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DEPARTMENT OF THE INTERIOR

Fish and Wildlife Service

50 CFR Part 17

[Docket No. FWS-R6-ES-2009-0013]

[92210-1117-0000-B4]

RIN 1018-AW45

**Endangered and Threatened Wildlife and Plants; Revised Critical Habitat for the
Preble's Meadow Jumping Mouse (*Zapus hudsonius preblei*) in Colorado**

AGENCY: Fish and Wildlife Service, Interior.

ACTION: Proposed rule.

SUMMARY: We, the U.S. Fish and Wildlife Service (Service), propose to revise designated critical habitat for the Preble's meadow jumping mouse (*Zapus hudsonius preblei*) in Colorado, where it is listed as threatened in a significant portion of the range

(SPR) under the Endangered Species Act of 1973, as amended (Act). The proposed revised critical habitat is located in Boulder, Broomfield, Douglas, El Paso, Jefferson, Larimer and Teller Counties in Colorado. Approximately 418 miles (mi) (674 kilometers (km)) of rivers and streams and 39,142 acres (ac) (15,840 hectares (ha)) fall within the boundaries of the proposed revised designation. The proposed revised designation would therefore add 184 mi (298 km) of rivers and streams and 18,462 ac (7,472 ha) to the existing critical habitat designation of 234 mi (376 km) and 20,680 ac (8,368 ha).

DATES: To ensure that we are able to consider your comments and information, we request that you provide them to us by **[INSERT DATE 60 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER]**. We must receive requests for public hearings, in writing, at the address shown in the **FOR FURTHER INFORMATION CONTACT** section by **[INSERT DATE 45 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER]**.

ADDRESSES: You may submit comments by one of the following methods:

- Electronically: Go to the Federal eRulemaking Portal at <http://www.regulations.gov> to comment on FWS-R6-ES-2009-0013, which is the docket number for this rulemaking.
- U.S. mail or hand-delivery: Public Comments Processing, Attn: [FWS-R6-ES-2009-0013]; Division of Policy and Directives Management; U.S. Fish and Wildlife Service; 4401 N. Fairfax Drive, Suite 222; Arlington, VA 22203.

We will post all comments on <http://www.regulations.gov>. This generally means that we will post any personal information you provide us (see the **Public Comments** section below for more information).

FOR FURTHER INFORMATION CONTACT: Susan Linner, Field Supervisor, Colorado Ecological Services Office; mailing address P.O. Box 25486, DFC (MS 65412), Denver, CO 80225; telephone 303-236-4773; located at 134 Union Boulevard, Suite 670, Lakewood, CO. If you use a telecommunications device for the deaf (TDD), call the Federal Information Relay Service (FIRS) at 800-877-8339.

SUPPLEMENTARY INFORMATION:

Public Comments

We intend that any final action resulting from this proposal will be based on the best scientific and commercial data available and will be as accurate and as effective as possible. Therefore, we request comments or suggestions on this proposed rule. We particularly seek comments concerning:

(1) The reasons why we should or should not revise the designation of specific habitat as “critical habitat” under section 4 of the Act (16 U.S.C. 1531 *et seq.*).

(2) Specific information on:

- The amount and distribution of Preble's meadow jumping mouse (PMJM) habitat in Colorado,
- Areas occupied at the time of listing and that contain features essential for the conservation of the species that we should include in the revised designation and why,
- Areas not containing features essential for the conservation of the species and why,
- Areas not occupied at the time of listing that are essential to the conservation of the species and why, and
- Areas that require special management consideration and protection and why.

(3) Comments or information that may assist us with identifying or clarifying the primary constituent elements (see section below on **Primary Constituent Elements**).

(4) Land use designations and current or planned activities in the areas proposed as revised critical habitat and their possible impacts on revised critical habitat.

(5) How the proposed boundaries of the revised critical habitat could be refined to more closely circumscribe the riparian and adjacent upland habitats occupied by the Preble's meadow jumping mouse.

(6) Whether our proposed revised designation should be altered in any way to account for the effects of climate change and why.

(7) Whether any specific areas being proposed as revised critical habitat should be excluded under section 4(b)(2) of the Act from the final designation, and whether the benefits of potentially excluding any particular area outweigh the benefits of including that area under section 4(b)(2) of the Act. We are specifically seeking comments from the public on the following lands: those covered by the Douglas County Habitat Conservation Plan (HCP) (Service 2006a) and the potential modification of outward boundaries of proposed critical habitat to conform to Douglas County's Riparian Conservation Zones (RCZs) (streams, adjacent floodplains, and nearby uplands likely to be used as habitat by the PMJM) as mapped for the Douglas County HCP; lands within the Livermore Area HCP (Service 2006b), the Larimer County's Eagle's Nest Open Space HCP (Service 2004b), the Denver Water HCP (Service 2003b), the Struther's Ranch HCP (Service 2003c), and other HCPs; lands within El Paso County (because the county is currently developing a countywide HCP); lands within the proposed Seaman Reservoir expansion footprint; and, lands within the Rocky Flats National Wildlife Refuge (NWR).

(8) Any foreseeable economic, national security, or other potential impacts resulting from the proposed revised designation and, in particular, any impacts on small entities, and the benefits of including or excluding areas that exhibit these impacts.

(9) Whether we could improve or modify our approach to designating revised critical habitat in any way to provide for greater public participation and understanding, or to better accommodate public concerns and comments.

We will revise the economic analysis and environmental assessment that were prepared for the previous designation, and we will provide drafts of the new economic analysis and environmental assessment to the public for review and comment before finalizing this proposal.

Based on the public comments, we may find, during the development of the final rule, that areas proposed are not essential to the conservation of the species, are appropriate for exclusion under section 4(b)(2) of the Act, or are not appropriate for exclusion. In all of these cases, this information will be incorporated into the final revised designation. Further, we may find, as a result of public comments, that areas not proposed also should be designated as revised critical habitat. Final management plans that address the conservation of the PMJM must be submitted to us during the public comment period so that we can take them into consideration when making our final critical habitat determination.

You may submit your comments and materials concerning this proposed rule by one of the methods listed in the **ADDRESSES** section.

If you submit a comment via <http://www.regulations.gov>, your entire comment, including any personal identifying information, will be posted on the website. If you submit a hardcopy comment that includes personal identifying information, you may request at the top of your document that we withhold this information from public

review. However, we cannot guarantee that we will be able to do so. We will post all hardcopy comments on <http://www.regulations.gov>.

Background

We intend to discuss only those topics directly relevant to the designation of critical habitat in this proposed rule. For additional information on the biology of this subspecies, see the May 13, 1998, final rule to list the PMJM as threatened (63 FR 26517); the June 23, 2003, final rule designating critical habitat for the PMJM (68 FR 37275); and the July 10, 2008, final rule to amend the listing for the PMJM to specify over what portion of its range the subspecies is threatened (73 FR 39789).

Species Description

The PMJM is recognized as 1 of 12 subspecies of meadow jumping mouse (*Zapus hudsonius*), a species that ranges from the Pacific Coast of Alaska to the Atlantic Coast and from the northern limit of forests south to New Mexico, Oklahoma, and Georgia (Hafner *et al.* 1981, p. 501; Hall 1981, p. 843; Krutzsch 1954, pp. 420-421). Meadow jumping mice are small rodents with long tails, large hind feet, and long hind legs. Total length of an adult is approximately 7 to 10 inches (187 to 255 millimeters), with the tail comprising 4 to 6 inches (108 to 155 millimeters) of that length (Krutzsch 1954, p. 420; Fitzgerald *et al.* 1994, p. 291). The large hind feet can be one-third again as large as those of other mice of similar size. The PMJM has a distinct, dark, broad stripe on its

back that runs from head to tail and is bordered on either side by gray to orange-brown fur. The hair on the back of all jumping mice appears coarse compared to other mice. The underside hair is white and much finer in texture. The tail is bicolored and sparsely furred.

Geographic Range

The PMJM is found along the foothills in southeastern Wyoming, southward along the eastern edge of the Front Range of Colorado to Colorado Springs in El Paso County (Hall 1981, p. 844; Clark and Stromberg 1987, pp. 184-188; Fitzgerald *et al.* 1994, pp. 291-293; Clippenger 2002, pp. 14-15, 20). Knowledge about the current distribution of the PMJM comes from collected specimens and live-trapping locations from both range-wide survey efforts and numerous site-specific survey efforts conducted in Wyoming and Colorado since the mid-1990s.

In Colorado, the distribution of the PMJM forms a band along the Front Range from Wyoming southward to Colorado Springs, with eastern marginal captures in western Weld County, western Elbert County, and north-central El Paso County.

The semi-arid climate in eastern Colorado limits the extent of riparian corridors and restricts the range of the PMJM in this region. The PMJM has not been found on the extreme eastern plains in Colorado. The eastern boundary for the subspecies is likely defined by the dry shortgrass prairie, which may present a barrier to eastward expansion

(Beauvais 2001, p. 3).

The western boundary of the PMJM's range in Colorado appears related to elevation along the Front Range. We use 7,600 feet (ft) (2,317 meters (m)) in elevation as the general upper limit of the PMJM's habitat in Colorado (Service 2004a, p. 5). The western jumping mouse (*Zapus princeps*), a separate species from the PMJM, is similar in appearance and can easily be confused with the PMJM. The range of the western jumping mouse in Colorado is generally west of, and at higher elevations than, the range of the PMJM. However, the two species appear to coexist over portions of their range in the Front Range of Colorado (Bohan *et al.* 2005; Schorr *et al.*, 2007). Recent morphological examination of specimens has confirmed the PMJM to an elevation of approximately 7,600 ft (2,317 m) in Colorado (Bohan *et al.*, 2005) and to 7,750 ft (2,360 m) in southeastern Wyoming (Service 2009). For a discussion of the difficulties of differentiating between the PMJM and the western jumping mouse see our July 10, 2008, final rule to amend the listing for the PMJM (73 FR 39789).

Although there is little information on past distribution or abundance of the PMJM, surveys identified various locations where the subspecies was historically present but is now absent (Ryon 1996, pp. 25-26). Since at least 1991, the PMJM has not been found in Denver, Adams, or Arapahoe Counties in Colorado. Its absence in these counties is likely due to urban development, which has altered, reduced, or eliminated riparian habitat (Compton and Hugie 1993, p. 22; Ryon 1996, pp. 29-30).

Ecology and Life History

Much of the current knowledge regarding life history of the meadow jumping mouse comes from studies of the species in the eastern and midwestern United States. The meadow jumping mouse usually has two litters per year, with an average of five young born per litter (Quimby 1951, p. 67; Whitaker 1963, p. 244). Research has not been conducted on the number or size of PMJM litters, but we assume that they are comparable to other subspecies of the meadow jumping mouse. The PMJM is a true hibernator, usually entering hibernation in September or October and emerging the following May, after a potential hibernation period of 7 or 8 months (Whitaker 1963, p. 5; Meaney *et al.* 2003, pp. 618-619). Similar to other subspecies of meadow jumping mouse, the PMJM does not store food, but survives on fat stores accumulated prior to hibernation (Whitaker 1963, p. 241).

Meadow jumping mice are primarily nocturnal or crepuscular (active during twilight), but also may be active during the day. Little is known about social interactions and their significance in the PMJM. While the PMJM's dispersal capabilities are thought to be limited, in one case a PMJM was documented moving as far as 0.7 mi (1.1 km) in 24 hours (Ryon 1999, p. 12), and the PMJM is able to move miles along stream corridors over its lifetime (Schorr 2003, pp. 9-10).

While fecal analyses have provided the best data on the PMJM's diet to date, they overestimate the components of the diet that are less digestible. Based on fecal analyses,

the PMJM eats insects; fungus; moss; pollen; *Salix* (willow); *Chenopodium sp.* (lamb's quarters); *Salsola sp.* (Russian thistle); *Helianthus spp.* (sunflower); *Carex spp.* (sedge); *Verbascum sp.* (mullein); *Bromus*, *Festuca*, *Poa*, *Sporobolus*, and *Agropyron spp.* (grasses); *Lesquerella sp.* (bladderpod); *Equisetum spp.* (horsetail); and assorted seeds (Shenk and Eussen 1999, pp. 9, 11; Shenk and Sivert 1999a, pp. 10-11). The diet shifts seasonally; it consists primarily of insects and fungi after emerging from hibernation, shifts to fungi, moss, and pollen during mid-summer (July and August), with insects again added in September (Shenk and Sivert 1999a, pp. 12-13). The shift in diet along with shifts in mouse movements suggests that the PMJM may require specific seasonal diets, perhaps related to the physiological constraints imposed by hibernation (Shenk and Sivert 1999a, p. 14).

The PMJM has a host of known predators, including the garter snake (*Thamnophis spp.*), prairie rattlesnake (*Crotalus viridus*), bullfrog (*Rana catesbiana*), fox (*Vulpes vulpes* and *Urocyon cinereoargenteus*), house cat (*Felis catus*), long-tailed weasel (*Mustela frenata*), and red-tailed hawk (*Buteo jamaicensis*) (Shenk and Sivert 1999a, p. 13; Schorr 2001, p. 29). Other potential predators include coyote (*Canis latrans*), barn owl (*Tyto alba*), great horned owl (*Bubo virginianus*), screech owl (*Otus spp.*), long-eared owl (*Asio otus*), northern harrier (*Circus cyaneus*), and large predatory fish. Mortality factors of the PMJM include drowning and being hit by vehicles (Schorr 2001, p. 29; Shenk and Sivert 1999a, p. 13). Introduced fauna that occupy riparian habitats may displace or compete with the PMJM. House mice (*Mus musculus*) were common in and adjacent to historic capture sites where the PMJM was no longer found

(Ryon 1996, p. 26). Mortality factors known for the meadow jumping mouse, such as starvation, exposure, disease, and insufficient fat stores for hibernation (Whitaker 1963, pp. 225-228) also are likely causes of death in the PMJM subspecies.

Preble's Meadow Jumping Mouse Habitat

Typical habitat for the PMJM is comprised of well-developed riparian vegetation with adjacent, relatively undisturbed grassland communities and a nearby water source (Bakeman 1997, pp. 22-31, 47-48). The PMJM is typically captured in areas with multi-storied cover with an understory of grasses or forbs or a mixture thereof (Bakeman 1997, pp. 22-31, 28-30; Meaney *et al.* 1997, pp. 15-16; Shenk and Eussen 1999, pp. 9-11; Schorr 2001, pp. 23-24). The shrub canopy is often *Salix* spp., although other shrub species may occur (Shenk and Eussen 1999, pp. 9-11).

Although the PMJM commonly uses riparian vegetation immediately adjacent to a stream, other features that provide habitat for the subspecies include seasonal streams (Bakeman 1997, p. 76), low moist areas and dry gulches (Shenk 2004), agricultural ditches (Meaney *et al.* 2003, p. 620), and wet meadows and seeps near streams (Ryon 1996, p. 29).

White and Shenk (2000, pp. 7-8) determined that riparian shrub cover, tree cover, and the amount of open water nearby are good predictors of PMJM densities. Trainor *et al.* (2007, pp. 471-472) found that high-use areas for the PMJM tended to be close to

creeks and were positively associated with the percentage of shrubs, grasses, and woody debris. Hydrologic regimes that support PMJM habitat range from large perennial rivers, such as the South Platte River, to small drainages only 3 to 10 ft (1 to 3 m) wide.

Clippenger (2002, pp. 44-45) found that, in Colorado, subshrub cover and plant species richness are higher at most sites where meadow jumping mice are present when compared to sites where they are absent, particularly at distances of 49 to 82 ft (15 to 25 m) from streams. In a study comparing habitats at PMJM capture locations on the Rocky Flats NWR (formerly the Department of Energy's (DOE's) Rocky Flats Environmental Technology Site), Jefferson County, and the U.S. Air Force Academy (Academy) in El Paso County, the Academy sites had lower plant species richness at capture locations but considerably greater numbers of the PMJM (Schorr 2001, p. 26). However, the Academy sites had higher densities of both grasses and shrubs. It is likely that PMJM abundance is not driven by the diversity of plant species alone, but by the density and abundance of riparian vegetation (Schorr 2001, p. 26).

The PMJM has rarely been trapped in uplands adjacent to riparian areas (Dharman 2001, pp. 19-20). However, in detailed studies of PMJM movement patterns using radio-telemetry, the PMJM has been found feeding and resting in adjacent uplands (Shenk and Sivert 1999a, pp. 11-12; Ryon 1999, p. 12; Schorr 2001, pp. 14-15). These studies suggest that the PMJM uses uplands at least as far out as 330 ft (100 m) beyond the 100-year floodplain (Shenk and Sivert 1999b, p. 11; Ryon 1999, p. 12; Schorr 2001, p. 14; Service 2003a, p. 26; Shenk 2004). These upland habitats also assist in

maintaining the integrity of riparian habitats by protecting them from disturbance and supporting normal hydrological functions of rivers, streams, and floodplains.

The PMJM constructs day nests composed of grasses, forbs, sedges, rushes, and other available plant material. They may be globular in shape or simply raised mats of litter and are most commonly above ground but also can be below ground. They are typically found under debris at the base of shrubs and trees or in open grasslands (Ryon 2001, p. 377). An individual mouse can have multiple day nests in both riparian and grassland communities (Shenk and Sivert 1999a, pp. 10-12) and may abandon a nest after approximately a week of use (Ryon 2001, p. 377).

Apparent hibernacula (hibernation nests) of the PMJM have been located both within and outside of the 100-year floodplain of streams (Shenk and Sivert 1999a, pp. 12-13; Schorr 2001, pp. 14-15). Those hibernating outside of the 100-year floodplain would likely be less vulnerable to flood-related mortality. Fifteen apparent PMJM hibernacula have been located through radio-telemetry, all within 335 ft (102 m) of a perennial stream bed or intermittent tributary (Shenk and Sivert 1999a, p. 12; Schorr 2001, p. 28; Ruggles *et al.* 2003, p. 19). Apparent hibernacula have been located under *Salix* shrubs, *Prunus virginiana* (chokecherry), *Symphoricarpos albus* (snowberry), *Rhus trilobata* (skunkbrush), *Rhus* spp. (sumac), *Clematis* spp. (clematis), *Populus* spp. (cottonwood), *Quercus gambelii* (Gambel's oak), *Cirsium* spp. (thistle), and *Alyssum* spp. (alyssum) (Shenk and Sivert 1999a, pp. 12-13). At the Academy, four of six apparent hibernacula found by radio-telemetry were located in close proximity to *Salix exigua* (coyote willow)

(Schorr 2001, p. 28).

Flooding is a common and natural event in the riparian systems in southeastern Wyoming and along the Front Range of Colorado. This periodic flooding helps create a dense vegetative community by stimulating resprouting from *Salix* shrubs, and allows herbs and grasses to take advantage of newly deposited soil. Fire is also a natural component of the Colorado Front Range, and PMJM habitat naturally waxes and wanes with fire events. Within shrubland and forest, intensive fire may result in adverse impacts to PMJM populations. However, in a review of the effects of grassland fires on small mammals, Kaufman *et al.* (1990, p. 55) found a positive effect of fire on the meadow jumping mouse in one study and no effect of fire on the species in another study.

The tolerance of the PMJM for invasive exotic plant species is not well understood. Whether or not exotic plant species reduce PMJM persistence at a site may be due in large part to whether plants create a monoculture and replace native species. The Preble's Meadow Jumping Mouse Recovery Team (Recovery Team) was particularly concerned about nonnative species such as *Euphorbia esula* (leafy spurge) that may form a monoculture, displacing native vegetation and thus reducing available habitat (Service 2003a, p. 13).

Previous Federal Actions

For information on previous Federal actions concerning the PMJM, refer to the

final listing rule published in the **Federal Register** on May 13, 1998 (63 FR 26517), the final rule designating critical habitat for the PMJM in portions of Colorado and Wyoming published in the **Federal Register** on June 23, 2003 (68 FR 37275), and the final rule to amend the listing for the PMJM to specify over what portion of its range the subspecies is threatened, published in the **Federal Register** on July 10, 2008 (73 FR 39789).

On July 17, 2002, we proposed critical habitat for the PMJM (67 FR 47154) and on June 23, 2003, we published a final rule designating critical habitat for the PMJM. On August 22, 2003, the City of Greeley filed a complaint in the U.S. District Court for the District of Colorado challenging our designation of critical habitat for the PMJM (*City of Greeley, Colorado v. United States Fish and Wildlife Service et al.*, Case No. 03–CV–01607–AP). On December 9, 2003, the Mountain States Legal Foundation filed a complaint in the U.S. District Court for the District of Wyoming challenging our 1998 listing of the PMJM and designation of critical habitat for the PMJM (*Mountain States Legal Foundation v. Gale E. Norton et al.*, Case No. 03-cv-250-J) that was later expanded that complaint to include our 2008 final determination on the PMJM and transferred it to the U.S. District Court for the District of Colorado (*Mountain States Legal Foundation v. Ken Salazar et al.*, Case No. 1:08-cv-2775-JLK). These lawsuits challenged the validity of the information and reasoning we used to designate critical habitat for the PMJM.

