

Beyond designating critical habitat for sites essential to the conservation of the Preble's because they are important to recovery, we reviewed other sites of Preble's occurrence, especially on Federal lands, for possible designation as critical habitat. Our conservation strategy emphasizes the importance of protecting additional Preble's populations, to provide insurance for the Preble's in the event that designated recovery populations cannot be effectively managed or protected as envisioned by the recovery plan, or are decimated by uncontrollable catastrophic events such as fires or flooding. Our conservation strategy entails directing recovery efforts toward public lands rather than private lands where possible, and calls upon all Federal agencies to protect and manage for the Preble's wherever it occurs on Federal lands. As part of our conservation strategy, we believe that the designation of additional areas of critical habitat on Federal land is essential for the conservation of the Preble's. Should unforeseen events cause the continued decline of Preble's populations throughout its range, Preble's populations and the primary constituent elements on which they depend are more likely to persist and remain viable on Federal lands than on non-Federal lands. The likelihood of maintaining stable populations is greatest on these Federal lands, where consistent and effective land management strategies can be more easily employed. Preble's populations on Federal lands could serve as substitute recovery populations should designated recovery populations decline or fail to meet recovery goals. In addition, some Preble's populations on Federal lands have been the subject of ongoing research that could prove vital to the conservation of the Preble's.

For the reasons stated above we have designated selected stream reaches on Federal lands supporting the Preble's that we believe to be essential to the conservation of the Preble's, even if these areas appear unlikely to be selected for initially designated recovery populations based on the Working Draft. These areas of designated critical habitat may include short reaches of intervening non-Federal lands that in some cases support all primary constituent elements needed by the Preble's or, if substantially developed, are likely to provide only connectivity between areas of Preble's habitat on nearby Federal lands.

Designated critical habitat units include only river and stream reaches, and adjacent floodplains and uplands, that are within the known geographic

and elevational range of the Preble's, have the primary constituent elements present, and, based on the best scientific data available, are believed to currently support the Preble's.

In Wyoming and at higher elevations along the Front Range in Colorado the geographical distribution of the Preble's has been subject to scrutiny due to the close resemblance, and apparent range overlap, between the Preble's and the western jumping mouse. However, new information obtained since the time of the Preble's listing has not appreciably changed the known range of the Preble's. Based on the most recent information on elevational range of the Preble's we have, with one exception, limited designated critical habitat to 2,300 m (7,600 ft) in elevation and below.

Presence of primary constituent elements was determined through a variety of sources including, but not limited to—Colorado Division of Wildlife mapping of Preble's Habitat Similarity Models derived from interpretation of aerial photographs; the Services' 1998 mapping of sites occupied or potentially occupied by the Preble's produced in conjunction with the Colorado Department of Natural Resources as part of proposed special regulations under section 4(d) of the Act (63 FR 66777); working maps produced by the Recovery Team during development of the Working Draft; National Wetland Inventory maps produced by the Service; results of research conducted on a variety of Federal properties by the Forest Service, the Department of Energy, the Air Force, and the Army Corps of Engineers; results of research conducted by the Colorado Division of Wildlife, Colorado Department of Transportation, and the City of Boulder; field assessments of habitat by Service staff; information amassed to support regional HCPs including those in Boulder, Douglas, and El Paso Counties in Colorado, and for Denver Water properties in Colorado; coordination with Forest Service personnel from the Medicine Bow-Routt, Arapaho-Roosevelt, and Pike-San Isabel National Forests; and, numerous evaluations of potential Preble's habitat by consulting biologists in support of developers, landowners, and other clients.

Presence of the Preble's was determined based largely on the results of trapping surveys, the vast majority of which were conducted in the past 7 years. Sites judged to be occupied by the Preble's include those that—(1) have recently been documented to support jumping mice identified by genetic or morphological examination as the

Preble's; or (2) have recently been documented to support jumping mice and for which historical verification of the Preble's exists. While in some cases designated critical habitat units extend well beyond these capture locations, boundaries of these critical habitat units include only those reaches that we believe to be occupied by the Preble's based on the best scientific data available regarding capture sites, the known mobility of the Preble's, and the quality and continuity of habitat components along stream reaches. Where appropriate, we have included details on the known status of the Preble's within specific subdrainages in the Critical Habitat Designation section of this document. Survey efforts to document the Preble's in Wyoming have been more limited than in Colorado and have been focused on—(1) Federal lands (the Medicine Bow-Routt National Forest, some Bureau of Land Management lands, and the F.E. Warren in Laramie County); (2) lands owned and surveyed by True Ranches; and (3) areas to be impacted by various proposed projects with a Federal nexus, most notably the Medicine Bow Lateral Pipeline.

We considered several qualitative criteria to judge the current status and probable persistence of Preble's populations in the selection and designation of specific areas as critical habitat. These included—(1) the quality, continuity, and extent of habitat components present; (2) the state of natural hydrological processes that maintain and rejuvenate suitable habitat components; (3) the presence of lands devoted to conservation, either public lands such as parks, wildlife management areas, and dedicated open space, or private lands under conservation easements; and (4) the landscape context of the site, including the overall degree of current human disturbance and presence, and likelihood of future development based on local planning and zoning.

In those units where, based on our conservation strategy, we designate critical habitat on Federal lands, we looked for contiguous Federal property along stream reaches at least 5 km (3 mi) in length supporting required primary constituent elements and occupied by the Preble's. In some cases shorter reaches on Federal lands were designated as critical habitat when they were separated from more substantial reaches on Federal lands by only small segments of intervening non-Federal lands.