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50 CFR Part 17

Endangered and Threatened Wildlife and Plants; Designation of Critical Habitat for the Preble's Meadow Jumping Mouse (Zapus hudsonius preblei); Proposed Rule

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RIN 1018–AI46

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

AGENCY: Fish and Wildlife Service, Interior.

ACTION: Proposed rule.

SUMMARY: We, the U.S. Fish and Wildlife Service (Service), propose to designate critical habitat for the Preble's meadow jumping mouse (*Zapus hudsonius preblei*) pursuant to the Endangered Species Act of 1973, as amended (Act). The proposed designation includes 19 habitat units totaling approximately 23,248 hectares (ha) (57,446 acres (ac)) found along 1,058.1 kilometers (km) (657.5 miles (mi)) of rivers and streams in the States of Colorado and Wyoming.

Critical habitat identifies specific areas, both occupied and unoccupied, that are essential to the conservation of a listed species and that may require special management considerations or protection. If this proposed rule is made final, section 7 of the Act will prohibit destruction or adverse modification of critical habitat by any activity funded, authorized, or carried out by any Federal agency; and Federal agencies proposing actions affecting areas designated as critical habitat must consult with us on the effects of their proposed actions, pursuant to section 7(a)(2) of the Act.

Section 4 of the Act requires that we consider economic and other relevant impacts prior to making a final decision on what areas to designate as critical habitat. We solicit data and comments from the public on all aspects of this proposal, including data on the economic and other impacts of the designation. We may revise this proposal to incorporate or address new information received during the comment period.

DATES: We will consider all comments on the proposed rule received from interested parties by September 16, 2002. Public hearing requests must be received by September 3, 2002.

ADDRESSES: You may submit written comments and information to Preble's Mouse Comments, Colorado Ecological Services Field Office, U.S. Fish and Wildlife Service, 755 Parfet Street, Suite 361, Lakewood, CO 80215 or by facsimile to 303–275–2371. You may hand-deliver written comments to our Colorado Ecological Services Field Office at the address given above. You may send comments by electronic mail (e-mail) to <*fw6_pmjm@fws.gov*>. See the ''Public Comments Solicited'' section below for file format and other information on electronic filing. You may view comments and materials received, as well as supporting documentation used in the preparation of this proposed rule, by appointment, during normal business hours, at the Colorado Ecological Services Field Office.

FOR FURTHER INFORMATION CONTACT: LeRoy Carlson, Field Supervisor, Colorado Ecological Services Field Office, (see **ADDRESSES** section), (telephone 303–275–2370; facsimile 303–275–2371).

SUPPLEMENTARY INFORMATION:

Background

Much of what is now known about the Preble's meadow jumping mouse (Preble's) is a result of information gained from the early 1990s to the present. Following the Preble's listing as a threatened species in 1998, knowledge about its distribution, habitat requirements, abundance, and population dynamics has grown substantially. However, much of the biology and ecology of the Preble's is still not well understood. Where gaps in knowledge exist, scientists have relied on information from closely related subspecies of the meadow jumping mouse (*Zapus hudsonius*), whose biology and ecology appear similar to the Preble's. Information presented below that is specific to the Preble's is described as being relevant to this subspecies, the Preble's, but when information pertains to what is known about other subspecies of meadow jumping mouse, it will be described as relevant to the species, the meadow jumping mouse. Portions of the following have been adapted from the general biology section of the Preble's Meadow Jumping Mouse Recovery Team's February 27, 2002, Draft Discussion Document on a recovery plan for the Preble's.

Taxonomy and Description

The Preble's is a member of the family Dipodidae (jumping mice) with four living genera, two of which, *Zapus* and *Napaeozapus*, are found in North America (Hall 1981). The three living species within the genus *Zapus* are *Z. hudsonius* (the meadow jumping mouse), *Z. princeps* (the western jumping mouse), and *Z. trinotatus* (the Pacific jumping mouse).

Edward A. Preble (1899) first documented the meadow jumping mouse from Colorado. Krutzch (1954) described the Preble's as a separate subspecies of meadow jumping mouse limited to Colorado and Wyoming. The Preble's is now recognized as 1 of 12 subspecies of meadow jumping mouse (Hafner *et al.* 1981).

The Preble's is a small rodent with an extremely long tail, large hind feet, and long hind legs. The tail is bicolored, lightly-furred, and typically twice as long as the body. The large hind feet can be one-third again as large as those of other mice of similar size. The Preble's 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. Total length of adult Preble's mice is approximately 180 to 250 millimeters (mm) (7 to 10 inches (in)), and tail length is 108 to 155 mm (4 to 6 in) (Krutzsch 1954, Fitzgerald *et al.* 1994).

The average weight of 120 adult Preble's mice captured early in their active season (prior to June 18) was 18 grams (g) (0.6 ounce (oz)); included were10 pregnant females weighing more than 22 g (0.8 oz) (Meaney *et al.,* in prep.). Upon emergence from hibernation, adult Preble's mice can weigh as little as 14 g (0.5 oz). Through late August and into mid-September, Preble's adults ready for hibernation weighed 25 to 34 g (0.9 to 1.2 oz) (Meaney *et al.,* in prep.), comparable to pre-hibernation weights for the meadow jumping mouse cited by Muchlinski (1988).

While the western jumping mouse is a distinctly separate species from the Preble's, it is similar in appearance and can easily be confused with Preble's. The range of the western jumping mouse in Wyoming and Colorado is generally west of, and at higher elevations than, the range of the Preble's. However, they appear to coexist over portions of their range in southeastern Wyoming and Colorado (Long 1965, Clark and Stromberg 1987, Schorr 1999, Meaney *et al.* 2001). Compared to the western jumping mouse, the Preble's is generally smaller, has a more distinctly bicolored tail, and a less obvious dorsal (back) stripe. Krutzsch (1954) described skull characteristics useful for differentiating the two species. Previously, studies found that the meadow jumping mouse could be distinguished from the western jumping mouse by a fold in the first

lower molar (Klingener 1963, Hafner 1993). However, this molar characteristic is not always reliable due to tooth wear as animals age; specimens showing the tooth fold are presumed to be Preble's, while specimens lacking the fold may be either species (Klingener 1963; Conner and Shenk, in prep.). A recent reevaluation of Preble's and western jumping mouse morphology showed that, by using a combination of six skull measurements and this molar characteristic, the Preble's could be distinguished from the western jumping mouse (Conner and Shenk, in prep.).

A genetic study that analyzed tissue samples of meadow jumping mice and western jumping mice from throughout North America concluded that the Preble's is distinct from other subspecies of the meadow jumping mouse and from the western jumping mouse (Riggs *et al.* 1997, Hafner 1997). While results from the genetic study supported the taxonomic status of Preble's, analysis of samples from jumping mice in a few Wyoming and Colorado locations produced unexpected results. In these cases, samples of assumed Preble's mice at lower elevations were later determined to be the western jumping mouse and samples of assumed western jumping mice at higher elevations were later determined to be the Preble's. Hafner (1997) suggested that limited hybridization could have affected the results of the study and Beauvais (2001) stated that zones of co-occurrence of the Preble's and the western jumping mouse in Wyoming provide the opportunity for hybridization. However, Krutzsch (1954) cited significant range overlap between the meadow jumping mouse and the western jumping mouse in North America and indicated that there was no evidence of interbreeding. While the question of possible hybridization between the Preble's and the western jumping mouse has yet to be fully explored, information currently available suggests that any hybridization between the two species is limited in scope.

Geographic Range

The Preble's is found along the foothills in southeastern Wyoming, southward along the eastern edge of the Front Range of Colorado to Colorado Springs, El Paso County (Hall 1981, Clark and Stromberg 1987, Fitzgerald *et al.* 1994). Knowledge about the current distribution of the Preble's 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. Recently collected specimens are housed at the Denver Museum of Nature and Science and survey reports are filed with the Service's Field Offices in Colorado and Wyoming.

In Wyoming, capture locations of mice confirmed as the Preble's, and locations of mice identified in the field as Preble's and released, extend in a band from the town of Douglas southward along the Laramie Range to the Colorado border, with captures east to eastern Platte County and Cheyenne, Laramie County. In Colorado, the distribution of the Preble's forms a band along the Front Range from Wyoming southward to Colorado Springs, El Paso County, with eastern marginal captures in western Weld County, western Elbert County, and north-central El Paso County.

The Preble's is likely an Ice Age relict (Hafner *et al.* 1981, Fitzgerald *et al.* 1994). Once the glaciers receded from the Front Range of Colorado and the foothills of Wyoming and the climate became drier, the Preble's was confined to the riparian (river) systems where moisture was more plentiful. The semi-arid climate in southeastern Wyoming and eastern Colorado limits the extent of riparian corridors and restricts the range of the Preble's in this region. The Preble's has not been found east of Cheyenne in Wyoming or 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).

The western boundary of Preble's range in both States appears related to elevation along the Laramie Range and Front Range. The Service has used 2,300 meters (m) (7,600 feet (ft)) in elevation as the general upward limit of Preble's habitat in Colorado (Service 1998). Recent morphological examination of specimens has confirmed the Preble's to an elevation of approximately 2,300 m (7,600 ft) in Colorado (Meaney *et al.* 2001) and to 2,360 m (7,750 ft) in southeastern Wyoming (Cheri Jones, Denver Museum of Natural Science, *in litt.,* 2001). In a modeling study of habitat associations in Wyoming, Keinath (2001) found suitable habitat predicted in the Laramie Basin and Snowy Range Mountains (west of known Preble's occurrence) but very little suitable habitat predicted on the plains of Goshen, Niobrara, and eastern Laramie Counties (east of known Preble's occurrence).

Although there is little information on past distribution or abundance of the Preble's, surveys have identified various locations where the subspecies was historically present but is now absent (Ryon 1996). Since at least 1991, the Preble's 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, Ryon 1996).

Ecology and Life History

Typical habitat for the Preble's comprises well-developed plains riparian vegetation with adjacent, undisturbed grassland communities and a nearby water source. Well-developed plains riparian vegetation typically includes a dense combination of grasses, forbs, and shrubs; a taller shrub and tree canopy may be present (Bakeman 1997). When present, the shrub canopy is often *Salix* spp. (willow), although shrub species including *Symphoricarpus* spp. (snowberry), *Prunus virginiana* (chokecherry), *Crataegus* spp. (hawthorn), *Quercus gambelli* (Gambel's oak), *Alnus incana* (alder), *Betula fontinalis* (river birch), *Rhus trilobata* (skunkbrush), *Prunus americana* (wild plum), *Amorpha fruticosa* (lead plant), *Cornus sericea* (dogwood), and others also may occur (Bakeman 1997, Shenk and Eussen 1998).

Preble's have rarely been trapped in uplands adjacent to riparian areas (Dharman 2001). However, in detailed studies of Preble's movement patterns using radio telemetry, Preble's has been found feeding and resting in adjacent uplands (Shenk and Sivert 1999b, Ryon 1999, Schorr 2001). These studies reveal that the Preble's regularly uses uplands at least as far out as 100 m (330 ft) beyond the 100-year floodplain (Ryon 1999; Tanya Shenk, Colorado Division of Wildlife, *in litt.,* 2002). Preble's also can move considerable distances along streams, as far as 1.6 km (1.0 mi) in one evening (Ryon 1999, Shenk and Sivert 1999a).

In a study comparing habitats at Preble's capture locations on the Department of Energy's Rocky Flats Environmental Technology Site (Rocky Flats), Jefferson County, CO, and the U.S. Air Force Academy (Academy), El Paso County, CO, the Academy sites had lower plant species richness at capture locations but considerably greater numbers of the Preble's (Schorr 2001). However, the Academy sites had higher densities of both grasses and shrubs. It is likely that Preble's abundance is not driven by the diversity of plant species, but by the density of riparian vegetation.

The tolerance of the Preble's for exotic plant species is not well understood. Whether or not exotic plant species reduce Preble's persistence at a site may be due in large part to whether plants

create a monoculture and replace native species. There is particular concern about nonnative species such as *Euphorbia esula* (leafy spurge) that may form a monoculture, displacing native vegetation and thus reducing available habitat.

Fifteen apparent Preble's hibernacula (hibernation nests) have been located through radio telemetry, all within 78 m (260 ft) of a perennial stream bed or intermittent tributary (Bakeman and Deans 1997, Shenk and Sivert 1999a, Schorr 2001). Of these, one was confirmed through excavation (Bakeman and Deans 1997); others were left intact to prevent harm to the mice. Hibernacula have been located under willow, chokecherry, snowberry, skunkbrush, *Rhus* spp. (sumac), *Clematis* spp. (clematis), *Populus* spp. (cottonwoods), Gambel's oak, *Cirsium* spp. (thistle), and *Alyssum* spp. (alyssum) (Shenk and Sivert 1999a). At the Academy, four of six hibernacula found by radio-telemetry were located in close proximity to coyote willow (*Salix exigua*) (Schorr 2001). The one excavated hibernaculum, at Rocky Flats, was found 9 m (30 ft) above the stream bed, in a dense patch of chokecherry and snowberry (Bakeman and Deans 1997). The nest was constructed of leaf litter 30 centimeters (cm) (12 in) below the surface in coarse textured soil.

The Preble's 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). An individual mouse can have multiple day nests in both riparian and grassland communities (Shenk and Sivert 1999a), and may abandon a nest after approximately a week of use (Ryon 2001).

Hydrologic regimes that support Preble's habitat range from large perennial rivers such as the South Platte River to small temporary drainages only 1 to 3 m (3 to 10 ft) in width, as at Rocky Flats and in montane habitats. Flooding is a common and natural event in the riparian systems along the Front Range of Colorado. This periodic flooding helps create a dense vegetative community by stimulating resprouting from willow 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 Wyoming foothills, and Preble's habitat naturally waxes and wanes with fire events. Within shrubland and forest, intensive fire may result in adverse impacts to Preble's populations. However, in a review of the effects of grassland fires on small mammals, Kaufman *et al.* (1990) 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.

Meadow jumping mice usually have two litters per year, but there are records of three litters per year. An average of five young are born per litter, but the size of a litter can range from two to eight young (Quimby 1951, Whitaker 1963).

The Preble's is long-lived for a small mammal, in comparison with many species of mice and voles that seldom live a full year. Along South Boulder Creek, Boulder County, CO, seven individuals originally captured as adults were still alive 2 years later, having attained at least 3 years of age (Meaney *et al.,* in prep.). However, like many small mammals, the Preble's annual survival rate is low. Preble's survival rates appear to be lower over the summer than over the winter. Over-summer survival rates ranged from 22 to 78 percent and over-winter survival rates ranged from 56 to 97 percent (Shenk and Sivert 1999b; Ensight Technical Services 2000, 2001; Schorr 2001; Meaney *et al.,* in prep.).

The Preble's has a host of known predators including garter snakes (*Thamnophis* spp.), prairie rattlesnakes (*Crotalus viridus*), bullfrogs (*Rana catesbiana*), foxes (*Vulpes vulpes* and *Urocyon cinereoargenteus*), house cats (*Felis catus*), long-tailed weasels (*Mustela frenata*), and red-tailed hawks (*Buteo jamaicensis*) (Shenk and Sivert 1999a, Schorr 2001). Other potential predators include coyotes (*Canis latrans*), barn owls (*Tyto alba*), great horned owls (*Bubo virginianus*), screech owls (*Otus* spp.), long-eared owls (*Asio otus*), northern harriers (*Circus cyaneus*), and large predatory fish.

Other mortality factors of the Preble's include drowning and vehicle collision (Schorr 2001, Shenk and Sivert 1999a). Mortality factors known for the meadow jumping mouse, such as starvation, exposure, disease, and insufficient fat stores for hibernation (Whitaker 1963) also are likely causes of death for the Preble's.

White and Shenk (2000) determined that riparian shrub cover, tree cover, and the amount of open water nearby are good predictors of Preble's densities, and summarized abundance estimates from nine sites in Colorado for field work conducted during 1998 and 1999. Estimates of abundance ranged from 4 to 67 mice per km (6 to 110 mice per mi) of stream and averaged 33 mice per km (53 mice per mi) of stream.

While fecal analyses have provided the best data on the Preble's diet to date, they overestimate the components of the diet that are less digestible. Based on fecal analyses the Preble's eats insects; fungus; moss; pollen; willow; *Chenopodium* sp. (lamb's quarters); *Salsola* sp. (Russian thistle); *Helianthus* spp. (sunflowers); *Carex* spp. (sedge); *Verbascum* sp. (mullein); *Bromus, Festuca, Poa, Sporobolus* and *Agropyron* spp. (grasses); *Lesquerella* sp. (bladderpod); *Equisetum* sp. (rushes); and assorted seeds (Shenk and Eussen 1998, Shenk and Sivert 1999a). The diet shifts seasonally; it consists primarily of insects and fungus after emerging from hibernation, shifts to fungus, moss, and pollen during mid-summer (July-August), with insects again added in September (Shenk and Sivert 1999a). The shift in diet along with shifts in mouse movements suggests that the Preble's may require specific seasonal diets, perhaps related to the physiological constraints imposed by hibernation (Shenk and Sivert 1999a).

The Preble's 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. Adults are the first age group to enter hibernation because they accumulate the necessary fat stores earlier than young of the year. Similar to other subspecies of meadow jumping mouse, Preble's do not store food, but survive on fat stores accumulated prior to hibernation (Whitaker 1963). Apparent hibernacula of the Preble's have been located both within and outside of the 100-year floodplain of streams (Shenk and Sivert 1999a, Ryon 2001, Schorr 2001). Those hibernating outside of the 100-year floodplain would likely be less vulnerable to flood-related mortality.

Meadow jumping mice are docile to handle and not antagonistic toward one another (Whitaker 1972). However, meadow jumping mice compete with meadow voles and may be kept at low densities by voles (Boonstra and Hoyle 1986). Introduced species that occupy riparian habitats may displace or compete with the Preble's. House mice (*Mus musculus*) were common in and adjacent to historic capture sites where the Preble's was no longer found (Ryon 1996).

The Preble's is primarily nocturnal or crepuscular but also may be active during the day, when they have been seen moving around or sitting still under a shrub (Shenk 1998). Little is known about social interactions and their significance in the Preble's. Jones

and Jones (1985) described lively social interactions in which several Preble's mice were observed jumping into the air and squeaking and suggested that they formed a gregarious unit. In a recent study, for the month their radio-collars were active, several Preble's mice came repeatedly from different day-nest locations to meet at one spot at night (Shenk, pers. comm., 2002).

Conservation Issues

The Preble's is closely associated with riparian ecosystems that are relatively narrow and represent a small percentage of the landscape. If habitat for the Preble's is destroyed or modified, populations in those areas will decline or be extirpated. The decline in the extent and quality of Preble's habitat is considered the main factor threatening the subspecies (Service 1998, Hafner *et al.* 1998, Shenk 1998). Habitat alteration, degradation, loss, and fragmentation resulting from urban development, flood control, water development, agriculture, and other human land uses have adversely impacted Preble's populations. Habitat destruction may impact individual Preble's directly or by destroying nest sites, food resources, and hibernation sites, by disrupting behavior, or by forming a barrier to movement.

Despite numerous surveys, the Preble's has not recently been found in the Denver and Colorado Springs metropolitan areas, and is believed to be extirpated from these areas as a result of extensive urban development. Given the overlap of the Preble's range with an area of extensive and rapid urban development along the Colorado Front Range, it is likely that significant losses of Preble's populations and habitats have occurred and may continue to occur.

Conversion of native riparian ecosystems to commercial croplands and grazed rangelands was identified as the major threat to Preble's persistence in Wyoming (Clark and Stromberg 1987, Compton and Hugie 1993). Intensive grazing and haying operations may negatively impact the Preble's by removing food and shelter. While some Preble's populations coexist with livestock operations, overgrazing can decimate riparian communities on which the Preble's depends. Similarly, haying operations that allow significant riparian vegetation to remain in place may be compatible with persistent Preble's populations.

Trail systems frequently parallel or intersect riparian communities and thus are common throughout Preble's range. Trail development can alter natural communities and may impact the Preble's by modifying nest sites, food resources, and hibernation sites, and by fragmenting its habitat. Humans and pets using these trails may alter behavior patterns of the Preble's and cause a decrease in survival and reproductive success.

Habitat fragmentation limits the extent and abundance of the Preble's. In general, as animal populations become fragmented and isolated, it becomes more difficult for them to persist. Small, isolated patches of habitat are unable to support as many Preble's mice as larger patches of habitat. When threats to persistence are similar, larger populations are more secure from extirpation than smaller ones.

The structure and function of riparian ecosystems are determined by the hydrology of the waterway. Changes in timing and abundance of water can alter the channel structure, riparian vegetation, and the adjacent floodplain, and may result in changes that are detrimental to the persistence of the Preble's. Similarly, depletion of groundwater also affects the habitat components needed by the Preble's. As groundwater supplies are depleted, more xeric (low moisture) plant communities replace the riparian vegetation. The conversion of habitats from mesic (moderate moisture), shrub-dominated systems to drier grass-dominated systems may preclude the Preble's from these areas.

Alluvial aggregate extraction may produce long-term changes to Preble's habitat by altering hydrology and removing riparian vegetation. In particular, such extraction removes and often precludes reestablishment of habitat components required by the Preble's. Such mining impacts the deposits of alluvial sands and gravels that may be important hibernation locations for the Preble's.

Within the Preble's range, bank stabilization, channelization, and other measures to address flooding and stormwater runoff have increased the rate of stream flow, straightened riparian channels, and narrowed riparian areas (Pague and Grunau 2000). Using riprap and other structural stabilization options to reduce erosion can destroy riparian vegetation, and prevent or delay its re-establishment. These measures can alter the hydrologic processes and plant communities present to the point where Preble's populations can no longer persist.

Transportation and utility corridors frequently cross Preble's habitat and may negatively affect populations. As new roads are built and old roads are maintained, habitat is destroyed or fragmented. Roads and bridges also may act as barriers to dispersal. Train and truck accidents within riparian areas may release spills of chemicals, fuels and other substances that may impact the mouse or its habitat. Sewer, water, communications, gas, and electric lines cross Preble's habitat. Their rights-of-way can contribute to habitat disturbance and fragmentation through new construction and periodic maintenance.

Invasive, noxious plants can encroach upon a landscape and displace native plant species. This change reduces the abundance and diversity of native plants, and may negatively impact cover and food sources for the Preble's. The control of noxious weeds also may impact the Preble's where large-scale removal of vegetation occurs through chemical treatments and mechanical mowing operations.

Pesticides and herbicides are used within the range of the Preble's. Inappropriate use of these chemicals may harm the Preble's directly or when ingested by the Preble's with food or water. Overall, an integrated pest management approach (use of biological, chemical, and mechanical control) may help reduce the threat of chemicals, but allow for the control of target species.

The increasing presence of humans near Preble's habitats may result in increased level of predation that may pose a threat to the Preble's. The striped skunk (*Mephitis mephitis*), raccoon (*Procyon lotor*), red fox (*Vulpes vulpes*), and the domestic and feral cat are found in greater densities in and around areas of human activity; all four of these species feed opportunistically on small mammals. Introduction of non-native sport fish and the bullfrog into waters within Preble's range may result in additional predation. The fact that summer mortality is higher than overwinter mortality underscores the impact that predators can have on the Preble's.

While normal flooding events help maintain the riparian and floodplain communities that provide suitable habitat for the Preble's, increased development and surfaces impervious to water absorption within a drainage can result in more frequent and severe flood events and prevent the re-establishment of riparian communities.

Catastrophic fires can alter habitat dramatically and change the structure and composition of the vegetation communities so that the Preble's may no longer persist. In addition, precipitation falling in a burned area may degrade Preble's habitat by causing greater levels of erosion and sedimentation along creeks. Controlled use of fire may be one

method to maintain appropriate riparian, floodplain, and upland vegetation within Preble's habitat. However, over the past several decades, as human presence has increased through Preble's range, significant effort has been made to suppress fires. Long periods of fire suppression may result in a build-up of fuel and result in a catastrophic fire.