On July 20, 2007, we announced that we would review the June 23, 2003, final rule designating critical habitat after questions were raised about the integrity of scientific

information we used and whether the decision we made was consistent with the appropriate legal standards (Service 2007a). Based on our review of the previous critical habitat designation, we have determined that it is necessary to revise critical habitat, and this rule proposes those revisions.

On July 10, 2008, we amended the final rule for the PMJM to specify over what portion of its range the subspecies is threatened (73 FR 39789), and determined that the listing of the PMJM is limited to the Significant Portion of the Range (SPR) in Colorado. Upon that determination, all critical habitat designated in 2003 in the State of Wyoming was removed from the regulations of 50 CFR 17.95 for this species.

On April 16, 2009, we reached a settlement agreement with the City of Greeley in which we agreed to reconsider our critical habitat designation for the PMJM. The settlement stipulated that we submit to the **Federal Register** a proposed rule for revised critical habitat by September 30, 2009, and a final rule for revised critical habitat by September 30, 2010 (U.S. District Court, District of Colorado 2009a). On June 16, 2009, an order was issued granting Mountain States Legal Foundation a motion to dismiss their claims on the 1998 listing and 2008 final determination without prejudice, and stayed their challenge to the 2003 critical habitat designation pursuant to the City of Greeley settlement (U.S. District Court, District of Colorado 2009b).

Recovery Planning

Restoring an endangered or threatened species to the point where it is recovered is a primary goal of our endangered species program. To help guide the recovery effort, we prepare recovery plans for listed species native to the United States. Recovery plans describe actions considered necessary for conservation of the species, establish criteria for downlisting or delisting the species, and estimate time and cost for implementing the recovery measures needed.

In early 2000, we established the Recovery Team under section 4(f)(2) of the Act and our cooperative policy on recovery plan participation, a policy intended to involve stakeholders in recovery planning (59 FR 34272, July 1, 1994). Stakeholder involvement in the development of recovery plans helps minimize the social and economic impacts that could be associated with recovery of endangered species. Various stakeholders were represented on the Recovery Team, and other public participation (including oral comments at Recovery Team meetings and written comments on the early drafts of the recovery plan) took place. The Recovery Team prepared a series of drafts of a recovery plan for the PMJM. They identify the criteria for reaching recovery and delisting of the PMJM. Our June 23, 2003, final rule to designate critical habitat (68 FR 37275) cited the draft recovery plan dated March 11, 2003, which we refer to as the Working Draft (Prebles Recovery Team 2003). The 2003 rule and the conservation strategy that supported it were developed incorporating information from the Working Draft. We revised this Working Draft in November 2003 and released it to the public (<http://www.fws.gov/mountain-prairie/species/mammals/preble/Nov2003DraftRecoveryPlan.pdf>). This version is

hereafter referred to as the Preliminary Draft Recovery Plan (or Plan) (Service 2003a).

For various reasons, primarily the prolonged evaluation undertaken in response to 2003 petitions to delist the PMJM, a draft recovery plan for the PMJM has not yet been finalized or issued for public comment. However, after inactivity from 2004 to 2009, the Recovery Team was reconvened and has initiated a review and update of the Preliminary Draft Recovery Plan. Recent Recovery Team review has largely reaffirmed the conservation strategies that were the basis of the Preliminary Draft Recovery Plan and that review is considered in this proposal. A draft recovery plan, once completed, will be published in the **Federal Register**, will be available for public comments, and will provide an additional venue for stakeholder and public participation.

However, a final recovery plan is not a regulatory document (recovery plans are advisory documents because there are no specific protections, prohibitions, or requirements afforded to a species solely on the basis of a recovery plan) and does not obligate or commit parties to the actions or determination of the plans. Total disclosure and open communication with the public of our thoughts regarding possible future recovery scenarios are essential parts of recovery planning. Public review, peer review, and stakeholder involvement are also essential aspects of recovery planning, and are required by the Act and by Service policy. For these reasons, decisions we make in designation of critical habitat will not preclude determination or decisions in any aspect of recovery planning. Therefore, determinations of recovery strategies, criteria, or tasks within the recovery plan will not be limited by this proposed revision of critical habitat.

Summary of Proposed Changes to Previously Designated Critical Habitat

The areas identified in this proposed rule constitute a proposed revision from the areas we designated as critical habitat for the PMJM on June 23, 2003 (68 FR 37275) and amended on July 10, 2008 (73 FR 39789). This proposed rule addresses only the PMJM in the SPR in Colorado. The differences include the following:

(1) We propose to include in critical habitat specific areas that were excluded under section 4(b)(2) of the ESA and that were identified in our 2003 critical habitat designation. The 2003 designation of critical habitat for the PMJM in the SPR in Colorado comprises 5 units totaling 234 mi (377 km) of stream corridors. This proposed revision includes 11 units comprising a total of 418 mi (674 km) of stream corridors currently considered essential to the conservation of the PMJM. The six additional units (Cedar Creek, South Boulder Creek, Rocky Flats NWR, Cherry Creek, West Plum Creek, and Monument Creek) were all proposed as critical habitat in the same or similar form on July 17, 2002 (67 FR 47154), but were not included in the 2003 final designation.

(2) We propose as critical habitat lands addressed in the Denver Water HCP (Service 2003b) that were excluded under section 4(b)(2) of the Act in our 2003 final designation.

(3) In Table 1, we provide a comparison between our 2003 final critical habitat

designation and this proposed revised critical habitat rule.

TABLE 1. Existing and Proposed Critical Habitat for the Preble's Meadow Jumping Mouse by Stream Miles (Kilometers) and Acres (Hectares) per Unit.

UNIT	EXISTING	PROPOSED
1. N. Fork, Cache la Poudre River	88 mi (142 km) 8,206 ac (3,321 ha)*	88 mi (142 km) 8,619 ac (3,488 ha)
2. Cache la Poudre River	51 mi (82 km) 4,725 ac (1,912 ha)*	51 mi (82 km) 4,944 ac (2,001 ha)
3. Buckhorn Creek	43 mi (69 km)* 3,798 ac (1,537 ha)*	46 mi (73 km) 3,995 ac (1,617 ha)
4. Cedar Creek	0	8 mi (12 km) 668 ac (270 ha)
5. South Boulder Creek	0	8 mi (12 km) 856 ac (347 ha)
6. Rocky Flats NWR	0	13 mi (20 km) 1,108 ac (449 ha)
7. Ralston Creek	8 mi (13 km)* 686 ac (277 ha)*	9 mi (14 km) 809 ac (328 ha)
8. Cherry Creek	0	30 mi (48 km) 2,647 ac (1,071 ha)
9. West Plum Creek	0	94 mi (151 km) 8,724 ac (3,530 ha)
10. Upper South Platte River	44 mi (71 km)** 3,265 ac (1,321 ha)*	35 mi (57 km) 3,353 ac (1,357 ha)
11. Monument Creek	0	39 mi. (62 km) 3,419 ac (1,383 ha)
Total	234 mi (377 km) 20,680 ac (8,368 ha)	418 mi (674 km) 39,142 ac (15,840 ha)

* Changes from existing to proposed result only from corrected errors (imprecise measurements) from 2003 designated critical habitat totals.

** Changes from existing to proposed due to a significant error in 2003 designated critical habitat totals.

(4) The following is a list of the areas added or enlarged in this proposed revision to critical habitat designation as compared to our 2003 critical habitat designation, and an explanation of why these areas are being considered.

Unit 4: We proposed the Cedar Creek Unit as critical habitat in 2002 based on presence of jumping mice thought to be the PMJM, but excluded it from final designation

in 2003 due to lack of confirmed identification to species of those jumping mice captured. We now consider this unit occupied by the PMJM and are proposing it as critical habitat. This determination is based on the elevation (lower than 6,000 ft (1,829 m)) of jumping mouse captures and confirmation of the PMJM elsewhere in this subdrainage (Service 2009). It is consistent with our July 10, 2008, final rule to amend the listing for the PMJM (73 FR 39789).

Units 5, 8, 9, and 11: We proposed these units as critical habitat in 2002 but excluded them from final designation in 2003 based on HCPs under development in Boulder, Douglas, and El Paso Counties. We propose these units as critical habitat in this rule and will review them for possible exclusion, where appropriate, under section 4(b)(2) of the Act for our final designation. This proposal includes small changes from the 2002 proposal to Units 9 and 11, and a more substantial change to Unit 8 based on reevaluation of certain stream reaches.

Unit 6: We proposed this unit on Rocky Flats National Wildlife Refuge (NWR) as critical habitat in 2002 but excluded it from final designation in 2003 based on Federal ownership by the Department of Energy (DOE) and pending transfer of the site to the Service as Rocky Flats NWR. We propose this unit as critical habitat in this rule and will consider it for possible exclusion from our final designation under section 4(b)(2) of the Act.

Units 7 and 10: In our 2003 designation, we excluded small portions of these

Units from critical habitat based on the Denver Water HCP under section 4(b)(2) of the Act. The portions we previously excluded we again propose as critical habitat. We will review these specific areas, along with other lands we proposed as critical habitat included in the Denver Water HCP, under section 4(b)(2) of the Act prior to our final designation.

Critical Habitat

Critical habitat is defined in section 3 of the Act as:

(1) The specific areas within the geographical area occupied by a species, at the time it is listed in accordance with the Act, on which are found those physical or biological features:

(a) essential to the conservation of the species and

(b) that may require special management considerations or protection; and

(2) specific areas outside the geographical area occupied by a species at the time it is listed, upon a determination that such areas are essential for the conservation of the species.

Conservation, as defined under section 3 of the Act, means the use of all methods and procedures that are necessary to bring any endangered or threatened species to the point at which the measures provided under the Act are no longer necessary. Such methods and procedures include, but are not limited to, all activities associated with

scientific resources management, such as research, census, law enforcement, habitat acquisition and maintenance, propagation, live trapping, transplantation, and (in the extraordinary case where population pressures within a given ecosystem cannot otherwise be relieved) regulated taking.

Critical habitat receives protection under section 7(a)(2) of the Act through the prohibition against Federal agencies carrying out, funding, or authorizing the destruction or adverse modification of critical habitat. Section 7(a)(2) of the Act requires consultation on Federal actions that may affect critical habitat. The designation of critical habitat does not affect land ownership or establish a refuge, wilderness, reserve, preserve, or other conservation area. Such designation does not allow the government or public to access private lands. Such designation does not require implementation of restoration, recovery, or enhancement measures by private landowners. Where a landowner requests Federal agency funding or authorization for an action that may affect a listed species or critical habitat, the consultation requirements of section 7(a)(2) would apply, but even in the event of a destruction or adverse modification finding, the landowner's obligation is not to restore or recover the species, but to implement reasonable and prudent alternatives to avoid destruction or adverse modification of critical habitat.

For inclusion in a critical habitat designation, the habitat within the geographical area occupied by the species at the time of listing must contain physical and biological features that are essential to the conservation of the species, and be included only if those features may require special management considerations or protection. Critical habitat designations identify, to the extent known using the best scientific data available, habitat

areas that provide essential life cycle needs of the species (i.e., areas on which are found the primary constituent elements (PCEs) laid out in the appropriate quantity and spatial arrangement essential to the conservation of the species). Under the Act, we can designate critical habitat in areas outside the geographical area occupied by the species at the time it is listed as critical habitat only when we determine that those areas are essential for the conservation of the species.

Section 4 of the Act requires that we designate critical habitat on the basis of the best scientific and commercial data available. Further, our Policy on Information Standards Under the Act (published in the **Federal Register** on July 1, 1994 (59 FR 34271)), the Information Quality Act (Section 515 of the Treasury and General Government Appropriations Act for Fiscal Year 2001 (Pub. L. 106-554; H.R. 5658)), and our associated Information Quality Guidelines (Service 2007b) provide criteria, establish procedures, and guidance to ensure that our decisions are based on the best scientific data available. They require our biologists, to the extent consistent with the Act and with the use of the best scientific data available, to use primary and original sources of information as the basis for recommendations to designate critical habitat.

When we are determining which areas should be designated as critical habitat, our primary source of information is generally the information developed during the listing process for the species. Additional information sources may include the recovery plan for the species, articles in peer-reviewed journals, conservation plans developed by States and counties, scientific status surveys and studies, biological assessments, or other

unpublished materials and expert opinion or personal knowledge.

Habitat is often dynamic, and species may move from one area to another over time. Furthermore, we recognize that designation of critical habitat may not include all habitat areas that we may eventually determine are necessary for the recovery of the species, based on scientific data not now available. For these reasons, a critical habitat designation does not signal that habitat outside the designated area is unimportant or may not promote the recovery of the species.

Areas that support occurrences, whether they are inside or outside the critical habitat designation, will continue to be subject to conservation actions we implement under section 7(a)(1) of the Act. They also are subject to the regulatory protections afforded by the section 7(a)(2) jeopardy standard, as determined on the basis of the best available scientific information at the time of the agency action. Federally funded or permitted projects affecting listed species, whether inside or outside designated critical habitat areas, may still result in jeopardy findings in some cases. Similarly, critical habitat designations made on the basis of the best available information at the time of designation will not control the direction and substance of future recovery plans, HCPs, or other species conservation planning efforts, if new information available to these planning efforts require a different outcome.

Primary Constituent Elements

In accordance with section 3(5)(A)(i) of the Act and the regulations at 50 CFR 424.12(b), in determining which areas occupied at the time of listing to propose as critical habitat, we consider the physical and biological features that are essential to the conservation of the species to be the PCEs laid out in the appropriate quantity and spatial arrangement for conservation of the species. In general, PCEs include, but are not limited to:

- (1) Space for individual and population growth and for normal behavior;
- (2) Food, water, air, light, minerals, or other nutritional or physiological requirements;
- (3) Cover or shelter;
- (4) Sites for breeding, reproduction, or rearing (or development) of offspring; and
- (5) Habitats that are protected from disturbance or are representative of the historic, geographical, and ecological distributions of a species.

We derive the PCEs required for the PMJM from its biological needs. The area proposed for designation as revised critical habitat provides riparian and adjacent upland habitat for the PMJM, including those habitat components essential for the biological needs of reproduction, rearing of young, foraging, sheltering, hibernation, dispersal, and genetic exchange. The PMJM is able to live and reproduce in and near riparian areas located within grassland, shrubland, forest, and mixed vegetation types where dense herbaceous or woody vegetation occurs near the ground level, where available open water normally exists during their active season, and where there are ample upland habitats of sufficient width and quality for foraging, hibernation, and refugia from

catastrophic flooding events. While *Salix* (willow) in shrub form is a dominant component in many riparian habitats occupied by the PMJM, the structure of the vegetation appears more important to the PMJM than species composition (Schorr 2001, p. 26).

The PCEs associated with the biological needs of dispersal and genetic exchange also are found in areas that provide connectivity or linkage between or within PMJM populations. These areas may not include the habitat components listed above and may have experienced substantial human alteration or disturbance.

The dynamic ecological processes that create and maintain PMJM habitat also are important PCEs. Habitat components essential to the PMJM are found in and near those areas where past and present geomorphological and hydrological processes have shaped streams, rivers, and floodplains, and have created conditions that support appropriate vegetative communities. PMJM habitat is maintained over time along rivers and streams by a natural flooding regime (or one sufficiently corresponding to a natural regime) that periodically scours riparian vegetation; reworks stream channels, floodplains, and benches; and redistributes sediments such that a pattern of appropriate vegetation is present along river and stream edges, and throughout their floodplains. Periodic disturbance of riparian areas sets back succession and promotes dense, low-growing shrubs and lush herbaceous vegetation favorable to the PMJM. Where flows are controlled to preclude a natural pattern and other disturbance is limited, a less favorable mature successional stage of vegetation dominated by cottonwoods or other trees may

develop. The long-term availability of habitat components favored by the PMJM also depends on plant succession and impacts of drought, fires, windstorms, herbivory, and other natural events. In some cases, these naturally occurring ecological processes are modified or are supplanted by human land uses that include manipulation of water flow and of vegetation.

Based on our current knowledge of the life history, biology, and ecology of the PMJM, and the requirements of the habitat to sustain the essential life history functions of the species, we have determined that the PCEs specific to the PMJM are:

(1) Riparian corridors:

(A) Formed and maintained by normal, dynamic, geomorphological, and hydrological processes that create and maintain river and stream channels, floodplains, and floodplain benches and promote patterns of vegetation favorable to the PMJM;

(B) Containing dense, riparian vegetation consisting of grasses, forbs, or shrubs, or any combination thereof, in areas along rivers and streams that normally provide open water through the PMJM's active season; and

(C) Including specific movement corridors that provide connectivity between and within populations. This may include river and stream reaches with minimal vegetative cover or that are armored for erosion control; travel ways beneath bridges, through culverts, along canals and ditches; and other areas that have experienced substantial human alteration or disturbance; and

(2) Additional adjacent floodplain and upland habitat with limited human disturbance (including hayed fields, grazed pasture, other agricultural lands that are not plowed or disked regularly, areas that have been restored after past aggregate extraction, areas supporting recreational trails, and urban–wildland interfaces).

Existing human-created features and structures within the boundaries of the mapped units, such as buildings, roads, parking lots, other paved areas, manicured lawns, other urban and suburban landscaped areas, regularly plowed or disked agricultural areas, and other features not containing any of the PCEs would not be considered critical habitat if this proposal is adopted.

Special Management Considerations or Protection

When designating critical habitat, we assess whether the occupied areas contain the physical and biological features that are essential to the conservation of the species, and whether these features may require special management considerations or protection.

The area proposed for designation as revised critical habitat will require some level of management to address the current and future threats to the physical and biological features essential to the conservation of the PMJM. In all proposed units, special management considerations or protection of the essential features may be required

to provide for the sustained function of the riparian corridors on which the PMJM depends.

The PMJM is closely associated with riparian ecosystems that are relatively narrow and represent a small percentage of the landscape. We consider the decline in the extent and quality of PMJM habitat to be the main factor threatening the subspecies (63 FR 26517, May 13, 1998; Hafner *et al.* 1998, pp. 121-123; Shenk 1998, pp. 24-27). Special management considerations and protection may be required to address the threats of habitat alteration, degradation, loss, and fragmentation resulting from urban development, flood control, water development, agriculture, and other human land uses that have adversely impacted PMJM populations. Habitat destruction may affect the PMJM directly or by destroying nest sites, food resources, and hibernation sites; by disrupting behavior; or by forming a barrier to movement.

Criteria Used To Identify Critical Habitat

In this proposed designation of revised critical habitat we have identified specific areas that include only river and stream reaches, and their adjacent floodplains and uplands, that are within the known geographic and elevational range of the PMJM, that contain the features essential to the conservation of the PMJM. Further, the areas included in proposed critical habitat contain at least one of the requisite PCEs, and are currently occupied by the PMJM or provide crucial opportunities for connectivity to facilitate dispersal and genetic exchange.

This proposed critical habitat designation identifies only the appropriate quantity and spatial arrangement of the requisite PCEs that we have determined to be essential to the conservation of the subspecies. We determined that there are more areas currently occupied by the PMJM than are necessary to conserve the subspecies within the SPR in Colorado. We base this on the known occurrence and distribution of the PMJM (Service 2009) and upon the conservation strategy in the Preliminary Draft Recovery Plan, which indicates that when specified criteria are met for a subset of existing populations throughout the range of the PMJM, the subspecies can be delisted (Service 2003a, p. 19). To recover the PMJM to the point where it can be delisted, the Preliminary Draft Recovery Plan identifies the need for a specified number, size, and distribution of wild, self-sustaining PMJM populations across the known range of the PMJM. On the basis of the above criteria, we have chosen a subset of the areas occupied by the PMJM within the SPR in Colorado that have the physical and biological features essential to the PMJM for inclusion in the proposed critical habitat.

We only consider including unoccupied areas within critical habitat designations if they are essential to the conservation of the species, and we determine that we cannot conserve the species by only including occupied areas in the critical habitat . Because we have determined that the conservation of the PMJM can be achieved through the designation of currently occupied lands, we find that no unoccupied areas are essential at this time. The subspecies was listed primarily due to the threat of impending development to the existing remaining habitat for the species within the Front Range of Colorado. We

have determined that recovery of the subspecies can be achieved by protecting a subset of the currently occupied habitat from the threat of development. Recolonization of former parts of the range, while beneficial to the subspecies, is not currently believed to be necessary to conserve the species in the long-term.

In selecting areas of proposed critical habitat, we made an effort to avoid developed areas that are not likely to contribute to PMJM conservation. Our mapping incorporates the best scientific information available, but is limited in scale by our technical capabilities and the time available to us in under our settlement agreement with the City of Greeley (U.S. District Court, District of Colorado 2009a).

