



United States Department of the Interior

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FINDING OF NO SIGNIFICANT IMPACT FOR ISSUANCE OF AN INCIDENTAL TAKE PERMIT FOR THE PREBLE'S MEADOW JUMPING MOUSE TO THE LIVERMORE AREA LANDOWNERS GROUP, THE NATURE CONSERVANCY, AND THE STATE OF 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 (ESA), to the Livermore Area Landowners Group, The Nature Conservancy, and the State of Colorado (Applicants). The ITP would authorize the incidental take of the federally threatened Preble's meadow jumping mouse, *Zapus hudsonius preblei* (Preble's), in the Livermore Area of Larimer County, Colorado. The Livermore Area approximates the North Fork of the Cache la Poudre watershed. The duration of the proposed ITP is 30 years. The Environmental Assessment (EA) evaluates the potential environmental effects associated with issuance of an ITP and implementation of a Livermore Area Habitat Conservation Plan (LAHCP) to cover ongoing agricultural and other compatible activities, and conservation and stewardship activities in the Livermore Area. The LAHCP is needed because agricultural and conservation practices in the Livermore Area could not continue without the potential for regular and frequent violations of the ESA. Within the LAHCP Area, the total estimated potential habitat (known as the "Conservation Zone" or CZ) which will be subject to provisions of the LAHCP comprises approximately 201.6 miles of stream reaches consisting of approximately 21,316 acres. The Applicants anticipate a maximum of 20 percent of the Preble's habitat would be adversely affected by the proposed action. This amount corresponds to 28.8 stream miles, or 3,356.7 acres if all parties enroll and implement the maximum allowable development. Potential habitat for Preble's is defined as natural areas comprising 325 feet on either side of a natural stream as measured from the centerline of the stream.

The Applicant has prepared the LAHCP 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 Habitat Conservation Plan (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:

In the event that any of the covered activities cause temporary disturbances to areas within the CZ, participating landowners will ensure that restoration measures meet the following standards:

- All areas actually disturbed by the permitted activity shall be reseeded or replanted with weed-free mixes unless they are less than 20 feet from an agricultural building, residence or accessory structure;
- In all areas, reseeded or replanted vegetation shall be with the same type of vegetation (usually grassland or riparian) as that disturbed by the activity; and
- When the activity is completed between mid-April and mid-September, reseeded and replanting shall be completed within 30 days after such completion. If vegetation is not established within this time frame, if appropriate, erosion control materials will be used at the site.

Mitigation Measures for Specific Activities: The LAHCP covers a number of activities that do not cause surface disturbances, but which may impact the CZ and Preble's. As described below, these activities are addressed through conservation measures specifically tailored to such activities and designed to ensure that impacts are minimized and mitigated to the maximum extent practicable. In addition, the LAHCP covers minimal effect and compatible activities that are likely to have little or no effect on covered species or their habitats. In some cases, the activity may benefit the Preble's. For these activities, conservation measures have been developed, where appropriate, to ensure that any potential impact is appropriately minimized and mitigated and that the compatibility of these activities is maintained. Specific activities include: ongoing agricultural activities; maintenance and replacement of existing structures, landscaping, and related structures and improvements; rodent control; noxious/invasive weed and pest control; existing uses of water; ditch maintenance; education and interpretation; inspection and surveillance of property; outdoor recreation; habitat management; and emergency circumstances.

In addition, conservation banking may be established voluntarily by participating landowners.

LAHCP Habitat Management Program: As discussed in this plan, most of the covered activities currently being undertaken within the LAHCP Area are either compatible with the survival and recovery of the Preble's or will be carried out in a manner that substantially avoids impacts. Accordingly, a comprehensive management program is not deemed to be necessary or advisable for all lands within the LAHCP Area. However, where opportunities do exist, such as on lands managed by TNC and CDOW, efforts will be made to tailor existing land management practices to maximize opportunities to improve, enhance, or restore habitat for the Preble's. In addition, other participating landowners may, on a voluntary basis, engage in management activities on their lands in a manner consistent with practices and guidelines established by TNC, CDOW, and the LAHCP Board.

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. One hundred acres could be destroyed without mitigation; however, the remainder would be mitigated by either a 2:1 enhancement or creation of habitat or 4:1 protection of habitat. This mitigation ratio means that at least 6,500 acres would be protected if all landowners chose enhancement, and 13,000 acres protected if all landowners chose straight protection. This mitigation would offset the loss of the 3,356 acres described above.