Previous Federal Action

The Service included the Preble's as a category 2 candidate species in the 1985 Animal Notice of Review (50 FR 37958) and retained that status in subsequent notices published in the **Federal Register** on January 6, 1989 (54 FR 554), November 21, 1991 (56 FR 58810), and November 15, 1994 (59 FR 58982). In 1996 the Service discontinued the practice of maintaining a list of category 2 species and the Preble's did not appear in the February 28, 1996, notice of review (61 FR 7596). Category 2 species were those species for which information in the Service's possession indicated that listing was possibly appropriate, but for which substantive data on biological vulnerability and threats were not available to support a proposed rule.

On August 16, 1994, we received a petition from the Biodiversity Legal Foundation to list the Preble's as endangered or threatened throughout its range and to designate critical habitat within a reasonable amount of time following the listing. On March 15,1995, we published notice of the 90-day finding that the petition presented substantial information indicating that listing the Preble's may be warranted (60 FR 13950), and requested comments and biological data on the status of the Preble's. On March 25, 1997, we issued a proposed rule to list the Preble's as an endangered species (62 FR 14093) and announced a 90-day public comment period. After a review of the best scientific data available and all comments received in response to the proposed rule, we published a final rule on May 13, 1998, designating the Preble's as threatened throughout its range (62 FR 26517). The Service did not designate critical habitat for the species at that time.

On December 3, 1998, we proposed special regulations under section 4(d) of the Act (63 FR 66777) to define conditions under which certain activities that could result in incidental take of the Preble's would be exempt from the section 9 take prohibitions of the Act. On May 22, 2001, we published a final rule (66 FR 28125) adopting certain portions of the proposal that provided exemptions for specified activities related to rodent control, ongoing agricultural activities, landscape maintenance, and ongoing use of perfected water rights, for a period of 36 months (through May 21, 2004). On August 30, 2001, we proposed to amend the special regulations to provide additional exemptions from section 9 take prohibitions for certain noxious weed control and ditch maintenance activities (66 FR 45829).

The final listing rule for the Preble's indicated that designation of critical habitat was not prudent because publication of specific locations would increase the threat of vandalism or intentional destruction of habitat. On June 9, 2000, the Biodiversity Legal Foundation, Biodiversity Associates, Center for Biological Diversity, South Dakota Resources Coalition, David C. Jones, and Dennis Williams filed a suit in the U.S. District Court for the District of Colorado (Civil Action Number 00–D–1180) against the Department of the Interior and the Service over our failure to designate critical habitat for both the Preble's and the Topeka shiner, and for failure to prepare and implement a recovery plan for the Preble's. A court-mediated settlement was reached with the litigants that included a June 4, 2002, date for submission of proposed critical habitat for the Preble's to the **Federal Register** for publication and a June 4, 2003, date for submission of final critical habitat for the Preble's to the **Federal Register**. They agreed to dismiss their claim that the Service failed to prepare a recovery plan for the Preble's and subsequently agreed to extend the date for submission of the proposed critical habitat for the Preble's to July 8, 2001. In early 2000, we formed the Preble's Meadow Jumping Mouse Recovery Team. A recovery plan for the Preble's is currently being drafted. The team's working draft is available to the public as a discussion document.

Critical Habitat

Critical habitat is defined in section 3(5)(A) of the Act as (i) the specific areas within the geographic 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 (I) essential to conserve the species and (II) that may require special management considerations or protection; and (ii) specific areas outside the geographic area occupied by a species at the time it is listed, upon determination that such areas are essential to conserve the species. ''Conservation'' means the use of all methods and procedures that are necessary to bring an endangered or threatened species to the point at which listing under the Act is no longer necessary.

Critical habitat receives protection under section 7 of the Act through the prohibition against destruction or adverse modification of critical habitat with regard to actions carried out, funded, or authorized by a Federal agency. Section 7 also requires conferences with the Service on Federal actions that are likely to result in the destruction or adverse modification of proposed critical habitat. In our regulations at 50 CFR 402.02, we define destruction or adverse modification as ''a direct or indirect alteration that appreciably diminishes the value of critical habitat for both the survival and recovery of a listed species. Such alterations include, but are not limited to, alterations adversely modifying any of those physical or biological features that were the basis for determining the habitat to be critical.'' Aside from the added protection that may be provided under section 7, the Act does not provide other forms of protection to lands designated as critical habitat. Because consultation under section 7 of the Act does not apply to activities on private or other non-Federal lands that do not involve a Federal nexus, critical habitat designation would not result in any regulatory requirement for these actions.

To be included in a critical habitat designation, the habitat must first be ''essential to the conservation of the species.'' Critical habitat designations identify, to the extent known using the best scientific and commercial data available, habitat areas that provide essential life cycle needs of the species (*i.e.*, areas on which are found the primary constituent elements, as defined at 50 CFR 424.12(b)).

Section 4 requires that we designate critical habitat at the time of listing and based on what we know at the time of designation. When we designate critical habitat at the time of listing or under short court-ordered deadlines, we will often not have sufficient information to identify all areas of critical habitat. We are required, nevertheless, to make a decision and thus must base our designations on what, at the time of designation, we know to be critical habitat.

In accordance with sections 3(5)(C) of the Act, not all areas that can be occupied by a species will be designated critical habitat. Within the geographic area occupied by the species we designate only areas currently known to be essential. Essential areas should already have the features and habitat characteristics that are necessary to conserve the species. We will not

speculate about what areas might be found to be essential if better information becomes available, or what areas may become essential over time. If the information available at the time of designation does not show that an area provides essential life cycle needs of the species, then the area should not be included in the critical habitat designation. We will not designate areas within the geographic area occupied by the species unless at least one of the primary constituent elements are present, as defined at 50 CFR 424.12(b), that provide essential life cycle needs of the species. Moreover, areas occupied by certain known populations of the Preble's have not been proposed as critical habitat. For example, we did not propose critical habitat for some small scattered populations or habitats in areas highly fragmented by human development.

Our regulations state, ''The Secretary shall designate as critical habitat areas outside the geographical area presently occupied by a species only when a designation limited to its present range would be inadequate to ensure the conservation of the species'' (50 CFR 424.12(e)). Based on the best available science and commercial data, there appears to be no foundation upon which to make a determination that the conservation needs of the Preble's require designation of critical habitat outside of the geographic area occupied by the species, so we have not proposed to designate critical habitat outside of the geographic area believed to be occupied.

Our Policy on Information Standards Under the Endangered Species Act, published in the **Federal Register** on July 1, 1994 (59 FR 34271), provides criteria, procedures, and guidance to ensure decisions made by the Service represent the best scientific and commercial data available. It requires Service biologists, to the extent consistent with the Act and with the use of the best scientific and commercial data available, to use primary and original sources of information as the basis for recommendations to designate critical habitat. When determining which areas are critical habitat, a primary source of information should be the listing package for the species. Additional information may be obtained from a recovery plan, articles in peer-reviewed journals, conservation plans developed by States, Tribes, and counties, scientific status surveys and studies, and 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 designation of critical habitat may not include all habitat eventually determined as necessary to recover the species. For these reasons, all should understand that critical habitat designations do not signal that habitat outside the designation is unimportant or may not be required for recovery. Areas outside the critical habitat designation will continue to be subject to conservation actions that may be implemented under section 7(a)(1) of the Act, and the regulatory protections afforded by the section 7(a)(2) jeopardy standard and the section 9 take prohibition, as determined on the basis of the best available information at the time of the action. Federally funded or assisted projects affecting listed species outside their designated critical habitat areas may still result in likely-to-jeopardize 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, habitat conservation plans, or other species conservation planning efforts, if new information available to these planning efforts calls for a different outcome.

Methods

In determining areas essential to conserve the Preble's, we used the best scientific and commercial data available. We have reviewed approaches to the conservation of the Preble's undertaken by the Federal, State, and local agencies operating within the species' range since its listing in 1998, and the identified steps necessary for recovery outlined in the working draft of the recovery plan for the Preble's. We also reviewed available information that pertains to the habitat requirements of this species, including material received since the listing of the Preble's. The material included research published in peer-reviewed articles, academic theses and agency reports; reports from biologists conducting research under section 10(a)(1)(A) recovery permits; the working draft of the recovery plan for the Preble's; information from consulting biologists conducting site assessments, surveys, formal and informal consultations; as well as information obtained in personal communications with Federal, State, and other knowledgeable biologists in Colorado and Wyoming.

Primary Constituent Elements

In accordance with section 3(5)(A)(i) of the Act and regulations at 50 CFR 424.12, in determining which areas to propose as critical habitat we are required to base critical habitat determinations on the best scientific and commercial data available and to consider physical and biological features (primary constituent elements) that are essential to conservation of the species, and that may require special management considerations and protection. These physical and biological features 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, rearing (or development) of offspring; and (5) habitats protected from disturbance or that are representative of the historic geographical and ecological distributions of a species.

The primary constituent elements for the Preble's include those habitat components essential for the biological needs of reproducing, rearing of young, foraging, sheltering, hibernation, dispersal, and genetic exchange. The Preble's 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 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 willows of shrub form are a dominant component in many riparian habitats occupied by the Preble's, the structure of the vegetation appears more important to the Preble's than species composition.

Primary constituent elements associated with the biological needs of dispersal and genetic exchange also are found in areas that provide connectivity or linkage between or within Preble's 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 Preble's habitat also are important primary constituent elements. Habitat components essential to the Preble's 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. Preble's 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 Preble's. 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 Preble's 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.

Primary constituent elements for the Preble's include:

(1) A pattern of dense riparian vegetation consisting of grasses, forbs, and shrubs in areas along rivers and streams that provide open water through the Preble's active season.

(2) Adjacent floodplains and vegetated uplands with limited human disturbance (including hayed fields, grazed pasture, other agricultural lands that are not plowed or disced regularly, areas that have been restored after past aggregate extraction, areas supporting recreational trails, and urban/wildland interfaces).

(3) Areas that provide connectivity between and within populations. These 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.

(4) Dynamic geomorphological and hydrological processes typical of systems within the range of the Preble's, *i.e.*, those processes that create and maintain river and stream channels, floodplains, and floodplain benches, and promote patterns of vegetation favorable to the Preble's.

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 disced agricultural areas, and other features not containing any of the primary constituent elements are not considered critical habitat.

Criteria Used To Identify Critical Habitat

The Preble's Meadow Jumping Mouse Recovery Team's February 27, 2002, Draft Discussion Document on a recovery plan for the Preble's (Draft Document) identifies specific criteria for reaching recovery and the delisting of the Preble's. While elements of this Draft Document may change prior to plan finalization, the concepts described within it apply the best available science on the Preble's and serve as a logical starting point for identifying areas that are essential for the conservation of the Preble's. We anticipate that a draft recovery plan for the Preble's will be published prior to our final designation of critical habitat. To assure that designation of critical habitat for the Preble's and the recovery plan for the Preble's are compatible, the content of the draft recovery plan and comments received on the plan will be reviewed and incorporated, as appropriate, into the final designation of critical habitat.

To recover the Preble's to the point where it can be delisted, the Draft Document identifies the need for a specified number, size, and distribution of wild, self-sustaining Preble's populations across the known range of the Preble's. The distribution of these recovery populations is intended both to reduce the risk of multiple Preble's populations being negatively affected by natural or man-made events at any one time and to preserve the existing genetic variation within the Preble's.

The Draft Document identifies recovery criteria for each of the three major river drainages where the Preble's occurs (the North Platte River drainage in Wyoming, the South Platte River drainage in Wyoming and Colorado, and the Arkansas River drainage in Colorado) and for each subdrainage judged likely to support Preble's. In some cases the Draft Document identifies recovery criteria for subdrainages where trapping for the Preble's has not yet occurred or where limited trapping has not confirmed the presence of the Preble's. Boundaries of drainages and subdrainages have been mapped by the U.S. Geological Survey (USGS). For the Draft Document, 8-digit Hydrological Unit Code (HUC) boundaries were selected to define subdrainages. Hereafter, we refer to these specific subdrainages as ''HUCs.'' A total of 19 HUCs are identified in the Draft Document as occupied or potentially occupied by the Preble's. Of these, 5 are located in the North Platte River drainage, 11 in the South Platte River drainage, and 3 in the Arkansas River drainage.

Three large and three medium Preble's populations in Colorado that are designated in the Draft Document as recovery populations are reflected in this critical habitat proposal. The Draft Document defines large populations as maintaining 2,500 mice and usually including at least 80 km (50 mi) of rivers and streams. It defines medium populations as maintaining 500 mice over at least 16 km (10 mi) of rivers and streams. However, the Draft Document does not delineate specific boundaries of these six recovery populations. In addition, in the remaining 13 HUCs within the Preble's range the Draft Document calls for recovery populations but does not designate their locations. In these cases, the Draft Document only prescribes the need to establish one or more recovery populations of specified minimum size within a HUC. The Draft Document anticipates that, in the future, the locations of these recovery populations will be designated and their boundaries delineated by State and local governments, and other interested parties, working in coordination with the Service. However, to meet the deadline for this critical habitat proposal, we have proposed specific critical habitat units in these areas. In addition, we have proposed specific critical habitat units, as appropriate, in HUCs where recovery populations are called for by the Draft Document, but where their locations have not been specifically designated in the Draft Document.

Beyond proposing critical habitat for sites of likely recovery populations based on the Draft Document, we reviewed other sites of Preble's occurrence, especially on Federal lands, for possible designation as critical habitat. The Draft Document emphasizes the importance of protecting additional Preble's populations, to provide insurance for the Preble's in the event that designated recovery populations cannot be effectively managed or protected as envisioned by the recovery plan, or are decimated by uncontrollable catastrophic events such as fires or flooding. The Draft Document also 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 Preble's wherever it occurs on Federal lands. Given these recommendations from the Draft Plan, the designation of additional areas of critical habitat on Federal land is essential for the conservation of the Preble's. Should unforseen events cause

the continued decline of Preble's populations throughout its range, Preble's populations and the primary constituent elements on which they depend are more likely to persist and remain viable on Federal lands than on non-Federal lands. The likelihood of maintaining stable populations is greatest on these Federal lands, where consistent and effective land management strategies can be more easily employed. Preble's populations on Federal lands could serve as substitute recovery populations should designated recovery populations decline or fail to meet recovery goals. In addition, some Preble's populations on Federal lands have been the subject of ongoing research that could prove vital to the conservation of the Preble's.

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

Proposed critical habitat units include only river and stream reaches, and adjacent floodplains and uplands, that are within the known geographic and elevational range of the Preble's, have the primary constituent elements present, and, based on the best available scientific information, are believed to currently support the Preble's.

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

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

Presence of the Preble's was determined based largely on the results of trapping surveys, the majority of which were conducted in the past 6 years. Sites judged to be occupied by the Preble's include those that—(1) have recently been documented to support jumping mice identified by genetic or morphological examination as Preble's; (2) have recently been documented to support jumping mice and for which historical verification of the Preble's exists; or (3) are at appropriate elevation levels for the Preble's, have recently been documented to support jumping mice identified in the field as the Preble's, but where the mice were released alive and not subject to definitive morphological or genetic studies. While, in some cases, proposed critical habitat units extend well beyond these Preble's capture locations, boundaries of these critical habitat units include only those reaches that we believe to be occupied by the Preble's based on the best available information regarding capture sites, the known mobility of the Preble's, and the quality and continuity of habitat components along stream reaches. Where appropriate, we have included details on the known status of the Preble's within specific subdrainages in the in the Proposed Critical Habitat Designation section of this document.

Survey efforts to document the Preble's in Wyoming have been more limited than in Colorado and have been focused on—(1) Federal lands (the Medicine Bow-Routt National Forest, some Bureau of Land Management lands, and the F.E. Warren Air Force Base in Laramie County); (2) lands owned by True Ranches; and (3) areas to be impacted by proposed projects, most notably the Medicine Bow Lateral Pipeline.

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

In those units where we propose critical habitat on Federal lands judged not likely to be initially designated as recovery populations under the Draft Document, we looked for contiguous Federal property along stream reaches occupied by the Preble's of at least 3 miles in length. This corresponds to the minimum size of small populations consistent with recovery criteria in the Draft Document. In some cases shorter reaches on Federal lands were proposed as critical habitat when they were separated from more substantial reaches on Federal lands by only small segments of intervening non-Federal lands.

We also determined whether areas or portions of areas designated as recovery populations in the Draft Document, or otherwise likely to be proposed as critical habitat based on factors described above, do not represent critical habitat due to adequate protection and management under an existing Integrated Natural Resource Management Plan, HCP, or other special management plan. Where regional HCPs are being developed, we evaluated the potential completion schedule of these planning efforts in relation to the likely completion of the final rule designating Preble's critical habitat.

North Platte River Drainage

In order to meet recovery criteria, the Draft Document calls for one large and

two medium recovery populations spread over three of the five HUCs in the North Platte River drainage likely to support the Preble's. The Draft Document calls for three small populations (defined as 5 km (3 mi) or more of occupied habitat) or one medium population in each of the other two HUCs. Two of the five HUCs currently lack confirmed occurrence of the Preble's. Therefore, we have proposed critical habitat areas representing large and medium recovery populations on the remaining three HUCs, all of which have extensive areas supporting primary constituent elements required by the Preble's.

Suitable habitat appears to be present throughout the Middle North Platte-Casper HUC. However, survey efforts targeted at the Preble's have occurred on only a limited basis in this subdrainage, with the only known captures of jumping mice at elevations above 2,800 m (7,800 ft) and likely to be western jumping mice. Therefore, while primary constituent elements for the Preble's appear present in this subdrainage and the Preble's probably occurs within this system, we have not proposed critical habitat based on lack of known occurrence.

Suitable habitat components occur throughout the Glendo HUC. We have proposed critical habitat on the Cottonwood Creek watershed consistent with one of the medium recovery populations required to meet recovery criteria for the North Platte River drainage in the Draft Document. In addition, we have proposed critical habitat in the Horseshoe Creek watershed on Forest Service land.

Primary constituent elements required by the Preble's appear widespread within the Lower Laramie HUC. Of two major watersheds we investigated, the complex formed by Chugwater Creek and its tributaries appears to be of better habitat quality and includes more stream miles than the complex formed by Sybille Creek and its tributaries. We have proposed critical habitat on the Chugwater Creek watershed consistent with the one large recovery population required to meet recovery criteria for the North Platte River drainage in the Draft Document. Richeau Creek and Hunton Creek were not included as proposed critical habitat since they are segregated from the main portion of the Chugwater Creek complex by long stretches of less suitable habitat.

In the Lower Laramie HUC, habitat components typically used by the Preble's exist on Federal property on the Medicine Bow-Routt National Forest. While many of these locations are at higher elevations than those that the Preble's has been shown to inhabit, surveys have captured jumping mice identified in the field as the Preble's from the appropriate elevational range. Therefore, we have proposed critical habitat on Forest Service lands and small parcels of intervening non-Federal lands within the Friend Creek watershed and within the Murphy Canyon watershed.

Suitable habitat in the Horse Creek HUC is generally limited to the western half of the subdrainage. Two areas of suitable habitat include the complex formed by Horse Creek and its tributaries and the various tributaries to Bear Creek. The Bear Creek tributaries are generally isolated from each other and from Horse Creek by large sections of unsuitable habitat. The Horse Creek complex is the larger complex and has better quality habitat. Therefore, we have proposed critical habitat on the Horse Creek watershed consistent with one of the two medium recovery populations required to meet recovery criteria for the North Platte River drainage in the Draft Document.

Habitat components suitable for the Preble's appear to be quite limited in the Middle North Platte-Scottsbluff HUC and are largely confined to the westernmost portions of the subdrainage. Some small pockets of suitable habitat are scattered throughout the rest of the subdrainage, but they are quite isolated. Additionally, trapping efforts targeted at the Preble's have occurred on a limited basis in this subdrainage with no surveys providing captures of the jumping mice. Therefore, while there is a high probability that the Preble's occurs within this subdrainage, we have not proposed critical habitat based on lack of known occurrence.

South Platte River Drainage

Recovery criteria in the Draft Document require three small recovery populations or one medium population in the Upper Lodgepole HUC. Suitable habitat for Preble's is generally limited to the western half of the subdrainage. Most trapping efforts in this HUC have been on the Medicine Bow-Routt National Forest at elevations above 2,300 m (7,700 ft). Additionally, one trapping effort at a lower elevation produced a jumping mouse presumed to be a Preble's. We have proposed two critical habitat units in this subdrainage, Lodgepole Creek and Upper Middle Lodgepole Creek, consistent with two of the three small recovery populations identified for the HUC in the Draft Document.

In Crow Creek HUC we have proposed critical habitat consistent with one of the three small recovery populations required to meet recovery criteria in the Draft Document. This area is limited to the F.E. Warren Air Force Base in Cheyenne.

The Lone Tree-Owl HUC supports primary constituent elements for Preble's both in Wyoming and in Colorado. Based on the recovery criteria of three small or one medium recovery population assigned to this HUC in the Draft Document, we have proposed two small areas of critical habitat along Lone Tree Creek, one in Wyoming and one in Colorado.

We have elected not to propose additional critical habitat on Federal property in the Upper Lodgepole, Crow Creek, and Lone Tree-Owl HUCs in southern Wyoming beyond those populations likely to be designated recovery populations under the proposed plan. Within these HUCs, Bureau of Land Management properties are largely upland areas with only small segments of streams. Forest Service lands in the Medicine Bow—Routt National Forest include many suitable-looking streams, but most occur at elevations ranging from 2,200 m (7,300 ft) to 2,400 m (8,000 ft). Although surveys from these riparian areas have produced jumping mice that are potentially the Preble's, it is likely, based on elevation, that many of these are western jumping mice. We will continue to work with the Forest Service regarding potential Preble's populations on their lands and will encourage further survey effort and collection of jumping mouse specimens for species verification.

In the Cache La Poudre HUC, we have proposed critical habitat along the lower portions of the North Fork of the Cache Le Poudre River and its tributaries, consistent with the large recovery population designated in the Draft Document. In addition, further south in this subdrainage we have proposed a second area limited largely to Forest Service lands along the main stem of the Cache Le Poudre River and on selected tributaries. While additional stream reaches that support Preble's populations are present on Forest Service lands in the upper reaches of the North Fork of the Cache Le Poudre and its tributaries, including Bull Creek, Willow Creek, Mill Creek, and Trail Creek, the extent of contiguous stream reaches in Forest Service ownership is very limited. A checkerboard pattern of land ownership convinced us that proposing additional critical habitat centered on Federal lands is not warranted; therefore, we proposed no critical habitat in this area.

In the Big Thompson HUC we proposed critical habitat on Buckhorn

Creek and its tributaries consistent with the medium recovery population designated to meet recovery criteria for this area under the Draft Document. We also assessed Forest Service lands along the Big Thompson River and Little Thompson River for possible inclusion as proposed critical habitat. Potential areas along the Big Thompson River and the North Fork of the Big Thompson River were largely in private ownership, with substantial human development occurring in many places. For these reasons we proposed only one additional area as critical habitat, centered on Forest Service lands on portions of Dry Creek and its tributaries. Similarly, Forest Service holdings along the Little Thompson River and its tributaries are highly fragmented by non-Federal lands or represent only short stream reaches near the 7,600-foot elevation. No critical habitat has been proposed on the Little Thompson River.

