent disturbance activities (i.e., the one acre lost permanently would be offset through the creation of 2.25 acres of riparian and upland Preble's habitat). Under the worst case scenario (more than one acre of permanent disturbance and up to a maximum of 10 acres), short-term impacts to wetland,

riparian, and aquatic resources are anticipated to be minor from temporary disturbances, which will be revegetated. Impacts to wetland, riparian, and aquatic resources are anticipated to be minor and adverse, depending on how much permanent disturbance actually occurs. However, under this worst case scenario, Denver Water would enhance and/or preserve a minimum of seven acres to mitigate the additional disturbances, some of which would include wetland, riparian, and aquatic habitats. This would have a long-term, minor to major, beneficial effect on these resources, depending on whether the minimum seven acres or the maximum 72 acres are preserved/enhanced. Please refer to the HCP or section 2.3.4 of the EA for a detailed discussion of the mitigation ratios.

To ensure compliance with section 7 of the Act, the EA considers the effects of the Preferred Alternative on threatened and endangered species, including Preble's and other federally-listed, proposed, or candidate species. Denver Water consulted with the Service, as documented in the EA, in identifying the species that should be considered. The determination of effect, using terminology from the Act, was made as follows for those species:

- Preble's: *may affect/likely to adversely affect*
- Bald eagle, Pawnee montane skipper, Ute ladies' tresses, black-tailed prairie dog, Canada lynx, Mexican spotted owl, mountain plover, greenback cutthroat trout, Colorado butterfly plant: *no effect*

Consultation with the Colorado Natural Heritage Program (CNHP) also identified state-listed or monitored species that should be considered in the EA. The river otter (*Lontra canadensis*) and a number of fish, birds, and one amphibian were listed as state threatened, endangered, or special concern species that may occur within the planning area covered by the HCP. Other plant and wildlife species, monitored by CNHP (but not federally- or state-listed as endangered, threatened, or species of special concern) that may occur within the HCP area include several species of butterflies and a number of vascular plants. Because implementing the Preferred Alternative is anticipated to disturb small acreages, negligible to minor, adverse impacts on state listed species, over both the short and long term, are expected.

The State Historic Preservation Officer (SHPO) was contacted for information concerning cultural resources in the planning area covered by the HCP. Various archaeological and historic resources were identified, and an assessment of effect, in accordance with section 106 of the National Historic Preservation Act (NHPA), is made in the EA. Although many of these resources have not been evaluated for inclusion on the National Register of Historic Places (NRHP), some are eligible or listed. A Programmatic Agreement (PA) with the SHPO is being developed to identify any of the activities covered by the HCP and ITP that would be exempted from further consultation because they would have no effect on historic properties. This PA would also identify appropriate levels of mitigation when an activity would potentially have an affect on such properties. This ITP is conditional on a signed PA received at the Service's Field Office within 180 days of Notice of Issuance in the Federal Register. If the PA is not signed within that time frame, the ITP will become temporarily inactive until a suitable alternative PA or other measure(s) are agreed to by the Service.

As defined in the draft PA, those activities that involve new ground disturbance and/or potential removal or significant alteration of mechanical features of canals and ditches would require review under section 106 of the NHPA. If after surveying for historic properties, none are identified within the planning area covered by the HCP, then there would be no effect on historic properties under this alternative. However, if historic properties were found to exist within the planning area covered by the HCP, then potential effects would be assessed. If these effects were determined not to alter the character-defining features of a historic resource or not to impact portions of archaeological sites that make them eligible for the NRHP, then a no adverse effect determination would likely apply. For archaeological sites, typically determined eligible for the NRHP based on their information potential, disturbance of deposits would likely result in a determination that historic properties would be adversely affected. Under the ITP and PA, mitigation of adverse effect would be negotiated with the SHPO and completed prior to undertaking any activity that could result in an adverse effect.

The Service finds that the proposed issuance of a section 10(a)(1)(B) ITP for take of Preble's in association with Denver Water activities will not have a significant effect on the human environment for the following reasons:

1. The permanent loss of up to 10 acres, and temporary loss of 64 to 74 acres (as defined in the EA/HCP and analyzed in the Service's BO), of potential and occupied habitat resulting from Denver Water activities will not jeopardize the survival or recovery of Preble's nor result in the destruction or adverse modification of proposed critical habitat.
2. The proposed mitigation measures are consistent with recovery of Preble's and are adequate to compensate for the loss of habitat and loss of individual Preble's.
3. The impact upon populations of native species, including sensitive species, will be minimal due to the small area subject to disturbance.
4. Negligible to no impacts to geology and soils; water resources; federally-listed species in the central Platte River ecosystem; general wildlife; air quality; prime and unique farmlands; ecologically critical areas, Wild and Scenic Rivers, and other unique areas; Indian Trust resources; ethnographic resources; the socioeconomic environment; or environmental justice. The Service has examined two alternatives for the proposed action in detail in the EA, including a No Action and a Preferred Alternative. Under the No Action Alternative, the Service would evaluate individual ITPs and HCPs prepared by Denver Water on a project-by-project basis. Activities that avoid incidental take of Preble's or its habitat would be approved, while each proposed activity on Denver Water property that may result in incidental take would require an individual ITP and HCP pursuant to section 10(a)(1)(B) of the Act. However, certain activities would not require an HCP or ITP as they are exempted under section 4(d) of the Act<sup>1</sup>.