Available Information

Our June 23, 2003, final rule designating critical habitat for the PMJM (68 FR 37275) cited the March 11, 2003, Working Draft of a recovery plan for the PMJM (Preble's Recovery Team 2003) and the concepts described within the Working Draft as a source of the best scientific and commercial data available on the PMJM. For this proposal, we rely heavily on the information, concepts, and conservation recommendations contained in the Working Draft and the slightly modified Preliminary Draft Recovery Plan (Service 2003a), as well as the current efforts of the newly formed Recovery Team. We use these as a starting point for identifying those areas for inclusion in critical habitat that contain the requisite PCEs in the appropriate quantity and spatial arrangement that are essential for the conservation of the PMJM. The Preliminary

Draft Recovery Plan is based on the work of scientists and stakeholders who met regularly over a period of more than three years. The plan was developed by incorporating principles of conservation biology and all available knowledge regarding the PMJM. Recovery Team meetings were open to the public, and drafts of the Plan were discussed in public meetings held in Colorado and Wyoming. We forwarded a draft of the Preliminary Draft Recovery Plan to species experts for review and their comments (Armstrong 2003; Hafner 2003) were considered prior to the Preliminary Draft Recovery Plan being made available on the Service website.

We also have incorporated all new information received since 2003, including:

- Data in reports submitted by researchers holding recovery permits under section 10(a)(1)(A) of the Act;
- Research published in peer-reviewed articles and presented in academic theses, agency reports, and unpublished data; and
- Various Geographic Information System (GIS) data layers and cover type information, including land ownership information, topographic information, locations of the PMJM obtained from radio-collars, and locations of the PMJM confirmed to species via deoxyribonucleic acid (DNA) analysis, morphological analysis, and other verified records.

We received information from Federal, State, and local governmental agencies, and from academia and private organizations that have collected scientific data on the PMJM.

The Preliminary Draft Recovery Plan identifies specific criteria for reaching

recovery and the delisting of the PMJM. An important change since our 2003 designation of critical habitat was the 2008 final rule limiting the listing of the PMJM to the SPR in Colorado. The Preliminary Draft Recovery Plan identified areas as necessary for recovery throughout the range of the PMJM, including areas in Wyoming where the PMJM was listed at the time. Identified areas within the PMJM SPR in Colorado were based on the best available information and continue to reflect our best judgment of what we believe to be necessary for recovery. While elements of the Preliminary Draft Recovery Plan may change prior to finalization of a recovery plan, our recent review of the Preliminary Draft Recovery Plan and the recent Recovery Team review leads us to conclude that the concepts described within it continue to represent the best scientific and commercial data available regarding steps needed for the recovery of the PMJM.

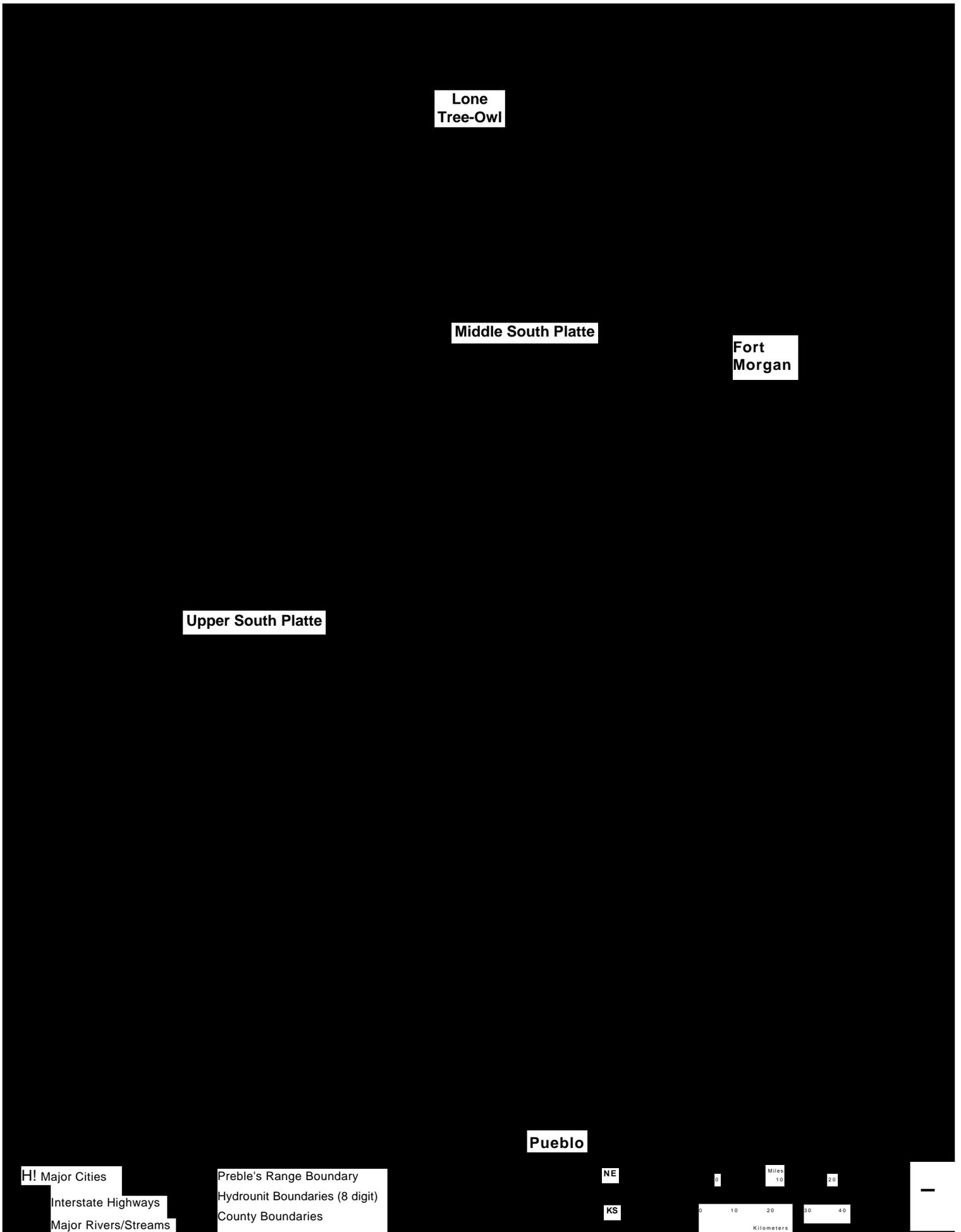
The Preliminary Draft Recovery Plan provides a review of conservation biology theory regarding population viability (Service 2003a, p. 21). To recover the PMJM to the point where it can be delisted, the Preliminary Draft Recovery Plan identifies the need for a specified number, size, and distribution of wild, self-sustaining PMJM populations across the known range of the PMJM. It defines large populations as maintaining 2,500 mice and usually including at least 50 mi (80 km) of rivers and streams. It defines medium populations as maintaining 500 mice and usually including at least 10 mi (16 km) of rivers and streams. The average number of PMJM per stream mile was derived from site-specific studies and used to approximate minimum occupied stream miles required to support recovery populations of appropriate size (Service 2003a, p. 21).

The distribution of these recovery populations is intended both to reduce the risk of multiple PMJM populations being negatively affected by natural or manmade events at any one time, and to preserve the existing genetic variation within the PMJM. The Preliminary Draft Recovery Plan states, “species well-distributed across their historical range are less susceptible to extinction and more likely to reach recovery than species confined to a small portion of their range.” The document also states that “spreading the recovery populations across hydrologic units throughout the range of the subspecies also preserves the greatest amount of the remaining genetic variation, and may provide some genetic security to the range-wide population” (Service 2003a, p. 20). The Preliminary Draft Recovery Plan emphasizes the value of retaining disjunct or peripheral populations that may be important to recovery (Lomolino and Channell 1995, p. 481) and may have diverged genetically from more central populations due to isolation, genetic drift, and adaptation to local environments (Lesica and Allendorf 1995, pp. 754-755).

While the Preliminary Draft Recovery Plan addresses the entire range of the PMJM, the SPR in Colorado where the PMJM remains listed includes multiple subdrainages that are addressed individually in the Preliminary Draft Recovery Plan (Figure 1). Within Colorado, the Plan identifies recovery criteria for the two major river drainages where the PMJM occurs (the South Platte River drainage and the Arkansas River drainage), and for each subdrainage judged likely to support the PMJM. In some cases, the Plan identifies recovery criteria for subdrainages where limited trapping has not confirmed the presence of the PMJM. Boundaries of drainages and subdrainages have been mapped by the U.S. Geological Survey (USGS). For the Preliminary Draft

Recovery Plan, 8-digit hydrologic unit (HUC) boundaries were selected to define subdrainages. A total of 13 HUCs in the SPR of PMJM in Colorado are identified in the Plan as occupied or potentially occupied by the PMJM. Ten are identified in the South Platte River drainage and three in the Arkansas River drainage.

Figure 1: Preble's Meadow Jumping Mouse Range in Colorado



One issue recently reviewed by the Recovery Team was whether the conservation strategy that specified the number, size, and distribution of PMJM recovery populations in Colorado remained valid despite the removal of the Wyoming portion of PMJM's range from listing. In Colorado, the strategy is to establish at least three large populations and three medium populations spread over six subdrainages. Recovery of the PMJM would require these populations to be protected from threats. Additionally, the Plan suggests establishing at least three small populations or one medium population in seven other subdrainages, if the PMJM is present. Another issue raised was whether the strategy required modification based on DNA testing that revealed that the PMJM in northern and southern areas of the subspecies' range (Wyoming and Larimer County in Colorado vs. Douglas and El Paso Counties in Colorado) exhibited significant genetic differences (King *et al.* 2006, pp. 4337-4338). The Recovery Team concluded that the previous strategy adequately addresses recovery across the PMJM's range in Colorado (Jackson 2009). The Recovery Team noted that recovery populations were appropriately spread north and south of the Denver metropolitan area, which lies between northern and southern populations examined in the King *et al.* (2006) study (Jackson 2009).

Biological Factors

Presence of the PMJM was determined based largely on the results of trapping surveys, the vast majority of which were conducted in the 11 years since listing under the Act. Consistent with our July 10, 2008, final rule to amend the listing for the PMJM (73 FR 39789), subdrainages judged to be occupied by the PMJM in Colorado include those

that: (1) Have recently been documented to support jumping mice identified by genetic or morphological examination as the PMJM; or (2) have recently been documented to support jumping mice not identified to species but occurring at elevations below 6,700 ft (2,050 m), where western jumping mice have infrequently been documented. In our July 17, 2002, proposal (67 FR 47154) and our June 23, 2003, designation of critical habitat (68 FR 37275), we summarized trapping results and means of positive identification for each unit. We have limited discussion in this proposal. See our 2003 rule designating critical habitat and our 2008 final rule to amend the listing for the PMJM for more information on our determinations regarding presence of the PMJM in various subdrainages.

Boundaries of some critical habitat units extend beyond capture locations only to include those reaches that we believe to be occupied by the PMJM based on the best scientific data available regarding capture sites, the known mobility of the PMJM, and the quality and continuity of habitat components along stream reaches. Where appropriate, we include details on the known status of the PMJM within specific subdrainages in the **Proposed Revised Critical Habitat Designation** section of this proposal.

Despite numerous surveys, the PMJM has not been found in the Denver metropolitan area since well before its 1998 listing and is believed to be extirpated from much of the Front Range urban corridor as a result of extensive urban development. The area does not support the spatial arrangement and quantity of requisite PCEs to

support PMJM populations, and, as a consequence, we have determined that this area does not contain the features essential to the conservation of the species. Therefore, this area is not included in this proposed critical habitat designation.

Additional Factors Considered

Based on the draft recovery plan , we believe that we can achieve conservation of the PMJM with only a subset of areas currently occupied or containing essential features. To identify the specific subset of areas for inclusion in the proposed critical habitat, we considered several qualitative criteria in addition to the presence of the PCEs. These criteria were used to judge the current status, conservation needs, and probable persistence of the essential features and of PMJM populations in specific areas and included: (1) the quality, continuity, and extent of habitat components present; (2) 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 (3) 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.

Where possible, given all other criteria being comparable, and the specific areas meeting the definition of critical habitat under section 3 of the Act (in that they are within the geographical area occupied by the species and contain features essential to the conservation of the species which may require special management considerations or

protection), we evaluated land ownership as a selection criterion for inclusion in proposed critical habitat. We first selected Federal lands where effective land management strategies can be employed by Federal agencies to conserve PMJM populations. Federal agencies already have an affirmative conservation mandate under the Act to contribute to the conservation of listed species. Therefore, we find that federally owned lands are more likely to meet the requirements for recovery of the species than private lands that are not subject to the Act's affirmative conservation mandate. However, we cannot depend solely on federally owned lands for proposed critical habitat, as these lands are limited in geographic location, size, and habitat quality within the range of the PMJM. In addition to the federally owned lands, we selected some non-Federal public lands, including lands owned by the State of Colorado and by local governments, and privately owned lands.

This proposed designation of revised critical habitat in Colorado includes six units designed to support three large and three medium PMJM recovery populations, corresponding to those designated in the Preliminary Draft Recovery Plan. While the Preliminary Draft Recovery Plan designates the approximate location of these large and medium recovery populations, it does not delineate specific boundaries. In addition, the Plan identifies seven other HUCs within the PMJM's range in Colorado, where a large or medium recovery population is not designated. In these seven additional HUCs, the Plan suggests establishing three small recovery populations (including at least 3 mi (5 km) of rivers or streams) or one medium recovery population in each, except for those HUCs which, when adequately surveyed, are without an existing PMJM population. The Plan

does not identify the locations of recovery populations within these remaining seven HUCs. In this proposed designation of revised critical habitat, we are not proposing critical habitat units corresponding to Plan requirements in all of these remaining seven HUCs. In some, occurrence or distribution of PMJM populations is largely unknown; in others the quality, continuity, and extent of physical and biological features essential to the PMJM are lacking. Designating critical habitat in each of these remaining HUCs is not necessary to provide for the conservation of the subspecies.

The Preliminary Draft Recovery Plan anticipates that, in the future, the locations of these remaining recovery populations will be designated and specific boundaries of all recovery populations (large, medium, and small) will be delineated by State and local governments, and other interested parties, working in coordination with us. In contrast to the Preliminary Draft Recovery Plan, this proposed revised designation of critical habitat must delineate specific boundaries for all critical habitat areas proposed in order to meet the requirements of the Act and our implementing regulations. As a result, any future recovery plan developed for the PMJM may designate recovery populations or delineate their boundaries in a manner inconsistent with the critical habitat units we propose. This is likely to occur if future information changes our understanding of the distribution of PMJM populations.

In some HUCs identified in the Preliminary Draft Recovery Plan, little is known regarding the status of the PMJM. For example, PMJM has not been confirmed to occur in the Crow Creek, Lone Tree, and Bijou HUCs within the South Platte River drainage in

Colorado or the Big Sandy HUC in the Arkansas River drainage. If the PMJM is not present, designation of recovery populations in these HUCs may not be warranted, and these HUCS may be deleted from any future recovery plan. We do not believe that these areas contain features that are essential to the conservation of the species, so we are not proposing critical habitat within these four HUCs. We have determined that we can meet the statutory requirements of critical habitat by proposing a subset of lands that contain the PCEs essential to the conservation of the PMJM.

The conservation strategy employed in the Preliminary Draft Recovery Plan emphasizes the importance of protecting additional PMJM populations beyond those designated as recovery populations, to provide insurance for the PMJM in the event that designated recovery populations cannot be effectively managed or protected as envisioned, or are decimated by rare but uncontrollable events such as catastrophic fires or flooding. The Plan recommends directing recovery efforts toward public lands rather than private lands where possible, and calls upon all Federal agencies to protect and manage for the PMJM wherever it occurs on Federal lands. For this reason, we prioritized inclusion of Federal lands where possible. However, Federal lands alone cannot fully provide for the conservation of the species. Therefore, we included some non-Federal lands when we found those lands contained the PCEs in the appropriate quantity and spatial arrangement to provide the physical and biological features essential to the conservation of the species. We believe that the designation of areas of critical habitat outside of those areas identified for recovery populations on Federal land is essential for the conservation of the PMJM. Should unforeseen events cause the

continued decline of PMJM populations throughout its range, PMJM populations and the PCEs on which they depend are more likely to persist and remain viable on Federal lands, where consistent and effective land management strategies can be more easily employed. These additional PMJM populations on Federal lands could serve as substitute recovery populations should designated recovery populations decline or fail to meet recovery goals. In addition, some PMJM populations on Federal lands have been the subject of ongoing research that could prove vital to the conservation of the PMJM. Therefore, in addition to proposing critical habitat for sites consistent with those listed in the Preliminary Draft Recovery Plan, we reviewed other sites of PMJM occurrence, especially Federal lands, and are proposing certain additional units for designation as critical habitat that include the requisite PCEs and are known to support the PMJM.

Based on this conservation strategy, we propose to designate critical habitat preferentially on certain Federal lands that support required PCEs in the appropriate spatial arrangement and quantity and are occupied by the PMJM, where Federal property extends along stream reaches at least 3 mi (5 km). This length corresponds to the minimum size of small recovery populations as defined by the Preliminary Draft Recovery Plan. These areas of proposed critical habitat may include intervening non-Federal lands that in some cases support all PCEs needed by the PMJM or, if fragmented by human development, contain at least one of the PCEs and are at least likely to provide connectivity between areas of PMJM habitat on adjacent Federal lands.

Revisions to the critical habitat designation may be necessary in the future to

accommodate shifts in the occupied range of the PMJM. For example, there is potential for impacts to the PMJM and its habitat from currently predicted future climate changes. While specific effects to PMJM are somewhat uncertain, a trend of climate change in the mountains of western North America is expected to decrease snowpack, hasten spring runoff, and reduce summer flows (Intergovernmental Panel on Climate Change 2007, p. 11). Resultant changes to vegetative communities may compel PMJM distribution to shift to higher elevations not currently occupied, but still within the designated boundary of the SPR in Colorado. While effects from climate change may result in an increased PMJM dependence on these areas in the future if lower elevation areas become less habitable, elevations above 7,600 ft (2,317 m) are not known to support the PMJM at this time. The preponderance of lands above 7,600 ft (2,317 m) within subdrainages supporting the PMJM are in Federal ownership.

South Platte River Drainage North of Denver

In the Cache la Poudre HUC, stream reaches that contain requisite PCEs are widespread. We are proposing critical habitat along the lower portions of the North Fork of the Cache la Poudre River and its tributaries, to provide for the large recovery population specified in the Preliminary Draft Recovery Plan. We are also proposing a second area further south in this subdrainage on National Forest System lands along the main stem of the Cache la Poudre River and on selected tributaries. The two proposed units in the lower reaches and subdrainage contain the appropriate spatial arrangement of the requisite PCEs to ensure the conservation of the PMJM. While additional stream

reaches that support requisite PCEs are present in the upper reaches of the North Fork of the Cache la Poudre and its tributaries, including Bull Creek, Willow Creek, Mill Creek, and Trail Creek, the PCEs in these reaches are of limited quantity. As a consequence, we are not proposing critical habitat in the upper reaches because we have determined that they do not contain the features essential for the conservation of the species. Therefore, we propose no critical habitat in the upper reaches of the North Fork.

The Preliminary Draft Recovery Plan specifies a medium recovery population on South Boulder Creek within the St. Vrain HUC. Consistent with our 2002 proposal of critical habitat (67 FR 47153), we are including portions of the South Boulder Creek and Spring Creek as proposed critical habitat. Previously, we considered designating critical habitat along the St. Vrain River and adjacent tributaries and ditches between the towns of Hygiene and Lyons. However, we find that the areas along South Boulder Creek that contain the requisite PCEs are preferable to the St. Vrain River area because they are of higher habitat quality, while some of the areas and features along the St. Vrain River are being impacted by aggregate mining and other human development. We also find only one unit within this general area is necessary to the conservation of the PMJM as outlined in the Preliminary Draft Recovery Plan. Therefore, we are selecting the areas along South Boulder Creek for inclusion in proposed critical habitat instead of the St. Vrain River, due to the quality, quantity, and spatial arrangement of the PCEs and subsequent essential features..

We also considered proposing critical habitat for the PMJM on higher elevations

along the North St. Vrain Creek and the Middle St. Vrain Creek. However, since limited trapping efforts targeted at the PMJM have been conducted in these areas and occupancy by the PMJM appears uncertain, we are not proposing critical habitat along these creeks. The lack of presence of the mouse would mean that we would need to determine that these lands are essential to the conservation of the mouse in order to include them in the proposed designation. As stated previously, we determined that we could meet the statutory requirements of critical habitat by designating a subset of the known occupied lands.