Within the St. Vrain HUC, the Draft Document designated a medium recovery population on South Boulder Creek as necessary to meet recovery criteria. We included the South Boulder Creek as proposed critical habitat. At the request of representatives from the City of Boulder we considered proposing critical habitat along the St. Vrain River between Hygiene and Lyons. We have little evidence to support designation of critical habitat for the Preble's population on the St. Vrain River as a preferable alternative to that on South Boulder Creek, nor did we find reason to propose critical habitat for a second population on non-Federal lands within this subdrainage. We considered proposing critical habitat for the Preble's on Forest Service lands at higher elevations along the North St. Vrain Creek and the Middle St. Vrain Creek. However, since no trapping efforts targeted at the Preble's have been conducted in these areas and we are aware of no records of the Preble's occurrence in these watersheds, neither has been proposed as critical habitat.

The Department of Energy's Rocky Flats site spans portions of the St. Vrain HUC and the Middle South Platte-Cherry Creek HUC. Rocky Flats has been a focus of research on the Preble's. We have proposed a critical habitat unit consisting of three streams in close proximity to one another on Department of Energy lands within these two subdrainages.

While the Draft Document calls for three small recovery populations or one medium recovery population within the Clear Creek HUC, the Preble's has been captured only along a segment of Ralston Creek above Ralston Reservoir. Based on limited occurrence of habitat components needed by the Preble's and the absence of other captures, we limited proposed critical habitat within the Clear Creek HUC to this single population.

The Draft Document calls for a medium recovery population along Cherry Creek in the Middle South Platte-Cherry Creek HUC. Preble's habitat in the upper reaches of the Cherry Creek basin appears extensive. We propose critical habitat in an area that includes a segment of Cherry Creek, Lake Gulch, and its tributaries. This area was chosen partly because it includes substantial public lands.

Within the Upper South Platte HUC we have proposed critical habitat along West Plum Creek and its tributaries consistent with the large recovery population designated in the Draft Document. An approved HCP exists for The Harding Property on West Plum Creek just upstream from its confluence with Garber Creek. Since the duration of the permit for this HCP is only 3 years, we have included this property in the proposed critical habitat.

We examined other areas of Preble's habitat on Federal lands within the Upper South Platte HUC, and have proposed critical habitat on Corps of Engineers lands upstream of Chatfield Reservoir along the South Platte River and on four areas centered on Forest Service land in the Pike-San Isabel National Forest within the South Platte River watershed. Though Forest Service lands in the Upper South Platte HUC are extensive, much of the South Platte itself is not federally owned. On Forest Service lands on some of the major tributaries of the South Platte River, habitat components required by the Preble's have been degraded by fire, flooding, or both. The Buffalo Creek watershed in particular has been highly degraded by fire, followed by flooding and accompanying erosion and sedimentation. Critical habitat has not been proposed in these areas. Combined, these five areas of proposed critical habitat should help assure that a viable population of the Preble's is maintained in the portion of this HUC upstream of Chatfield Reservoir on the South Platte River.

While the Draft Document calls for either three small populations or one medium population in both the Kiowa and Bijou HUCs, no confirmation of the Preble's currently exists for either of these subdrainages. To our knowledge, no trapping efforts targeted at the Preble's have taken place within likely Preble's habitat in either HUC. While primary constituent elements appear present and it is likely that the Preble's occurs within these systems, based on lack of known Preble's occurrence we have not proposed critical habitat within these HUCs.

Arkansas River Drainage

Within the Fountain Creek HUC the Draft Document calls for a large recovery population along Monument Creek and its tributaries including lands within the Air Force Academy. While the Academy would be an essential part of this recovery population, we have determined that the Academy does not meet the definition of critical habitat since it does not require special management considerations or protection. In determining boundaries of proposed critical habitat we considered whether documented Preble's populations on some reaches remained connected to the larger population present along Monument Creek or, due to fragmentation caused by past development, they have become permanently isolated.

Massive erosion and habitat modification along Pine Creek has likely isolated the Preble's population east of Interstate Highway 25 from that downstream on Monument Creek. Therefore, we have proposed no critical habitat on Pine Creek. A significant barrier to Preble's movement is present on Kettle Creek in the form of a large detention basin just east of Interstate Highway 25 and accompanying outflow structure that channels creek flow under the highway. Recent discussions have addressed possible means of improving connectivity between upstream and downstream Preble's populations along this reach. Since improved connectivity may be pursued and could prove important in meeting the recovery criteria in this HUC, we have proposed critical habitat through 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 Preble's movement upstream and downstream. While a current project will likely enhance connectivity for the Preble's population along this reach of Monument Creek, some reaches upstream from Monument Lake have been significantly altered by human activity. Based on our examination of the extent and quality of Preble's habitat upstream from Monument Lake, we have chosen to limit proposed critical habitat to areas downstream of the dam.

The Draft Document calls for either three small recovery populations or one medium recovery population to meet recovery criteria in both the Chico and the Big Sandy HUCs. The Preble's has been documented at a single location

within the Chico HUC, in apparently marginal habitat along an unnamed tributary of Black Squirrel Creek. Subsequent trapping could not relocate the Preble's at the site. Limited trapping of other sites has produced no captures of the Preble's and the extent of appropriate habitat components within the subdrainage appears limited. We have not proposed critical habitat in the Chico HUC based on our uncertainty that the Preble's exists within any given reach in this area. In the Big Sandy HUC limited trapping efforts targeted at the Preble's have not confirmed Preble's presence. Sites supporting primary constituent elements required by the Preble's appear few. For these reasons we have not proposed critical habitat in the Big Sandy HUC.

Proposed critical habitat for the Preble's was delineated based on the interpretation of multiple sources used during the preparation of this proposed rule. We used GIS-based mapping using ARCInfo that incorporated streams, steam order (Stahler method), roads, and cities from USGS maps, floodplains from Federal Emergency Management Agency maps, and surface management maps depicting property ownership from the Bureau of Land Management (primarily from the early 1990s). Lands proposed as critical habitat were divided into specific mapping units, *i.e.*, critical habitat units, often corresponding to individual HUCs. For the purposes of this proposed rule these units have been described primarily by latitude and longitude, and by section, township, and range, to mark the upstream and the downstream extent of proposed critical habitat along rivers and streams.

We were presented with a decision in designating outward extent of critical habitat into uplands. The Service has typically described Preble's habitat as extending outward 300 ft (90 m) from the 100-year floodplain of rivers and streams (Service 1998). The Draft Document defines Preble's habitat as the 100-year floodplain plus 100 m (330 ft) outward on both sides, but allows for alternative delineations that provide for all the needs of the Preble's and include the alluvial floodplain, transition slopes, and pertinent uplands.

In order to allow normal behavior and to assure that the Preble's and the primary constituent elements on which it depends are protected from disturbance, 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 Preble's range and electronic layers depicting 100-year floodplains needed to facilitate GIS mapping are not available for several counties within Preble'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 lacked an explicit data layer that could support such a delineation. Creation of such a layer through interpretation of aerial photographs and site visits was not possible given the time and resources available for this proposal.

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 Preble's. 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 Preble's.

For this proposal we ultimately settled on 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 an additional 100 m (330 ft) outward on each side. Based on this calculation, for streams of order 1 and 2 (the smallest streams) we have delineated critical habitat as 110 m (360 ft) outward from the stream edge, for streams of order 3 and 4 we have delineated critical habitat as 120 m (400 ft) outward from the stream edge, and for stream orders 5 and above (the largest streams and rivers) we have delineated critical habitat as 140 m (460 ft) outward from the stream edge. While proposed critical habitat will not include all areas used by individual Preble's over time, we believe that these corridors of critical habitat ranging from 220 m (720 ft) to 280 m (920 ft) in width (plus the river or stream width) will support the full range of primary constituent elements essential for persistence of Preble's populations, and should help protect the Preble's and their habitats from secondary impacts of nearby disturbance. We welcome comments regarding the appropriate outward limits of critical habitat and means of establishing them.

In selecting areas of proposed critical habitat, we made an effort to avoid developed areas that are not likely to contribute to Preble's conservation. However, the scale of mapping that we used to approximate our delineation of critical habitat did not allow us to exclude all developed areas such as roads and rural development. In addition, some developed stream reaches serve as important connectors within Preble's populations. Existing structures and features 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 disced agricultural areas, and certain other areas are not likely to contain primary constituent elements for the Preble's and, therefore, are not critical habitat. Federal actions limited to these areas would not trigger a section 7 consultation unless they affect the Preble's or primary constituent elements within proposed critical habitat.

Consistent with the Draft Document, we could not depend solely on federally-owned lands to propose critical habitat designation, as these lands are limited in geographic location, size, and habitat quality within the range of the Preble's. In addition to the federally-owned lands, we are proposing critical habitat on non-Federal public lands and privately owned lands, including lands owned by the State of Colorado and State of Wyoming, and by local governments. All non-Federal lands designated as critical habitat meet the definition of critical habitat under section 3 of the Act in that they are within the geographical area occupied by the species, are essential to the conservation of the species, and may require special management considerations or protection.

Section 4(b)(2) of the Act requires us to consider the economic and other relevant impacts of designating areas as critical habitat. We may exclude areas from critical habitat upon a determination that the benefits of such exclusions outweigh the benefits of designating these areas as critical habitat. We cannot exclude areas from critical habitat when the exclusion will result in the extinction of the species. We will make available for public review an economic analysis of this proposal; this economic analysis will serve as the basis of our 4(b)(2) analysis and any exclusions. However, this economic analysis is not yet completed;

as a result, we are not able to identify proposed exclusions under section 4(b)(2) in this proposed rule. We will complete our economic analysis, re-open the public comment period, and review public comments before making a final determination of critical habitat. This review, combined with our assessment of the benefits of designating areas as critical habitat, may identify certain proposed areas that should be excluded from the final critical habitat designation, provided these exclusions will not result in the extinction of the species. As a result, the final critical habitat determination may differ from this proposal.

Proposed Critical Habitat Designation

The proposed critical habitat contained within units discussed below constitutes our best evaluation of areas necessary to conserve the Preble's. Proposed critical habitat may be revised should new information become available prior to the final rule, or may be revised through rule-making (including notice and public comment) if new information becomes available after the final rule.

Table 1 provides a summary of land ownership by river or stream length and area of proposed critical habitat in each county for which critical habitat has been proposed. Critical habitat for the Preble's includes approximately 381.7 km (237.2 mi) of rivers and streams and 8,116 ha (20,054 ac) of lands in Wyoming and approximately 676.4 km (420.3 mi) of rivers and streams and 15,132 ha (37,392 ac) of lands in Colorado. Lands proposed as critical habitat are under Federal, State, local government, and private ownership. No lands proposed as critical habitat are under Tribal ownership. Estimates reflect the total river or stream length, or area of lands within critical habitat unit boundaries, without regard to the presence of primary constituent elements. Therefore, given exclusions for developed areas and other areas not supporting the primary constituent elements, the area proposed for designation is actually less than indicated in Table 1.

TABLE 1.—PROPOSED CRITICAL HABITAT FOR THE PREBLE'S MEADOW JUMPING MOUSE BY COUNTY IN WYOMING AND COLORADO, SUMMARIZED BY FEDERAL, STATE, AND OTHER OWNERSHIP

Ownership				
Linear River Kilometers and Hectares by State and County				
	Federal	State	Other	Total
Wyoming	51.4 km (32.0 mi); 1,552 ha (3,836 ac).	12.8 km (7.9 mi); 265 ha (655 ac).	317.5 km (197.3 mi) 6,297 ha (15,561 ac).	381.7 km (237.2 mi); 8,116 ha (20,253 ac)
Albany	42.8 km (26.6 mi); 940 ha (2,323 ac).	5.6 km (3.5 mi); 107 ha (265 ac).	63.3 km (39.3 mi); 1,348 ha (3,334 ac).	111.7 km (69.4 mi); 2,396 ha (5,921 ac)
Converse	3.8 km (2.1 mi); 143 ha (279 ac).	0; 0	1.4 km (0.9 mi); 0	4.8 km (3.0 mi); 113 ha (279 ac)
Laramie	5.0 km (3.1 mi); 496 ha (1,225 ac).	4.4 km (2.7 mi); 98 ha (242 ac).	188.6 km (117.2 mi); 3,617 ha (8,937 ac).	198.0 km (123.0 mi); 4,210 ha (10,403 ac)
Platte	0.1 km (0.1 mi); 4 ha (11 ac).	2.8 km (1.8 mi); 60 ha (148 ac).	64.2 km (39.9 mi); 1,332 ha (3,292 ac).	67.2 km (41.7 mi); 1,397 ha (3,451 ac)
Colorado	215.2 km (133.6 mi); 4,942 ha (12,214 ac).	65.2 km (40.5 mi); 1,405 ha (3,473 ac).	396.1 km (246.1 mi); 8,784 ha (21,706 ac).	676.4 km (420.3 mi); 15,132 ha (37, 392 ac)
Boulder	0	0	12.3 km (7.7 mi); 299 ha (740 ac).	12.3 km (7.7 mi); 299 ha (740 ac)
Douglas	57.5 km (35.7 mi) 1,351 ha (3,479 ac).	13,5 km (8.4 mi); 276 ha (683 ac).	157.7 km (98.0 mi); 3,450 ha (8,524 ac).	228.7 km (142.1 mi); 5,076 ha (12,545 ac)
El Paso	0.2 km (0.1 mi); 16 ha (41 ac).	0.4 km (0.3 mi); 8 ha (21 ac).	55.6 km (34.5 mi); 1,232 ha (3.048 ac).	56.3 km (35.0 mi); 1,259 ha (3,110 ac)
Jefferson	31.8 km (19.7 mi) 611 ha (1,509 ac).	5.1 km (3.2 mi); 82 ha (203 ac).	26.7 km (16.6 mi); 551 ha (1,361 ac).	63.8 km (39.6 mi); 1,244 ga (3,073 ac)
Larimer	124.2 km (77.2 mi); 2,939 ha (6,745 ac).	46.0 km (28.6 mi); 1,038 ha (2,564 ac).	134.8 km (83.3 ac); 3,054 ha (7,547 ac).	305.1 km (189.6 mi); 7,022 ha (17,352 ac)
Teller	1.3 km (0.8 mi); 34 ha (85 ac).	0	0	1.3 km (0.8 mi); 34 ha (85 ac)
Weld	0	0.0; 1 ha (2 ac)	8.9 km (5.6 mi); 196 ha (484 ac).	8.9 km (5.6 mi); 197 ha (486 ac)

Lands proposed as critical habitat are divided into 19 critical habitat units containing all of those primary constituent elements necessary to meet the primary biological needs of the Preble's. We did not include all areas currently occupied by the Preble's. A brief description of each Preble's critical habitat unit and the reasons why they are essential for the conservation of the Preble's are provided below. The units are generally based on geographically distinct river drainages and subdrainages described in the Draft Document. These units have been subject to, or are threatened by, varying degrees of degradation from human use and development. For these reasons, all of the areas we are proposing for critical habitat designation may require special management considerations or protection.

In areas within the range of the Preble's where there has been concern over possible confusion between the Preble's and the western jumping mouse, we have provided comments regarding known occurrence of the Preble's. Unless otherwise noted, references to ''morphological examination'' refer to Connor and Shenk (in prep.), references to ''genetic examination'' refer to Riggs *et al.* (1997), and references to ''captures presumed to be the Preble's'' refer to field surveys where jumping mice presumed to be Preble's were released alive and not subject to morphological or genetic examination.

The following five critical habitat units are located in the North Platte River drainage:

Unit NP1: Cottonwood Creek, Albany, Platte, and Converse Counties, Wyoming.

Unit NP1 encompasses approximately 924 ha (2,284 ac) on 43.3 km (26.9 mi) of streams within the Cottonwood Creek watershed. It includes Cottonwood Creek from Harris Park Road upstream to the 2,100-m (7,000-ft) elevation. Tributaries include North Cottonwood Creek and Preacher Creek. The unit includes both public and private lands, including a small portion on the Medicine Bow-Routt National Forest.

This unit is located in the Glendo HUC and is proposed to address the one of two medium recovery populations required to meet recovery criteria for the North Platte River drainage in the Draft Document. The Preble's habitat on this unit appears generally excellent, particularly on the Forest Service lands. This population is essential not only to maintain distribution near the northernmost extreme of known Preble's range, but because the large size of the population (as predicted by amount and quality of habitat) should help ensure viability into the future. Private lands within the unit are used extensively for grazing, which could pose a threat to the Preble's and its habitat if not managed appropriately.

A specimen examined by Krutzch (1954) in describing the subspecies is from Springhill in this HUC. Five recent specimens from this subdrainage have been identified as the Preble's through morphological examination (tooth fold presence) (Jones, *in litt.,* 2002). Captures of jumping mice presumed to be Preble's have occurred at several other locations in this subdrainage.

NP2: Horseshoe Creek, Albany County, Wyoming.

Unit NP2 encompasses approximately 153 ha (377 ac) on 6.5 km (4.1 mi) of streams within the Horseshoe Creek watershed. It includes Horseshoe Creek upstream from Harris Park Road. The unit is entirely on Federal lands within the Medicine Bow-Routt National Forest.

This unit is located in the Glendo HUC and, while unlikely to serve as an initial recovery population under the Draft Document, it encompasses a significant area of habitat entirely on Federal lands. Proposal of critical habitat on this area is based upon captures of jumping mice presumed to be the Preble's on Trail Creek (an upstream tributary to Horshoe Creek) and on primary constituent elements present in this area.

Unit NP3: Chugwater Creek, Albany, Laramie, and Platte Counties, Wyoming.

Unit NP3 encompasses approximately 3,811 ha (9,416 ac) on 179.4 km (111.5 mi) of streams within the Chugwater Creek watershed. It extends from several miles downstream of the town of Chugwater, upstream on Chugwater Creek and its tributaries to approximately the 2,100-m (7,000-ft) elevation. Major tributaries within the unit include Middle Chugwater Creek, South Chugwater Creek, Three Mile Creek, Sand Creek, Ricker Creek, Strong Creek, and Shanton Creek. The unit consists of both public and private lands.

This unit is located in the Lower Laramie HUC and is proposed to address the large recovery population in the North Platte River drainage required to meet the recovery criteria described in the Draft Document. The unit supports excellent Preble's habitat with a complex tributary system and is likely to support a high density of the Preble's. While some isolated portions of this unit may be less suitable, we do not believe those areas are permanently affected by current land use practices or pose such barriers as to segregate portions of this Preble's population. Based on the amount and apparent quality of Preble's habitat contained in this unit, it may support one of the largest populations of the Preble's within its entire range and has a high probability of remaining viable well into the future. Threats are presented by future development, road construction, and road improvements. In addition, the unit is repeatedly crossed by gas pipelines and utility corridors. Haying and grazing may be threats to the Preble's in portions of the unit.

Specimens of Preble's from this HUC include a specimen from Chugwater examined by Krutzch (1954) in describing the subspecies, and specimens from Sybille Creek, Chugwater Creek, and Hunton Creek verified as the Preble's through morphological examination (tooth fold presence) (Jones, *in litt.,* 2002). Capture of jumping mice presumed to be the Preble's has occurred at several other locations in this subdrainage.

Unit NP4: Friend Creek and Murphy Canyon, Albany County, Wyoming.

Unit NP4 encompasses approximately 683 ha (1,689 ac) on 32.0 km (19.9 mi) of streams within two subunits, the Friend Creek and Murphy Canyon watersheds. It consists largely of Federal lands within the Medicine Bow-Routt National Forest but includes small parcels of intervening non-Federal lands.

This unit is located in the Lower Laramie HUC and, while unlikely to serve as an initial recovery population under the Draft Document, it encompasses a significant area of Preble's habitat largely on Federal lands within the Medicine Bow-Routt National Forest. We have proposed this unit as critical habitat based on the primary constituent elements present and captures of jumping mice presumed to be the Preble's.

Unit NP5: Horse Creek, Laramie County, Wyoming.

Unit NP5 encompasses approximately 1,770 ha (4,373 ac) on 84.1 km (52.3 mi) of streams within the Horse Creek watershed. It includes Horse Creek from the Interstate Highway 25 bridge upstream to the 2,100-m (7,000-ft) elevation with major tributaries including Dry Creek, the South Fork of Horse Creek, Mill Creek, and the North Fork of Horse Creek. The unit consists of both public and private lands. It includes lands owned by the University of Wyoming.

The unit is located in the Horse Creek HUC and is proposed to address one of the two medium recovery populations required in the Draft Document to meet recovery criteria in the North Platte River drainage. In general, the habitat appears extremely good with a broad floodplain, patches of dense shrubs, and extensive hay meadows. This population appears to be relatively large, as predicted by the quality and extent of habitat present, and should retain viability into the future. Current and future threats include development, road construction, and utility corridors. Additionally, haying and grazing may be threats to the Preble's in portions of the unit.

This designation is based upon a capture of a mouse verified to be the Preble's through morphological examination (tooth fold presence) (Jones, *in litt.,* 2002) on Horse Creek and other captures presumed to be Preble's on Horse Creek and the South Fork of Horse Creek. We elected to propose critical habitat both upstream and downstream of successful survey locations based on the extensive complex of suitable habitat that is present.

The following 13 critical habitat units are located in the South Platte River drainage:

Unit SP1: Lodgepole Creek and Upper Middle Lodgepole Creek, Laramie County, Wyoming.

Unit SP1 encompasses approximately 265 ha (654 ac) on 20.8 km (13.0 mi) of streams within two subunits in the Lodgepole Creek watershed, Lodgepole Creek and the Upper Middle Lodgepole Creek. The Lodgepole Creek subunit includes Lodgepole Creek from Horse Creek Road (County Road 211) upstream beyond the confluence of North Lodgepole Creek and Middle Lodgepole

Creek up to 2,300-m (7,000-ft) elevation on both creeks. The subunit consists of almost entirely private lands. The Upper Middle Lodgepole Creek subunit includes Middle Lodgepole Creek from the eastern boundary of the Pole Mountain Unit of the Medicine Bow-Routt National Forest upstream to about 2,400-m (7,750-ft) elevation and including the North Branch of Middle Lodgepole Creek. The unit consists of public lands including portions of the Medicine Bow-Routt National Forest.

This unit is located in the Upper Lodgepole HUC and is proposed to address two of three small recovery populations included in the recovery criteria for this HUC in the Draft Document. The Lodgepole Creek subunit will likely be threatened in the future by development including road construction. The Upper Middle Lodgepole Creek subunit may be threatened by grazing pressure (particularly during drought conditions) and off-road vehicle use.

Critical habitat on this unit is proposed based on captures of jumping mice on Middle Lodgepole Creek and North Branch of Middle Lodgepole Creek. Although these two trap sites are fairly high in elevation, a specimen was confirmed as the Preble's on the North Branch of Middle Lodgepole Creek through genetic examination and a second specimen was verified to be the Preble's through morphological examination (tooth fold presence) (Jones, *in litt.,* 2001).

Unit SP2: F.E. Warren Air Force Base, Laramie County, Wyoming.

Unit SP2 encompasses approximately 134 ha (331 ac) on 5.7 km (3.6 mi) of streams within the Crow Creek watershed. It includes Crow Creek on the F.E. Warren Air Force Base from the southeastern boundary of the Air Force Base in Cheyenne upstream to the western boundary of the Air Force Base. The unit consists entirely of Federal lands of the Air Force Base.

This unit is located in the Crow Creek HUC and is proposed to address one of three small recovery populations required in the recovery criteria for this HUC in the Draft Document. This unit includes portions of the Air Force Base threatened by water management for flood control, reclamation of landfills, and other Air Force Base operations.

Crow Creek on the Air Force Base has been the subject of repeated past trapping. Trapping efforts by the University of Wyoming, Colorado Natural Heritage Program, and the Wyoming Natural Diversity Database identified mice from the Air Force Base as the Preble's, though without morphological examination of specimens. A specimen from Cheyenne, within this HUC, was examined by Krutzch (1954) and used in describing the Preble's subspecies. However, genetic examination identified specimens from the Air Force Base as western jumping mice. One 1996 specimen taken from the Air Force Base was identified through morphological examination as a western jumping mouse. Given that the Air Force Base is within the normal elevational range of the Preble's, it is likely the Air Force Base is occupied by both the Preble's and the western jumping mouse.

