



United States Department of the Interior

FISH AND WILDLIFE SERVICE

Ecological Services
Colorado Field Office
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FINDING OF NO SIGNIFICANT IMPACT For Issuance of an Incidental Take Permit For the Preble's Meadow Jumping Mouse To Tracy and Lana Leonard Boulder County, Colorado

PROPOSED ACTION

Queen of the River Fish Company has prepared an environment assessment (EA) and Habitat Conservation Plan (HCP) on behalf of Tracy and Lana Leonard for the issuance of a section 10(a)(1)(B) permit under the Endangered Species Act of 1973 (16 U.S.C. 1531-1544, 87 Stat. 884), as amended. The permit would authorize the incidental take of the federally threatened Preble's Meadow Jumping Mouse (*Zapus hudsonius preblei*)(Preble's) in association with the construction of two single family residences on the 28.5 acre Leonard Property, in Boulder County, Colorado. This property is located at 11666 Crane Hollow Road, 1/4 mile south of Hygiene Road in the Northeast 1/4 of Section 35, Township 3, Range 70 West of the Sixth Principal Meridian. The duration of the proposed permit is 50 years. The EA evaluates the potential environmental effects associated with construction of the proposed two single family residences totaling 1.7 acres; and the creation of a 1.5 acre orchard on the 28.5 acre property. Preble's, listed as threatened by the U.S. Fish and Wildlife Service (Service) in 1998, is a rare subspecies of the meadow jumping mouse native only to southeastern Wyoming and southeastern Colorado. Populations of Preble's are known to occur along the St. Vrain 0.3 miles east of the Leonard property. Although no trapping was conducted to determine absence or presence on the Leonard property, Preble's are assumed to occur along St. Vrain Creek due to the proximity of known Preble's populations and high quality habitat that has been maintained by the landowners. No other federally-listed threatened or endangered species occur on the property.

The HCP 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. An HCP has been developed as part of the proposed alternative as mitigation for the incidental taking of Preble's. Many of these measures were implemented over the past several years to protect Preble's and wildlife in general, as confirmed by Colorado Division of Wildlife. Many of these protection measures were initiated prior to the listing of Preble's and were completed as proactive wildlife conservation. These measures include:

- Protection of the St. Vrain Creek Corridor through a conservation easement in perpetuity.
- Gravel mining operations were conducted with sensitivity for Preble's and its habitat.
- The shoreline of the 7 acre pond has been designed to create 3.1 acres of new palustrine emergent, scrub/shrub, and forested wetlands.
- Livestock grazing will be managed within the Riparian Protection Zone and Recreation/Landscape Zones as to protect Preble's habitat.
- Relocate Crane Hollow Road farther away from Preble's habitat than originally planned.
- The proposed building sites (residential lots) are clustered and located farther away from preferred mouse habitat.
- Approximately 3.0 acres of upland adjacent to St. Vrain Creek will be replanted with native grasses.
- The loss of 3.0 acres of Preble's habitat will be compensated through the protection of St. Vrain Creek, restoration of native grasses, and development of riparian shrubs and wetlands.

This alternative was selected as the proposed action as it will allow development of the property (as approved by Boulder County through the NUPUD process) and provide a conservation plan to minimize and offset the potential impact to Preble's by providing for onsite conservation measures which will promote recovery of the species.

Documents used in the preparation of this finding of no significant impact include: the HCP and the EA for the HCP (Queen of the River Fish Co, 1999), the biological opinion on the Leonard's permit application (Service 2000a), and the recommendations and findings for the Leonard residential project (Service 2000b). All documents are incorporated by reference, as described in 40 CFR 1508.13.

ENVIRONMENTAL EFFECTS OF THE PROPOSED ACTION

The proposed permit would authorize the incidental take of an unquantifiable number of Preble's within the 3.2-acre proposed project site. The permit would also authorize a limited amount of incidental take associated with habitat management and monitoring activities in the proposed conservation area. The Service is unable to determine the specific number of individuals of Preble's that would be taken because the numbers of individuals present on site may vary from year to year and due to their small size and secretive nature. 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 proposed conservation site.

The Leonard's have already initiated many of the proposed measures to reduce the loss of individual Preble's prior to construction of other permitted activities on their property. The Service has determined that the loss of 3.2 acres of potential habitat associated with the issuance of the permit to the Leonard's would not compromise the status of Preble's or its recovery needs for several reasons. As part of the mitigation measures, the Leonard's have established in perpetuity a conservation easement with Boulder County to preserve 21.5 acres along the St.