Rocky Flats NWR spans portions of the St. Vrain HUC and the Middle South Platte–Cherry Creek HUC. Requisite PCEs are present and the site supports small streams largely unimpacted by human development. Rocky Flats NWR has been a focus of research on the PMJM and monitoring of populations took place for several years when the site was owned by the Department of Energy (DOE) (PTI 1998). We proposed the site as critical habitat in 2002, but excluded in our 2003 final designation of critical habitat based on our section 4(b)(2) analysis that concluded the area did not require special management efforts. We propose the site again as critical habitat and we will again evaluate whether it is appropriate to exclude the site from critical habitat designation under section 4(b)(2) of the Act.

As in our 2003 final designation of critical habitat (68 FR 37275), we are proposing critical habitat in the Big Thompson HUC on Buckhorn Creek and its tributaries consistent to provide for the medium recovery population as advised in the

Preliminary Draft Recovery Plan. We are also proposing one additional area as critical habitat that is a tributary to the Big Thompson River, centered on National Forest System lands on portions of Dry Creek and its tributaries. We excluded this area from our 2003 designation of critical habitat in part due to uncertainty regarding identity of the jumping mice present. We know that the area both supports the PMJM and contains the PCEs essential to the conservation of the species.

We also assessed National Forest System lands along the Big Thompson River and Little Thompson River for possible inclusion as critical habitat. Areas along the Big Thompson River and the North Fork of the Big Thompson River that contain the PCEs essential to the conservation of the PMJM are largely in private ownership that are impacted by substantial human development. The remaining protected lands (i.e., USFS holdings) are highly fragmented or are present only as stream reaches near the 7,600 ft (2,317 m) elevation. Requisite PCEs are generally not in the appropriate spatial arrangement and quantity to provide for the conservation of the PMJM. Therefore, we propose no critical habitat on the Big Thompson River, the North Fork of the Big Thompson River, or the Little Thompson River.

The Lone Tree-Owl HUC provides requisite PCEs along limited stream reaches in Colorado. While the Preliminary Draft Recovery Plan (Service 2003a) suggests three small or one medium recovery population in the Lone Tree-Owl HUC if PMJM are present, it is questionable whether the PMJM occurs within this HUC. On July 17, 2002, we proposed two small areas of critical habitat along Lone Tree Creek, one in Wyoming

and one in Colorado (67 FR 47154). However, we omitted critical habitat along Lone Tree Creek from our June 23, 2003, designation (68 FR 37275) because, despite the relatively low elevation of the stream, to date the only jumping mice verified to species from Lone Tree Creek are western jumping mice (Service 2009). This corresponds to the pattern in southern Wyoming where, unlike in most of Colorado, western jumping mice are found regularly below 6,700 ft (2,043 m). No further captures of jumping mice have occurred in the Colorado portion of this HUC since our 2003 designation. The lack of presence of PMJM would mean that we would need to determine that these lands are essential to the conservation of the mouse in order to include them in the proposed designation. As stated previously, we determined that we could meet the statutory requirements of critical habitat by designating a subset of the known occupied lands. Therefore, we are not proposing critical habitat in the Lone Tree-Owl HUC.

The Preliminary Draft Recovery Plan suggests three small recovery populations or one medium recovery population in the Crow Creek HUC, if PMJM are present. The Crow Creek HUC has few stream reaches that support requisite PCEs in the appropriate spatial arrangement and quantity to be essential to the conservation of the PMJM within the SPR in Colorado. Further, trapping within this HUC in Colorado has not resulted in captures of jumping mice (Service 2009). The lack of presence of the mouse would mean that we would need to determine that these lands are essential to the conservation of the mouse in order to include them in the proposed designation. As stated previously, we determined that we could meet the statutory requirements of critical habitat by designating a subset of the known occupied lands. Therefore, we are proposing no

critical habitat within this HUC.

The Preliminary Draft Recovery Plan suggests three small recovery populations or one medium recovery population in the Clear Creek HUC, if PMJM are present. The PMJM has been confirmed along a segment of Ralston Creek above Ralston Reservoir (Service 2009). We propose critical habitat on this reach similar to that in our 2003 designation of critical habitat. Based on limited occurrence of stream reaches that contain the requisite PCEs and existing human development patterns, we are limiting our proposed designation of critical habitat within the Clear Creek HUC to this single reach.

South Platte River Drainage South of Denver

Within the Upper South Platte HUC, we propose critical habitat along West Plum Creek and its tributaries consistent with the large recovery population called for in the Preliminary Draft Recovery Plan. Based on public comments and information received in 2002, some small changes have been made to the tributaries previously proposed as critical habitat. We are not including portions of one unnamed tributary to West Plum Creek and the upper portion of Metz Canyon because they do not support the features essential to the PMJM.

Consistent with our 2003 final designation of critical habitat within the Upper South Platte HUC, we propose critical habitat on Army Corps of Engineers' lands upstream of Chatfield Reservoir along the South Platte River and on three areas centered

on National Forest System land in the Pike–San Isabel National Forest within the South Platte River watershed. The four areas of proposed critical habitat should ensure that a population of the PMJM sufficient for its conservation is maintained in the portion of this HUC upstream of Chatfield Reservoir on the South Platte River and its tributaries.

However, we are not proposing to include some National Forest System lands on some major tributaries of the South Platte River, because the habitat components required by the PMJM do not contain features essential to the subspecies conservation since they have been degraded by catastrophic fire, flooding, or both. The Buffalo Creek watershed has been highly degraded by fire, followed by flooding, accompanying erosion, and sedimentation. While there is evidence of recovery of the habitat occurring, we conclude that, in the foreseeable future, this area will not develop the essential physical or biological features in the appropriate quantity and spatial arrangement to provide for the conservation of the PMJM; therefore, we are not proposing critical habitat in the Buffalo Creek watershed. The Wigwam Creek area, proposed as a critical habitat subunit in 2002, was not designated as critical habitat in 2003 following intense burning by the 2002 Hayman Fire, and is not being included in this proposal. The area remains degraded, and minimally supports PCEs necessary for the conservation of the PMJM, and we conclude that it is not appropriate to propose critical habitat in the area.

The Preliminary Draft Recovery Plan (Service 2003a) specifies a medium recovery population along Cherry Creek in the Middle South Platte–Cherry Creek HUC. PCEs essential to the conservation of the PMJM in the upper reaches of the Cherry Creek basin appear widespread and there are multiple options as to where we could designate

critical habitat for a medium recovery population. Similar to our July 17, 2002, proposal of critical habitat (67 FR 47154), we include portions of Cherry Creek, Lake Gulch, and Upper Lake Gulch as proposed critical habitat because it contains the best spatial arrangement and quantity of requisite PCEs within the HUC. After additional review of the quality, continuity and extent of requisite PCEs; PMJM distribution; conservation potential; and conservation efforts within upper reaches of Cherry Creek and its tributaries, including East Cherry Creek and West Cherry Creek, we are proposing a second subunit of critical habitat on portions of Antelope Creek and Haskel Creek. We believe that this area contains the features essential to the conservation of the PMJM and could serve as an alternate or additional medium recovery population consistent with our recovery strategy.

The Preliminary Draft Recovery Plan suggests either three small populations or one medium population in the Kiowa HUC if PMJM are present. No confirmation of the PMJM existed at the time of 2003 critical habitat designation for this subdrainage, and no critical habitat was designated. Since 2003, PMJM were captured at two sites within the Kiowa (Service 2009). Various stream reaches throughout southern portions of the HUC support some of the PCEs and may support the PMJM. However, we do not believe that the areas contain the PCEs in the appropriate quantity and spatial arrangement. As a consequence, we are not proposing any critical habitat within the HUC.

The Preliminary Draft Recovery Plan suggests either three small populations or one medium population in the Bijou HUC if PMJM are present. While requisite PCEs

are present in the Bijou HUC, the limited trapping efforts that have occurred have not resulted in captures of jumping mice (Service 2009); therefore, consistent with our determination that areas not known to be occupied by the PMJM are not essential to its conservation, we are not proposing critical habitat in this HUC.

Arkansas River Drainage

Within the Fountain Creek HUC, the Preliminary Draft Recovery Plan (Service 2003a) specifies a large recovery population along Monument Creek and its tributaries including lands within the U.S. Air Force Academy (Academy). While the Academy lands support the requisite PCEs, a significant PMJM population, and are essential to maintaining this recovery population, we determined that the Academy land merits exemption pursuant to section 4(a)(3) of the Act. We propose critical habitat east and north of the Academy similar to the area we proposed on July 17, 2002 (67 FR 47154), with the addition of one stream reach. In determining boundaries of critical habitat we considered whether documented PMJM populations on some stream reaches remained connected to the larger population present along Monument Creek and its tributaries on the Academy or whether, due to fragmentation caused by past development, they have become permanently isolated.

A significant barrier to PMJM movement is present on Kettle Creek in the form of a large detention basin on the Academy just east of Interstate Highway 25 and accompanying outflow structure that channels creek flow under the highway. We have

had discussions with the Academy regarding possible means of improving connectivity between upstream and downstream PMJM populations along this reach. Since improved connectivity may be possible and could prove essential in meeting the recovery criteria in this HUC, we are proposing critical habitat upstream of this reach of Kettle Creek.

Along the upper reaches of Monument Creek, Monument Lake and the dam that forms it create at least a partial barrier to PMJM movement upstream and downstream. Mitigation associated with a project that modified Monument Lake Dam was intended to enhance connectivity for the PMJM through this reach of Monument Creek (Service 2002a). However, the mitigation has thus far not been completed. In addition some reaches upstream from Monument Lake have been significantly altered by human activity. We have not included these upper reaches in our proposed designation because they do not contain the requisite PCEs in an appropriate quantity and spatial arrangement.

The Preliminary Draft Recovery Plan suggests either three small recovery populations or one medium recovery population to meet recovery criteria in both the Chico and the Big Sandy HUCs, if PMJM are present. We did not propose critical habitat in either of these HUCs in 2002 or designate it in 2003. We are not proposing critical habitat in the Chico HUC because the PCEs appear very limited in quantity and spatial arrangement within the subdrainage and, therefore, the area does not contain the features essential to the conservation of the PMJM. Additionally, the PMJM has been found at two locations within the Chico HUC, in apparently marginal habitat along an unnamed tributary of Black Squirrel Creek and at a site in the upper reaches of Black

Squirrel Creek that is under development pressure (Service 2009). Subsequent trapping could not relocate the PMJM at the former site. In the Big Sandy HUC, requisite PCEs are limited to a few short reaches and, therefore, the area does not contain the features essential to the conservation of the PMJM. For this reason we are not proposing critical habitat in the Big Sandy HUC. In this location, limited trapping efforts targeted at the PMJM have not confirmed the presence of the PMJM (Service 2009).

Delineation of Critical Habitat Boundaries

We propose revised critical habitat for the PMJM based on the interpretation of multiple sources used during our June 23, 2003, designation of critical habitat (68 FR 37275) and using new information in the preparation of this revised proposed rule. For this proposed rule, we used GIS-based mapping using ESRI ArcGIS software incorporating USGS National Hydrography Dataset streams along with stream order (by Strahler code), Colorado Department of Transportation roads, U.S. Census Bureau cities, USGS topographic maps, 2005 Farm Service Agency, National Agricultural Inventory Program 1m color imagery, and the COMaP dataset (Theobald *et al.* 2008). We divided lands we are proposing as critical habitat into specific mapping units, i.e., critical habitat units, often corresponding to individual HUCs. For the purposes of this proposed rule, these units are described primarily by latitude and longitude, and by Public Land Survey, Township, Section, and Range, to mark the upstream and the downstream extent of proposed critical habitat along rivers and streams.

As in 2003, we are faced with a decision concerning the outward extent of critical habitat into uplands. Studies suggest that the PMJM uses uplands at least as far out as 330 ft (100 m) beyond the 100-year floodplain (Shenk and Sivert 1999a, p. 11; Ryon 1999, p. 12; Schorr 2001, p. 14; Shenk 2004; Service 2003a, p. 26). Apparent hibernacula have ranged outward to 335 ft (102 m) of a perennial stream bed or intermittent tributary (Ruggles *et al.* 2003, p. 19). We have typically described potential PMJM habitat as extending outward 300 ft (90 m) from the 100-year floodplain of rivers and streams (Service 2004a, p. 5). The Preliminary Draft Recovery Plan (Service 2003a) defines PMJM habitat as the 100-year floodplain plus 330 ft (100 m) outward on both sides, but allows for alternative delineations that provide for all the needs of the PMJM and include the alluvial floodplain, transition slopes, and appropriate upland habitat.

To allow normal behavior and to ensure that the PMJM and the PCEs on which it depends are protected, we believe that the outward extent of critical habitat should at least approximate the outward distances described above in relation to the 100-year floodplain. Unfortunately, floodplains have not been mapped for many streams within the PMJM's range. Where floodplain mapping is available, we have found that it may include local inaccuracies. While alternative delineation of critical habitat based on geomorphology and existing vegetation could accurately portray the presence and extent of required habitat components, we lack an explicit data layer that could support such a delineation of critical habitat.

In 2003, we also considered determining the outward extent of critical habitat

based on a distance outward from features such as the stream edge, associated wetlands, or riparian areas. We judged wetlands an inconsistent indicator of habitat extent and found no consistent source of riparian mapping available across the range of the PMJM. We also considered using an outward extent of critical habitat established by a vertical distance above the elevation of the river or stream to approximate the floodplain and adjacent uplands likely to be used by the PMJM. This proved unacceptable over the diverse topography that surrounds stream reaches occupied by the PMJM.

For this proposed revised designation, we maintain consistency with our 2003 designation of critical habitat in delineating the upland extent of critical habitat boundaries as a set distance outward from the river or stream edge (as defined by the ordinary high water mark) varying with the size (order) of a river or stream. We compared known floodplain widths to stream order over a series of sites and approximated average floodplain width for various orders of streams. To that average we added 328 ft (100 m) outward on each side. For example, this analysis determined the average flood plain for streams of order 1 and 2 (the smallest streams) is 33 feet (10 m). Based on this calculation, for streams of order 1 and 2, we propose critical habitat as 361 ft (110 m) outward from the stream edge; for streams of order 3 and 4, we propose critical habitat as 394 ft (120 m) outward from the stream edge; and for stream orders 5 and above (the largest streams and rivers), we propose critical habitat as 459 ft (140 m) outward from the stream edge. While proposed critical habitat will not extend outward to all areas used by individual mice over time, we believe that these corridors of critical habitat ranging from 722 ft (220 m) to 918 ft (280 m) in width (plus the river or stream

width) will support the full range of PCEs essential for conservation of PMJM populations in these reaches and should help protect the PMJM and their habitats from secondary impacts of nearby disturbance. Following our July 17, 2002, proposal of critical habitat (67 FR 47154), we received a number of public comments regarding the appropriate outward limits of critical habitat and means of establishing them. However, most comments suggested either standardizing a single outward distance for all rivers and streams, site specific mapping of critical habitat for each reach, or relying on alternative mapping created for HCPs as a surrogate for site-specific mapping of critical habitat. We determined that none of these alternatives were both feasible with the resources available to us and more accurate rangewide than the methodology employed above.

Proposed Revised Critical Habitat Designation

The proposed critical habitat contained within units discussed below constitutes our best evaluation of areas necessary to conserve the PMJM. Table 1 above provides a summary of the length of stream reach with habitat in each unit that is proposed as revised critical habitat. Proposed critical habitat for the PMJM includes approximately 426 mi (686 km) of rivers and streams and 39,835 ac (16,121 ha) of lands in Colorado. Lands proposed as critical habitat are under Federal, State, local government, and private ownership (Table 2). No lands proposed as critical habitat are under tribal ownership. Estimates reflect the total river or stream length and area of lands within critical habitat unit boundaries. Limited areas within these boundaries may not include any of the requisite PCEs. Therefore, excluding certain developed areas or other areas not

supporting any of the requisite PCEs, the areas proposed be less than that indicated in Table 2.

TABLE 2. Proposed Critical Habitat Acreage for the Preble’s Meadow Jumping Mouse in Colorado Counties by Land Ownership.

COUNTY	FEDERAL	STATE	LOCAL GVT	OTHER	TOTAL
Boulder	6 ac (2 ha)	0	515 ac (208 ha)	351 ac (142 ha)	871 ac (352 ha)
Douglas	3,024 ac (1,224 ha)	762 ac (308 ha)	512 ac (207 ha)	9,599 ac (3,885 ha)	13,896 ac (5,624 ha)
El Paso	59 ac (24 ha)	0	160 ac (65 ha)	3,199 ac (1,285 ha)	3,419 ac (1,383 ha)
Jefferson/ Broom- field*	1,564 ac (633 ha)	195 ac (79 ha)	311 ac (126 ha)	584 ac (236 ha)	2,654 ac (1,074 ha)
Larimer	7,867 ac (3,184 ha)	2,363 ac (956 ha)	187 ac (76 ha)	7,809 ac (3,160 ha)	18,226 ac (7,376 ha)
Teller	77 ac (31 ha)	0	0	0	77 ac (31 ha)
Total	12,596ac (5,097 ha)	3,319 ac (1,343 ha)	1,685 ac (682 ha)	21,542 ac (8,718 ha)	39,142 ac (15,840 ha)

* Broomfield County extends minimally on to Rock Flats NWR (Unit 7).

Lands proposed as revised critical habitat are divided into 11 critical habitat units containing all of those PCEs necessary to meet the primary biological needs of the PMJM throughout Colorado where it is listed. Each unit has all of the requisite PCEs present, and, based on the best scientific data available, all are believed to currently support the PMJM. Individual stream reaches designated within each unit contain at least one of the PCEs, and are either believed to be occupied by the PMJM or provide crucial opportunities for connectivity to facilitate dispersal and genetic exchange within the unit.

In proposing critical habitat, we did not include all areas currently occupied by the PMJM. A brief description of each PMJM critical habitat unit is provided below. The units are generally based on geographically distinct river drainages and subdrainages. These units have been subject to, or are threatened by, varying degrees of degradation from human use and development. For these reasons, the essential features within each of the specific areas we are proposing as critical habitat may require special management considerations or protection. Management may include additional measures in addition to those that may already be in place to preserve such areas; to avoid, reduce, or offset human-induced and natural impacts; and to restore such areas following unavoidable adverse impacts, including fire or flooding.

Unit 1: North Fork of the Cache la Poudre River, Larimer, Colorado.

Unit 1 encompasses approximately 8,619 ac (3,488 ha) on 88 mi (142 km) of streams within the North Fork of the Cache la Poudre River watershed. It includes the North Fork of the Cache la Poudre River from Seaman Reservoir upstream to Halligan Reservoir. Major tributaries within the unit include Stonewall Creek, Rabbit Creek (including its North Fork, Middle Fork, and South Fork), and Lone Pine Creek. The unit includes both public and private lands. It includes portions of the Arapaho-Roosevelt National Forest, as well as Lone Pine State Wildlife Area.

The unit is located in the Cache la Poudre HUC and is proposed to address the large recovery population designated for this area in the Preliminary Draft Recovery Plan

(Service 2003a). The area remains rural and agricultural with habitat components likely to support relatively high densities of the PMJM. Pressure for expanded development is increasing within the area.

Unit 2: Cache la Poudre River, Larimer County.

Unit 2 encompasses approximately 4,944 ac (2,001 ha) on 51 mi (82 km) of streams within the Cache la Poudre River watershed. It includes the Cache la Poudre River from Poudre Park upstream to the 7,600 ft (2,317 m) elevation (below Rustic). Major tributaries within the unit include Hewlett Gulch, Young Gulch, Skin Gulch, Poverty Gulch, Elkhorn Creek, Pendergrass Creek, and Bennett Creek. The unit is primarily composed of Federal lands of the Arapaho-Roosevelt National Forest, including portions of the Cache la Poudre Wilderness, but includes limited non-Federal lands.

Since this unit is located in the same Cache la Poudre HUC as Unit 1, it is unlikely to serve as an initial recovery population. However, it encompasses a significant area of habitat likely to support a sizeable population of the PMJM. Due to Federal ownership, development pressure is minimal; however, the area is subject to substantial recreational use (rafting, kayaking, fishing) in the Cache la Poudre River corridor. Non-Federal lands include existing development that may limit the habitat components present. Some such reaches may serve the PMJM mostly as connectors between areas containing all necessary PCEs.

Unit 3: Buckhorn Creek, Larimer County.

Unit 3 encompasses approximately 3,995 ac (1,617 ha) on 46 mi (73 km) of streams within the Buckhorn Creek watershed. It includes Buckhorn Creek from just west of Masonville, upstream to the 7,600 ft (2,317 m) elevation. Major tributaries within the unit include Little Bear Gulch, Bear Gulch, Stringtown Gulch, Fish Creek, and Stove Prairie Creek. The unit includes both public and private lands and portions of the Arapaho-Roosevelt National Forest.