Unit SP3: Lone Tree Creek, Laramie County, Wyoming, Weld County, Colorado.

Unit SP3 encompasses approximately 394 ha (974 ac) on 18.7 km (11.7 mi) of streams within the Lone Tree Creek watershed. It includes two subunits, Lone Tree Creek, Wyoming and Lone Tree Creek, Colorado. The Lone Tree Creek, Wyoming, subunit includes a reach of Lone Tree Creek and a portion of Goose Creek. The subunit consists of both public and private lands. The Lone Tree Creek, Colorado, subunit includes Lone Tree Creek both upstream and downstream of a successful trapping site near Interstate Highway 25. This subunit also consists of both public and private lands.

This unit is located in the Lone Tree-Owl HUC and is proposed to address two of three small recovery populations required in the recovery criteria for this HUC in the Draft Document. Suitable habitat occurs throughout the HUC, although some areas are of lower quality due to heavy grazing. This unit may be threatened by development in the future.

Proposal of critical habitat within this unit is based on captured jumping mice presumed to be the Preble's in Wyoming and Colorado. In the Colorado subunit, a mouse identified in the field as a Preble's was determined by genetic examination to be more similar to a western jumping mouse. Given the low elevation of the capture site 1,900 m (6,200 ft), it is likely that both the Preble's and the western jumping mouse are present within this unit.

Unit SP4: North Fork Cache La Poudre River, Larimer, Colorado.

Unit SP4 encompasses approximately 3,321 ha (8,206 ac) on 141.8 km (88.1 mi) 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 Draft Document. The area remains rural and agricultural with habitat components likely to support relatively high densities of Preble's. Pressure for expanded development is increasing within the area. Portions of the unit are the subject of the Livermore Valley Landowners HCP currently under development.

Specimens from Rabbit Creek and Lone Pine Creek were verified through genetic examination as the Preble's. Jumping mice presumed to be the Preble's have been captured at several locations within the unit.

Unit SP5: Cache La Poudre River, Larimer County, Colorado.

Unit SP5 encompasses approximately 1,912 ha (4,725 ac) on 82.4 km (51.2 mi) of streams within the Cache La Poudre River watershed. It includes the Cache La Poudre River from Poudre Park upstream to the 2,300-m (7,600-ft) 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.

The unit is located in the Cache La Poudre HUC and, while unlikely to serve as a recovery population under the Draft Document, it encompasses a significant area of habitat likely to support a sizeable population of Preble's. 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 habitat components present. Some such reaches may serve the Preble's mostly as connectors between areas containing all necessary primary constituent elements.

A number of jumping mice, presumed to be the Preble's, have been captured from this unit, with one specimen from Young Gulch was verified through morphological examination as a Preble's.

Unit SP6: Buckhorn Creek, Larimer County, Colorado.

Unit SP6 encompasses approximately 1,537 ha (3,798 ac) on 69.2 km (43.0 mi)

of streams within the Buckhorn Creek watershed. It includes Buckhorn Creek from just west of Masonville, upstream to the 7,600-foot 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 includes 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 designated for this area in the Draft Document. Pressure for expanded rural development exists on non-Federal lands within the unit.

Jumping mice presumed to be the Preble's have been captured from various portions of this unit with one specimen from Little Bear Gulch verified through morphological examination as the Preble's.

Unit SP7: Cedar Creek, Larimer County, Colorado.

Unit SP7 encompasses approximately 252 ha (624 ac) on 11.7 km (7.3 mi) 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 under the Draft Document, it supports a population on mostly Federal lands of the upper Big Thompson River, isolated, at least in terms of riparian connection, from the Preble's population on nearby Buckhorn Creek. This site is upstream of The Narrows of the Big Thompson Canyon, a barrier to Preble's 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 Preble's mice may pass between the two populations and thus between the two significant watersheds within this HUC.

Jumping mice presumed to be the Preble's have been captured from within this unit. The Little Bear Gulch capture of Preble's, cited above, is from just north of this unit and within the same HUC.

Unit SP8: South Boulder Creek, Boulder County, Colorado.

Unit SP8 encompasses approximately 283 ha (699 ac) on 11.8 km (7.3 mi) 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 Draft Document. Portions of the area have been the subject of Preble's research funded by the City of Boulder and, in places, high densities of the Preble's have been documented. A wide floodplain, complex ditch system, and the irrigation of pastures makes habitat within the lower portions of this unit unique. In places, the outward extent of primary constituent elements surpasses the standard distance outward from the stream used to define critical habitat in this proposal. Boundaries of critical habitat on this unit should be refined in cooperation with the City of Boulder prior to the final rule. 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 Preble's. The entire unit is within the Boulder County HCP currently under development.

The Preble's has been verified through genetic and morphological examination of specimens from several sites within the unit.

Unit SP9: Rocky Flats Environmental Technology Site, Jefferson County, Colorado.

Unit SP9 encompasses approximately 429 ha (1,059 ac) on 19.5 km (12.1 mi) of streams within the Rock Creek, Woman Creek, and Walnut Creek watersheds. The unit includes only Federal lands on the Department of Energy's Rocky Flats.

Portions of this unit are located in the St. Vrain HUC (Rock Creek) and portions are in the Middle South Platte-Cherry Creek HUC (Woman Creek and Walnut Creek). While unlikely to serve as an initial recovery population under the Draft Document, this unit is unique in that it is limited entirely to Federal lands and has been the subject of substantial past research on the Preble's. After cleanup and closure of the Rocky Flats Environmental Technology Site, the property will be transferred to the Service to become part of the National Wildlife Refuge system. Population studies have taken place on the site over a period of years. Streams within the unit are small and habitat components present do not support a high density of the Preble's. The site presents an opportunity to study small populations and their viability over time.

The Preble's has been verified to be present through genetic and morphological examination of specimens from within the unit.

Unit SP10: Ralston Creek, Jefferson County, Colorado.

Unit SP10 encompasses approximately 282 ha (698 ac) on 13.1 km (8.1 mi) of streams within the Ralston Creek watershed. It includes Ralston Creek from Ralston Reservoir upstream to the 7,600-foot elevation. The unit includes both public and private lands including lands in Golden Gate Canyon State Park, White Ranch County Park, and lands owned by Denver Water.

This unit is located in the Clear Creek HUC and is proposed to partially address the criteria of three small recovery populations or one medium recovery population required for this area in the Draft Document. The segment of Ralston Creek that passes through the Cotter Corporation's existing Schwartzwalder Mine serves as a connector between areas supporting primary constituent elements required by the Preble's located in areas upstream and downstream.

The Preble's has been verified through morphological examination of a specimen from the lower portion of this unit.

Unit SP11: Cherry Creek, Douglas County, Colorado.

Unit SP11 encompasses approximately 703 ha (1,738 ac) on 32.1 km (19.9 mi) of streams within the Cherry Creek watershed. It includes Cherry Creek from the downstream boundary of the Castlewood Canyon State Recreation Area, upstream to its confluence with Lake Gulch. Major tributaries within the unit include Lake Gulch and Upper Lake Gulch. The unit includes both public and private lands. It includes portions of the Castlewood Canyon State Recreation Area, as well as Douglas County's recently acquired Green Mountain Ranch property.

This unit is located in the Middle South Platte-Cherry Creek HUC and is proposed to address the medium recovery population designated for this area in the Draft Document. Some development pressure is occurring from expanding rural development within the area. The entire unit is within the Douglas County HCP currently being developed.

Unit SP12: West Plum Creek, Douglas County, Colorado.

Unit SP12 encompasses approximately 3,270 ha (8,080 ac) on 146.6 km (91.1 mi) 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 (Corps of Engineers property), and Colorado Division of Wildlife's Woodhouse Ranch property.

This unit is located in the Upper South Platte HUC and is proposed to address the large recovery population designated for this area in the Draft Document. Aside from a portion of Plum Creek, the area remains rather rural and includes habitat components likely to support relatively high densities of the Preble's. Pressure for expanded rural development is occurring within the area. With the exception of Federal lands, the entire unit is within the Douglas County HCP currently being developed.

Specimens from West Plum Creek, Garber Creek, and Indian Creek have been verified through morphological examination as the Preble's. The unit has been widely surveyed and jumping mice presumed to be the Preble's have been found in several other locations.

Unit SP13: Upper South Platte River, Jefferson and Douglas Counties, Colorado.

Unit SP13 encompasses approximately 1,687 ha (4,168 ac) on 83.1 km (51.6 mi) of streams within the Platte River watershed. It includes five subunits. The Chatfield subunit includes a section of the South Platte River upstream of Chatfield Reservoir within Chatfield State Recreation Area (Corps of Engineers' property). The Bear Creek subunit includes Bear Creek and West Bear Creek, tributaries to the South Platte River on Forest Service lands. The South Platte sub-unit 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. The Wigwam Creek subunit includes Wigwam Creek and its tributaries, Pine Creek and Cabin Creek on Forest Service lands.

This unit is located in the Upper South Platte HUC and, while unlikely to serve as an initial recovery population under the Draft Document, encompasses five areas of primarily Federal land spread through the drainage, four within the Pike-San Isabel National Forest boundary. Habitat components present and the likely density of Preble's populations vary. The Trout Creek subunit appears to have high quality Preble's habitat and may provide an opportunity to research relationships between the Preble's and the western jumping mouse, both of which have been verified from a single location in the subunit. Small segments of non-Federal lands in the unit are within the Douglas County HCP currently being developed.

Preble's has been confirmed through morphological examination of a specimen from Trout Creek near the Douglas County-Teller County boundary at 2,310 m (7,590 ft). Other captures of jumping mice from various locations within this unit are presumed to be the Preble's.

The following critical habitat unit is located in the Arkansas River drainage:

Unit A1: Monument Creek, El Paso County, Colorado.

Unit A1 encompasses approximately 1,259 ha (3,110 ac) 56.3 km (35.0 mi) of streams within the Monument Creek watershed. It includes Monument Creek from the confluence of Cottonwood Creek upstream to the southern boundary of the 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, 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 is proposed to address the large recovery population designated for this area in the Draft Document. The area is unique in that it represents the only known Preble's population of significant size within the Arkansas River drainage and the southernmost known occurrence of the Preble's. Development pressure is extremely high on some private lands within the unit. There is concern that development will result in changes in flows from increased stormwater runoff and will affect riparian systems. Non-Federal lands within the unit are addressed in the El Paso County HCP currently being developed.

Jumping mice presumed to be the Preble's have been captured throughout this unit and specimens from the Academy and within the unit have been verified as the Preble's through genetic and morphological examination.

Effects of Critical Habitat Designation

Designating critical habitat does not, in itself, lead to the recovery of a listed species. The designation does not establish a reserve, create a management plan, establish numerical population goals, prescribe specific management practices (inside or outside of critical habitat), or directly affect areas not designated as critical habitat. Specific management recommendations for areas designated as critical habitat are most appropriately addressed in recovery and conservation plans, and through section 7 consultation and section 10 permits.

However, designation of critical habitat can help focus conservation activities for listed species by identifying areas essential to conserve the species. Designation of critical habitat also alerts the public, as well as land-managing agencies, to the importance of these areas. As a result of critical habitat designation, Federal agencies may be able to prioritize landowner incentive programs such as Conservation Reserve Program enrollment and other private landowner agreements that benefit the Preble's. Critical habitat designation also may assist States and local governments in prioritizing their conservation and land management programs.

ESA Section 7 Consultation

The regulatory effects of a critical habitat designation under the Act are triggered through the provisions of section 7, which applies only to activities conducted, authorized, or funded by a Federal agency (Federal actions). Regulations implementing this interagency cooperation provision of the Act are codified at 50 CFR 402. Individuals, organizations, States, local governments, and other non-Federal entities are not affected by the designation of critical habitat unless their actions occur on Federal lands, require Federal authorization, or involve Federal funding.

Section 7(a)(2) of the Act requires Federal agencies, including us, to insure that their actions are not likely to jeopardize the continued existence of a listed species or result in the destruction or adverse modification of designated critical habitat. This requirement is met through section 7

consultation under the Act. Adverse modification might result from alterations that include, but are not limited to, adverse changes to the physical or biological features, *i.e.,* the primary constituent elements, that were the basis for determining the habitat to be critical.

Conference for Proposed Critical Habitat

Section 7(a)(4) of the Act requires Federal agencies to confer with us on any action that is likely to result in the destruction or adverse modification of proposed critical habitat. The regulations for interagency cooperation regarding proposed critical habitat are codified at 50 CFR 402.10. During a conference on the effects of a Federal action on proposed critical habitat, we make non-binding recommendations on ways to minimize or avoid adverse effects of the action. We document these recommendations and any conclusions reached in a conference report provided to the Federal agency and to any applicant involved.

If requested by the Federal agency and deemed appropriate by us, the conference may be conducted in accordance with the procedures for formal consultation under 50 CFR 402.14. We may adopt an opinion issued at the conclusion of the conference as our biological opinion when the critical habitat is designated by final rule, but only if new information or changes to the proposed Federal action would not significantly alter the content of the opinion.

Consultation for Designated Critical Habitat

If a Federal action may affect a listed species or its designated critical habitat, the action agency must initiate consultation with us (50 CFR 402.14). Through this consultation, we would advise the agency whether the action would likely jeopardize the continued existence of the species or adversely modify its critical habitat.

When we issue a biological opinion that concludes that an action is likely to result in the destruction or adverse modification of critical habitat, we must provide reasonable and prudent alternatives to the action, if any are identifiable. Reasonable and prudent alternatives are actions identified during consultation that can be implemented in a manner consistent with the intended purpose of the proposed action, are consistent with the scope of the action agency's authority and jurisdiction, are economically and technologically feasible, and would likely avoid the destruction or adverse modification of critical habitat (50 CFR 402.02).

Reinitiation of Prior Consultations

A Federal agency may request a conference with us for any previously reviewed action that is likely to destroy or adversely modify proposed critical habitat and over which the agency retains discretionary involvement or control, as described above under ''Conference for Proposed Critical Habitat.'' Following designation of critical habitat, regulations at 50 CFR 402.16 require a Federal agency to reinitiate consultation for previously reviewed actions that may affect critical habitat and over which the agency has retained discretionary involvement or control.

Federal Actions That May Destroy or Adversely Modify Preble's Meadow Jumping Mouse Critical Habitat

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

Federal actions that, when carried out, funded or authorized by a federal agency, may destroy or adversely modify critical habitat for the Preble's include, but are not limited to:

(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, discing, 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 (*e.g.,* 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; and

(5) Any activity that could lead to the introduction, expansion, or increased density of exotic plant or animal species that are detrimental to the Preble's 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.

Previous Section 7 Consultations

Many section 7 consultations for Federal actions affecting the Preble's and its habitat have preceded this critical habitat proposal, including, but not limited to:

(1) Activities on Federal lands including those of the Department of Defense, Forest Service, Department of Energy, and Bureau of Land Management;

(2) Activities affecting waters of the United States by the Corps of Engineers under section 404 of the Clean Water Act;

(3) Licensing or relicensing of dams by the Federal Energy Regulatory Commission;

(4) Development, operation, and maintenance of dams, canals, and other means of directing flows by the Corps of Engineers and the Bureau of Reclamation;

(5) Funding and regulation of highway and bridge construction, and improvements by the Federal Highway Administration;

(6) Licensing or construction of communication sites by the Federal Communications Commission;

(7) Hazard mitigation and post-disaster repairs funded by the Federal Emergence Management Agency; and

(8) Issuance of Endangered Species Act section 10(a)(1)(B) permits by the Fish and Wildlife Service.

If you have any questions regarding whether specific activities will likely constitute destruction or adverse modification of critical habitat, contact LeRoy Carlson, Field Supervisor, Colorado Ecological Services Field Office (see **FOR FURTHER INFORMATION CONTACT**). Requests for copies of regulations on listed wildlife and inquiries about prohibitions and permits may be addressed to U.S. Fish and Wildlife Service, Ecological Services, P.O. Box 25486, DFC, Denver, CO 80225–0486 (telephone 303–236–7400; facsimile 303–236–0027).

Relationship of Critical Habitat to Military Lands

The Sikes Act Improvements Act of 1997 (Sikes Act) requires each military installation that includes land and water suitable for the conservation and management of natural resources to complete, by November 17, 2001, an Integrated Natural Resources Management Plan (INRMP). An INRMP integrates implementation of the

military mission of the installation with stewardship of the natural resources found there. Each INRMP includes an assessment of the ecological needs on the installation, including needs to provide for the conservation of listed species; a statement of goals and priorities; a detailed description of management actions to be implemented to provide for these ecological needs; and a monitoring and adaptive management plan. We consult with the military on the development and implementation of INRMPs for installations with listed species. Bases that have completed and approved INRMPs that address the needs of the species generally do not meet the definition of critical habitat discussed above, as they require no additional special management or protection. Therefore, we do not include these areas in critical habitat designations if they meet the following three criteria: (1) A current INRMP must be complete and provide a conservation benefit to the species; (2) the plan must provide assurances that the conservation management strategies will be implemented; and (3) the plan must provide assurances that the conservation management strategies will be effective, by providing for periodic monitoring and revisions as necessary. If all of these criteria are met, then the lands covered under the plan would not meet the definition of critical habitat.

In place at the Air Force Academy in El Paso County, CO are an INRMP, a 1999 Conservation and Management Plan for Preble's Meadow Jumping Mouse on the U.S. Air Force Academy, and a 2000 programmatic section 7 consultation addressing certain activities on the Academy that may affect the Preble's. The conservation and management plan provides guidance for U.S. Air Force management decisions regarding the Preble's and its habitat over five years (2000—2005). While it was based upon the most current scientific knowledge available at the time that it was developed, research regarding Preble's is ongoing at the Academy and the conservation and management plan will be updated as new information is collected.

We have reviewed these measures and have determined that they address the three criteria identified above. Therefore, Academy lands do not meet the definition of critical habitat and are not included in this proposed designation of critical habitat for the Preble's. To date, the Academy is the only Department of Defense installation that has completed a final INRMP that provides for sufficient conservation, management and protection for the Preble's.

Relationship to Habitat Conservation Plans and Other Planning Efforts

Section 10(a) of the Act authorizes us to issue permits for private actions which result in the taking of listed species incidental to otherwise lawful activities. Incidental take permit applications must be supported by an HCP that identifies conservation measures that the permittee agrees to implement for the species to minimize and mitigate the impacts of the requested incidental take. Currently a limited number of small HCPs covering the Preble's or its habitat have been approved and regional or county-wide HCPs are being developed in a few instances. We have not proposed to exclude any lands from this critical habitat designation on the basis of existing HCPs. However, HCPs that will likely include proposed critical habitat are currently under development. Should any of these HCPs be approved by the Service prior to finalization of a rule designating critical habitat, we will consider whether the area covered by the HCP does not represent critical habitat due to adequate existing protection and management under the HCP.

In the event that future HCPs covering the Preble's are developed within the boundaries of designated critical habitat after finalization of the critical habitat designation, we will provide technical assistance and work closely with the applicants to identify lands essential for the long-term conservation of the Preble's, ensure that the HCPs provide for protection and management of habitat areas essential to the Preble's by either directing development and habitat modification to nonessential areas, or appropriately modifying activities within essential habitat areas so that such activities will not adversely modify the primary constituent elements. The HCP development process provides an opportunity for more intensive analysis and data collection regarding the use of particular habitat areas by the Preble's and a more detailed analysis of the importance of such lands.

Economic Analysis

Section 4(b)(2) of the Act requires us to designate critical habitat on the basis of the best scientific and commercial information available, and to consider the economic and other relevant impacts of designating these areas as critical habitat. We may exclude areas from critical habitat upon a determination that the benefits of such exclusions outweigh the benefits of designating these areas as critical habitat. We cannot exclude areas from critical habitat when the exclusion will result in the extinction of the species. We will conduct an analysis of the economic impacts of designating these areas as critical habitat prior to a final determination. When completed, we will announce the availability of the draft economic analysis with a notice in the **Federal Register** and reopen the comment period at the time to accept comments on the economic analysis or, if necessary, further comments on the proposed rule. The economic analysis will be available at *http://www.R6.FWS.GOV/preble.* This economic analysis will serve as the basis of our analysis under section 4(b)(2), and of any exclusions. As this economic analysis is not yet completed, we are not yet able to identify proposed exclusions under section 4(b)(2) in this proposed rule. We will review this analysis, public comments on the analysis and this proposed rule, and the benefits of designating areas as critical habitat; we may identify certain proposed areas that should be excluded from the final critical habitat designation, provided these exclusions will not result in the extinction of the species. As a result, the final critical habitat determination may differ from this proposal.

Public Comments Solicited

We intend any final action resulting from this proposal to be as accurate and as effective as possible. Therefore, we solicit comments or suggestions from the public, other concerned governmental agencies, the scientific community, industry, or any other interested party concerning this proposed rule. We particularly seek comments concerning:

(1) Reasons why any habitat should or should not be determined to be critical habitat as provided by section 4 of the Act, including whether the benefits of designation will outweigh any threats to the species due to designation;

(2) Specific information on the amount and distribution of the Preble's habitat, and what habitat is essential to the conservation of the species and why;

(3) Land use practices, and current or planned activities in the subject areas and their possible impacts on proposed critical habitat;

(4) Any foreseeable economic or other impacts resulting from the proposed designation of critical habitat, in particular, any impacts on small entities or families;

(5) Economic and other values associated with designating critical

habitat for the Preble's, such as those derived from non-consumptive uses (*e.g.,* hiking, camping, birdwatching, enhanced watershed protection, improved air quality, increased soil retention, ''existence values,'' and reductions in administrative costs); and

(6) Whether our approach to critical habitat designation could be improved or modified in any way to provide for greater public participation and understanding, or to assist us in accommodating public concern and comments.

If you wish to comment, you may submit your comments and materials concerning this proposal by any one of several methods (see **ADDRESSES**). If you would like to submit comments by electronic format, please submit them in ASCII file format and avoid the use of special characters and encryption. Please include your name and return e-mail address in your e-mail message. Please note that the e-mail address will be closed out at the termination of the public comment period. If you do not receive confirmation from the system that we have received your message, contact us directly by calling our Colorado Ecological Services Field Office at 303–275–2370.

Our practice is to make comments, including names and home addresses of respondents, available for public review during regular business hours. Individual respondents may request that we withhold their home address, which we will honor to the extent allowable by law. If you wish us to withhold your name or address, you must state this request prominently at the beginning of your comments. However, we will not consider anonymous comments. To the extent consistent with applicable law, we will make all submissions from organizations or businesses, and from individuals identifying themselves as representatives or officials of organizations or businesses, available for public inspection in their entirety. Comments and materials received will be available for public inspection, by appointment, during normal business hours at the above address.

Peer Review

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

We will consider all comments and data received during the 60-day comment period on this proposed rule during preparation of a final rule. Accordingly, the final rule may differ from this proposal.

Public Hearings

The Act provides for one or more public hearings on this proposal, if requested. Requests for public hearings must be made at least 15 days prior to the close of the public comment period. We will schedule public hearings on this proposal, if requested, and announce the dates, times, and places of those hearings in the **Federal Register** and local newspapers at least 15 days prior to the first hearing.

We plan to schedule at least three informal public meetings in Wyoming and Colorado to provide information on and an opportunity for discussion of this proposed rule. The dates, times, and places of these meetings will be publicized by the Service, including announcements in local newspapers.

Clarity of the Rule

Executive Order 12866 requires each agency to write regulations and notices that are easy to understand. We invite your comments on how to make this proposed rule easier to understand including answers to questions such as the following—(1) Are the requirements in the proposed rule clearly stated? (2) Does the proposed rule contain technical language or jargon that interferes with the clarity? (3) Does the format of the proposed rule (grouping and order of sections, use of headings, paragraphing, etc.) aid or reduce its clarity? (4) Is the description of the proposed rule in the **SUPPLEMENTARY INFORMATION** section of the preamble helpful in understanding the proposal? (5) What else could we do to make the proposed rule easier to understand?