Vrain River. Under the terms of the easement, this area will be managed for agriculture, wildlife, and recreation. No structures (with the exception of dock/deck connections and a loafing shed) are allowed to be built. No further subdividing of the property is permitted. Since all of this area with the exception of the surface area of the pond (7 acres total) is considered Preble's habitat, 14.5 acres of useable habitat will be preserved. Approximately 3.0 acres of upland adjacent to St. Vrain Creek will be replanted with native grasses. Revegetation of 1.5 acres of the upland area between the riparian area and the ponds will be completed within five years. The orchard (1.5 acres) will be revegetated at the time of orchard planting. Additional mitigation measures include: creating 3.1 acres of new palustrine emergent, scrub/shrub, and forested wetlands along the shoreline of a new 7 acre pond; managing livestock grazing within the Riparian Protection Zone and Recreation/Landscape Zones as to protect Preble's habitat; relocation of Crane Hollow Road farther away from potential habitat than originally planned; and clustering and relocating the proposed building sites (residential lots) farther away from preferred habitat than originally planned. The permanent protection and management of this high-quality habitat to offset the loss of a smaller area of lower quality habitat would be an overall benefit to the status and recovery of Preble's.

The environmental effects of the proposed project on other aspects of the human environment such as geology and soils, hydrology, air quality, light, noise, traffic, aesthetics, land use, and cultural resources were analyzed in the EA. A summary of these issues and impacts is included in the EA.

The Service finds that the proposed issuance of an Endangered Species Act section 10(a)(1)(B) permit for take of Preble's in association with the Leonard's residential development project will not have a significant effect on the human environment for the following reasons:

1. The loss of 3.2 acres of potential habitat resulting from the construction of the proposed project will not jeopardize the survival or recovery of Preble's.
2. The proposed mitigation measures are consistent with recovery for 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. Project approval conditions required by Boulder County (summarized in the EA) have already reduced individual and cumulative impacts of the proposed project on other aspects of the human environment to a level of less than significant.

ALTERNATIVES

The effects of the proposed project and four alternatives were analyzed in the EA. The alternatives include: 1) proposed action, 2) selection of an alternate site, 3) modification of site

design and layout, 4) waiting on approval of a regional section 10(a)(1)(B) permit, and 5) no action. The proposed project alternative involves the issuance of a section 10(a)(1)(B) incidental take permit. The no-residential development alternative and the alternate site alternative would not require the issuance of a section 10(a)(1)(B) permit and are considered to be no-action (no permit issuance) alternatives. The modification of site design would require issuance of an incidental take permit because most of the property supports Preble's habitat. The alternative to wait for approval of a regional section 10(a)(1)(B) permit would also result in issuance of an incidental take permit.

The Service did not select the alternatives to the proposed action for the following reasons. The alternative site and no development alternatives do not meet the Leonard's intent to allow the family farm to remain in the family. The Service notes that the project proponent has indicated that the alternate site alternative was infeasible from a financial standpoint, given private contractual constraints and that the proposed project site is already owned by the Leonard's. The original sites for the residential homes were already moved farther away from the St. Vrain River to reduce wildlife impacts. Utilizing the most extensive definition of Preble's habitat which includes 300 feet from the 100-year floodplain, alternative site layout design would not eliminate the incidental take anticipated to occur. With this habitat definition, the only building location that does not result in incidental take is lot 2. Therefore, this alternative was considered non-practicable. Due to uncertainties as to when a regional HCP might become available, this alternative was considered non-practicable. Furthermore, none of these alternatives would substantially benefit Preble's in the long-term because no habitat would be permanently managed and protected. The configuration and location of the proposed project alternative was designed to affect the parts of the property that have already been disturbed the most, thereby allowing the preservation of areas with a greater level of native habitat quality and biological diversity.

AVAILABILITY AND PUBLIC COMMENT

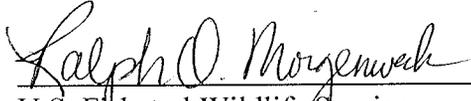
The Service published a notice of availability of an EA for the issuance of an incidental take permit for the proposed action in the *Federal Register* on December 13, 1999. Publication of the notice initiated a 30-day comment period. Copies of the EA/HCP also were provided to interested parties.