The unit is located in the Big Thompson HUC and is proposed to address the medium recovery population called for this area in the Preliminary Draft Recovery Plan (Service 2003a). Pressure for expanded rural development exists on non-Federal lands within the unit.

Unit 4: Cedar Creek, Larimer County.

Unit 4 encompasses approximately 668 ac (270 ha) on 8 mi (12 km) of streams within the Cedar Creek watershed, including Dry Creek and Jug Gulch. Cedar Creek is a tributary of the Big Thompson River and enters the Big Thompson River at Cedar Cove. The unit is centered on Federal lands of the Arapaho-Roosevelt National Forest, but includes some stream reaches on non-Federal lands.

This unit is located in the Big Thompson HUC and, while unlikely to serve as an initial recovery population, it supports a population on mostly Federal lands of the upper Big Thompson River. It is isolated, at least in terms of riparian connection, from the PMJM population on nearby Buckhorn Creek. This site is upstream of The Narrows of the Big Thompson Canyon, a barrier to PMJM movement, while the confluence of the Big Thompson River and Buckhorn Creek is downstream from The Narrows. However, the close proximity of the headwaters of Jug Gulch within this unit to the headwaters of Bear Gulch within the Buckhorn Creek unit suggests that some individual mice may pass between the two populations and thus between the two significant watersheds within this HUC.

Unit 5: South Boulder Creek, Boulder County.

Unit 5 encompasses approximately 856 ac (347 ha) on 8 mi (12 km) of streams within the South Boulder Creek watershed. It includes South Boulder Creek from Baseline Road upstream to Eldorado Springs, and includes the Spring Brook tributary. The unit includes both public and private lands. It includes substantial lands owned by the City of Boulder Open Space and Mountain Parks.

This unit is located in the St. Vrain HUC and is proposed to address the medium recovery population designated for this area in the Preliminary Draft Recovery Plan (Service 2003a). Portions of the area have been the subject of PMJM research funded by the City of Boulder and, in places, high densities of the PMJM have been documented

(Meaney *et al.* 2003, pp. 616 - 617). A wide floodplain, complex ditch system, and the irrigation of pastures make habitat within the lower portions of this unit unique. In places, the outward extent of PCEs surpasses the standard distance outward from the stream used to define critical habitat in this designation. Pressure for expanded development is occurring on private lands within the unit. Recreational use of the City of Boulder lands is considerable and may adversely impact the PMJM.

Unit 6: Rocky Flats NWR, Jefferson and Broomfield Counties..

Unit 6 encompasses approximately 1,108 ac (449 ha) on 13 mi (20 km) of streams on the subunits corresponding to the Rock Creek, Woman Creek, and Walnut Creek watersheds. The unit includes only Federal lands on the Rocky Flats NWR.

The Rock Creek subunit is located in the St. Vrain HUC and the Woman Creek and Walnut Creek subunits are in the Middle South Platte-Cherry Creek HUC. Since the unit extends to two HUCs, both of which have designated recovery population elsewhere, this unit is unlikely to serve as an initial recovery population. However, this unit is unique because it is limited entirely to Federal lands and populations on the site have been the subject of the longest continuing research on the PMJM. After cleanup and closure of the DOE's Rocky Flats Environmental Technology Site, the property was transferred to the Service to become part of our National Wildlife Refuge System. Streams within the unit are small and habitat components present do not support a high density of the PMJM. The site presents an opportunity to study small populations and

their viability over time.

Unit 7: Ralston Creek, Jefferson County.

Unit 7 encompasses approximately 809 ac (328 ha) on 9 mi (14 km) of streams within the Ralston Creek watershed. It includes Ralston Creek from Ralston Reservoir upstream to the 7,600 ft (2,317 m) elevation. The unit includes both public and private lands including lands in Golden Gate Canyon State Park and White Ranch County Park.

This unit is located in the Clear Creek HUC and we are proposing to designate it as critical habitat to partially address the criteria of three small recovery populations or one medium recovery population called for in this area in the Preliminary Draft Recovery Plan (Service 2003a). The segment of Ralston Creek that passes through the Cotter Corporation's existing Schwartzwalder Mine serves as a connector between areas supporting all PCEs required by the PMJM located upstream and downstream.

Unit 8: Cherry Creek, Douglas County.

Unit 8 encompasses approximately 2,647 ac (1,071 ha) on 30 mi (48 km) of streams within the Cherry Creek watershed. It includes two subunits. The first includes Cherry Creek from the downstream boundary of the Castlewood Canyon State Recreation Area, upstream to its confluence with Lake Gulch. Tributaries within the unit include Lake Gulch and Upper Lake Gulch. It includes portions of the Castlewood Canyon State

Recreation Area, as well as Douglas County's recently acquired Green Mountain Ranch property. The second subunit includes Antelope Creek from its confluence with West Cherry Creek upstream and a tributary, Haskel Creek. Both subunits include both public and private lands. These subunits are located in the Middle South Platte-Cherry Creek HUC and address the medium recovery population designated for this area in the Preliminary Draft Recovery Plan (Service 2003a). Some development pressure is occurring from expanding rural development on private lands within these areas.

Unit 9: West Plum Creek, Douglas County.

Unit 9 encompasses approximately 8,724 ac (3,530 ha) on 94 mi (151 km) of streams within the Plum Creek watershed. It includes Plum Creek from Chatfield Reservoir upstream to the confluence with West Plum Creek then continues upstream on West Plum Creek to its headwaters. Major tributaries within the unit include Indian Creek, Jarre Creek, Garber Creek (including North, Middle, and South Garber Creek), Jackson Creek, Spring Creek, Dry Gulch, Bear Creek, Starr Canyon, Gove Creek, and Metz Canyon. The unit is a combination of public and private lands. It includes portions of the Pike-San Isabel National Forest, as well as Chatfield State Recreation Area (Army Corps of Engineers' property), and Colorado Division of Wildlife's Woodhouse Ranch property.

This unit is located in the Upper South Platte HUC, and we propose to designate it as critical habitat to address the large recovery population designated for this area in the

Preliminary Draft Recovery Plan (Service 2003a). Aside from a portion of Plum Creek, the area remains rather rural and includes habitat components likely to support relatively high densities of the PMJM. Pressure for expanded suburban and rural development is occurring within the area.

Unit 10: Upper South Platte River, Douglas, Jefferson, and Teller Counties.

Unit 10 encompasses approximately 3,353 ac (1,357 ha) on 35 mi (57 km) of streams within the Platte River watershed. It includes four subunits. The Chatfield Subunit includes a section of the South Platte River upstream of Chatfield Reservoir within Chatfield State Recreation Area (Army Corps of Engineers' property). The Bear Creek Subunit includes Bear Creek and West Bear Creek, tributaries to the South Platte River on National Forest System lands. The South Platte Subunit includes a segment of the South Platte River upstream from Nighthawk, including the tributaries Gunbarrel Creek and Sugar Creek. This subunit is centered on Federal lands of the Pike-San Isabel National Forest but includes some intervening non-Federal lands. The Trout Creek Subunit includes portions of Trout Creek, a tributary to Horse Creek, and also portions of Eagle Creek, Long Hollow, Fern Creek, Illinois Gulch, and Missouri Gulch. This subunit is centered on Federal lands of the Pike-San Isabel National Forest but includes some intervening non-Federal lands along Trout Creek.

This unit is located in the same Upper South Platte HUC as West Plum Creek, where a large recovery population has been designated and, therefore, is unlikely to serve

as an initial recovery population. The unit encompasses four areas of primarily Federal land spread through the drainage, three within the Pike-San Isabel National Forest boundary. Habitat components present and the likely density of PMJM populations vary. The Trout Creek Subunit appears to have high quality PMJM habitat and may provide a continued opportunity to research relationships between the PMJM and the western jumping mouse, both of which have been verified from the same trapping effort in the subunit (Schorr *et al.* 2007).

Unit 11: Monument Creek, El Paso County.

Unit 11 is located in the Arkansas River drainage. It encompasses approximately 3,419 ac (1,383 ha) on 39 mi (62 km) of streams within the Monument Creek watershed. It includes Monument Creek from the confluence of Cottonwood Creek upstream to the southern boundary of the U.S. Air Force Academy and from the northern boundary of the Academy upstream to the dam at Monument Lake. Major tributaries within the unit include Kettle Creek, Black Squirrel Creek, Monument Branch, Middle Tributary, Smith Creek, Jackson Creek, Beaver Creek, Teachout Creek, and Dirty Woman Creek. The unit is primarily on private lands. It includes a small portion of the Pike-San Isabel National Forest.

This unit is located in the Fountain Creek HUC and we are proposing it as critical habitat to address the large recovery population designated for this area in the Preliminary Draft Recovery Plan (Service 2003a). The area is unique in that it represents

the only known PMJM population of significant size within the Arkansas River drainage and the southernmost known occurrence of the PMJM. Development pressure is extremely high on some private lands within the unit. Development has resulted in changes in flows from increased stormwater runoff and has affected stream channels and associated riparian systems (Mihlbachler 2007).

Effects of Critical Habitat Designation

Section 7 Consultation

Section 7(a)(2) of the Act requires Federal agencies, including the Service, to ensure that actions they fund, authorize, or carry out are not likely to destroy or adversely modify critical habitat. Decisions by the 5th and 9th Circuit Courts of Appeals have invalidated our definition of “destruction or adverse modification” (50 CFR 402.02) (see *Gifford Pinchot Task Force v. U.S. Fish and Wildlife Service*, 378 F. 3d 1059 (9th Cir 2004) and *Sierra Club v. U.S. Fish and Wildlife Service et al.*, 245 F.3d 434, 442F (5th Cir 2001)), and we do not rely on this regulatory definition when analyzing whether an action is likely to destroy or adversely modify critical habitat. Under the statutory provisions of the Act, we determine destruction or adverse modification on the basis of whether, with implementation of the proposed Federal action, the affected critical habitat would remain functional (or retain the current ability for the PCEs to be functionally established) to serve its intended conservation role for the species.

Section 7(a)(4) of the Act requires Federal agencies to confer with us on any action that is likely to jeopardize the continued existence of a species proposed for listing or result in destruction or adverse modification of proposed critical habitat. Conference reports provide conservation recommendations to assist the agency in eliminating conflicts that may be caused by the proposed action. We may issue a formal conference report if requested by a Federal agency. Formal conference reports on proposed critical habitat contain an opinion that is prepared according to 50 CFR 402.14, as if we had designated critical habitat. We may adopt the formal conference report as the biological opinion when the critical habitat is designated, if no substantial new information or changes in the action alter the content of the opinion (see 50 CFR 402.10(d)). The conservation recommendations in a conference report or opinion are advisory.

If a species is listed or critical habitat is designated, section 7(a)(2) of the Act requires Federal agencies to ensure that activities they authorize, fund, or carry out are not likely to jeopardize the continued existence of such a species or to destroy or adversely modify its critical habitat. If a Federal action may affect a listed species or its critical habitat, the responsible Federal agency (action agency) must enter into consultation with us in most cases. As a result of this consultation, we document compliance with the requirements of section 7(a)(2) through our issuance of: (1) A concurrence letter for Federal actions that may affect, but are not likely to adversely affect, listed species or designated critical habitat; or (2) A biological opinion for Federal actions that are likely to adversely affect listed species or designated critical habitat.

An exception to the concurrence process referred to in (1) above occurs in consultations involving National Fire Plan projects. In 2004, the USFS and the Bureau of Land Management (BLM) reached agreements with us to streamline a portion of the section 7 consultation process (BLM 2004, pp. 1–8; USFS 2004, pp. 1–8). The agreements allow the USFS and the BLM the opportunity to make “not likely to adversely affect” determinations for projects implementing the National Fire Plan. Such projects include prescribed fire, mechanical fuels treatments (thinning and removal of fuels to prescribed objectives), emergency stabilization, burned area rehabilitation, road maintenance and operation activities, ecosystem restoration, and culvert replacement actions. The USFS and the BLM must ensure staff are properly trained, and both agencies must submit monitoring reports to us to determine if the procedures are being implemented properly and that effects on endangered species and their habitats are being properly evaluated.

If we issue a biological opinion concluding that a project is likely to jeopardize the continued existence of a listed species or destroy or adversely modify critical habitat, we also provide reasonable and prudent alternatives to the project, if any are identifiable. We define “Reasonable and prudent alternatives” at 50 CFR 402.02 as alternative actions identified during consultation that:

- Can be implemented in a manner consistent with the intended purpose of the action,
- Can be implemented consistent with the scope of the Federal agency’s legal authority and jurisdiction,
- Are economically and technologically feasible, and

- Would, in the Director’s opinion, avoid jeopardizing the continued existence of the listed species or destroying or adversely modifying its critical habitat.

Reasonable and prudent alternatives can vary from slight project modifications to extensive redesign or relocation of the project. Costs associated with implementing a reasonable and prudent alternative are similarly variable.

When we issue a biological opinion concluding that a project is not likely to jeopardize a listed species or adversely modify its critical habitat but may result in incidental take of listed animals, we provide an incidental take statement that specifies the impact of such incidental taking on the species. We then define “reasonable and prudent measures” considered necessary or appropriate to minimize the impact of such taking. Reasonable and prudent measures are binding measures the action agency must implement to receive an exemption to the prohibition against take contained in section 9 of the Act. These reasonable and prudent measures are implemented through specific “terms and conditions” that must be followed by the action agency or passed along by the action agency as binding conditions to an applicant. Reasonable and prudent measures, along with the terms and conditions that implement them, cannot alter the basic design, location, scope, duration, or timing of the action under consultation and may involve only minor changes (50 CFR 402.14). We may provide the action agency with additional conservation recommendations, which are advisory and not intended to carry binding legal force.

Regulations at 50 CFR 402.16 require Federal agencies to reinitiate consultation

on previously reviewed actions in instances where we have listed a new species or subsequently designated critical habitat that may be affected and the Federal agency has retained discretionary involvement or control over the action (or the agency's discretionary involvement or control is authorized by law). Consequently, Federal agencies may sometimes need to request reinitiation of consultation with us on actions for which formal consultation has been completed, if those actions with discretionary involvement or control may affect subsequently listed species or designated critical habitat.

Federal activities that may affect the PMJM or its designated critical habitat will require section 7 consultation under the Act. Activities on State, tribal, local, or private lands requiring a Federal permit (such as a permit from the U.S. Army Corps of Engineers under section 404 of the Clean Water Act (33 U.S.C. 1251 *et seq.*) or a permit from us under section 10(a)(1)(B) of the Act) or involving some other Federal action (such as funding from the Federal Highway Administration, Federal Aviation Administration, or the Federal Emergency Management Agency) also will be subject to the section 7 consultation process. Federal actions not affecting listed species or critical habitat, and actions on State, tribal, local, or private lands that are not federally funded, authorized, or permitted, do not require section 7 consultations.

The designation of critical habitat does not imply that lands outside of critical habitat do not play an important role in the conservation of the PMJM. Federal actions that may affect areas outside of critical habitat, such as development, agricultural

activities, and road construction, are still subject to review under section 7 of the Act if they may affect the PMJM, because Federal agencies must consider both effects to the species and effects to critical habitat independently. The prohibitions of section 9 of the Act applicable to the PMJM under 50 CFR 17.31 also continue to apply both inside and outside of designated critical habitat.

Application of the “Adverse Modification” Standard

The key factor related to the adverse modification determination is whether, with implementation of the proposed Federal action, the affected critical habitat would continue to serve its intended conservation role for the species, or would retain its current ability for the primary constituent element(s) to be functionally established. Activities that may destroy or adversely modify critical habitat are those that alter the physical and biological features to an extent that appreciably reduces the conservation value of critical habitat for the PMJM. Generally, the conservation role of the proposed revised PMJM critical habitat units is to support viable populations.

Section 4(b)(8) of the Act requires us to briefly evaluate and describe in any proposed or final regulation that designates critical habitat those activities involving a Federal action that may destroy or adversely modify such habitat, or that may be affected by such designation.

Activities that, when carried out, funded, or authorized by a Federal agency, may

adversely affect critical habitat and, therefore, should result in consultation for the PMJM include, but are not limited to, the following:

(1) Any activity that results in development or alteration of the landscape within a unit, including: land clearing; activities associated with construction for urban and industrial development, roads, bridges, pipelines, or bank stabilization; agricultural activities such as plowing, disking, haying, or intensive grazing; off-road vehicle activity; and mining or drilling of wells.

(2) Any activity that results in changes in the hydrology of the unit, including: construction, operation, and maintenance of levees, dams, berms, and channels; activities associated with flow control, such as releases, diversions, and related operations; irrigation; sediment, sand, or gravel removal; and other activities resulting in the draining or inundation of a unit.

(3) Any sale, exchange, or lease of Federal land that is likely to result in the habitat in a unit being destroyed or appreciably degraded.

(4) Any activity that detrimentally alters natural processes in a unit including the changes to inputs of water, sediment and nutrients, or that significantly and detrimentally alters water quantity in the unit.

(5) Any activity that could lead to the introduction, expansion, or increased density of an exotic plant or animal species that is detrimental to the PMJM and to its habitat.

Federal actions not affecting listed species or critical habitat and actions on non-Federal lands that are not federally funded or permitted do not require section 7

consultation.

Note that the scale of these activities would be a crucial factor in determining whether, in any instance, they would directly or indirectly alter critical habitat to the extent that the value of the critical habitat for the survival and recovery of the PMJM would be appreciably diminished.

Application of Section 4(a)(3) of the Endangered Species Act

The National Defense Authorization Act for Fiscal Year 2004 (Pub. L. 108–136) amended the Act to limit areas eligible for designation as critical habitat. Specifically, section 4(a)(3)(B)(i) of the Act (16 U.S.C. 1533(a)(3)(B)(i)) now provides: “The Secretary shall not designate as critical habitat any lands or other geographical areas owned or controlled by the Department of Defense, or designated for its use, that are subject to an integrated natural resources management plan prepared under section 101 of the Sikes Act (16 U.S.C. 670a), if the Secretary determines in writing that such plan provides a benefit to the species for which critical habitat is proposed for designation.”

The Sikes Act of 1997 required each military installation that includes land and water suitable for the conservation and management of natural resources to complete an Integrated Natural Resources Management Plan (INRMP) by November 17, 2001. An INRMP integrates implementation of the military mission of the installation with stewardship of the natural resources found on the base. Each INRMP includes:

- (1) An assessment of the ecological needs on the installation, including the need to provide for the conservation of listed species;
- (2) A statement of goals and priorities;
- (3) A detailed description of management actions to be implemented to provide for these ecological needs; and
- (4) A monitoring and adaptive management plan.

Among other things, each INRMP must, to the extent appropriate and applicable, provide for fish and wildlife management; fish and wildlife habitat enhancement or modification; wetland protection, enhancement, and restoration where necessary to support fish and wildlife; and enforcement of applicable natural resource laws.

We consult with the military on the development and implementation of INRMPs for installations with federally listed species. We analyzed INRMPs developed by military installations that are located within the range of the PMJM and that contain those features essential to the species' conservation for exemption under the authority of section 4(a)(3)(B) of the Act.

U.S. Air Force Academy

The U.S. Air Force Academy (Academy) in El Paso County, Colorado, is the lone Department of Defense property in the area of the proposed revised critical habitat. The

Academy has a completed INRMP that contains those features essential to the species' conservation. The Academy has completed an INRMP (U.S. Air Force 1998), a 1999 "Conservation and Management Plan for the Prebles Meadow Jumping Mouse at the U.S. Air Force Academy" (U.S. Air Force 1999), and the Service completed a 2000 programmatic section 7 consultation addressing certain activities at the Academy that may affect the PMJM (Service 2000). The Conservation and Management Plan provides guidance for Air Force management decisions. Following its initial 5-year duration, the Conservation and Management Plan was renewed and extended annually (Linner 2007). The plan was based upon the most current scientific knowledge available at the time that it was developed. Research regarding the PMJM is ongoing at the Academy, and we anticipate that an update to the Conservation and Management Plan will be finalized in 2009.

The Academy's INRMP describes habitats found at the Academy, including habitats used by the PMJM (U.S. Air Force 1998). It addresses management concerns, goals and objectives regarding the PMJM, and describes management actions designed to accomplish those objectives. The INRMP also requires monitoring, evaluation of the plan's effectiveness, and provides for modification of management actions when appropriate. We have reviewed these measures and have concluded that they address the four criteria identified above. As a result, such lands are not included in the proposed designation.

Application of Section 4(b)(2) of the Endangered Species Act

Section 4(b)(2) of the Act states that the Secretary must designate and revise critical habitat on the basis of the best available scientific data after taking into consideration the economic impact, national security impact, and any other relevant impact of specifying any particular area as critical habitat. The Secretary may exclude an area from critical habitat if he determines that the benefits of such exclusion outweigh the benefits of specifying such area as part of the critical habitat, unless he determines, based on the best scientific data available, that the failure to designate such area as critical habitat will result in the extinction of the species. In making that determination, the statute, as well as the legislative history, is clear that the Secretary has broad discretion regarding which factor(s) to use and how much weight to give to any factor (Department of the Interior, 2008).