Send a copy of any comments that concern how we could make this proposed rule easier to understand to: Office of Regulatory Affairs, Department of the Interior, Room 7229, 1849 C Street, NW, Washington, DC 20240. You may also e-mail comments to: *Exsec@ios.doi.gov.*

Required Determinations

Regulatory Planning and Review

In accordance with Executive Order 12866, this document is a significant rule and was reviewed by the Office of Management and Budget (OMB). We are preparing a draft economic analysis of this proposed action. We will use this analysis to meet the requirement of section 4(b)(2) of the Act to determine the economic consequences of designating the specific areas as critical habitat and excluding any area from critical habitat if it is determined that the benefits of such exclusion outweigh the benefits of specifying such areas as part of the critical habitat, unless failure to designate such area as critical habitat will lead to the extinction of the Preble's. This analysis will be available for public comment before finalizing this designation. The availability of the draft economic analysis will be announced in the **Federal Register** and in local newspapers.

Regulatory Flexibility Act (5 U.S.C. 601 et seq.)

In the economic analysis, we will determine whether designation of critical habitat will have a significant effect on a substantial number of small entities. As indicated on Table 1 (see ''Critical Habitat Designation''), we have proposed designating property owned by Federal, State, and local governments, and private entities.

Within these areas, the types of Federal actions or authorized activities that we have identified as potential concerns are:

(1) Activities on Federal lands including the Department of Defense, Forest Service, Department of Energy, and Bureau of Land Management;

(2) Regulations of activities affecting waters of the United States by the Corps of Engineers under section 404 of the Clean Water Act;

(3) Licensing or relicensing of dams by the Federal Energy Regulatory Commission;

(4) Development, operations, and maintenance of dams, canals, and other means of directing flows by the Corps of Engineers and Bureau of Reclamation;

(5) Funding and regulation of highway and bridge construction and improvements by the Federal Highway Administration;

(6) Licensing or construction of communication sites by the Federal Communications Commission;

(7) Hazard mitigation and post-disaster repairs funded by the Federal Emergency Management Agency; and

(8) Issuance of Endangered Species Act section 10(a)(1)(B) permits by the Fish and Wildlife Service.

Many of these activities sponsored by Federal agencies within the proposed critical habitat areas are carried out by small entities (as defined by the Regulatory Flexibility Act) through

contract, grant, permit, or other Federal authorization. These actions are currently required to comply with the listing protections of the Act, and the designation of critical habitat is not anticipated to have significant additional effects on these activities in areas of critical habitat occupied by the species.

For actions on non-Federal property that do not have a Federal connection (such as funding or authorization), the current restrictions concerning take of the species remain in effect, and this rule will have no additional restrictions.

Small Business Regulatory Enforcement Fairness Act (5 U.S.C. 804(2))

In the economic analysis, we will determine whether designation of critical habitat will cause—(a) any effect on the economy of $100 million or more; (b) any increases in costs or prices for consumers, individual industries, Federal, State, Tribal, or local government agencies, or geographic regions; or (c) any significant adverse effects on competition, employment, investment, productivity, innovation, or the ability of United States-based enterprises to compete with foreign-based enterprises.

Energy Supply, Distribution or Use (Executive Order 13211)

On May 18, 2001, the President issued an Executive Order (E.O. 13211) on regulations that significantly affect energy supply, distribution, and use. Executive Order 13211 requires agencies to prepare Statements of Energy Effects when undertaking certain actions. Though this proposed rule is a significant regulatory action under Executive Order 12866, it is not expected to significantly affect energy supplies, distribution, or use. Therefore, this action is not a significant energy action and no Statement of Energy Effects is required.

Unfunded Mandates Reform Act (2 U.S.C. 1501 et seq.)

In accordance with the Unfunded Mandates Reform Act (2 U.S.C. 1501 *et seq.*), the Service will use the economic analysis to further evaluate this situation.

Takings

In accordance with Executive Order 12630, this rule does not have significant takings implications, and a takings implication assessment is not required. As discussed above, the designation of critical habitat affects only Federal agency actions. The rule will not increase or decrease the current restrictions on private property concerning take of the Preble's as defined in section 9 of the Act and its implementing regulations (50 FR 17.31). Due to current public knowledge of the species' protection, the prohibition against take of the Preble's both within and outside of the proposed areas, and the fact that critical habitat provides no incremental restrictions, we do not anticipate that property values will be affected by the critical habitat designation. Additionally, critical habitat designation does not preclude development of HCPs and issuance of incidental take permits. Landowners in areas that are included in the designated critical habitat will continue to have the opportunity to utilize their property in ways consistent with the conservation of the Preble's.

Federalism

In accordance with Executive Order 13132, the rule does not have significant Federalism effects. A Federalism assessment is not required. In keeping with Department of the Interior policy, the Service requested information from and coordinated development of this critical habitat proposal with appropriate State resource agencies in Wyoming and Colorado. We will continue to coordinate any future designation of critical habitat for the Preble's with the appropriate State agencies. The designation of critical habitat for the Preble's imposes few 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 in that the areas essential to the conservation of the species are more clearly defined and the primary constituent elements of the habitat necessary to the conservation of the species are specifically identified. While making this definition and identification does not alter where and what federally-sponsored activities may occur, doing so may assist these local governments in long-range planning (rather than waiting for case-by-case section 7 consultations to occur).

Civil Justice Reform

In accordance with Executive Order 12988, the Office of the Solicitor has determined that the rule does not unduly burden the judicial system and meets the requirements of sections 3(a) and 3(b)(2) of the Order. We are proposing to designate critical habitat in accordance with the provisions of the Act and plan public meetings on the proposed designation during the comment period. The rule uses standard property descriptions and identifies the primary constituent elements within the designated areas to assist the public in understanding the habitat needs of the Preble's.

Paperwork Reduction Act of 1995 (44 U.S.C. 3501 et seq.)

This rule does not contain any information collection requirements for which Office of Management and Budget approval under the Paperwork Reduction Act is required. An agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a valid OMB control number.

National Environmental Policy Act

Our position is that, outside the Tenth Circuit, we do not need to prepare environmental analyses as defined by the National Environmental Policy Act (NEPA) in connection with designating critical habitat under the Endangered Species Act of 1973, as amended. We published a notice outlining our reasons for this determination in the **Federal Register** on October 25, 1983 (48 FR 49244). This assertion was upheld in the courts of the Ninth Circuit (*Douglas County* v. *Babbitt*, 48 F.3d 1495 (9th Cir. Ore. 1995), cert. denied 116 S. Ct. 698 (1996)). However, when the range of the species includes States within the Tenth Circuit, pursuant to 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 complete a NEPA analysis with an Environmental Assessment. The range of the Preble's includes States within the Tenth Circuit; therefore, we are completing an Environmental Assessment and will announce its availability in the **Federal Register**.

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), Executive Order 13175, and 512 DM 2, we readily acknowledge our responsibility to communicate meaningfully with recognized Federal Tribes on a government-to-government basis. We are required to assess the effects of critical habitat designation on tribal lands and tribal trust resources. We believe that no tribal lands or tribal trust resources are essential for the conservation of the Preble's.

References Cited

A complete list of all references cited in this final rule is available upon request from the Colorado Fish and

Wildlife Service Field Office (see **ADDRESSES**).

Author

The primary author of this proposed rule is Peter Plage, Biologist, of the Colorado Ecological Services Field Office (see **ADDRESSES**).

List of Subjects in 50 CFR Part 17

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

Proposed Regulation Promulgation

Accordingly, 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 § 17.11(h), revise the entry for ''Mouse, Preble's meadow jumping'' under ''MAMMALS'' to read as follows:

§ 17.11 Endangered and threatened wildlife.

* * * * *

(h) * * *

Species		Historic range	Vertebrate population where endangered or threatened	Status	When listed	Critical habitat	Special rules
Common name	Scientific name						
MAMMALS							
*	*	*	*	*	*		*
Mouse, Preble's meadow jumping.	*Zapus hudsonius preblei*.	U.S.A. (CO, WY)	Entire	T	636	17.95(a)	NA
*	*	*	*	*	*		*

3. Amend § 17.95(a) by adding critical habitat for the Preble's meadow jumping mouse (*Zapus hudsonius preblei*) in the same alphabetical order as the species occurs in § 17.11(h) 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 Wyoming and Colorado. Maps and description follow.

(2) Within these areas, the primary constituent elements for the Preble's include those habitat components essential for the biological needs of reproducing, rearing of young, foraging, sheltering, hibernation, dispersal, and genetic exchange. The primary constituent elements are found 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 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. Primary constituent elements associated with the biological needs of dispersal and genetic exchange also are found in areas that provide connectivity or linkage between or within Preble's populations. The dynamic ecological processes that create and maintain Preble's habitat also are important primary constituent elements. Primary constituent elements include:

(i) A pattern of dense riparian vegetation consisting of grasses, forbs, and shrubs in areas along rivers and streams that provide open water through the Preble's active season;

(ii) Adjacent floodplains and vegetated uplands with limited human disturbance (including hayed fields, grazed pasture, other agricultural lands that are not plowed or disced regularly, areas that have been restored after past aggregate extraction, areas supporting recreational trails, and urban/wildland interfaces);

(iii) Areas that provide connectivity between and within populations. These 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

(iv) Dynamic geomorphological and hydrological processes typical of systems within the range of the Preble's, *i.e.,* those processes that create and maintain river and stream channels, floodplains, and floodplain benches, and promote patterns of vegetation favorable to the Preble's.

(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 disced agricultural areas, and other features not containing any of the primary constituent elements are not considered critical habitat.

(4) Critical Habitat Units—Wyoming Index Map Follows:

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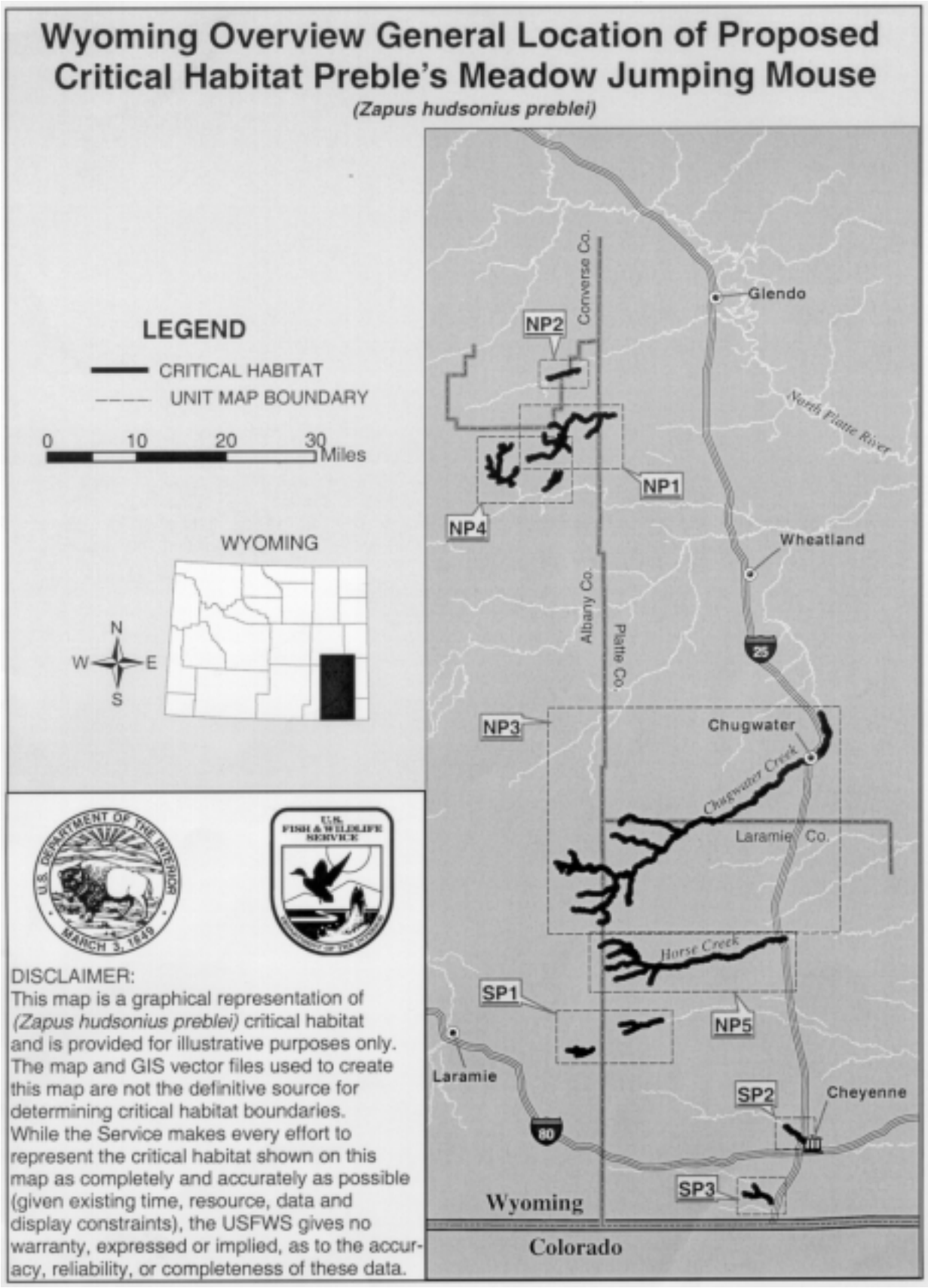
Wyoming Overview General Location of Proposed Critical Habitat Preble's Meadow Jumping Mouse
(Zapus hudsonius preblei)
LEGEND
CRITICAL HABITAT
UNIT MAP BOUNDARY
0 10 20 30 Miles
WYOMING
N
W
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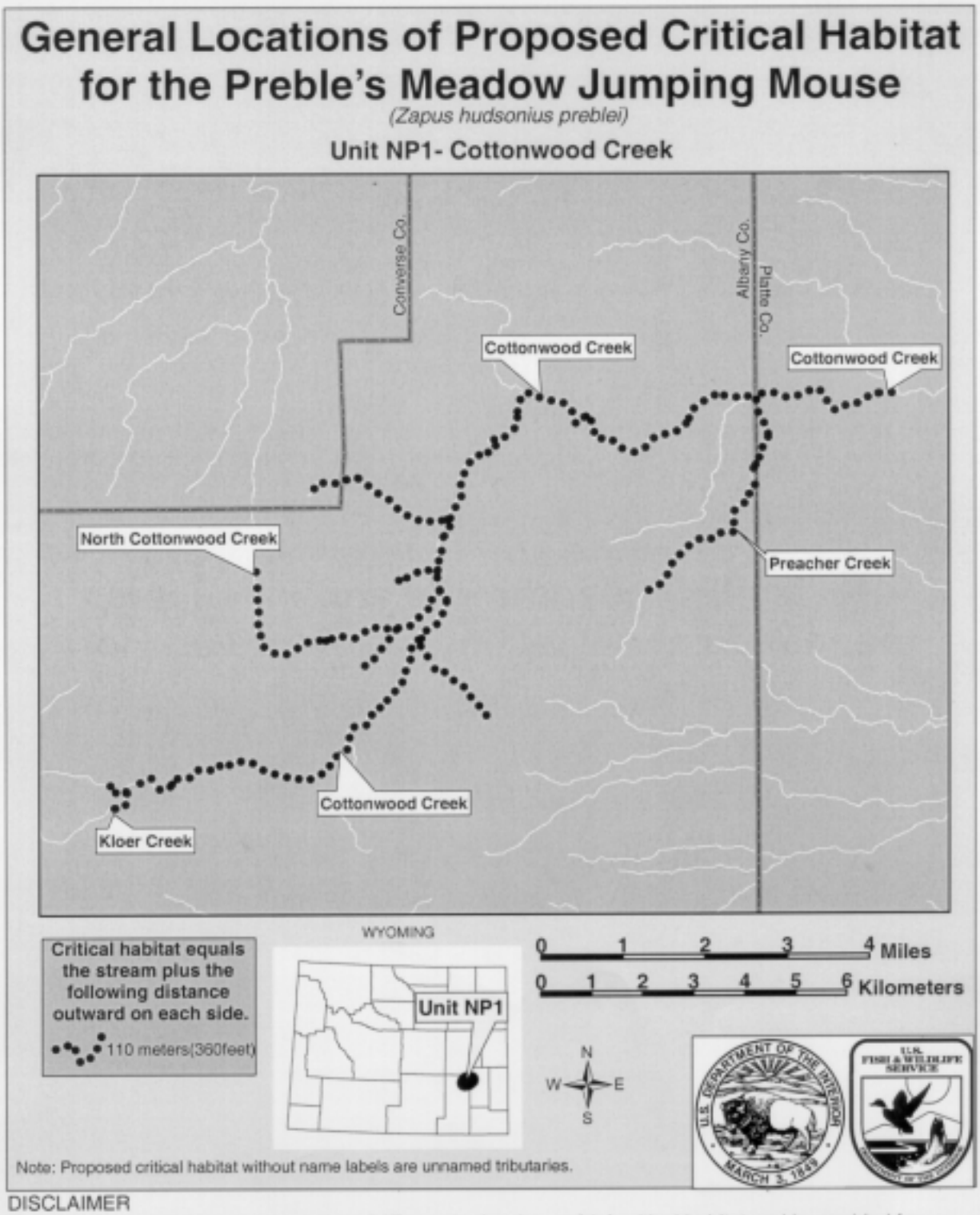
S
DISCLAIMER:
This map is a graphical representation of (Zapus hudsonius preblei) critical habitat and is provided for illustrative purposes only. The map and GIS vector files used to create this map are not the definitive source for determining critical habitat boundaries. While the Service makes every effort to represent the critical habitat shown on this map as completely and accurately as possible (given existing time, resource, data and display constraints), the USFWS gives no warranty, expressed or implied, as to the accuracy, reliability, or completeness of these data.
U.S. DEPARTMENT OF THE INTERIOR
MARCH 3, 1849
U.S. FISH & WILDLIFE SERVICE
Converse Co.
Glendo
NP2
North Platte River
NP1
NP4
Wheatland
Albany Co.
Platte Co.
25
NP3
Chugwater
Chugwater Creek
Laramie Co.
Horse Creek
SP1
NP5
Laramie
SP2
Cheyenne
80
SP3
Wyoming
Colorado

(5) Map Unit NP1: Cottonwood Creek, Albany, Platte, and Converse Counties, Wyoming.

(i) This unit consists of the following:

43.3 km (26.9 mi) of streams. Cottonwood Creek from the confluence with Held Creek at (42 18 44N 105 14 50W, T.27N., R.70W., Sec. 16) upstream to (42 14 34N 105 26 04W, T.26N., R.72W., Sec. 12). Includes Preacher Creek from its confluence with Cottonwood Creek at (42 18 43N 105 16 51W, T.27N., R.70W., Sec. 17) upstream to (42 16 39N 105 18 22W, T.27N., R.71W., Sec. 25). Also includes an unnamed tributary from its confluence with Cottonwood Creek at (42 17 24N 105 21 12W, T.27N., R.71W., south boundary Sec. 22) upstream to (42 17 39N 105 23 13W, T.27N., R.71W., Sec. 20). Also includes another unnamed tributary from its confluence with Cottonwood Creek at (42 16 51N 105 21 23W, T.27N., R.71W., Sec. 28) upstream to (42 16 46N 105 21 59W, T.27N., R.71W., Sec. 28). Also includes North Cottonwood Creek from its confluence with Cottonwood Creek at (42 16 39N 105 21 21W, T.27N., R.71W., Sec. 28) upstream to (42 16 51N 105 23 59W, T.27N., R.71W., Sec. 30). Which includes an unnamed tributary from its confluence North Cottonwood Creek at (42 16 15N 105 21 57W, T.27N., R.71W., Sec. 33) upstream to (42 15 48N 105 22 30W, T.27N., R.71W., Sec. 32). Cottonwood Creek includes another unnamed tributary from its confluence with Cottonwood Creek at (42 16 08N 105 21 38W, T.27N., R.71W., Sec. 33) upstream to (42 15 17N 105 20 39W, T.26N., R.71W., Sec. 3). Also includes a final tributary, Kloer Creek from its confluence with Cottonwood Creek at (42 14 30N 105 25 49W, T.26N., R.72W., Sec. 12) upstream to (42 14 20N 105 26 00W, T.26N., R.72W., Sec. 12).

(ii) Map Unit NP1 follows:



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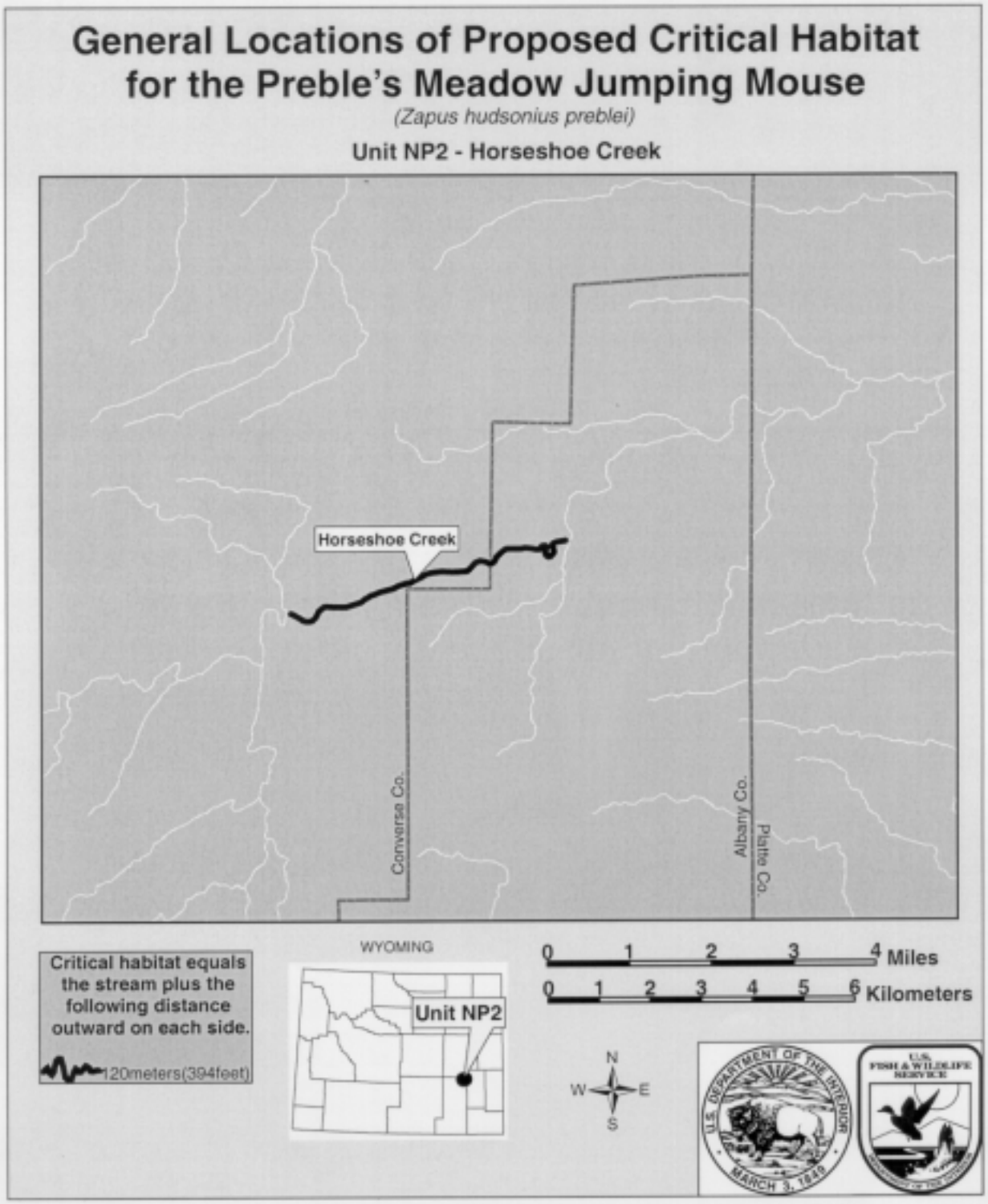
(6) Map Unit NP2: Horseshoe Creek, Albany County, Wyoming.