The EA considered environmental effects of the Preferred Alternative on other aspects of the human environment, such as vegetation; general wildlife; threatened and endangered species and species of special concern; wetland, riparian, and aquatic resources; geology and soils; land use; cultural resources; air quality; water resources and water quality; 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.

Under the Preferred Alternative, long-term, negligible, adverse impacts to wetland, riparian, and aquatic resources are anticipated from the disturbances associated with 3 percent permanent impacts allowable under the LAHCP within the portion of the CZ owned by private landowners not requiring mitigation and 1 percent on TNC, CDOW, and SLB lands. Long-term, minor, beneficial effects would occur from the mitigation of permanent disturbance activities on up to 17 percent of land owned by private landowners. If all lands containing Preble's potential habitat within the CZ of the LAHCP area enrolled in the LAHCP (i.e., 201.6 stream miles and 21,316 acres), these impacts would affect a maximum of approximately 28.8 stream reach miles or 3,356.7 acres of Preble's habitat and accordingly 172.8 stream miles or 17,959.3 acres of Preble's habitat would be avoided. The land uses in the LAHCP Area (e.g. ranching, farming, rural human residences, ecological restoration, wildlife management, management of nature reserves, and passive recreation) coexist with a population of Preble's believed to have high viability. For this reason, the benefits of the LAHCP to the Preble's described in the conservation strategy are expected to greatly outweigh any loss of habitat covered by the LAHCP within the CZ.

Because of the rural character of the LAHCP Area, any indirect or secondary impacts are likely to arise from agricultural land uses and very low density residential uses. Since these uses are generally the same as those presently occurring in the LAHCP Area, any indirect effects on covered species would be adequately addressed through the conservation measures.

Additional impacts may occur as a result of new development through increased storm water runoff, intensified use of pesticides and fertilizers, and the introduction of greater numbers of pets. However, the minimal level of development covered by the LAHCP, coupled with the protections afforded by this plan, provide adequate assurances that

Colorado, as described in the LAHCP will not have a significant effect on the human environment for the following reasons:

1. The permanent loss of up to 3 percent of privately owned land and 1 percent of land owned by TNC, CDOW, and SLB (as defined in the EA/HCP and analyzed in the Service's Biological Opinion), of potential and occupied habitat resulting from activities in the CZ as described in the LAHCP 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 vegetation; general wildlife; threatened and endangered species and species of special concern; wetland, riparian, and aquatic resources; geology and soils; land use; cultural resources; air quality; water resources and water quality; and environmental justice.

The Service has examined four alternatives for the proposed action in detail in the EA, including: 1) a No Action alternative; 2) the Preferred Alternative, issuance of a section 10(a)(1)(B) Incidental Take Permit under the Endangered Species Act of 1973 (16 U.S.C. 1531-1544, 87 Stat. 884) as amended to the Applicants; 3) an alternative to grant conservation easements to protect Preble's habitat; and 4) an alternative to develop a countywide HCP for Larimer County.

Under the No Action Alternative, the Service would evaluate individual ITPs and HCPs prepared by landowners in the Livermore Area of Larimer County, Colorado 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 land in the area that may result in incidental take would require an individual ITP and HCP pursuant to section 10(a)(1)(B) of the ESA. However, certain activities would not require an HCP or ITP as they are exempted under section 4(d) of the ESA¹. Development of an HCP for issuance of an individual ITP would require from 6 to 9 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.

¹ 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.

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.

Richard A. Coleman

12/12/05

**ACTING
Deputy**

**U.S. Fish and Wildlife Service
Regional Director**

Date

Public Comments on the Draft Livermore Habitat Conservation Plan (HCP) and Environmental Assessment

This appendix summarizes and responds to the comments received on the Draft Livermore Habitat Conservation Plan (HCP) and Environmental Assessment. The 30-day public comment period for the DLEIS began on January 13, 2004, and ended on March 15, 2004.

The sections below summarize the number and type of comments received, describe how those comments were incorporated into the Final EA, and respond to substantive issues raised in the comments. Included are tabular summaries of written comments, and a list of commenters and references to comments made. No comments were received from tribal governments.

Number and Type of Comments Received

The U.S. Fish and Wildlife Service received two public comments on the Draft Livermore Habitat Conservation Plan (HCP) and Environmental Assessment. A team from the Service's Region 6 Office reviewed and responded to all substantive comments. Issue statements were formulated and responses for those issues are presented below. Substantive comments are defined as those that do one or more of the following:

- Question, with reasonable basis, the accuracy of the information in the EA;
- Question, with reasonable basis, the adequacy of the environmental analysis;
- Present reasonable alternatives other than those presented in the EA;
- Or cause changes or revisions in the proposal. In other words, they raise debate or question a point of fact or policy.