We are updating the previous economic analysis of the impacts of the proposed designation of revised critical habitat, which will be available for public review and comment when it is complete. Based on public comment on that document, on the proposed designation itself, and on the information in the revised final economic analysis, the Secretary may exclude from critical habitat additional areas beyond those identified in this assessment under the provisions of section 4(b)(2) of the Act. This also is addressed in our implementing regulations at 50 CFR 424.19.

The National Environmental Policy Act (NEPA) (42 U.S.C. 4321 *et seq.*) analysis we will conduct also may disclose other impacts we may consider in our analysis under section 4(b)(2) of the Act. In considering whether to exclude a particular area from the

designation, we must identify the benefits of including the area in the designation, identify the benefits of excluding the area from the designation, and determine whether the benefits of exclusion outweigh the benefits of inclusion. If based on this analysis, we determine that the benefits of exclusion outweigh the benefits of inclusion, then we can exclude the area only if such exclusion would not result in the extinction of the species.

When considering the benefits of inclusion for an area, we consider the additional regulatory benefits that area would receive from the protection from adverse modification or destruction as a result of actions with a Federal nexus, the educational benefits of mapping essential habitat for recovery of the listed species, and any benefits that may result from a designation due to State or Federal laws that may apply to critical habitat.

When considering the benefits of exclusion, we consider, among other things, whether exclusion of a specific area is likely to result in conservation; the continuation, strengthening, or encouragement of partnerships; or implementation of a management plan that provides equal to or more conservation than a critical habitat designation would provide.

In the case of the PMJM, the benefits of critical habitat include public awareness of the PMJM's presence and the importance of habitat protection, and in cases where a Federal action exists, increased habitat protection for the PMJM due to the protection from adverse modification or destruction of critical habitat.

When we evaluate the existence of a conservation plan to consider the benefits of exclusion, we consider a variety of factors, including but not limited to, whether the plan is finalized; how it provides for the conservation of the essential physical and biological features; whether there is a reasonable expectation that the conservation management strategies and actions contained in a management plan will be implemented into the future; whether the conservation strategies in the plan are likely to be effective; and whether the plan contains a monitoring program or adaptive management to ensure that the conservation measures are effective and can be adapted in the future in response to new information.

After evaluating the benefits of inclusion and the benefits of exclusion, we carefully weigh the two sides to determine whether the benefits of exclusion outweigh those of inclusion. If we determine that they do, we then determine whether exclusion would result in extinction. If exclusion of an area from critical habitat would result in extinction, we will not exclude it from the designation.

Conservation Partnerships on Non-Federal Lands

Most federally listed species in the United States will not recover without cooperation of non-Federal landowners. More than 60 percent of the United States is privately owned (National Wilderness Institute 1995), and at least 80 percent of endangered or threatened species occur either partially or solely on private lands (Crouse *et al.* 2002, p. 720). Stein *et al.* (1995, p. 400) found that only about 12 percent of listed

species were found almost exclusively on Federal lands (90 to 100 percent of their known occurrences restricted to Federal lands) and that 50 percent of federally listed species are not known to occur on Federal lands at all.

Given the distribution of listed species with respect to land ownership, conservation of listed species in many parts of the United States is dependent upon working partnerships with a wide variety of entities and the voluntary cooperation of many non-Federal landowners (Wilcove and Chen 1998, p. 1407; Crouse *et al.* 2002, p. 720; James 2002, p. 271). Building partnerships and promoting voluntary cooperation of landowners are essential to understanding the status of species on non-Federal lands, and are necessary to implement recovery actions such as reintroducing listed species, habitat restoration, and habitat protection.

Many non-Federal landowners derive satisfaction from contributing to endangered species recovery. We promote these private-sector efforts through the Department of the Interior's Cooperative Conservation philosophy. Conservation agreements with non-Federal landowners (safe harbor agreements, other conservation agreements, easements, and State and local regulations) enhance species conservation by extending species protections beyond those available through section 7 consultations. In the past decade, we encouraged non-Federal landowners to enter into conservation agreements, based on a view that we can achieve greater species conservation on non-Federal land through such partnerships than we can through regulatory methods (December 2, 1996, 61 FR 63854).

As discussed above, consultation under section 7(a)(2) of the Act, and the duty to avoid jeopardy to a listed species and adverse modification of designated critical habitat, is only triggered where Federal agency action is involved. In the absence of Federal agency action, the primary regulatory restriction applicable to non-Federal landowners is the prohibition against take of listed animal species under section 9 of the Act. In order to take listed animal species where no independent Federal action is involved that would trigger section 7 consultation, a private landowner must obtain an incidental take permit under section 10 of the Act.

However, many private landowners are wary of the possible consequences of encouraging endangered species to their property. Mounting evidence suggests that some regulatory actions by the Federal government, while well-intentioned and required by law, can (under certain circumstances) have unintended negative consequences for the conservation of species on private lands (Wilcove *et al.* 1996, pp. 5-6; Bean 2002, pp. 2-3; Conner and Mathews 2002, pp. 1-2; James 2002, pp. 270-271; Koch 2002, pp. 2-3; Brook *et al.* 2003, pp. 1639-1643). Many landowners fear a decline in their property value due to real or perceived restrictions on land-use options where threatened or endangered species are found. Consequently, harboring endangered species is viewed by many landowners as a liability. This holds true for PMJM presence on private lands in Colorado. This perception results in anti-conservation incentives because maintaining habitats that harbor endangered species represents a risk to future economic opportunities (Main *et al.* 1999, pp. 1264-1265; Brook *et al.* 2003, pp. 1644-1648).

According to some researchers, the designation of critical habitat on private lands significantly reduces the likelihood that landowners will support and carry out conservation actions (Main *et al.* 1999, p. 1263; Bean 2002, p. 2; Brook *et al.* 2003, pp. 1644-1648). The magnitude of this negative outcome is greatly amplified in situations where active management measures (such as reintroduction, fire management, and control of invasive species) are necessary for species conservation (Bean 2002, pp. 3-4). We believe that the judicious exclusion of specific areas of non-federally owned lands from critical habitat designations can contribute to species recovery and provide a superior level of conservation than critical habitat alone.

The purpose of designating critical habitat is to contribute to the conservation of threatened and endangered species and the ecosystems upon which they depend. The outcome of the designation, triggering regulatory requirements for actions funded, authorized, or carried out by Federal agencies under section 7(a)(2) of the Act, can sometimes be counterproductive to its intended purpose on non-Federal lands. Thus the benefits of excluding areas that are covered by partnerships or voluntary conservation efforts can often be high.

Benefits of Excluding Lands with Habitat Conservation Plans

The benefits of excluding lands with approved HCPs from critical habitat designation, such as HCPs that cover the PMJM, include relieving landowners,

communities, and counties of any additional regulatory burden that might be imposed as a result of the critical habitat designation. Many HCPs take years to develop, and upon completion, are consistent with the recovery objectives for listed species that are covered within the plan area. Many HCPs also provide conservation benefits to unlisted sensitive species.

A related benefit of excluding lands covered by approved HCPs from critical habitat designation is the unhindered, continued ability it gives us to seek new partnerships with future plan participants, including States, counties, local jurisdictions, conservation organizations, and private landowners, which together can implement conservation actions that we would be unable to accomplish otherwise. The HCPs often cover a wide range of species, including listed plant species and species that are not State and federally listed and would otherwise receive little protection from development. By excluding these lands, we preserve our current partnerships and encourage additional conservation actions in the future.

We also note that permit issuance in association with HCP applications requires consultation under section 7(a)(2) of the Act, which would include the review of the effects of all HCP-covered activities that might adversely impact the species under a jeopardy standard, including possibly significant habitat modification (see definition of “harm” at 50 CFR 17.3), even without the critical habitat designation. In addition, all other Federal actions that may affect the listed species would still require consultation under section 7(a)(2) of the Act, and we would review these actions for possibly

significant habitat modification in accordance with the definition of harm referenced above.

The information provided in the previous section applies to the following discussions of potential exclusions under section (4)(b)(2) of the Act. We are considering the exclusion of lands covered by such plans. Portions of the proposed revised critical habitat units and their subunits may warrant exclusion from the proposed designation of revised critical habitat under section 4(b)(2) of the Act based on the partnerships, management, and protection afforded under these approved and legally operative HCPs. In this revised proposed rule, we are seeking input from the stakeholders in these HCPs and the public as to whether or not we should exclude these areas from the final revised critical habitat designation. We also are asking for public comment on the possible exclusion of proposed critical habitat within the El Paso County HCP planning area; this HCP is currently under development. Below is a brief description of each plan and the lands within the units proposed as revised critical habitat that relate to each plan.

Douglas County Habitat Conservation Plan

On May 11, 2006, we issued a section 10 incidental take permit for the Douglas County HCP (Service 2006a). This permit covers the PMJM. The Douglas County HCP covers specified activities conducted by Douglas County and the Towns of Castle Rock and Parker, on private and non-Federal lands within a Riparian Conservation Zone (RCZ) as mapped by Douglas County. The activities covered by the Douglas County HCP

include construction, use, maintenance, and closure of roads, bridges, trails, and recreational facilities; maintenance and repair of existing structures and facilities; emergency activities; habitat improvements that benefit the RCZ; and other necessary County or town public improvements. These activities are subject to conditions and best management practices to minimize impacts to known or potential PMJM habitat.

The RCZ depicts the geographic limits of known or potential PMJM habitat over 283 stream mi (456 km) and over 18,000 ac (7,000 ha) in Douglas County. Impacts to the RCZ associated with the covered activities are mitigated by the permanent protection of portions of the RCZ and the restoration of habitat from temporary impacts. Stream segments totaling 15 mi (24 km) in length and 1,132 ac (458 ha) of the RCZ have been permanently protected as part of the Douglas County HCP. Management plans exist or are in development for these protected properties (Dougherty 2009). In addition, the Douglas County HCP establishes an impact cap of 430 ac (174 ha) of the RCZ. The permanent impacts associated with the covered activities are distributed throughout Douglas County and the RCZ and may permanently affect 308 ac (125 ha) of the RCZ (about 1.6 percent of the RCZ) over the 10-year life of the permit. However, in the period from permit issuance in May 2006, through May 2009, only about 12 ac (5 ha) of impacts have been documented (Dougherty 2009).

A related issue on which we seek comment is the potential modification of outward boundaries of proposed critical habitat within the RCZ to conform to Douglas County's mapped RCZ boundaries. While boundaries of the proposed critical habitat

units include standard distances outward from streams (varying based on stream order), the RCZ represents a site-specific attempt to map boundaries of PMJM habitat.

Proposed critical habitat Units 8 and 9 are within the boundaries of the Douglas County HCP; a small amount of non-Federal property in Unit 10 is also within the boundaries of the Douglas County HCP. Protected properties serving as mitigation under the Douglas County HCP that are all or in part within Unit 8 include the Nelson Ranch and Dupont Property; those all or in part within Unit 9 include the Prairie Canyon Ranch, Greenland Ranch, and Lake Gulch Property.

Livermore Area Habitat Conservation Plan

On May 11, 2006, we issued a section 10 incidental take permit for the Livermore Area HCP (Service 2006b). This permit covers the PMJM. The Livermore Area is located in northern Larimer County (Colorado) in the Laramie Foothills, near the Wyoming border. The Livermore Area HCP planning area includes approximately 750 square mi (1,940 square km) and 796 mi (1,282 km) of streams including a PMJM “conservation zone” estimated at approximately 201 mi (324 km) of stream and 21,320 ac (8,570 ha). The HCP cites protection of 71 mi (114 km) of stream, mostly on State lands managed for the conservation of their natural resources, but also on private lands held by The Nature Conservancy and managed for the protection of biodiversity, or on private lands where owners have placed conservation easements on their properties to ensure their protection in perpetuity. It is not clear what proportion of these areas support

the PMJM.

Local landowners and public agencies holding land within the boundaries of the Livermore Area HCP may opt for coverage under the HCP and receive incidental take permits for activities consistent with the Livermore Area HCP. The Livermore Area HCP is designed to support current land uses, including ranching and farming. However, inclusion of landowners is optional, and they may choose to pursue land uses inconsistent with those specified in the Livermore Area HCP. Many of the private landowners represent large land holdings that potentially support the PMJM and other sensitive species. These large holdings are managed primarily for ranching and other agricultural uses. Most of the rivers, creeks, and tributaries in the Livermore Area are located on these properties. The Livermore Area HCP includes proposed critical habitat within Unit 1.

Eagle's Nest Open Space Habitat Conservation Plan

We issued Larimer County a section 10 incidental take for an HCP on their Eagle's Nest Open Space (ENOS) property located in the Laramie Foothills region of Larimer County (Service 2004b). This permit covers the PMJM. The ENOS encompasses 755 ac (306 ha) of rolling foothills and steep slopes and includes 1.0 mi (1.6 km) of the North Fork of the Poudre River. There are approximately 264 ac (107 ha) of PMJM habitat on the ENOS HCP. Less than 3 ac (1 ha) can be permanently affected by a river access area and trail under the ENOS HCP.

This area is protected as open space by the Larimer County Open Lands program. The protection and enhancement of wildlife habitat is one of the primary goals on ENOS. The majority of the riparian zone will be managed for PMJM conservation. Habitat restoration and enhancement will be employed to offset impacts to PMJM habitat at a minimum ratio of 1.5:1. The ENOS HCP includes proposed critical habitat in Unit 1.

Denver Water Habitat Conservation Plan

On May 1, 2003, we issued a section 10 incidental take permit to Denver Water for their HCP (Service 2003b). This permit covers the PMJM. Denver Water owns various properties (including easements), facilities, and infrastructure within the PMJM's range. The Denver Water HCP covers the water facilities and infrastructure owned and operated by Denver Water including: the Foothills, Marston, and Moffat treatment plants; 17 pump stations; 29 treated water storage reservoirs; and 2,464 mi (3,968 km) of pipe. The permit area includes approximately 6,000 ac (2,700 ha) of occupied and potential PMJM habitat on Denver Water properties in Boulder, Jefferson, and Douglas Counties. The HCP promotes implementation of applicable best management practices to benefit the PMJM that avoid, minimize, and eliminate impacts to occupied and potential PMJM habitat. Where impacts occur, Denver Water conducts mitigation as required in the HCP. Denver Water is authorized to take up to 25 ac (10 ha) of occupied and potential habitat through impacts from the covered activities at any one time with a maximum of 75 ac (30 ha) total disturbed over the 30-year term of the HCP. The Denver Water HCP includes

proposed critical habitat within Units 5, 6, 9, and 10.

Struther's Ranch Habitat Conservation Plan

We issued a section 10 incidental take permit for the Struthers Ranch residential development consistent with the Struther's Ranch HCP on December 12, 2003 (Service 2003c). This permit covers the PMJM. The site supported approximately 49 ac (20 ha) of PMJM habitat. Approximately 35.5 ac (14.4 ha) of undeveloped land along Black Forest Creek was withdrawn from cattle grazing, returned to a more natural condition, and is maintained as a preserve with conservation measures to restore and enhance vegetation for wildlife.

Flooding has heavily impacted the middle and upper portions of Black Forest Creek. A 1999 flood event inundated the middle fork and deposited a large amount of sand and silt downstream. The HCP is designed to minimize the possibility of future severe flooding events, substantially improve remaining PMJM habitat, and minimize any adverse effects resulting from developed areas nearby. Lands preserved as PMJM habitat are deed-restricted and managed for the PMJM. The deed restriction prohibits any activities that would adversely impact PMJM habitat. The Struther's Ranch HCP includes portions of proposed critical habitat Unit 11.

Other Habitat Conservation Plans

On November 19, 2002, we approved an HCP, and we issued a section 10 incidental take permit covering the PMJM for a single family residence on the Lefever Property in Black Forest, El Paso County (Service 2002b). Under the HCP, 0.561 ac (0.252 ha) of PMJM habitat was permitted to be disturbed and 4.515 ac (1.828 ha) of the property was placed in a conservation easement and deeded to El Paso County to be managed according to specific requirements laid out in the HCP. The permit expires November 19, 2012. The Lefever Property is within proposed critical habitat Unit 11.

On July 23, 2002, we approved an HCP, and we issued a section 10 incidental take permit covering the PMJM for a single family residence on the Dahl Property, Thunderbird Estates, in Colorado Springs, El Paso County (Service 2002c). Under the HCP, 0.15 ac (0.06 ha) of upland PMJM habitat was permitted to be disturbed and 0.5 ac (0.2 ha) of the property was preserved in a native and unmowed condition and enhanced through weed control and *Salix* planting. The take permit expired July 29, 2007; however, preservation of PMJM habitat continues in perpetuity. The Dahl Property is within proposed critical habitat Unit 11.

Proposed El Paso County Habitat Conservation Plan

El Paso County, in coordination with the Service, is developing a countywide HCP for the PMJM. We have no assurance as to if, when, or in what form this HCP will be completed and approved, or an incidental take permit under section 10 issued. Any countywide plan would likely cover most or all of the area in proposed critical habitat

Unit 11.

Other Properties

For the following properties, currently proposed as critical habitat, we invite comment regarding potential exclusion from revised critical habitat under section 4(b)(2) of the Act.

Rocky Flats National Wildlife Refuge

Rocky Flats NWR is located in Jefferson County and covers approximately 6,262 ac (2,534 ha), of which approximately 5,900 ac (2,388 ha) forms an undeveloped buffer zone around a central formerly industrialized portion. The site was a nuclear industrial facility for the DOE between 1951 and the end of the Cold War. Buildings and other structures at the site have been decommissioned and demolished, and the disturbed areas have been or are undergoing restoration. A programmatic section 7 consultation on cleanup activities was completed by the Service in 2004 (Service 2004c). This consultation addressed removal of manmade structures in and adjacent to PMJM habitat. The site became the Rocky Flats NWR in 2005.

The final Rocky Flats NWR Comprehensive Conservation Plan (CCP) was announced in the **Federal Register** on April 18, 2005 (70 FR 20164). The CCP outlines the management direction and strategies for NWR operations, habitat restoration, and

visitor services for a period of 15 years. The CCP provides a vision for the NWR; guidance for management decisions; and the goals, objectives, and strategies to achieve the NWR's vision and purpose. One objective of the CCP is to protect, maintain, and improve approximately 1,000 ac (400 ha) of PMJM habitat on the NWR. All of proposed critical habitat Unit 6 is within Rocky Flats NWR.

Proposed Expansion of the Milton Seaman Reservoir

Portions of critical habitat Unit 1 are within the footprint of the planned expansion area of Milton Seaman Reservoir along the North Fork of the Cache la Poudre River in Larimer County. Expansion under the existing plan would inundate 2.96 mi (4.77 km) within critical habitat designated on June 23, 2003 (68 FR 37275), that also is included in this revised proposal. The proposed reservoir expansion is not planned until about 2029. The City of Greeley, in a letter dated May 20, 2009, outlined its concerns regarding designation of critical habitat in this area and requested exclusion of the area under section 4(2)(b) of the Act (Kolanz, *in litt.*, 2009). The letter contended that the area in question is not essential to the conservation of the species and that designation would create significant financial burden on the City of Greeley. In addition, the letter cited Federal and local cooperation in the development of water resources in the drainage, that impacts from inundation would be offset by mitigation, and that reservoir expansion would not result in extinction of the PMJM.

Economic Analysis

We conducted an analysis of the potential economic impacts of designating critical habitat for the PMJM in 2003 when we designated critical habitat (68 FR 37275; June 23, 2003). We will update that analysis with any new information that may be available in addition to considering the economic impacts on lands that are proposed in this revision but that were not previously proposed. We will announce the availability of the draft economic analysis as soon as it is completed, at which time we will seek public review and comment. At that time, copies of the draft economic analysis will be available on the Internet at *www.regulations.gov*, on the Internet at *http://www.fws.gov/mountain-prairie/species/mammals/Preble/*, or by contacting the Colorado Ecological Services Office directly (see **FOR FURTHER INFORMATION CONTACT**).

Peer Review

In accordance with our joint policy published in the **Federal Register** on July 1, 1994 (59 FR 34270), we will be obtaining the expert opinions of at least three appropriate independent specialists regarding this proposed rule. The purpose of peer review is to ensure that our proposed designation of revised critical habitat is based on scientifically sound data, assumptions, and analyses. We will invite these peer reviewers to comment during this public comment period on our specific assumptions and conclusions in this proposed designation.

Public Hearings

The Act provides for one or more public hearings on this proposal if we receive any requests for hearings. We must receive your request for a public hearing within 45 days after the date of this **Federal Register** publication. Send your request to the mailing address listed in the **FOR FURTHER INFORMATION CONTACT** section. We will schedule public hearings on this proposal, if any are requested, and announce the dates, times, and places of those hearings, as well as how to obtain reasonable accommodations, in the **Federal Register** and local newspapers at least 15 days before the first hearing.