---

<sup>1</sup> Under section 4(d) of the Act, a special rule can be tailored for a particular threatened species that has specific prohibitions (and exemptions) necessary and appropriate to conserve that species. In the case of Preble's, this special rule identified specific circumstances under which section 9 prohibitions would not apply. Please refer to section 1.4.3 of the attached EA for a detailed discussion of habitat conservation planning and its relation to the National Environmental Policy Act of 1969, as amended.

Development of an HCP for issuance of an individual ITP would require from six to nine months for each activity requiring an environmental assessment, and less time for those that do not (e.g., activities that are covered by the 4(d) rule or can be covered by a categorical exclusion under the National Environmental Policy Act [NEPA]). The Preferred Alternative consists of issuance of a single section 10(a)(1)(B) ITP and implementation of a single HCP.

The No Action Alternative was not selected because of the numerous delays and costs associated with acquiring multiple, individual ITPs. This would not allow Denver Water to efficiently operate and maintain their water supply system, nor would it educate Denver Water staff, system-wide, on efforts that can be taken to eliminate or offset impacts to Preble's. Two other alternatives (participation in three county-wide ITPs and HCPs or participation in a state-wide ITP and HCP) were considered but dismissed from detailed consideration because: 1) they would not ensure that Denver Water's purpose and need for an HCP are satisfied; and 2) they would require additional funding not needed under the Preferred Alternative.

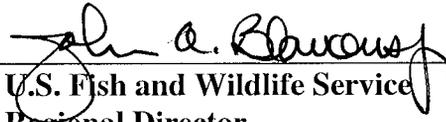
Because it successfully balances environmental impacts with benefits to the community, the Service chose the Preferred Alternative of the EA. Although permanent loss of one to 10 acres, and temporary disturbance of 64 to 74 acres, could result, between seven and 72 acres of Preble's habitat would be created, enhanced, or preserved under this alternative. Through the conservation measures described in the HCP, currently degraded habitat would be improved. The single ITP and HCP would also eliminate the numerous delays and costs incurred by Denver Water and the Service under the current approach (No Action Alternative).

The Preferred Alternative has been thoroughly coordinated with all interested and/or affected parties. Several Federal, state, local, and tribal governments, in addition to other organizations, have been involved in identifying issues and developing alternatives, or were given an opportunity to review and comment on the environmental assessment (see section 7.0 and Appendix A of the EA for a complete list).

On February 7, 2003 the Service issued a notice of availability in the *Federal Register* (Vol. 68, No. 27 FR 6756) announcing the receipt of the ITP application from Denver Water and the availability of the HCP and EA for public review. A 60-day public comment and review period was open until April 11, 2003. The HCP and EA were available at, or could be requested through, the Colorado Field Office of the Service, and on the Denver Water web site. The HCP and EA were also distributed to individuals and organizations on a mailing list maintained by the Service. Copies of the mailing list and correspondence received, in addition to any responses, regarding the preparation of the EA are on file at the Colorado Field Office. The Service did not receive any comments during the public comment period.

Based on my review and evaluation of the enclosed EA and HCP and other supporting documentation, I have determined that issuance of an Act section 10(a)(1)(B) permit TE-068418-0 to the Applicant for take of the federally threatened Preble's meadow jumping mouse on Denver Water properties in Boulder County, Douglas County, and Jefferson Counties, State of Colorado, is not a major Federal Action which would significantly affect the quality of the human environment within the meaning of section 102(2)(c) of the NEPA of 1969. Accordingly,

preparation of an environmental impact statement on the proposed action is not required.  
Therefore, an environmental impact statement will not be prepared.

  
\_\_\_\_\_  
U.S. Fish and Wildlife Service  
Regional Director

5/1/03  
~~4/30/03~~  
\_\_\_\_\_  
Date

**RELATED DOCUMENTS:**

Denver Water. 2003. Habitat Conservation Plan for the Preble's Meadow Jumping Mouse. April 2003.

engineering-environmental Management, Inc. 2003. Environmental Assessment for the Denver Water Board Habitat Conservation Plan for Preble's Meadow Jumping Mouse. April 2003.

U.S. Fish and Wildlife Service, 2003a. Intra-Service Section 7 Consultation and Biological Opinion on Issuance of an Incidental Take Permit to City and County of Denver, acting by and through its Board of Water Commissioners for Denver Water Properties, Colorado Field Office, Lakewood, Colorado.

U.S. Fish and Wildlife Service, 2003b. Findings and Recommendations on Issuance of an Incidental Take Permit for the Preble's Meadow Jumping Mouse to City and County of Denver's Board of Water Commissioners (Denver Water) for Operations and Maintenance activities on Denver Water Properties in Boulder, Jefferson, and Douglas Counties, Colorado.