Comments in favor of or against the preferred alternative or other alternatives, or those that only agree or disagree with Agency policy are not considered substantive.

Before issuing the permit, we will finalize our intra-Service consultation that addresses the Ute ladies-tresses orchid and Colorado butterfly plant. In our draft consultation, we determined that neither plant was likely to be adversely affected by the proposed action, because no individuals of these species are known from the area. Given the lack of known records from the Planning area, we concluded that there was no need to address the species in the HCP. Our regulations require that we use the best available information when making our determination. We used this information to base our conclusion as that these species are not likely present in the project area. Our regulations do not require either us or the applicant to gather new information during this process.

Comment #4 - If either the Colorado Division of Wildlife (CDOW) or the School Land Board (SLB) is to be a permittee under this HCP, there needs to be a commitment by each agency to preparation of management plans.

Response: Currently, CDOW or SLB have not committed to sign on to the HCP. All permittees included under the plan in the future will need to meet the requirements of the HCP. Although we recommend that landowners develop a management plan, the HCP does not require them to do so. Therefore, if CDOW or SLB choose to be covered under the HCP in the future, preparing a management plan would be at their discretion. Nothing in our section 10 statute and regulations require the preparation of individual management plans. The Livermore Area HCP meets the issuance criteria pursuant to section 10(a)(1)(B) without the inclusion of that measure.

Comment #5 - No Action Alternative is incorrect and action alternatives are poorly represented.

Response: The No Action and action alternatives have been revised to better reflect their intent.

Comment #6 - Recommend that the Colorado State Historic Preservation Office review the documents for compliance with both State and Federal historic preservation laws.

Response: The Colorado Historical Society (CHS) was contacted to obtain a database of possible cultural resources within the planning area that might be affected by activities allowed under the HCP. A file search was completed and a determination made that no significant cultural resources exist within the conservation zone.

A number of historic sites do occur within the planning area but not within the conservation zone for two reasons: 1) These riparian areas are prone to flooding so historically settlements were not located in the areas identified as the conservation zone; and 2) the topography of the conservation zone consists of narrow cliffs and canyons where access is limited and difficult for long-term settlements to occur. Most historical activity in the area of the conservation zone was transitional. Native Americans moved across the ecotone eastward seasonally and their permanent sites

Response: The ecotone within which the conservation zone is located is very diverse. Therefore any mitigation and restoration activities will be designed so that they are appropriate for each site. The Nature Conservancy will establish permanent photo points to document baseline conditions within the conservation zone on each property as they are enrolled, including current plant community condition and land uses.

If an activity is planned that may result in permanent impacts requiring restoration or mitigation, the preimpact condition information will be used to set the standard for restoration to either the same or a greater level of condition. Site specific information will be used from each site and restoration efforts should be more appropriate, and successful and more efficient because landowners will be working towards restoring a condition that previously existed on their land.

Comment #10 - The HCP and the DEA analysis fails to address possibility of impacts from activities on "other" lands such as those managed by the Forest Service and CDOW.

Response: The HCP does not rely on the Forest Service and CDOW lands for mitigation. Rather it looks at how these lands fit into the big picture of the status of the Preble's meadow jumping mouse and whether the project would result in an "appreciable reduction" of the likelihood of survival and recovery of the species in the wild. The Forest Service's responsibilities pursuant to section 7 of the ESA will ensure that the impacts of activities on their lands, combined with the status of the mouse throughout its range including the covered lands of the Livermore HCP, would not jeopardize the continued existence of the mouse.

Comment #11 - Need to clarify what constitutes an emergency situation.

Response: The HCP section 4.1.3 at page 21 defines emergency activities as those "necessary to protect life, property, and financial loss. Such activities, which may involve maintenance, repair or replacement of affected property, are permitted to be carried out without prior approval from the Service, provided they are in response to an emergency situation." We anticipate that the majority of emergency activities would result from weather events such as rain, snow, and hail storms, or from fires, wildland or structural. We have concluded that the understanding of emergency situations is clear and that the HCP sufficiently describes them to allow us to determine compliance with this measure.

Comment #12 - The HCP should clarify the scale of weed control and limit it to non-native species.