Required Determinations

Regulatory Planning and Review - Executive Order 12866

The Office of Management and Budget (OMB) has determined that this rule is not significant and has not reviewed this proposed rule under E.O. 12866. The OMB bases its determination upon the following four criteria:

(1) Whether the rule will have an annual effect of \$100 million or more on the economy or adversely affect an economic sector, productivity, jobs, the environment, or other units of the government.

(2) Whether the rule will create inconsistencies with other Federal agencies' actions.

(3) Whether the rule will materially affect entitlements, grants, user fees, loan programs, or the rights and obligations of their recipients.

(4) Whether the rule raises novel legal or policy issues.

Regulatory Flexibility Act

Under the Regulatory Flexibility Act (RFA) (5 U.S.C. 601 *et seq.*), as amended by the Small Business Regulatory Enforcement Fairness Act (SBREFA) of 1996), whenever an agency must publish a notice of rulemaking for any proposed or final rule, it must prepare and make available for public comment a regulatory flexibility analysis that describes the effect of the rule on small entities (i.e., small businesses, small organizations, and small government jurisdictions). However, no regulatory flexibility analysis is required if the head of an agency certifies the rule will not have a significant economic impact on a substantial number of small entities. The SBREFA amended the RFA to require Federal agencies to provide a statement of factual basis for certifying that the rule will not have a significant economic impact on a substantial number of small entities.

We conducted a draft analysis of the economic impacts for our previous proposed critical habitat designation and made it available to the public on January 28, 2003 (68 FR 4160). We issued an addendum to the economic analysis on June 3, 2003 (Service 2003d). The costs associated with critical habitat for the PMJM, across the entire area considered for designation (areas later designated or excluded), were primarily a result of the potential effect of critical habitat on residential development (almost 80 percent), followed by transportation, and other activities, including agriculture (Service 2003d, pp.

1-2). We estimated the economic impact to be between \$79 and \$183 million over the next 10 years (Service 2003d, p. 1). We presented an analysis of the effects of critical habitat on small business and certified that the designation would not have a significant effect on a substantial number of small entities in our June 23, 2003, designation of critical habitat (68 FR 37275).

While we do not believe our revised designation, as proposed in this document, would result in a significant impact on a substantial number of small business entities based on the previous designation, we are initiating new analyses to more thoroughly evaluate potential economic impacts of this revision to critical habitat. Therefore, we defer the RFA finding until completion of the draft economic analysis prepared under section 4(b)(2) of the Act and E.O. 12866. The draft economic analysis will provide the required factual basis for the RFA finding. Upon completion of the draft economic analysis, we will announce its availability in the **Federal Register** and reopen the public comment period for the proposed revised designation. We will include with this announcement, as appropriate, an initial regulatory flexibility analysis or a certification that the rule will not have a significant economic impact on a substantial number of small entities accompanied by the factual basis for that determination. We conclude that deferring the RFA finding until completion of the draft economic analysis is necessary to meet the purposes and requirements of the RFA. Deferring the RFA finding in this manner will ensure that we make a sufficiently informed determination based on adequate economic information and provide the necessary opportunity for public comment.

Unfunded Mandates Reform Act

In accordance with the Unfunded Mandates Reform Act, we make the following findings:

(1) This rule would not produce a Federal mandate. In general, a Federal mandate is a provision in legislation, statute, or regulation that would impose an enforceable duty upon State, local, or tribal governments, or the private sector, and includes both “Federal intergovernmental mandates” and “Federal private sector mandates.” These terms are defined in 2 U.S.C. 658(5) – (7). “Federal intergovernmental mandate” includes a regulation that “would impose an enforceable duty upon State, local, or tribal governments,” with two exceptions. It excludes “a condition of Federal assistance.” It also excludes “a duty arising from participation in a voluntary Federal program,” unless the regulation “relates to a then-existing Federal program under which \$500,000,000 or more is provided annually to State, local, and tribal governments under entitlement authority,” if the provision would “increase the stringency of conditions of assistance” or “place caps upon, or otherwise decrease, the Federal Government’s responsibility to provide funding,” and the State, local, or tribal governments “lack authority” to adjust accordingly. At the time of enactment, these entitlement programs were: Medicaid; AFDC work programs; Child Nutrition; Food Stamps; Social Services Block Grants; Vocational Rehabilitation State Grants; Foster Care, Adoption Assistance, and Independent Living; Family Support Welfare Services; and Child Support Enforcement.

“Federal private sector mandate” includes a regulation that “would impose an enforceable duty upon the private sector, except (i) a condition of Federal assistance or (ii) a duty arising from participation in a voluntary Federal program.”

The designation of critical habitat does not impose a legally binding duty on non-Federal government entities or private parties. Under the Act, the only regulatory effect is that Federal agencies must ensure that their actions do not destroy or adversely modify critical habitat under section 7. While non-Federal entities that receive Federal funding, assistance, permits, or otherwise require approval or authorization from a Federal agency for an action may be indirectly impacted by the designation of critical habitat, the legally binding duty to avoid destruction or adverse modification of critical habitat rests squarely on the Federal agency. Furthermore, to the extent that non-Federal entities are indirectly impacted because they receive Federal assistance or participate in a voluntary Federal aid program, the Unfunded Mandates Reform Act would not apply, nor would critical habitat shift the costs of the large entitlement programs listed above onto State governments.

(2) Based in part on an analysis conducted for the 2003 designation of critical habitat and extrapolated to this proposed revised designation, we do not expect this rule to significantly or uniquely affect small governments. Small governments would be affected only to the extent that any programs having Federal funds, permits, or other authorized activities must ensure that their actions will not adversely affect the critical habitat. Therefore, a Small Government Agency Plan is not required. However, as we conduct our economic analysis for the revised rule, we will further evaluate this issue and

revise this assessment if appropriate.

Takings – Executive Order 12630

In accordance with E.O. 12630 (Government Actions and Interference with Constitutionally Protected Private Property Rights), we have analyzed the potential takings implications of designating revised critical habitat for the PMJM in a takings implications assessment. The takings implications assessment concludes that this proposed designation of revised critical habitat for the PMJM does not pose significant takings implications for lands within or affected by the proposed designation.

Federalism – Executive Order 13132

In accordance with E.O. 13132, this proposed rule does not have significant Federalism effects. A Federalism assessment is not required. In keeping with Department of the Interior and Department of Commerce policy, we requested information from, and coordinated development of, our 2003 critical habitat designation with appropriate State resource agencies in Colorado and Wyoming. We used the information gathered in that coordination effort in this revised proposal. We believe that the designation of revised critical habitat for the PMJM would have little incremental impact on State and local governments and their activities. The designation of critical habitat in areas currently occupied by the PMJM imposes no additional restrictions to those currently in place and, therefore, has little incremental impact on State and local

governments and their activities. The designation may have some benefit to these governments because the areas that contain the physical and biological features essential to the conservation of the species are more clearly defined, and the PCEs necessary to support the life processes of the species are specifically identified. This information does not alter where and what federally sponsored activities may occur. However, it may assist local governments in long-range planning (rather than having them wait for case-by-case consultations under section 7 of the Act to occur).

Civil Justice Reform – Executive Order 12988

In accordance with E.O. 12988, (Civil Justice Reform), the Office of the Solicitor has determined that the rule does not unduly burden the judicial system and that it meets the requirements of sections 3(a) and 3(b)(2) of the Order. We propose designating revised critical habitat in accordance with the provisions of the Act. This proposed rule uses standard property descriptions and identifies the physical and biological features essential to the conservation of the species within the designated areas to assist the public in understanding the habitat needs of the PMJM.

Paperwork Reduction Act of 1995

This rule does not contain any new collections of information that require approval by OMB under the Paperwork Reduction Act of 1995 (44 U.S.C. 3501 *et seq.*). This rule will not impose recordkeeping or reporting requirements on State or local

governments, individuals, businesses, or organizations. An agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a currently valid OMB control number.

National Environmental Policy Act

It is our position that, outside the jurisdiction of the Circuit Court of the United States for the Tenth Circuit, we do not need to prepare environmental analyses as defined by NEPA (42 U.S.C. 4321 *et seq.*) in connection with designating critical habitat under the Act. We published a notice outlining our reasons for this determination in the **Federal Register** on October 25, 1983 (48 FR 49244). This position was upheld by the Circuit Court of the United States for the Ninth Circuit (*Douglas County v. Babbitt*, 48 F.3d 1495 (9th Cir. Ore. 1995), cert. denied 516 U.S. 1042 (1996)). However, when the range of the species includes States within the tenth circuit, such as that of the PMJM, under the tenth circuit ruling in *Catron County Board of Commissioners v. U.S. Fish and Wildlife Service*, 75 F.3d 1429 (10th Cir. 1996), we will undertake a NEPA analysis for revised critical habitat designation and notify the public of the availability of a NEPA document for this proposal.

Clarity of the Rule

We are required by E.O. 12866 and E.O. 12988 and by the Presidential Memorandum of June 1, 1998, to write all rules in plain language. This means that each rule we publish must:

- (a) Be logically organized;
- (b) Use the active voice to address readers directly;
- (c) Use clear language rather than jargon;
- (d) Be divided into short sections and sentences; and
- (e) Use lists and tables wherever possible.

If you feel that we have not met these requirements, send us comments by one of the methods listed in the **ADDRESSES** section. To better help us revise the rule, your comments should be as specific as possible. For example, you should tell us the numbers of the sections or paragraphs that are unclearly written, which sections or sentences are too long, the sections where you feel lists or tables would be useful, etc.

Government-to-Government Relationship with Tribes

In accordance with the President's memorandum of April 29, 1994, Government-to-Government Relations with Native American Tribal Governments (59 FR 22951), E.O. 13175, the Department of the Interior's manual at 512 DM 2, and Secretarial Order 3206, we readily acknowledge our responsibility to communicate meaningfully with recognized Federal tribes on a government-to-government basis. In accordance with Secretarial Order 3206 of June 5, 1997 (American Indian Tribal Rights, Federal-Tribal

Trust Responsibilities, and the Endangered Species Act), we readily acknowledge our responsibilities to work directly with tribes in developing programs for healthy ecosystems, to acknowledge that tribal lands are not subject to the same controls as Federal public lands, to remain sensitive to Indian culture, and to make information available to tribes. Tribal lands in Colorado are not included in this proposed designation, and the PMJM is not believed to exist on or near tribal lands.

Energy Supply, Distribution, or Use – Executive Order 13211

On May 18, 2001, the President issued E.O. 13211 (Actions Concerning Regulations That Significantly Affect Energy Supply, Distribution, or Use) on regulations that significantly affect energy supply, distribution, and use. The E.O. 13211 requires agencies to prepare Statements of Energy Effects when undertaking certain actions. We do not expect this proposed rule to significantly affect energy supplies, distribution, or use based on the economic analysis we completed for the July 17, 2002, proposed PMJM critical habitat rule (67 FR 47154). Therefore, this action is not a significant energy action, and no Statement of Energy Effects is required. However, we will further evaluate this issue as we conduct our economic analysis, and review and revise this assessment as warranted.

References Cited

A complete list of all references cited in this rulemaking is available online at

<http://www.fws.gov/mountain-prairie/species/mammals/Preble/>, or upon request from the Field Supervisor, Colorado Ecological Services Office (see **FOR FURTHER INFORMATION CONTACT** section).

Author(s)

The primary author(s) of this package are the staff members of the Colorado Ecological Services Office.

List of Subjects in 50 CFR Part 17

Endangered and threatened species, Exports, Imports, Reporting and recordkeeping requirements, Transportation.

Proposed Regulation Promulgation

Accordingly, for the reasons we have stated in the preamble, we propose to amend part 17, subchapter B of chapter I, title 50 of the Code of Federal Regulations as set forth below:

PART 17—[AMENDED]

1. The authority citation for part 17 continues to read as follows:

Authority: 16 U.S.C. 1361-1407; 16 U.S.C. 1531-1544; 16 U.S.C. 4201-4245;
Pub. L. 99-625, 100 Stat. 3500; unless otherwise noted.

2. In § 17.95(a), revise the entry for “Preble’s Meadow Jumping Mouse (*Zapus hudsonius preblei*)” to read as follows:

§ 17.95 Critical habitat—fish and wildlife.

(a) *Mammals.*

* * * * *

Preble’s Meadow Jumping Mouse (*Zapus hudsonius preblei*)

(1) Critical habitat units are depicted for Colorado. Maps and descriptions follow.

(2) The primary constituent elements of critical habitat for the Preble’s meadow jumping mouse are:

(i) Riparian corridors:

(A) Formed and maintained by normal, dynamic, geomorphological, and hydrological processes that create and maintain river and stream channels, floodplains, and floodplain benches and promote patterns of vegetation favorable to the Preble’s meadow jumping mouse;

(B) Containing dense, riparian vegetation consisting of grasses, forbs, or shrubs, or any combination thereof, in areas along rivers and streams that normally provide open water through the Preble's meadow jumping mouse's active season; and

(C) Including specific movement corridors that provide connectivity between and within populations. This may include river and stream reaches with minimal vegetative cover or that are armored for erosion control; travel ways beneath bridges, through culverts, along canals and ditches; and other areas that have experienced substantial human alteration or disturbance; and

(ii) Additional adjacent floodplain and upland habitat with limited human disturbance (including hayed fields, grazed pasture, other agricultural lands that are not plowed or disked regularly, areas that have been restored after past aggregate extraction, areas supporting recreational trails, and urban-wildland interfaces).

(3) Existing features and structures within the boundaries of the mapped units, such as buildings, roads, parking lots, other paved areas, lawns, other urban and suburban landscaped areas, regularly plowed or disked agricultural areas, and other features not containing any of the PCEs are not considered critical habitat.

(4) *Note:* Index map of critical habitat for the Preble's meadow jumping mouse follows:

[insert index map]

(5) Map Unit 1: North Fork Cache la Poudre River, Larimer County, Colorado.

(i) This unit consists of 88.3 mi (142.1 km) of streams and rivers. North Fork Cache la Poudre River from Seaman Reservoir (40 43 7N 105 14 32W, T.9N., R.70W., Sec. 28) upstream to Halligan Reservoir spillway (40 52 44N 105 20 15W, T.11N., R.71W., Sec. 34). Includes Lone Pine Creek from its confluence North Fork Cache la Poudre River (40 47 54N 105 15 30W, T.10N., R.70W., Sec. 32) upstream and continuing upstream into North Lone Pine Creek to 7,600 ft (2,317 m) elevation (40 49 58N 105 34 09W, T.10N., R.73W., Sec. 15). Includes Columbine Canyon from its confluence with North Lone Pine Creek (40 49 47N 105 33 31W, T.10N., R.73W., Sec. 15) upstream to 7,600 ft (2,317 m) elevation (40 49 32N 105 33 58W, T.10N., R.73W., Sec. 15). Also includes Stonewall Creek from its confluence with North Fork Cache la Poudre River (40 48 19N 105 15 21W, T.10N., R.70W., Sec. 29) upstream to (40 53 26N 105 15 40W, T.11N., R.70W., Sec. 29). Includes Tenmile Creek from its confluence with Stonewall Creek (40 51 49N 105 15 32W, T.10N., R.70W., Sec. 5) upstream to Red Mountain Road (40 53 00N 105 16 09W, T.11N., R.70W., Sec. 31). Also includes Rabbit Creek from its confluence with North Fork Cache la Poudre River (40 48 30N 105 16 07W, T.10N., R.70W., Sec. 30) upstream to the confluence with North and Middle Forks of Rabbit Creek (40 49 34N 105 20 49W, T.10N., R.71W., Sec. 21). Also includes South Fork Rabbit Creek from its confluence with Rabbit Creek (40 48 39N 105 19 45W, T.10N., R.71W., Sec. 27) upstream to (40 49 39N 105 24 40W, T.10N., R.72W., north boundary Sec. 24). Includes an unnamed tributary from its confluence with South Fork Rabbit Creek (40 47 28N 105 20 47W, T.10N., R.71W., Sec. 33) upstream to (40 47 28N 105 23 12W, T.10N., R.71W., Sec. 31). Which in turn has an unnamed tributary from

their confluence at (40 47 17N 105 21 48W, T.10N., R.71W., east boundary Sec. 32) upstream to (40 46 55N 105 22 16W, T.9N., R.71W., Sec. 5). Also includes Middle Fork Rabbit Creek from its confluence with Rabbit Creek (40 49 34N 105 20 49W, T.10N., R.71W., Sec. 21) upstream to 7,600 ft (2,317 m) elevation (40 49 46N 105 26 59W, T.10N., R.72W., Sec. 15). This includes an unnamed tributary from its confluence with Middle Fork Rabbit Creek (40 49 56N 105 25 51W, T.10N., R.72W., Sec. 14) upstream to 7,600 ft (2,317 m) elevation (40 48 48N 105 26 29W, T.10N., R.72W., Sec. 23). This unit includes North Fork Rabbit Creek from its confluence with Rabbit Creek (40 49 34N 105 20 49W, T.10N., R.71W., Sec. 21) upstream to 7,600 ft (2,317 m) elevation (40 49 38N 105 29 19W, T.10N., R.72W., Sec. 17). Includes an unnamed tributary from its confluence with North Fork Rabbit Creek (40 50 45N 105 27 44W, T.10N., R.72W., Sec. 9) upstream to 7,600 ft (2,317 m) elevation (40 50 57N 105 28 46W, T.10N., R.72W., Sec. 9).

(ii) *Note:* Map of Unit 1 follows:

[insert map, Unit 1]

(6) Map Unit 2: Cache la Poudre River, Larimer County, Colorado.

(i) This unit consists of 50.6 mi (81.5 km) of streams and rivers. Cache la Poudre River from Poudre Park (40 41 16N 10 18 2W, T.8N., R.71W., Sec. 2) upstream to (40 42 02N 105 34 04W, T.9N., R.73W., west boundary Sec. 34). Includes Hewlett Gulch from its confluence with Cache la Poudre River (40 41 16N 105 18 24W, T.8N., R.71W., Sec. 2) upstream to the boundary of Arapahoe-Roosevelt National Forest (40 43 29N 105 18 51W, T.9N., R.71W., Sec. 23). Also includes Young Gulch from its confluence with Cache la Poudre River (40 41 25N 105 20 57W, T.8N., R.71W., Sec. 4) upstream to (40 39 14N 105 20 13W, T.8N., R.71W., south boundary Sec. 15). Also includes an unnamed tributary from its confluence with Cache la Poudre River at Stove Prairie Landing (40 40 58N 105 23 23W, T.8N., R.71W., Sec. 6) upstream to (40 39 31N 105 22 34W, T.8N., R.71W., Sec. 17). Includes Skin Gulch from its confluence with the aforementioned unnamed tributary at (40 40 33N 105 23 16W, T.8N., R.71W., Sec. 7) upstream to (40 39 40N 105 24 16W, T.8N., R.72W., Sec. 13). Unit 2 also includes Poverty Gulch from its confluence with Cache la Poudre River (40 40 28N 105 25 44W, T.8N., R.72W., Sec. 11) upstream to 7,600 ft (2,317 m) elevation (40 39 01N 105 26 40W, T.8N., R.72W., Sec. 22). Also includes Elkhorn Creek from its confluence with Cache la Poudre River (40 41 50N 105 26 24W, T.9N., R.72W., Sec. 34) upstream to (40 44 03N 105 27 34W, T.9N., R.72W., Sec. 21). Also includes South Fork Cache la Poudre River from its confluence with Cache la Poudre River (40 41 11N 105 26 50W, T.8N., R.72W., Sec. 3) upstream to 7,600 ft (2,317 m) elevation (40 38 48N 105 29 22W, T.8N., R.72W., Sec. 20). Includes Pendergrass Creek from its confluence with South Fork Cache la Poudre River (40 39 56N 105 27 30W, T.8N., R.72W., Sec. 15) upstream

to 7,600 ft (2,317 m) elevation (40 38 34N 105 27 28W, T.8N., R.72W., Sec. 22). Also included in the unit is Bennett Creek from its confluence with Cache la Poudre River (40 40 26N 105 28 41W, T.8N., R.72W., Sec. 9) upstream to 7,600 ft (2,317 m) elevation (40 39 19N 105 31 29W, T.8N., R.73W., Sec. 13).

(ii) *Note:* Map of Unit 2 follows:

[insert map, Unit 2]

(7) Map Unit 3: Buckhorn Creek, Larimer County, Colorado.