The Service did not receive any comments on the proposed action during the public comment period.

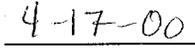
DETERMINATION

Based upon the information in the Service's EA, Findings and Recommendations, and biological opinion on the proposed action, and other documents referenced below, the Service has determined that the approval of Endangered Species Act section 10(a)(1)(B) Permit TE024039 to the Leonard's for take of the federally threatened Preble's Meadow Jumping Mouse associated with the proposed project at 11666 Crane Hollow Road in Hygiene, Boulder County, Colorado

will not significantly affect the quality of the human environment. The Service has determined that the proposed action does not constitute a major Federal action significantly affecting the quality of the human environment within the meaning of section 102(2)(c) of the National Environmental Policy Act of 1969. Therefore, an environmental impact statement will not be prepared.



U.S. Fish and Wildlife Service
Regional Director



Date

RELATED DOCUMENTS

Queen of the River Fish Company, Inc. 1999a. Environmental Assessment and Habitat conservation plan for the issuance of an incidental take permit for the Preble's Meadow Jumping Mouse (*Zapus hudsonius preblei*) for construction of two single family residences on the 28.5 acre Leonard Property, in Boulder County, Colorado. 21 pp. plus exhibits and appendices.

U.S. Fish and Wildlife Service. 2000a. Intra-Service Section 7 consultation and Biological Opinion on Issuance of an Incidental Take Permit to Tracy and Lana Leonard, Boulder County, Colorado (ES/GJ-6-CO-00-F-010). Colorado Field Office, Lakewood, Colorado.

U.S. Fish and Wildlife Service. 2000b. Findings and Recommendations on Issuance of an Incidental Take Permit for the Preble's meadow jumping mouse to Tracy and Lana Leonard for the construction of two single family residences on the 28.5 acre Leonard Property, in Boulder County, Colorado, Colorado (TE024039).

LITERATURE CITED

Armstrong, D.M., M.E. Bakeman, A. Deans, C.A. Meaney, and T.R. Ryon. 1997. Report on habitat findings of the Preble's meadow jumping mouse. Boulder (CO); report to the U.S. Fish and Wildlife Service and Colorado Division of Wildlife. 91 pp.

Compton, S.A., and R.D. Hugie. 1993. Status report on *Zapus hudsonius preblei*, a candidate endangered subspecies. Logan (UT): Pioneer Environmental Consulting Services Inc.; under contract with the U.S. Fish and Wildlife Service. 32 pp.

Compton, S.A., and R.D. Hugie. 1994. Addendum to the status report on *Zapus hudsonius preblei*, a candidate subspecies. Logan (UT): Pioneer Environmental Services, Inc.; under contract with the U.S. Fish and Wildlife Service. 8 pp.

Corn, J.G., C.A. Pague, A.R. Ellingson, M. Sherman, T. Zwięjac, G. Kittel, and C. Fleming. 1995. Final report on the geographic extent of the Preble's meadow jumping mouse population on the United States Air Force Academy. Ft. Collins (CO): Colorado Natural Heritage Program; under contract with the United States Air Force Academy. 40 pp.

Krutzsch, P.H. 1954. North American jumping mice (genus *Zapus*). University of Kansas Publications, Museum of Natural History 7:349-472.

Meaney, Carron, Clippenger, N.W., Deans, A., O'Shea-Stone, M. 1996. Second Year Survey for Preble's Meadow Jumping Mouse (*Zapus hudsonius preblei*) in Colorado. Prepared for Colorado Division of Wildlife. November 15, 1996.

Shenk, T.M. 1998. Conservation assessment and preliminary conservation strategy for Preble's meadow jumping mouse (*Zapus hudsonius preblei*). Fort Collins (CO): Colorado Division of Wildlife FY 1997-98 Annual Report. 38 pp.

Shenk, T.M. and M.M. Sivert. 1999a. Temporal and Spatial Variation in the Demography of Preble's meadow jumping mouse (*Zapus hudsonius preblei*). Fort Collins (CO): Colorado Division of Wildlife January-March 1999 Quarterly Report. 16 pp.

Shenk, T.M. and M.M. Sivert. 1999b. Movement patterns of Preble's meadow jumping mouse (*Zapus hudsonius preblei*) as they vary across time and space. Fort Collins (CO): Colorado Division of Wildlife January-March 1999 Quarterly Report. 35 pp.