(i) This unit consists of the following:

6.5 km (4.1 mi) of streams. Horseshoe Creek from the confluence with Soldier Creek at (42 23 07N 105 19 30W, T.28N., R.71W., Sec. 23) upstream to the confluence with Mary Cooper Creek at (42 22 20N 105 23 30W, T.28N., R.71W., Sec. 29).

(ii) Map Unit NP2 follows:



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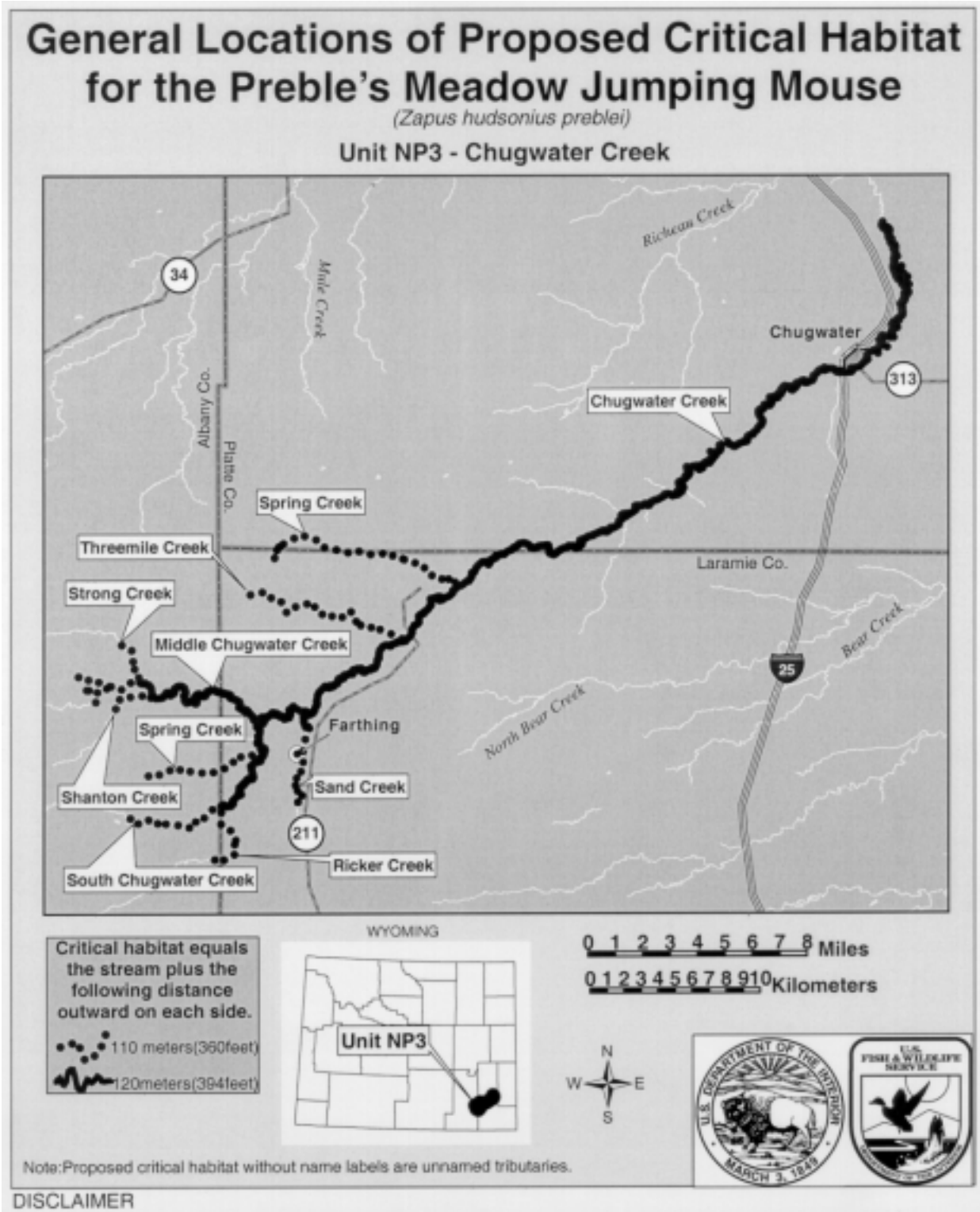
(7) Map Unit NP3: Chugwater Creek, Albany, Laramie, and Platte Counties, Wyoming.

(i) This unit consists of the following:

179.4 km (111.5 mi) of streams. Chugwater Creek from (41 49 41N 104 48 03W, T.21N., R.66W., north boundary Sec. 5) upstream to Farthing Reservoir (41 32 36N 105 14 31W, T.18N., R.70W., Sec. 9). Includes Spring Creek from its confluence with Chugwater Creek (41 38 10N 105 05 56W, T.19N., R.69W., Sec. 10) upstream to (41 39 00N 105 13 58W, T.19N., R.70W., Sec. 4). Includes Threemile Creek from its confluence with Chugwater Creek (41 36 22N 105 08 23W, T.19N., R.69W., Sec. 20) upstream to (41 37 51N 105 14 59W, T.19N., R.70W., west boundary Sec. 9). Also includes Sand Creek from its confluence with Chugwater Creek (41 34 09N 105 12 37W, T.18N., R.70W., north boundary Sec. 3) upstream to (41 31 12N 105 12 54W, T.18N., R.70W., Sec. 22). Also includes Middle Chugwater Creek from its confluence with Chugwater Creek (41 33 55N 105 14 20W, T.18N., R.70W., Sec. 4) upstream to (41 34 23N 105 21 32W, T.19N., R.71W., Sec. 33). Which includes Shanton Creek from its confluence with Middle Chugwater Creek at (41 34 36N 105 19 05W, T.19N., R.71W., Sec. 35) upstream to (41 34 12N 105 20 41W, T.19N., R.71W., southwest corner Sec. 34). Also includes Strong Creek from its confluence with Middle Chugwater Creek at (41 35 04N 105 19 36W, T.19N., R.71W., Sec. 34) upstream to (41 36 16N 105 20 25W, T.19N., R.71W., Sec. 22). Middle Chugwater Creek also includes an unnamed tributary from its confluence with Middle Chugwater Creek at (41 34 56N 105 20 54W, T.19N., R.71W., Sec. 33) upstream to (41 35 14N 105 22 17W, T.19N., R.71W., Sec. 29). Finally, another unnamed tributary from its confluence with Middle Chugwater Creek at (41 34 43N 105 21 28W, T.19N., R.71W., Sec. 33) upstream to (41 34 47N 105 21 56W, T.19N., R.71W., Sec. 32). Another included tributary of Chugwater Creek is Spring Creek from its confluence with Chugwater Creek at (41 32 57N 105 14 27W, T.18N., R.70W., Sec. 9) upstream to (42 32 03N 105 19 17W, T.18N., R.71W., Sec. 15). South Chugwater Creek is included in the unit from the ending point of Chugwater Creek at Farthing Reservoir (41 32 36N 105 14 31W, T.18N., R.70W., Sec. 9) upstream to (41 30 42N 105 20 03W, T.18N., R.71W., north boundary Sec. 27). Includes Ricker Creek from its confluence with South Chugwater Creek at (41 31 04N 105 16 07W, T.18N., R.70W., Sec. 19) upstream to (41 29 24N 105 16 39W, T.18N., R.70W., Sec. 31).

(ii) Map Unit NP3 follows:



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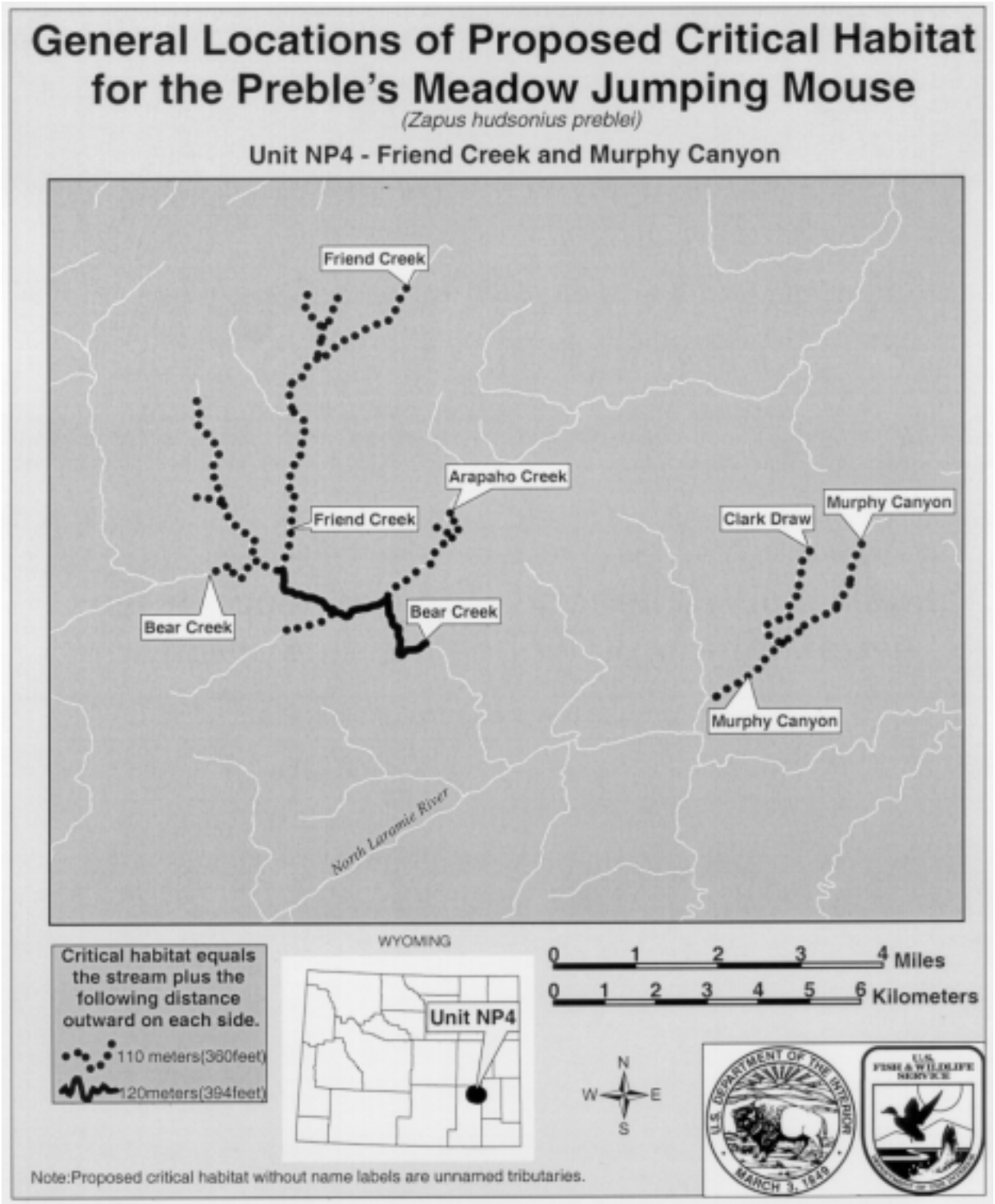
(8) Map Unit NP4: Friend Creek and Murphy Canyon, Albany County, Wyoming.

(i) This unit consists of the following:

32 km (19.9 mi) of streams. Includes 2 subunits. Subunit Murphy Canyon from its confluence with Sturgeon Creek at (42 11 27N 105 23 58W, T.26N., R.71W., Sec. 30) upstream to (42 13 07N 105 21 48W, T.26N., R.71W., north boundary Sec. 21). Includes Clark Draw from its confluence with Murphy Canyon at (42 12 03N 105 22 56W, T.26N., R.71W., Sec. 29) upstream to (42 13 05N 105 22 31W, T.26N., R.71W., north boundary Sec. 20).

Subunit Friend Creek includes Bear Creek from (42 12 02N 105 28 00W, T.26N., R.72W., Sec. 27) upstream to (42 12 46N 105 31 05W, T.26N., R.72W., Sec. 19). Includes Arapaho Creek from its confluence with Bear Creek at (42 12 30N 105 28 35W, T.26N., R.72W., Sec. 22) upstream to (42 13 32N 105 27 37W, T.26N., R.72W., Sec. 15). Includes an unnamed tributary from its confluence with Arapaho Creek at (42 13 11N 105 27 38W, T.26N., R.72W., Sec.15) upstream to (42 13 18N 105 27 53W, T.26N., R.72W., Sec.15). Bear Creek also includes an unnamed tributary from its confluence with Bear Creek at (42 12 22N 105 29 18W, T.26N., R.72W., Sec. 21) upstream to (42 12 11N 105 29 59W, T.26N., R.72W., Sec. 20). Also includes Friend Creek from its confluence with Bear Creek at (42 12 48N 105 30 03W, T.26N., R.72W., Sec.20) upstream to (42 15 48N 105 28 18W, T.27N., R.72W., Sec. 34). Which includes an unnamed tributary from its confluence with Friend Creek at (42 15 03N 105 29 34W, T.26N., R.72W., Sec. 4) upstream to (42 15 48N 105 29 18W, T.27N., R.72W., Sec. 33). Which includes another unnamed tributary from its confluence with the aforementioned unnamed tributary at (42 15 23N 105 29 28W, T.26N., R.72W., Sec. 4) upstream to (42 15 44N 105 29 43W, T.27N., R.72W., Sec. 33). Bear Creek finally includes an unnamed tributary from its confluence with Bear Creek at (42 12 54N 105 30 26W, T.26N., R.72W., Sec. 20) upstream to (42 14 36N 105 31 17W, T.26N., R.72W., Sec. 7). Which includes an unnamed tributary from its confluence with the aforementioned unnamed tributary at (42 13 32N 105 30 55W, T.26N., R.72W., Sec. 17) upstream to (42 13 37N 105 31 24W, T.26N., R.72W., Sec. 18).

(ii) Map Unit NP4 follows:



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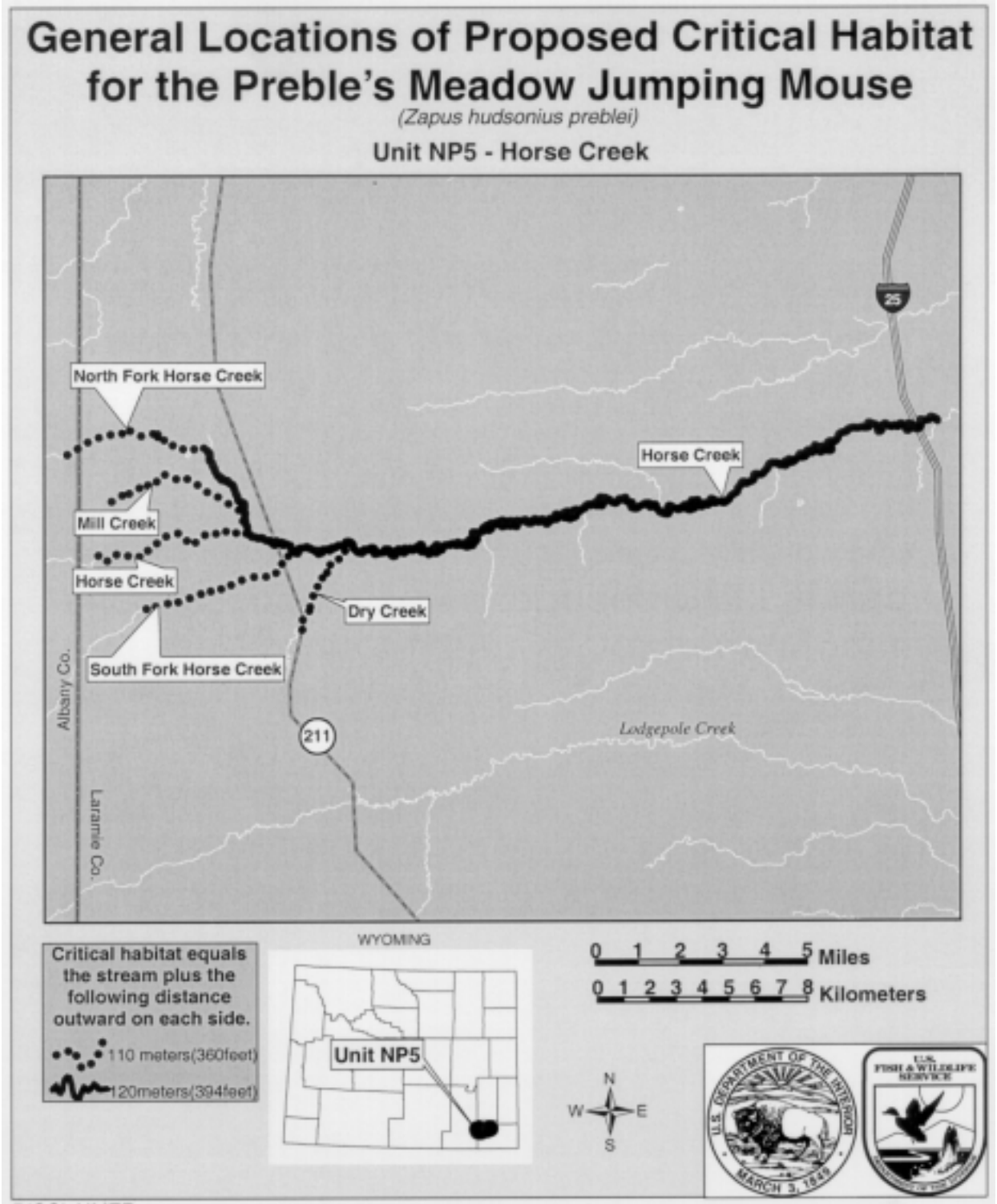
(9)Map Unit NP5: Horse Creek, Laramie County, Wyoming.

(i) This unit consists of the following:

84.1 km (52.3 mi) of streams. Horse Creek from (41 27 46N 104 52 40W, T.17N., R.67W., Sec. 10) upstream to (41 24 59N 105 15 40W, T.17N., R.70W., Sec. 29). Includes Dry Creek from its confluence with Horse Creek (41 25 12N 105 08 54W, T.17N., R.69W., Sec. 29) upstream to Highway 211 (41 23 29N 105 10 11W, T.16N., R.69W., Sec. 6). Also includes South Fork Horse Creek from its confluence with Horse Creek (41 25 07N 105 10 22W, T.17N., R.70W., Sec. 25) upstream to (41 23 52N 105 14 32W, T.17N., R.70W., Sec. 33). Also includes North Fork Horse Creek from its confluence with Horse Creek (41 25 27N 105 11 33W, T.17N., R.70W., Sec. 23) upstream to (41 27 05N 105 16 32W, T.17N., R.70W., Sec. 18). Which includes Mill Creek from its confluence with North Fork Horse Creek (41 25 40N 105 11 38W, T.17N., R.70W., Sec. 23) upstream to (41 26 06N 105 15 24W, T.17N., R.70W., Sec. 20).

(ii) Map Unit NP5 follows:



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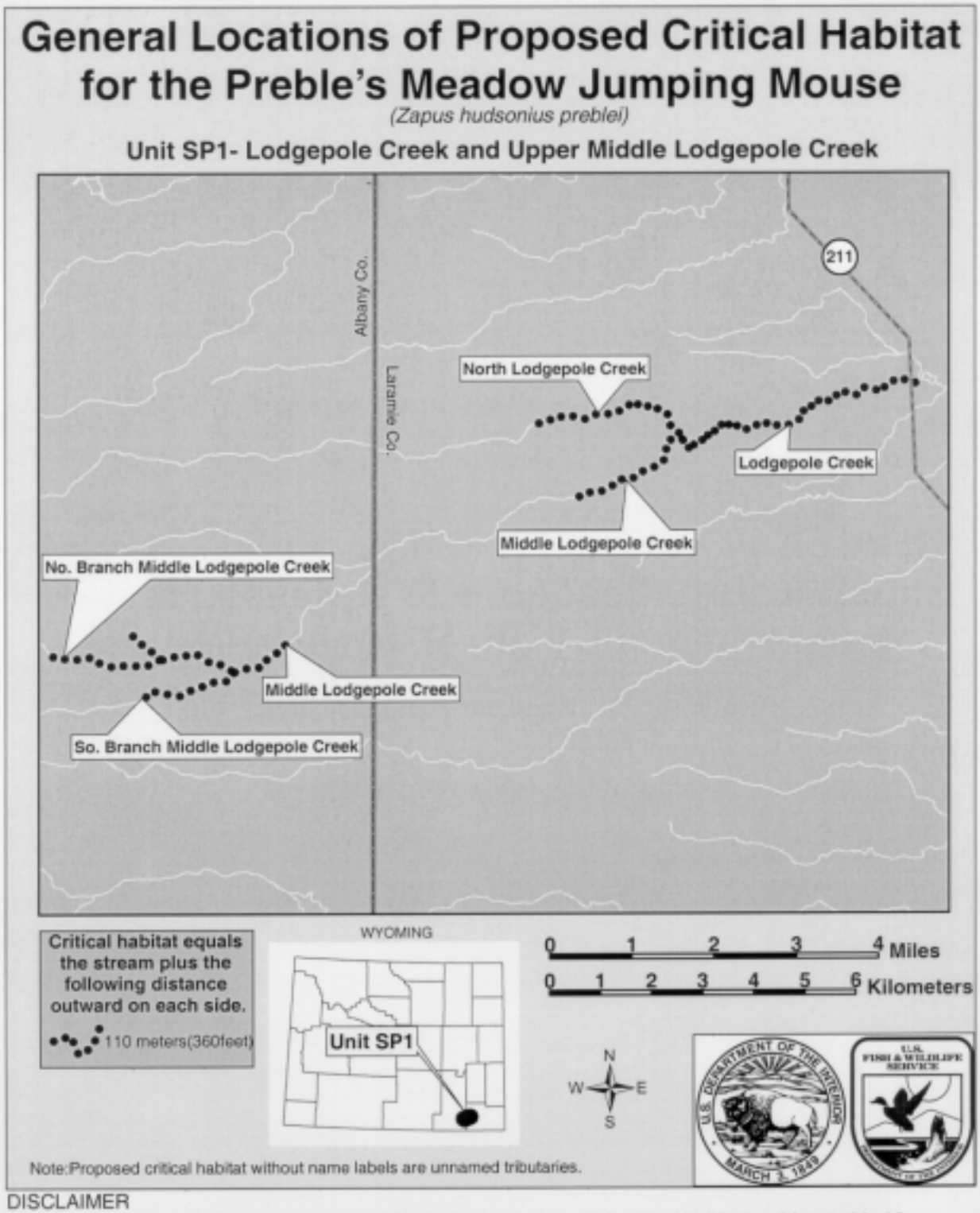
(10) Map Unit SP1: Lodgepole Creek and Upper Middle Lodgepole Creek, Laramie County, Wyoming.

(i) This unit consists of the following:

20.8 km (13 mi) of streams. Consists of 2 subunits. Subunit Lodgepole Creek, Laramie County, from Highway 211 (41 19 53N 105 08 35W, T.16N., R.69W., Sec. 29) upstream to the confluence of North Lodgepole Creek and Middle Lodgepole Creek (41 19 17N 105 11 52W, T16N., R.70W., Sec. 26). Includes North Lodgepole Creek from the aforementioned confluence (41 19 17N 105 11 52W, T16N., R.70W., Sec. 26) upstream to (41 19 27N 105 13 54W, T.16N., R.70W., west boundary Sec. 27). Also includes Middle Lodgepole Creek from (41 19 17N 105 11 52W, T16N., R.70W., Sec. 26) upstream to (41 18 40N 105 13 19W, T.16N., R.70W., Sec. 34).