(i) This unit consists of 45.5 mi (73.2 km) of streams. Buckhorn Creek from (40 30 20N 105 13 39W, T.6N., R.70W., east boundary Sec. 9) upstream to 7,600 ft (2,317 m) elevation (40 34 17N 105 25 31W, T.7N., R.72W., Sec. 14). Includes Little Bear Gulch from its confluence with Buckhorn Creek (40 31 17N 105 15 33W, T.6N., R.70W., Sec. 5) upstream to (40 30 43N 105 16 35W, T.6N., R.70W., Sec. 6). Also includes Bear Gulch from its confluence with Buckhorn Creek (40 31 16N 105 15 52W, T.6N., R.70W., Sec. 5) upstream to 7,600 ft (2,317 m) elevation (40 29 45N 105 20 4W, T.6N., R.71W., Sec. 10). Also includes Stringtown Gulch from its confluence with Buckhorn Creek (40 32 21N 105 16 42W, T.7N., R.70W., Sec. 30) upstream to 7,600 ft (2,317 m) elevation (40 30 30N 105 20 50W, T.6N., R.71W., Sec. 4). Also includes Fish Creek from its confluence with Buckhorn Creek (40 32 48N 105 18 20W, T.7N., R.70W., Sec. 30) upstream to 7,600 ft (2,317 m) elevation (40 30 56N 105 21 20W, T.6N., R.71W., Sec. 4). Includes North Fork Fish Creek from its confluence with Fish Creek (40 32 48N 105 18 20W, T.7N., R.71W., west boundary Sec. 25) upstream and following the first unnamed tributary northwest to (40 33 34N 105 19 45W, T.7N., R.71W., Sec. 22). Also includes Stove Prairie Creek from its confluence with Buckhorn Creek (40 34 16N 105 19 48W, T.7N., R.71W., Sec. 15) upstream to the dirt road crossing at (40 35 22N 105 20 17W, T.7N., R.71W., Sec. 10). Also includes Sheep Creek from its confluence with Buckhorn Creek (40 34 15N 105 20 53W, T.7N., R.71W., Sec. 16) upstream to 7,600 ft (2,317 m) elevation (40 33 08N 105 21 47W, T.7N., R.71W., Sec. 20). Also includes Twin Cabin Gulch from its confluence with Buckhorn Creek (40 34 38N 105 23 13W, T.7N., R.71W., Sec. 18) upstream to 7,600 ft (2,317 m) elevation (40

35 45N 105 23 36W, T.7N., R.71W., Sec. 6).

(ii) *Note:* Map of Units 3 and 4 follows:

[insert map, Units 3 and 4]

(8) Unit 4: Cedar Creek, Larimer County, Colorado.

(i) This unit consists of 7.5 mi (12.1 km) of streams. Cedar Creek from the boundary of Federal land (40 26 46N 105 16 17W, T.6N., R.70W., Sec. 31) upstream to the boundary of Federal land (40 28 15N 105 18 11W, T.6N., R.71W., Sec. 24). Includes Dry Creek from its confluence with Cedar Creek (40 27 07N 105 16 16W, T.6N., R.70W., Sec. 30) upstream to the boundary of Federal land (40 28 52N 105 16 21W, T.6N., R.70W., Sec. 18). Also includes Jug Gulch from its confluence with Cedar Creek (40 28 15N 105 17 41W, T.6N., R.71W., Sec. 24) upstream to the boundary of Federal land (40 29 07N 105 18 28W, T.6N., R.71W., Sec. 14).

(ii) Note: Map of Unit 4 appears at paragraph (7)(ii) of this entry.

(9) Unit 5: South Boulder Creek, Boulder County, Colorado.

(i) This unit consists of 7.6 mi (12.2 km) of streams. Including South Boulder Creek from Baseline Road (40 0 0N 105 12 54W, T.1S., R.70W., Sec. 3) upstream to near Eldorado Springs, Colorado (39 56 7N 105 16 16W, T.1S., R.70W., Sec. 30). Also Spring Brook from the Community Ditch near Eldorado Springs (39 55 59N 105 16 10W, T.1S., R.70W., Sec. 30) upstream to South Boulder Diversion Canal (39 55 11N 105 16 12W, T.1S., R.70W., Sec. 31).

(ii) *Note*: Map of Units 5, 6, and 7 follows:

[insert map, Units 5, 6, and 7]

(10) Unit 6: Rocky Flats NWR and Ralston Creek, Jefferson County and Broomfield Counties, Colorado.

(i) This unit consists of three subunits including 12.5 mi (20.1 km) of streams as follows:

(A) Subunit Woman Creek from Indiana Street (39 52 40N 105 9 55W, T.2S., R.70W., east boundary Sec. 13) upstream to (39 53 3N 105 13 20W, T.2S., R.70W., west boundary Sec. 15). Includes unnamed tributary from confluence with Woman Creek (39 52 43N 105 10 11W, T.2S., R.70W., Sec. 13) upstream to (39 52 39N 105 12 11W, T.2S., R.70W., west boundary Sec. 14).

(B) Subunit Walnut Creek from Indiana Street (39 54 5N 105 9 55W, T.2S., R.70W., east boundary Sec. 1) upstream to (39 53 49N 105 11 59W, T.2S., R.70W., Sec. 11). Includes unnamed tributary from its confluence with Walnut Creek (39 54 6N 105 10 42W, T.2S., R.70W., Sec. 1) upstream to (39 53 35N 105 11 29W, T.2S., R.70W., Sec. 11).

(C) Subunit Rock Creek from State Highway 128 (39 54 53N 105 11 40W, T.1S., R.70W., Sec. 35) upstream to (39 54 17N 105 13 20W, T.2S., R.70W., west boundary Sec. 3). Includes an unnamed tributary from its confluence with Rock Creek (39 54 40N 105 12 11W, T.2S., R.70W., east boundary Sec. 3) upstream to (39 54 42 N 105 13 00W, T.2S., R.70W., Sec. 3). Also includes an unnamed tributary from its confluence with Rock Creek at (39 54 26N 105 12 34W, T.2S., R.70W., Sec. 3) upstream to (39 54 7N 105 12 52W, T.2S., R.70W., Sec. 3). Another unnamed tributary from its confluence with Rock Creek at (39 54 23N 105 12 56W, T.2S., R.70W., Sec. 3) upstream to (39 54 8N 105 13 20W, T.2S., R.70W., west boundary Sec. 3). Another unnamed tributary from

its confluence with Rock Creek at (39 54 15N 105 13 5W, T.2S., R.70W., Sec. 3) upstream to (39 54 08N 105 13 09W, T.2S., R.70W., Sec. 3).

(ii) Note: Map of Unit 6 appears at paragraph (9)(ii) of this entry.

(11) Unit 7: Ralston Creek, Jefferson County, Colorado.

(i) This unit consists of 8.7 mi (13.9 km) of streams. Ralston Creek from Ralston Reservoir (39 49 12N 105 15 35W, T.3S., R.70W., Sec. 6) upstream into Golden Gate Canyon State Park to 7,600 ft (2,300 m) elevation (39 50 53 105 21 16W, T.2S., R.71W., Sec. 29).

(ii) Note: Map of Unit 7 appears at paragraph (9)(ii) of this entry.

(12) Unit 8: Cherry Creek, Douglas County, Colorado.

(i) This unit consists of two subunits including 29.8 mi (47.9 km) of streams as follows:

(A) Subunit Lake Gulch including Cherry Creek from the northern boundary of Castlewood Canyon State Recreation Area (39 21 44N 104 45 39W, T.8S., R.66W., south boundary Sec. 10) upstream to the confluence with Lake Gulch (39 20 24N 104 45 36W, T.8S., R.66W., Sec. 23). Lake Gulch from the aforementioned confluence upstream to (39 15 37N 104 46 05W, T.9S., R.66W., south boundary Sec. 15). Includes Upper Lake Gulch from its confluence with Lake Gulch (39 17 24N 104 46 11W, T.9S., R.66W., Sec. 3) upstream to (39 13 24N 104 50 21W, T.9S., R.67W., mid-point Sec. 36).

(B) Subunit Antelope Creek including Antelope Creek from its confluence with West Cherry Creek (39 16 11N 104 42 49W, T.9S R.65W., S18) upstream to the Franktown Parker Reservoir (39 10 20N 104 46 16W, T.10S R.66W., S22). It also includes Haskel Creek from its confluence with Antelope Creek (39 13 43N, 104 45 5W,

T.9S R.66W., S35) upstream to the Haskel Creek Spring Pond at 7,000 ft (2,134 m)
elevation (39 11 60N 104 47 40N, T.10S R.66W., S8).

(ii) *Note:* Map of Unit 8 follows:

[insert map, Unit 8]

(13) Unit 9: West Plum Creek, Douglas County, Colorado.

(i) This unit consists of 93.9 mi (151.1 km) of streams. Plum Creek from Chatfield Lake (39 32 35N 105 03 07W, T.6S., R.68W., Sec. 7) upstream to its confluence with West Plum Creek and East Plum Creek (39 25 49N 104 58 8W, T.7S., R.68W., Sec. 23). West Plum Creek from the aforementioned confluence (39 25 49N 104 58 8W, T.7S., R.68W., Sec. 23) upstream to the boundary of Pike-San Isabel National Forest and 7,600 ft (2,317 m) elevation (39 13 07N 104 59 20W, T.9S., R.68W., Sec. 34). Includes Indian Creek from its confluence with Plum Creek (39 28 22N 104 59 57W, T.7S., R.68W., Sec. 4) upstream to Silver State Youth Camp (39 22 24N 105 05 13W, T.8S., R.69W., Sec. 11). Indian Creek includes an unnamed tributary from its confluence with Indian Creek at Pine Nook (39 23 01N 105 04 24W, T.8S., R.69W., Sec. 2) upstream to (39 22 10N 105 04 08W, T.8S., R.69W., Sec. 12). Also includes Jarre Creek from its confluence with Plum Creek (39 25 50N 104 58 15W, T.7S., R.68W., Sec. 23) upstream to 7,600 ft (2,317 m) elevation (39 21 50N 105 03 20W, T.8S., R.69W., Sec. 12). Jarre Creek includes an unnamed tributary from its confluence with Jarre Creek (39 22 58N 105 01 52W, T.8S., R.68W., Sec. 5) upstream to (39 22 44N 105 02 14W, T.8S., R.68W., Sec. 8). Also includes an unnamed tributary from its confluence with West Plum Creek (39 22 20N 104 57 39W, T.8S., R.68W., Sec. 11) upstream to (39 21 33N 104 55 29W, T.8S., R.67W., Sec.18). Unit 9 also includes Garber Creek from its confluence with Plum Creek (39 22 10N 104 57 49W, T.8S., R.68W., Sec. 11) upstream to its confluence with South Garber Creek and Middle Garber Creek (39 21 02N 105 02 13W, T.8S., R.68W., Sec. 18). Including South Garber Creek from its confluence with Garber Creek (39 21 02N 105 02 13W, T.8S., R.68W., Sec. 18) upstream to 7,600 ft

(2,317 m) elevation (39 19 14N 105 03 13W, T.8S., R.69W., Sec. 25). Including Middle Garber Creek from its confluence with Garber Creek (39 20 55N 105 02 35W, T.8S., R.68W., Sec. 18) upstream to (39 19 48N 105 04 09W, T.8S., R.69W., west boundary Sec. 25). Including North Garber Creek from its confluence with Middle Garber Creek (39 20 55N 105 02 35W, T.8S., R.68W., Sec. 18) upstream to 7,600 ft (2,317 m) elevation (39 20 47N 105 04 37W, T.8S., R.69W., Sec. 23). Includes Jackson Creek from its confluence with Plum Creek (39 21 02N 104 58 30W, T.8S., R.68W., Sec. 14) upstream to 7,600 ft (2,317 m) elevation (39 17 59N 105 03 57W, T.9S., R.69W., Sec. 1). Includes Spring Creek from its confluence with West Plum Creek at (39 19 04N 104 58 26W, T.8S., R.68W., Sec. 35) upstream to (39 15 21N 105 01 40W, T.9S., R.68W., Sec. 20). Including Dry Gulch from its confluence with Spring Creek (39 17 54N 104 59 58W, T.9S., R.68W., Sec. 4) upstream to 7,600 ft (2,317 m) elevation (39 16 07N 105 02 33W, T.9S., R.68W., Sec. 18). Including Bear Creek from its confluence with West Plum Creek (39 17 30N 104 58 25W, T.9S., R.68W., Sec. 2) upstream to 7,600 ft (2,317 m) elevation (39 13 57N 105 06 06W, T.9S., R.68W., Sec. 29). Including Gove Creek from its confluence with West Plum Creek (39 14 07N 104 57 42W, T.9S., R.68W., Sec. 26) upstream to 7,600 ft (2,317 m) elevation (39 11 50N 104 58 32W, T.10S., R.68W., Sec. 11). Includes Merz Canyon stream from its confluence with Gove Creek (39 13 05N 104 57 33W, T.9S., R.68W., Sec. 36) upstream to (39 12 39N 104 57 04 W, T.10S., R.68W., Sec.1). Includes Starr Canyon stream from its confluence with West Plum Creek (39 13 07N 104 58 41W, T.9S., R.68W., Sec. 35) upstream to 7,600 ft (2,317 m) elevation (39 12 32N 104 59 01W, T.10S., R.68W., Sec. 3).

(ii) *Note:* Map of Unit 9 follows:

[insert map, Unit 9]

(14) Unit 10: Upper South Platte River, Douglas, Jefferson, and Teller Counties, Colorado.

(i) This unit consists of four subunits including 35.2 mi (56.6 km) of rivers and streams as follows:

(A) Subunit South Platte River north segment, on the border of Jefferson County and Douglas County from Chatfield Lake (39 31 35N 105 04 49W, T.6S., R.69W., Sec. 14) upstream to the boundary of U.S. Army Corps of Engineers property (39 29 33N 105 05 15W, T.6S., R.69W., south boundary Sec. 26).

(B) Subunit Bear Creek, Douglas County from Pike–San Isabel National Forest boundary (39 25 27N 105 07 40W, T.7S., R.69W., west boundary Sec. 21) upstream to (39 22 32N 105 06 40W, T.8S., R.69W., south boundary Sec. 4). Includes West Bear Creek from its confluence with Bear Creek (39 25 15N 105 07 30W, T.7S., R.69W., Sec. 21) upstream to a confluence with an unnamed tributary (39 24 17N 105 07 38W, T.7S., R.69W., Sec. 33).

(C) Subunit South Platte River south segment, on the border of Jefferson County and Douglas County from Nighthawk (39 21 05N 105 10 23W, T.8S., R.70W., Sec. 13) upstream to (39 17 27N 105 12 24W, T.9S., R.70W., Sec. 3). Includes Sugar Creek, Douglas County from its confluence with South Platte River at Oxyoke (39 18 22N 105 11 47W, T.8S., R.70W., Sec. 35) upstream to 7,600 ft (2,317 m) elevation (39 18 28N 105 08 07W, T.8S., R.69W., Sec. 32). Includes Gunbarrel Creek, Jefferson County from its confluence with South Platte River at Oxyoke (39 18 22N 105 11 47W, T.8S., R.70W., Sec. 35) upstream to (39 18 41N 105 14 34W, T.8S., R.70W., Sec. 32).

(D) Subunit Trout Creek, Douglas County upstream into Teller County from (39

13 02N 105 09 31W, T.9S., R.69W., Sec. 31) upstream to 7,600 ft (2,317 m) elevation which is 0.8 mi (1.3 km) into Teller County (39 07 13N 105 05 49W, T.11S., R.69W., Sec. 3). Includes Eagle Creek from its confluence with Trout Creek (39 11 52N 105 08 27W, T.10S., R.69W., Sec. 8) upstream to 7,600 ft (2,317 m) elevation (39 12 06N 105 07 12W, T.10S., R.69W., Sec. 9). Also including an unnamed tributary from its confluence with Trout Creek (39 11 07N 105 08 05W, T.10S., R.69W., Sec. 17) upstream to (39 10 18N 105 08 23W, T.10S., R.69W., Sec. 20). Also including Long Hollow from its confluence with Trout Creek (39 10 56N 105 08 01W, T.10S., R.69W., Sec. 17) upstream to 7,600 ft (2,317 m) elevation (39 11 30N 105 06 19W, T.10S., R.69W., Sec. 10).

(ii) *Note:* Map of Unit 10 follows:

[insert map, Unit 10]

(15) Unit 11: Monument Creek, El Paso County, Colorado.

(i) This unit consists of 38.6 mi (62.0 km) of streams. Monument Creek from its confluence with Cottonwood Creek (38 55 36N 104 48 55W, T.13S., R.66W., Sec. 7) upstream to the southern property boundary of the U.S. Air Force Academy (38 57 08N 104 49 49W, T.13S., R.66W., Sec. 6). Then Monument Creek from the northern property boundary of the U.S. Air Force Academy (39 02 31N 104 51 05W, T.12S., R.67W., north boundary Sec. 2) upstream to Monument Lake (39 05 19N 104 52 43W, T.11S., R.67W., Sec. 15). Includes Kettle Creek from the property boundary of the U.S. Air Force Academy (38 58 33N 104 47 55W, T.12S., R.66W., Sec. 29) upstream to its intersection with a road at (39 00 07N 104 45 24W, T.12S., R.66W., east boundary Sec. 15). Which includes an unnamed tributary from its confluence with Kettle Creek (38 59 06N 104 46 55W, T.12S., R.66W., Sec. 21) upstream to (38 59 14N 104 46 19W, T.12S., R.66W., Sec. 22). Also includes Black Squirrel Creek from the property boundary of the U.S. Air Force Academy (39 00 06N 104 49 00W, T.12S., R.66W., Sec. 18) upstream to (39 02 30N 104 44 38W, T.12S., R.66W., north boundary Sec. 2). Including an unnamed tributary from its confluence with Black Squirrel Creek (39 01 19N 104 46 21W, T.12S., R.66W., Sec. 10) upstream to (39 02 30N 104 45 42W, T.12S., R.66W., north boundary Sec. 3). Which includes another unnamed tributary from (39 01 50N 104 46 20W, T.12S., R.66W., Sec. 3) upstream to (39 02 30N 104 46 03W, T.12S., R.66W., north boundary Sec. 3). Also includes an unnamed tributary from the property boundary of the U.S. Air Force Academy (39 00 14N 104 49 3W, T.12S., R.66W., Sec. 18) upstream to 6,700 ft (2,043 m) elevation (39 0 29N 104 48 24W, T.12S., R.66W., Sec. 17). Including an unnamed tributary from (39 0 19N 104 48 55W, T. 12S., R.66W., Sec. 18) upstream to

(39 0 30N 104 48 48N, T. 12S., R.66W., Sec. 18). Unit 11 also includes Monument Branch from the property boundary of the U.S. Air Force Academy (39 00 50N 104 49 24W, T.12S., R.66W., Sec. 7) upstream to (39 01 10N 104 48 45W, T.12S., R.66W., east boundary Sec. 7). Also includes Smith Creek from the property boundary of the U.S. Air Force Academy (39 01 36N 104 49 46W, T.12S., R.66W., Sec. 7) upstream to (39 02 24N 104 48 00W, T.12S., R.66W., Sec. 5). Also includes an unnamed tributary from the property boundary of the U.S. Air Force Academy (39 02 30N 104 50 23W, T.12S., R.67W., Sec. 1) upstream to 6,800 ft (2,230 m) elevation (39 02 45N 104 49 57W, T.11S., R.67W., Sec. 36). Also includes Jackson Creek from its confluence with Monument Creek (39 02 33N 104 51 13W, T.11S., R.67W., Sec. 35) upstream to (39 04 30N 104 49 10W, T.11S., R.66W., Sec. 19). Includes an unnamed tributary from its confluence with Jackson Creek (39 04 12N 104 50 05W, T.11S., R.67W., Sec. 25) upstream to Higby Road (39 04 42N 104 49 40W, T.11S., R.66W., Sec. 19). Also includes Beaver Creek from its confluence with Monument Creek (39 02 52N 104 52 02W, T.11S., R.67W., Sec. 35) upstream to 7,600 ft (2,317 m) elevation (39 03 08N 104 55 32W, T.11S., R.67W., Sec. 31). Also includes Teachout Creek from its confluence with Monument Creek (39 03 44N 104 51 53W, T.11S., R.67W., Sec. 26) upstream to Interstate 25 (39 04 19N 104 51 29W, T.11S., R.67W., Sec. 23). Also includes Dirty Woman Creek from its confluence with Monument Creek (39 04 55N 104 52 35W, T.11S., R.67W., Sec 22) upstream to Highway 105 (39 05 35N 104 51 30 W, T.11S., R.67W., Sec 14).

(ii) *Note:* Map of Unit 11 follows:

[insert map of Unit 11]

* * * * *

Dated: _____

Signed: _____

Assistant Secretary for Fish and Wildlife and Parks

~~[Endangered and Threatened Wildlife and Plants; Revised Critical Habitat for the Significant Portion of the Range of the Preble's Meadow Jumping Mouse (*Zapus hudsonius preblei*) in Colorado]~~