Response: The commenter refers to the HCP's "exemption" for weed and pest control. However, the HCP is not providing an exemption for weed and pest control. Weed and pest control are listed in the HCP under section 4.2: Minimal effect and compatible activities. The Service has already determined that noxious weed control

permit will clarify that landowners would need to contact us before moving forward with beneficial projects that are not included on this list.

Comment #16 - Appears highly unlikely that proposed mitigation will contribute to Preble's mouse recovery. It is difficult to determine whether the permit "will not appreciably reduce the likelihood...recovery of the species" because a recovery plan has not yet been developed.

Response: As stated above, the issuance criteria for an incidental take permit does not require that the HCP contributes to recovery of a species. We disagree with the commenter's opinion that incidental take permits pursuant to section 10(a)(1)(B) of the ESA cannot be issued unless a recovery plan has been developed. In the absence of a recovery plan, the Service uses the best scientific and commercial data available to determine whether the project would result in an appreciable reduction of the survival and recovery of the species in the wild.

Comment #17 - Need to establish guidance for assessing adverse modification of Critical habitat. How much of the area in question falls within the critical habitat designation for Preble's?

Response: We analyzed the effects to critical habitat in the intra-Service biological opinion on the issuance of the permit. The action area lies within critical habitat Unit SP4, which contains 8,206 acres and 88 stream miles of critical habitat. The action area includes 81 stream miles of critical habitat, roughly 92 percent of the critical habitat in the unit. The proposed action could impact up to 20 percent of designated critical habitat. In our rule designating critical habitat for the species, we determined that four primary constituent elements (PCEs) were essential for the conservation of the Preble's meadow jumping mouse. The proposed action would adversely affect two of the four PCEs. In the biological opinion, we determined that these adverse effects did not rise to the level of adverse modification.

Comment #18 - The HCP offers no analysis of the expected reasonable costs of activities and how costs will compare to the fee revenues raised.

Response: The Nature Conservancy as a landowner and land manager has committed to performing the monitoring for this project. The Nature Conservancy has been active in the project area since 1987 and in Colorado since 1965. As landowners and land managers they have staff and skills to perform this function so to promote conservation and good land stewardship in the community. The approach to monitoring is adaptive and designed to be efficient, collecting enough data to answer the need without creating a large financial burden which may inhibit landowner participation. As landowners voluntarily enroll a survey will be completed and baseline monitoring established by TNC. The monitoring is also designed such that landowners themselves could perform some of the monitoring and TNC would

We have concluded that the impacts to Preble's from the covered activities are relatively small in scope. On the lands in TNC ownership or for which TNC holds conservation easements over (total of 8,329 acres), only one percent of the area will be impacted, and the majority of impacts will be temporary in nature. These impacts will be far outweighed by the beneficial effects of permanent protection of habitat that the TNC provides for the Preble's meadow jumping mouse.

On private (non-TNC, CDOW, or SLB) lands, no more than 20 percent of an enrolled property would be impacted. This percentage limits the overall scale of the HCP to 28.8 stream reach miles or 3,357 acres of habitat. In exchange, the HCP would protect 172.8 stream miles or 17,959 acres. In addition, permanently impacts would be scattered about in a patchwork, and would not render large areas of habitat incompatible with Preble's recovery.

Other activities on CDOW lands interspersed throughout the Planning Area will contribute to the overall picture of mouse conservation. A total of 25,095 acres are managed for wildlife conservation and recreation and are protected from the impacts of development, the single most imminent threat to the mouse.

Comment #22 - Need to subject the mitigation plan and related documents to an independent peer review.

Response: Independent peer review is not a required part of the HCP or NEPA processes. We see no reason to unduly subject the applicants to additional requirements beyond those required by our section 10(a)(1)(B) implementing regulations. In addition, mitigation methods for the Preble's meadow jumping mouse have been adequately worked out and are not complicated enough to warrant independent peer review.

Comment #23 - The discussion on biological goals and objectives is inadequate.

Response: The Livermore HCP includes several overall objectives on page 1, two of which relate to the Preble's meadow jumping mouse: 1) to provide for the long-term survival of the Preble's meadow jumping mouse; and 2) to promote habitat management activities intended to restore riparian and adjacent upland ecosystems. Three additional biological goals and objectives are presented on page 26; 1) continued protection of potential Preble's habitat on TNC and CDOW lands within the CZ; 2) preservation of at least 80 percent of remaining lands owned by other participating private landowners within the CZ; and 3) maintenance of key corridors and linkages within the CZ. Upon full enrollment, at least 50 miles of Preble's habitat with the potential to support 2,500 mice would be protected. We conclude that the biological goals and objectives of the HCP meet our issuance criteria.