Subunit Middle Lodgepole Creek, Albany County, includes Middle Lodgepole Creek from the boundary of Medicine Bow National Forest (41 17 06N 105 17 27W, T15N., R.71W., east boundary Sec. 12) upstream to the confluence of North Branch Middle Lodgepole Creek and Middle Branch Middle Lodgepole Creek (41 16 48N 105 18 10W, T.15N., R.71W., Sec. 12). Includes Middle Branch Middle Lodgepole Creek from the aforementioned confluence (41 16 48N 105 18 10W, T.15N., R.71W., Sec. 12) upstream to (41 16 29N 105 19 31W, T.15N., R.71W., Sec. 14). Also includes North Branch Middle Lodgepole Creek from the aforementioned confluence (41 16 48N 105 18 10W, T.15N., R.71W., Sec. 12) upstream to (41 16 58N 105 20 43W, T.15N., R.71W., Sec. 10). Which includes an unnamed tributary from its confluence with North Branch Middle Lodgepole Creek (41 16 56N 105 19 11W, T.15N., R.71W., Sec. 11) upstream to (41 17 12N 105 19 36W, T.15N., R.71W., Sec. 11).

(ii) Map Unit SP1 follows:



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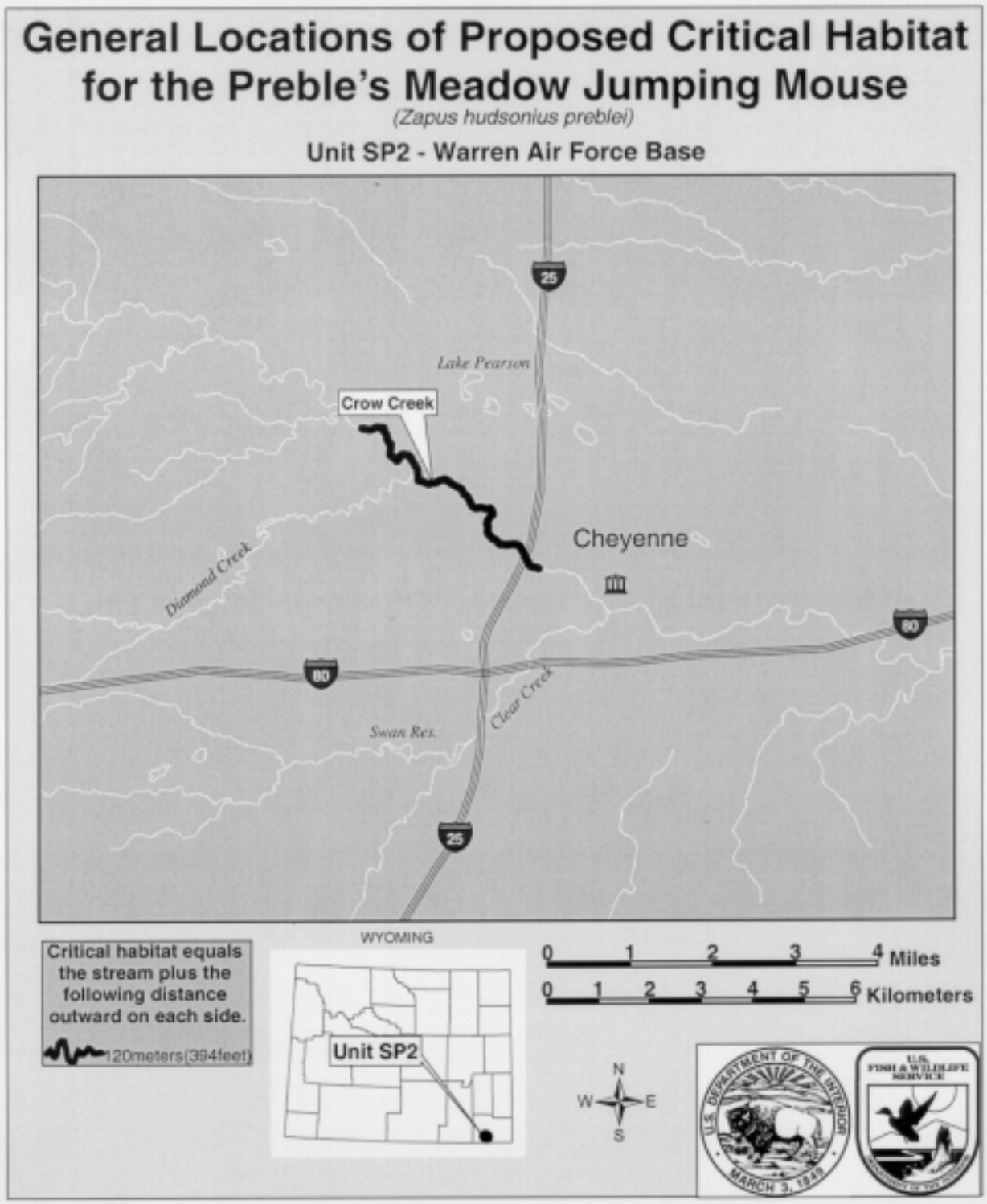
(11) Map Unit SP2: F.E. Warren Air Force Base, Laramie County, Wyoming.

(i) This unit consists of the following:

5.7 km (3.6 mi) of stream. Crow Creek within the boundary of Warren Air Force Base from (41 08 01N 104 50 21W, T.14N., R.67W., Sec. 36) upstream to (41 09 30N 104 52 48W, T.14N., R.67W., Sec. 27).

(ii) Map Unit SP2 follows:



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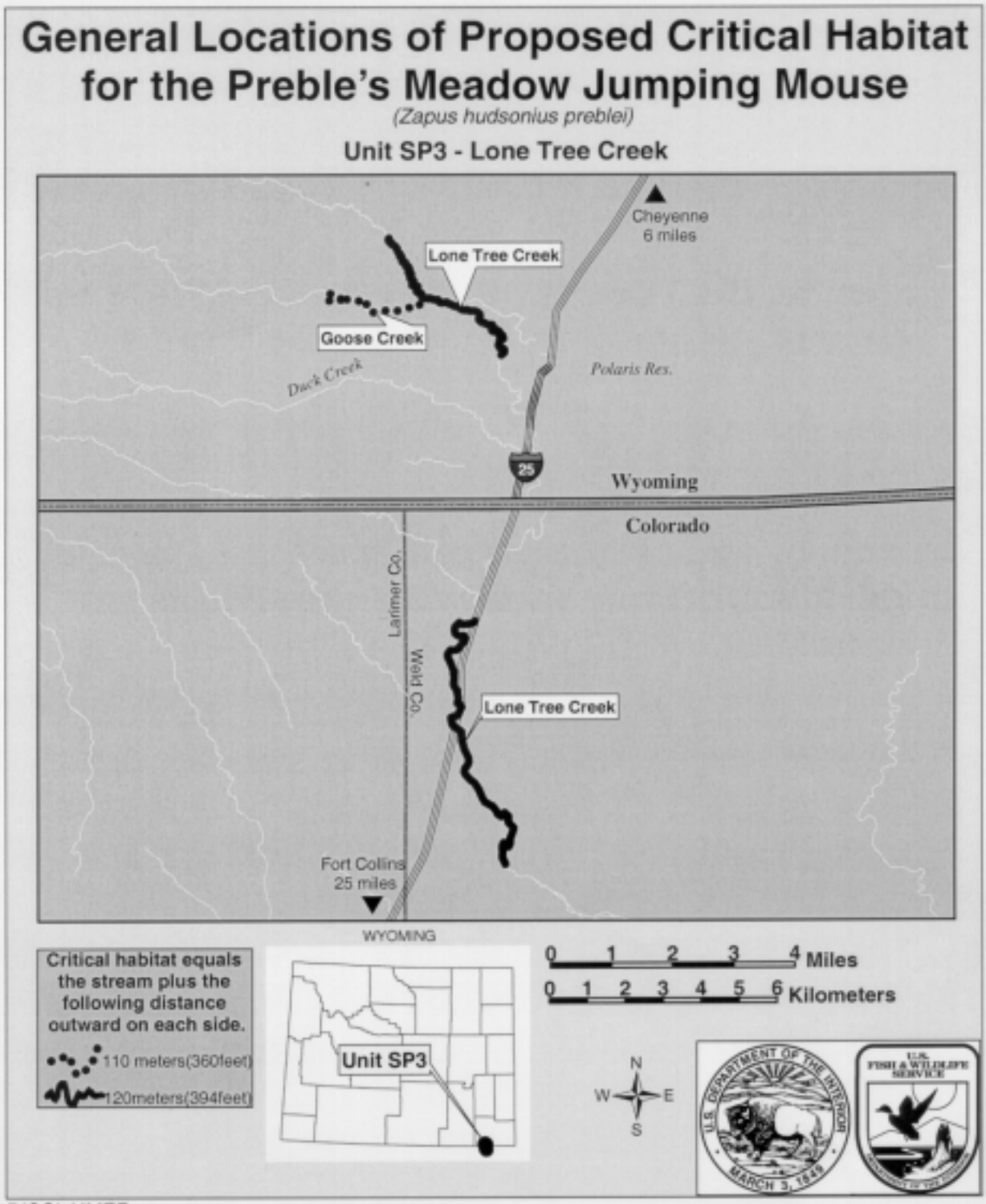
(12) Map Unit SP3: Lone Tree Creek, Laramie County, Wyoming.

(i) This unit consists of the following:

18.7 km (11.7 mi) of streams. Includes 2 subunits. Subunit Wyoming includes Lone Tree Creek from (41 02 06N 104 54 40W, T.12N., R.67W., Sec. 5) upstream to (41 03 46N 104 56 48W, T.13N., R.68W., Sec. 25). Includes Goose Creek from its confluence with Lone Tree Creek (41 02 55N 104 56 01W, T.13N., R.67W., Sec. 31) upstream to (41 03 01N 104 58 04W, T.13N., R.68W., Sec. 35). Which includes an unnamed tributary from its confluence with Goose Creek (41 02 54N 104 57 41W, T.13N., R.68W., Sec. 36) upstream to (41 02 52N 104 57 59W, T.13N., R.68W., Sec. 35).

Subunit Colorado includes Lone Tree Creek from 40 54 49N 104 54 36W, T.11N., R.67W., south boundary Sec. 17) upstream to (40 58 18N 104 55 11W, T.12N., R.67W., north boundary Sec. 32).

(ii) Map Unit SP3 (Wyoming) follows:



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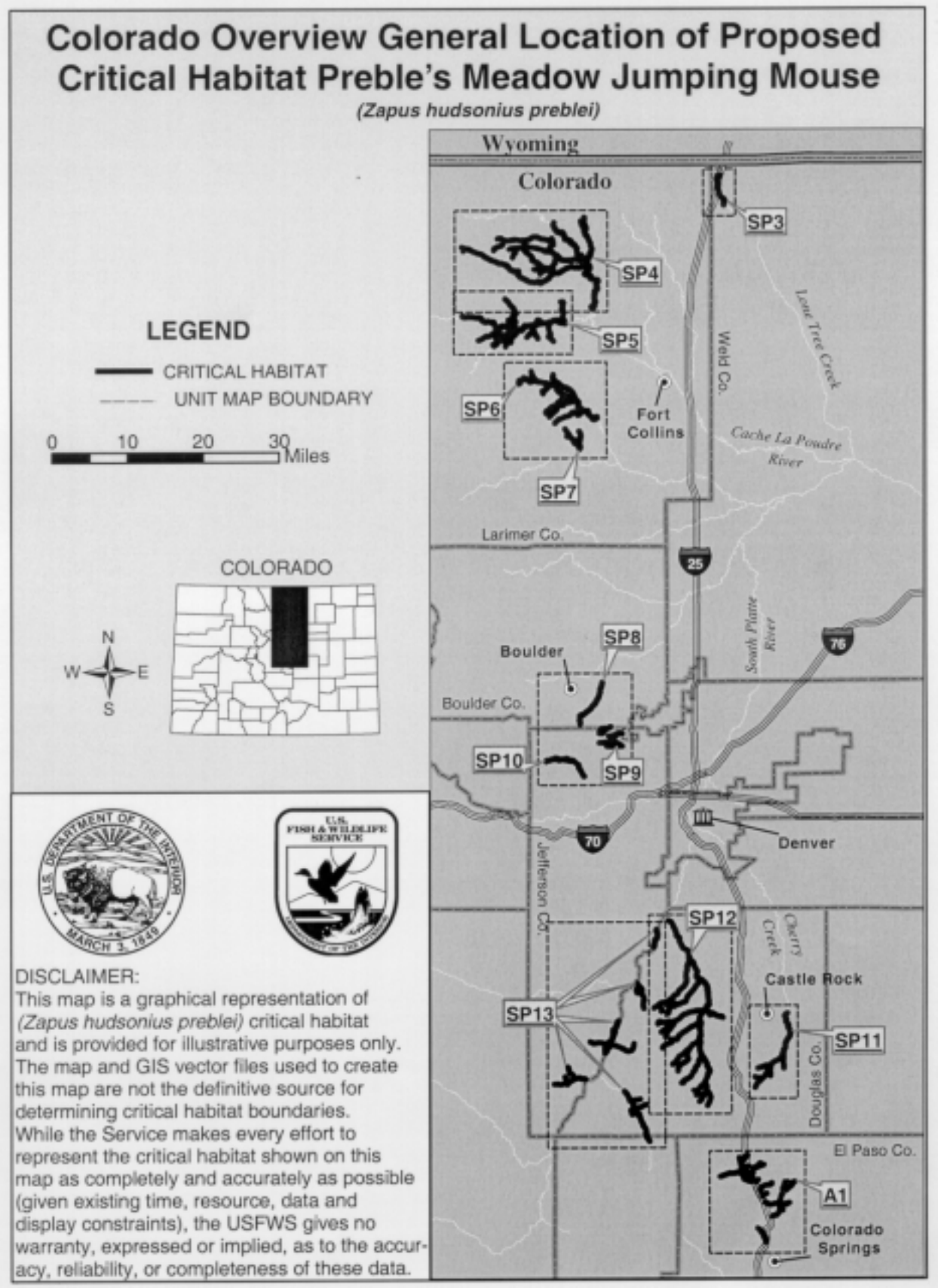
(13) Critical Habitat Units—Colorado Index Map Follows:



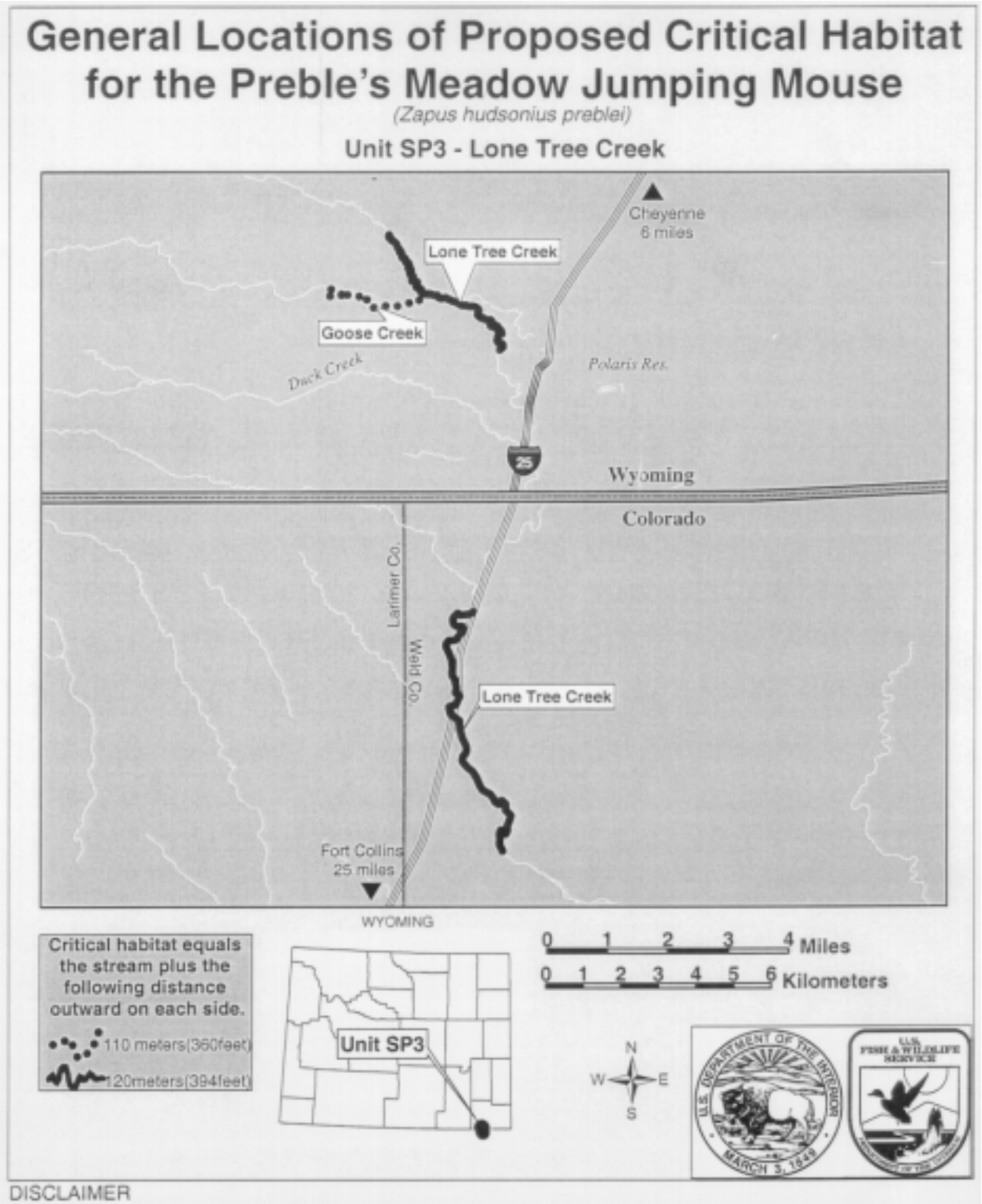
(14) Map Unit SP3: Lone Tree Creek, Weld County, Colorado.

(i) This unit consists of the following:

141.8 km (88.1 mi) of streams and rivers. North Fork Cache La Poudre River from Seaman Reservoir (40 43 03N 105 14 27W, T.9N., R.70W., Sec. 28) upstream to Halligan Reservoir spillway (40 52 49N 105 20 12W, T.11N., R.71W., Sec. 34). Includes Lone Pine Creek from its confluence North Fork Cache La Poudre River (40 47 53N 105 15 28W, T.10N., R.70W., Sec. 32) upstream and continuing upstream into North Lone Pine Creek to 7,600 feet elevation (40 49 58N 105 34 09W, T.01N., R.73W., Sec. 15). Which includes Columbine Canyon from its confluence with North Lone Pine Creek (40 49 48N 105 33 28W, T.10N., R.73W., Sec. 15) upstream to 7,600 feet elevation (40 49 33N 105 33 54W, 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 38W, T.11N., R.70W., Sec. 29). Which includes Tenmile Creek from its confluence with Stonewall Creek (40 51 48N 105 15 30W, 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 04W, T.10N., R.70W., Sec. 30) upstream to the confluence with North and Middle Forks of Rabbit Creek (40 49 34N 105 20 47W, T.10N., R 71W., Sec. 21). Also includes South Fork Rabbit Creek from its confluence with Rabbit Creek (40 48 40N 105 19 43W, T.10N., R.71W., Sec. 27) upstream to (40 49 39N 105 24 40W, T.10N., R.72W., north boundary Sec. 24). Which includes an unnamed tributary from its confluence with South Fork Rabbit Creek (40 47 28N 105 20 45W, T.10N., R.71W., Sec. 33) upstream to (40 47 28N 105 23 10W, T.10N., R.71W., Sec. 31). Which in turn has an unnamed tributary from their confluence at (40 47 16N 105 21 45W, T.10N., R.71W., east boundary Sec. 32) upstream to (40 46 54N 105 22 14W, T.9N., R.71W., Sec. 5). Also includes Middle Fork Rabbit Creek from its confluence with Rabbit Creek (40 49 34N 105 20 47W, T.10N., R 71W., Sec. 21) upstream to 7,600 feet elevation (40 49 46N 105 26 55W, T.10N., R.72W., Sec. 15). This includes an unnamed tributary from its confluence with Middle Fork Rabbit Creek (40 49 56N 105 25 49W, T.10N., R.72W., Sec. 14) upstream to 7,600 feet elevation (40 48 48N 105 26 26W, T.10N., R.72W., Sec. 23). This unit includes North Fork Rabbit Creek from its confluence with Rabbit Creek (40 49 34N 105 20 47W, T.10N., R.71W., Sec. 21) upstream to 7,600 feet elevation (40 49 38N 105 29 17W, T.10N., R.72W., Sec. 17). Which includes an unnamed tributary from its confluence with North Fork Rabbit Creek (40 50 45N 105 27 23W, T.10N., R.72W., Sec. 9) upstream to 7,600 feet elevation (40 50 57N 105 28 42W, T.10N., R.72W., Sec. 9).

(ii) Map Unit SP3 (Colorado) follows:

BILLING CODE 4310–55–P



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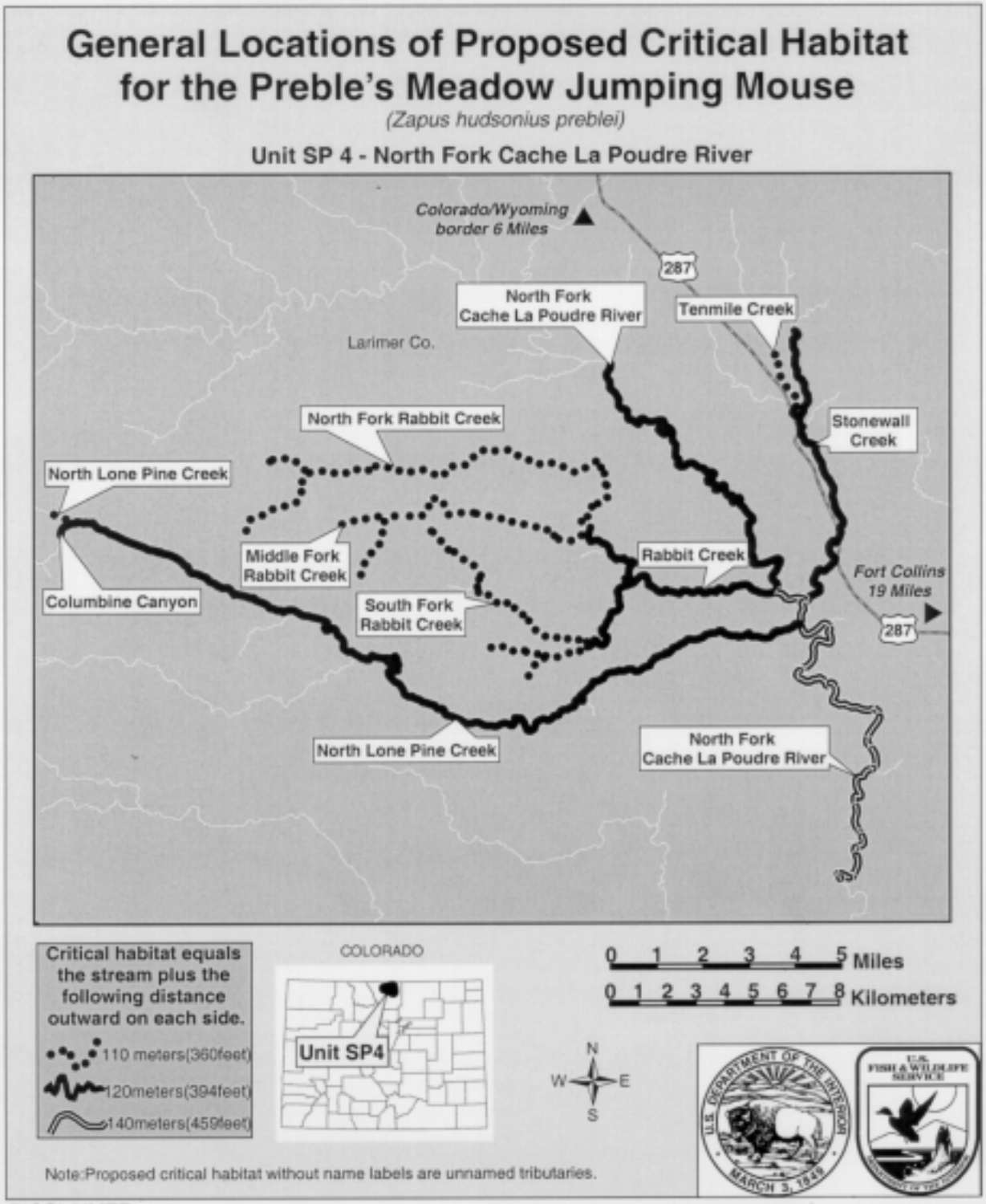
BILLING CODE 4310–55–C

(15) Map Unit SP4: North Fork Cache La Poudre River, Larimer County, Colorado.