Comment #24 - The FWS must prepare a biological opinion on the proposed incidental take permit.

section 7 consultation on the 4(d) rule and determined that the take exemptions were not likely to jeopardize the continued existence of the Preble's meadow jumping mouse and that the take that would result was biologically insignificant.

Comment #28 - Possible impacts to all listed or at-risk species have not been addressed.

Response: Listed species that might occur in the watershed other than Preble's include Greenback Cutthroat Trout (GCT), Colorado Butterfly Plant and Ute Ladies Tresses. GCT have been reintroduced in two locations within the watershed but not within the planning area. No occurrences of GCT have been documented in the planning area.

As noted in the EA, the Colorado Natural Heritage Program has surveyed the area for the two listed plants but has not documented any occurrences.

Comment #29 - Unclear on the basis for establishing the Conservation Zone at 325 feet especially with the Critical Habitat Designation ranges being from 360-459 feet.

Response: The areas occupied by Preble's meadow jumping mice in Livermore County are somewhat unique. The Livermore Area occurs mostly on igneous formations dominated by floodplains with steep walls (Pague in lit. 2003). This pattern differs from many other populations of the Preble's meadow jumping mouse, which are in areas with more erosive sedimentary formations. The majority of streams within the Livermore area increase in elevation much more rapidly from their edges from streams in much of the range, such as El Paso and Douglas Counties, which do not see as substantial elevation range from the stream edge. We believe that Preble's meadow jumping mice are likely to stay closer to streams within the Livermore Area, as they are dependent on riparian hydrology and vegetation. For this reason, we concluded that 325 feet from streams was protective of the Preble's meadow jumping mouse given the specific habitat conditions common to the Livermore area.

Comment #30 - The guidelines for minimizing impacts have not yet been established.

Response: The HCP presents several minimization and mitigation measures as part of the conservation strategy of the HCP (Section 5.0, pages 26-39 and Appendix B). We have concluded that the specified minimization measures meet the issuance criteria of the HCP. Any additional measures developed by the LAHCP Board will only increase the protection and benefits offered to Preble's by the HCP.

Comment #31 - Troubled by incorporation of the No Surprises rule and recommends use of adaptive management.

Response: The Service encourages applicants to incorporate adaptive management into their HCPs (reference for 5-point policy). However, the HCP is written by the applicant, not the Service. The applicants are not required to include adaptive management,

Table 1: Summary of Commenters for the Livermore Habitat Conservation Plan (HCP) and Environmental Assessment (EA)

Commenter #	TYPE	FROM	Pref. Alt.	ISSUE #
1	Letter	Individual		1-6
2	Letter	Center for Native Ecosystems		7-39

Table 2: Summary of Written Comments with Codes Received on the Livermore Habitat Conservation Plan (HCP) and Environmental Assessment (EA)

Comment Code	Comment Type
1	Need to clarify areal extent of the permit
2	Preservation concept would only place a conservation easement on lands that are already protected under the permit. Recommend mitigation of habitat through restoration enhancement or creation at the 2:1 ratio.
3	Surveys for Ute Ladies Tresses Orchid and Colorado Butterfly Plant need to be completed and evaluated before permit is issued.
4	If either the Colorado Division of Wildlife (CDOW) or the School Land Board (SLB) is to be a permittee under this HCP, there needs to be a commitment by each agency to preparation of management plans.
5	No Action Alternative is incorrect and action alternatives are poorly developed.
6	Recommend that the Colorado State Historic Preservation Office review the documents for compliance with both state and federal historic preservation laws.
7	The proposed mitigation will not ensure (as written) that conservation benefits actually accrue to the Preble's mouse.
8	The DEA's assessment of likely impacts is flawed because terms such as "maximum extent practicable", "minimize" and "temporary" are not defined in concrete terms.
9	The HCP fails to establish concrete standards for what constitutes sufficient mitigation and does not spell out the habitat conditions required in order for mitigation lands to count as "improved" or "newly created" habitat. The analysis offers no rationale for use of these limits.
10	The HCP and the DEA analysis fails to address possibility of impacts from activities on "other" lands such as those managed by the Forest Service and CDOW.
11	Need to clarify what constitutes an emergency situation.
12	Need to clarify exemptions for weed and pest control and eradication.

Comment Code	Comment Type
32	The standards for mitigation in the HCP are not high enough to make the assertion that the destruction of Preble's habitat and Preble's mice themselves contributes to the conservation of the species.