(i) This unit consists of the following:

82.4 km (51.2 mi) of streams and rivers. Cache La Poudre River from Poudre Park (40 41 16N 105 18 25W, T.8N., R.71W., Sec. 2) upstream to (40 42 02N 105 34 01W, T.9N., R.73W., west boundary Sec. 34). Includes Hewlett Gulch from its confluence with Cache La Poudre River (40 41 16N 105 18 25W, T.8N., R.71W., Sec. 2) upstream to the boundary of Arapahoe—Roosevelt National Forest (40 43 45N 105 19 06W, T.9N., R.71W., Sec. 23). Also includes Young Gulch from its confluence with Cache La Poudre River (40 41 25N 105 20 56W, T.8N., R.71W., Sec. 4) upstream to (40 39 13N 105 20 12W, 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 21W, T.8N., R.71W., Sec. 6) upstream to (40 39 32N 105 22 34W, T.8N., R.71W., Sec. 17). Which includes Skin Gulch from its confluence with the aforementioned unnamed tributary at (40 40 33N 105 23 15W, T.8N., R.71W., Sec. 7) upstream to (40 39 41N 105 24 13W, T.8N., R.72W., Sec. 13). Unit SP5 also includes Poverty Gulch from its confluence with Cache La Poudre River (40 40 28N 105 25 42W, T.8N., R.72W., Sec. 11) upstream to 7,600 feet elevation (40 39 02N 105 26 38W, 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 04N 105 27 32W, T.9N., R.72W., Sec. 21). Also includes South Fork Cache La Poudre River from its confluence with Cache La Poudre River (40 41 10N 105 26 46W, T.8N., R.72W., Sec. 3) upstream to 7,600 feet elevation (40 38 49N 105 29 20W, T.8N., R.72W., Sec. 20). Which includes Pendergrass Creek from its confluence with South Fork Cache La Poudre River (40 39 54N 105 27 27W, T.8N., R.72W., Sec. 15) upstream to 7,600 feet elevation (40 38 34N 105 27 26W, 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 37W, T.8N., R.72W., Sec. 9) upstream to 7,600 feet elevation (40 39 18N 105 31 31W, T.8N., R.73W., Sec. 13).

(ii) Map Unit SP4 follows:



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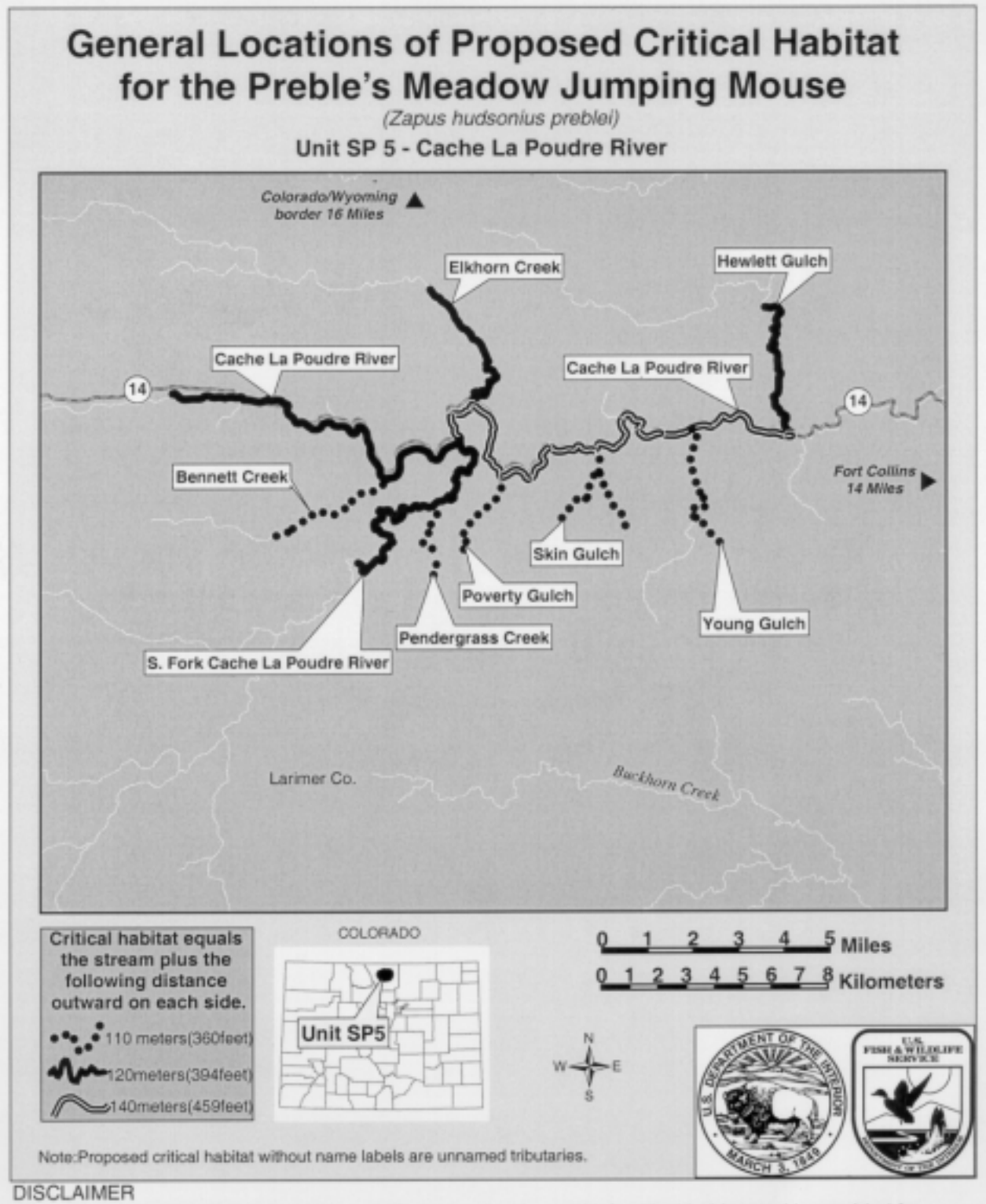
(16) Map Unit SP5: Cache La Poudre River, Larimer County, Colorado.

(i) This unit consists of the following:

82.4 km (51.2 mi) of streams and rivers. Cache La Poudre River from Poudre Park (40 41 16N 105 18 25W, T.8N., R.71W., Sec. 2) upstream to (40 42 02N 105 34 01W, T.9N., R.73W., west boundary Sec. 34). Includes Hewlett Gulch from its confluence with Cache La Poudre River (40 41 16N 105 18 25W, T.8N., R.71W., Sec. 2) upstream to the boundary of Arapahoe—Roosevelt National Forest (40 43 45N 105 19 06W, T.9N., R.71W., Sec. 23). Also includes Young Gulch from its confluence with Cache La Poudre River (40 41 25N 105 20 56W, T.8N., R.71W., Sec. 4) upstream to (40 39 13N 105 20 12W, 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 21W, T.8N., R.71W., Sec. 6) upstream to (40 39 32N 105 22 34W, T.8N., R.71W., Sec. 17). Which includes Skin Gulch from its confluence with the aforementioned unnamed tributary at (40 40 33N 105 23 15W, T.8N., R.71W., Sec. 7) upstream to (40 39 41N 105 24 13W, T.8N., R.72W., Sec. 13). Unit SP5 also includes Poverty Gulch from its confluence with Cache La Poudre River (40 40 28N 105 25 42W, T.8N., R.72W., Sec. 11) upstream to 7,600 feet elevation (40 39 02N 105 26 38W, 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 04N 105 27 32W, T.9N., R.72W., Sec. 21). Also includes South Fork Cache La Poudre River from its confluence with Cache La Poudre River (40 41 10N 105 26 46W, T.8N., R.72W., Sec. 3) upstream to 7,600 feet elevation (40 38 49N 105 29 20W, T.8N., R.72W., Sec. 20). Which includes Pendergrass Creek from its confluence with South Fork Cache La Poudre River (40 39 54N 105 27 27W, T.8N., R.72W., Sec. 15) upstream to 7,600 feet elevation (40 38 34N 105 27 26W, 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 37W, T.8N., R.72W., Sec. 9) upstream to 7,600 feet elevation (40 39 18N 105 31 31W, T.8N., R.73W., Sec. 13).

(ii) Map Unit SP5 follows:



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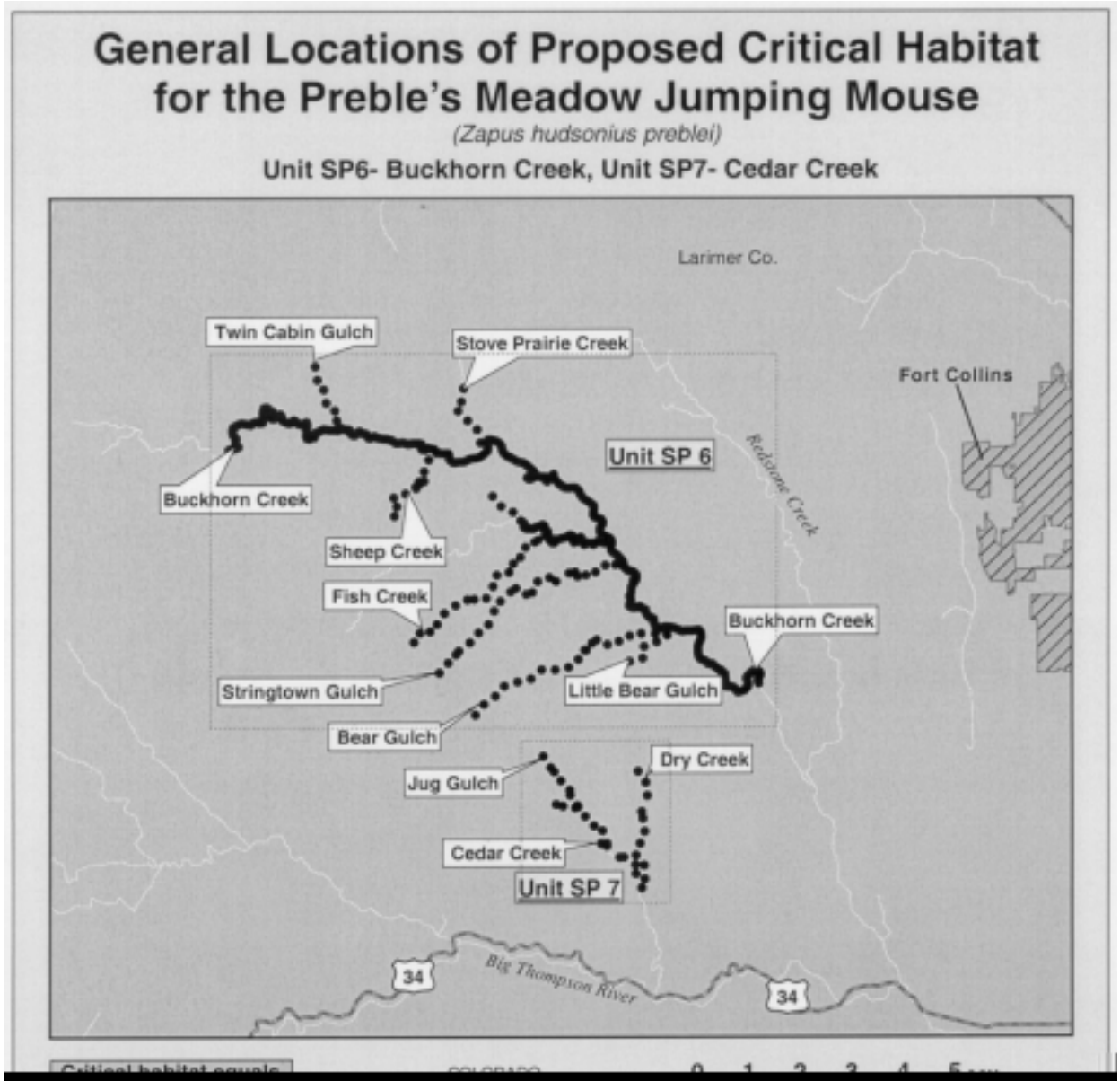
(17) Map Units SP6 and SP7: Buckhorn Creek and Cedar Creek, Larimer County, Colorado.

(i) These units consist of the following:

For SP6, Buckhorn Creek, 69.1 km (43 mi) of streams. Buckhorn Creek from (40 30 20N 105 13 39W, T.6N., R.70W., east boundary Sec. 9) upstream to 7,600 feet elevation (40 34 17N 105 25 28W, T.7N., R.72W., Sec. 14). Includes Little Bear Gulch from its confluence with Buckhorn Creek (40 31 16N 105 15 32W, T.6N., R.70W., Sec. 5) upstream to (40 30 43N 105 16 33W, T.6N., R.70W., Sec. 6). Also includes Bear Gulch from its confluence with Buckhorn Creek (40 31 15N 105 15 51W, T.6N., R.70W., Sec. 5) upstream to 7,600 feet elevation (40 29 47N 105 19 59W, T.6N., R.71W., Sec. 10). Also includes Stringtown Gulch from its confluence with Buckhorn Creek (40 32 19N 105 16 40W, T.7N., R.70W., Sec. 30) upstream to 7,600 feet elevation (40 30 30N 105 20 48W, T.6N., R.71W., Sec. 4). Also includes Fish Creek from its confluence with Buckhorn Creek (40 32 50N 105 17 05W, T.7N., R.70W., Sec. 30) upstream to 7,600 feet elevation (40 30 56N 105 21 19W, T.6N., R.71W., Sec. 4). Which includes North Fork Fish Creek from its confluence with Fish Creek (40 32 47N 105 18 18W, T.7N., R.71W., west boundary Sec. 25) upstream and following the first unnamed tributary northwest to (40 33 35N 105 19 42W, T.7N., R.71W., Sec. 22). Also includes Stove Prairie Creek from its confluence with Buckhorn Creek (40 34 15N 105 19 45W, T.7N., R.71W., Sec. 15) upstream to the dirt road crossing at (40 35 22N 105 20 16W, T.7N., R.71W., Sec. 10). Also includes Sheep Creek from its confluence with Buckhorn Creek (40 34 15N 105 20 51W, T.7N., R.71W., Sec. 16) upstream to 7,600 feet elevation (40 33 09N 105 21 46W, T.7N., R.71W., Sec. 20). Also includes Twin Cabin Gulch from its confluence with Buckhorn Creek (40 34 38N 105 23 11W, T.7N., R.71W., Sec. 18) upstream to 7,600 feet elevation (40 35 44N 105 23 33W, T.7N., R.71W., Sec. 6).

For SP7, Cedar Creek, 11.7 km (7.3 mi) 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) Map Units SP6 and SP7 follow:


General Locations of Proposed Critical Habitat for the Preble's Meadow Jumping Mouse
(Zapus hudsonius preblei)
Unit SP6- Buckhorn Creek, Unit SP7- Cedar Creek
Larimer Co.
Twin Cabin Gulch
Stove Prairie Creek
Fort Collins
Unit SP 6
Redstone Creek
Buckhorn Creek
Sheep Creek
Fish Creek
Buckhorn Creek
Stringtown Gulch
Little Bear Gulch
Bear Gulch
Dry Creek
Jug Gulch
Cedar Creek
Unit SP 7
34
Big Thompson River
34

(18) Map Units SP8, SP9, and SP10: South Boulder Creek, Boulder County, Colorado, Rocky Flats Environmental Technology Site and Ralston Creek, Jefferson County, Colorado.

(i) These units consists of the following:

For SP8, South Boulder Creek, 11.8 km (7.3 mi) of streams. Including South Boulder Creek from Baseline Road (39 59 59N 105 12 53W, T.1S., R.70W. Sec. 3) upstream to near Eldorado Springs, Colorado (39 56 7N 105 16 14W, T.1S., R.70W. Sec. 30) Also Spring Brook from the Community Ditch near Eldorado Springs (39 55 59N 105 16 8W, T.1S., R.70W. Sec. 30) upstream to South Boulder Diversion Canal (39 55 11N 105 16 11W, T.1S., R.70W. Sec. 31).

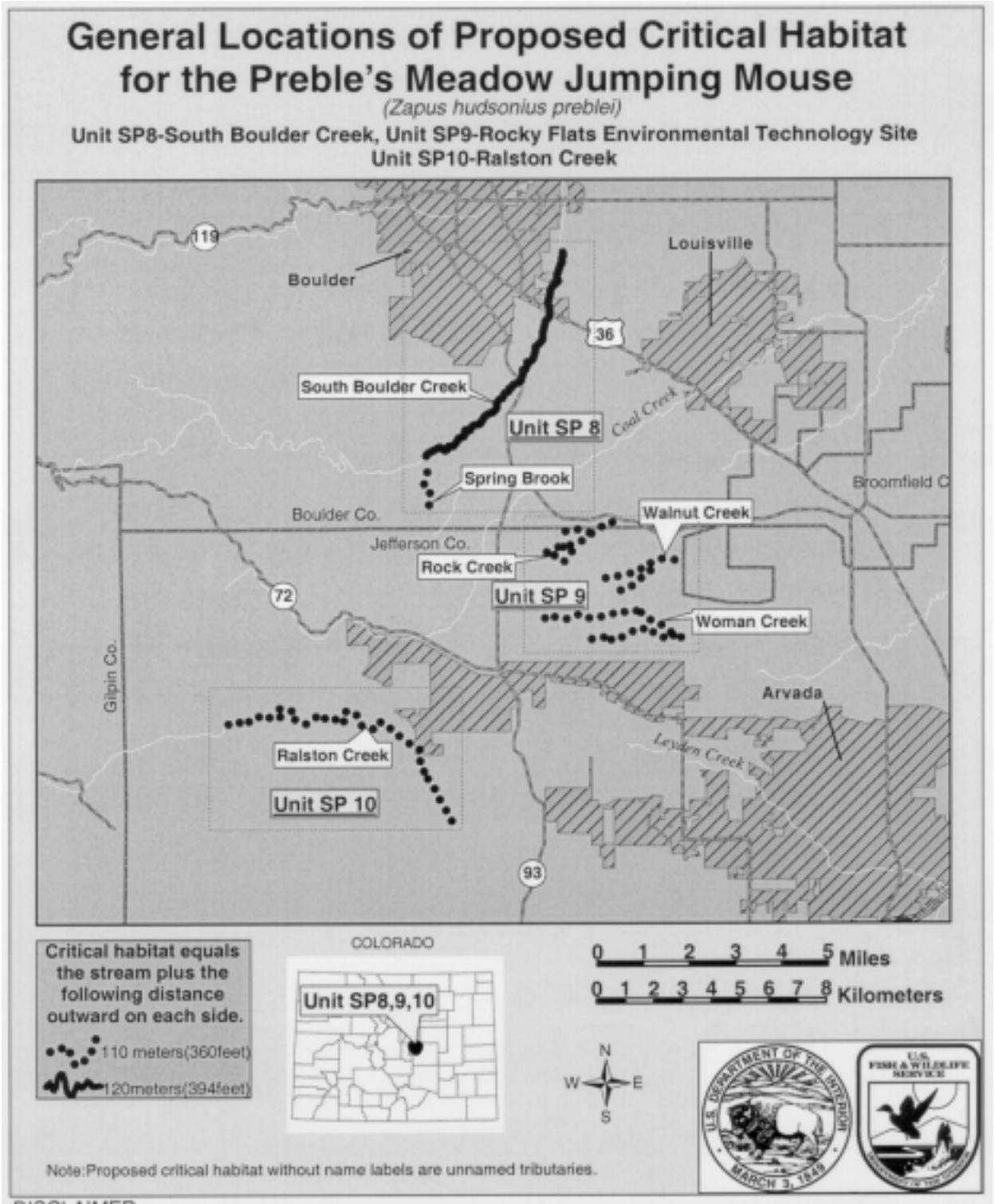
For SP9, the Rocky Flats Environmental Technology Site, 19.5 km (12.1 mi) of streams. Consists of 3 subunits. Subunit Woman Creek from Indiana Street (39 52 40N 105 9 53W, T.2S., R.70W., east boundary Sec. 13) upstream to (39 53 3N 105 13 17W, T.2S., R.70W., west boundary Sec. 15). Includes unnamed tributary from confluence with Woman Creek (39 52 43N 105 10 8W, T.2S., R.70W., Sec. 13) upstream to (39 52 39N 105 12 9W, T.2S., R.70W., west boundary Sec. 14).

Subunit Walnut Creek from Indiana Street (39 54 5N 105 9 54W, T.2S., R.70W., east boundary Sec. 1) upstream to (39 53 48N 105 11 54W, T.2S., R.70W., Sec. 11). Includes unnamed tributary from its confluence with Walnut Creek (39 54 6N 105 10 40W, T.2S., R.70W., Sec. 1) upstream to (39 53 34N 105 11 29W, T.2S., R.70W., Sec. 11).

Subunit Rock Creek from State Highway 128 (39 54 53N 105 11 37W, T.1S., R.70W., Sec. 35) upstream to (39 54 8N 105 13 18W, T.2S., R.70W., west boundary Sec. 3). Includes an unnamed tributary from its confluence with Rock Creek (39 54 40N 105 12 8W, T.2S., R.70W., east boundary Sec. 3) upstream to (39 54 41 N 105 13 00W, T.2S., R.70W., Sec. 3). Also includes an unnamed tributary from its confluence with Rock Creek at (39 54 27N 105 12 32W, T.2S., R.70W., Sec. 3) upstream to (39 54 6N 105 12 51W, T.2S., R.70W., Sec. 3). Another unnamed tributary from its confluence with Rock Creek at (39 54 23N 105 12 54W, T.2S., R.70W., Sec. 3) upstream to (39 54 18N 105 13 18W, T.2S., R.70W., west boundary Sec. 3. Another unnamed tributary from its confluence with Rock Creek at (39 54 00N 105 13 12W, T.2S., R.70W., Sec. 3) upstream to (39 54 07N 105 13 08W, T.2S., R.70W., Sec. 3).

For SP10, Ralston Creek, 13.1 km (8.1 mi) of streams. Ralston Creek from Ralston Reservoir (39 49 12N 105 15 32W, T.3S., R.70W. Sec. 6) upstream into Golden Gate Canyon State Park to 7,600 feet elevation (39 50 54N 105 21 12W, T.2S., R.71W. Sec. 29).

(ii) Map Units SP8, SP9, and SP10 follow:



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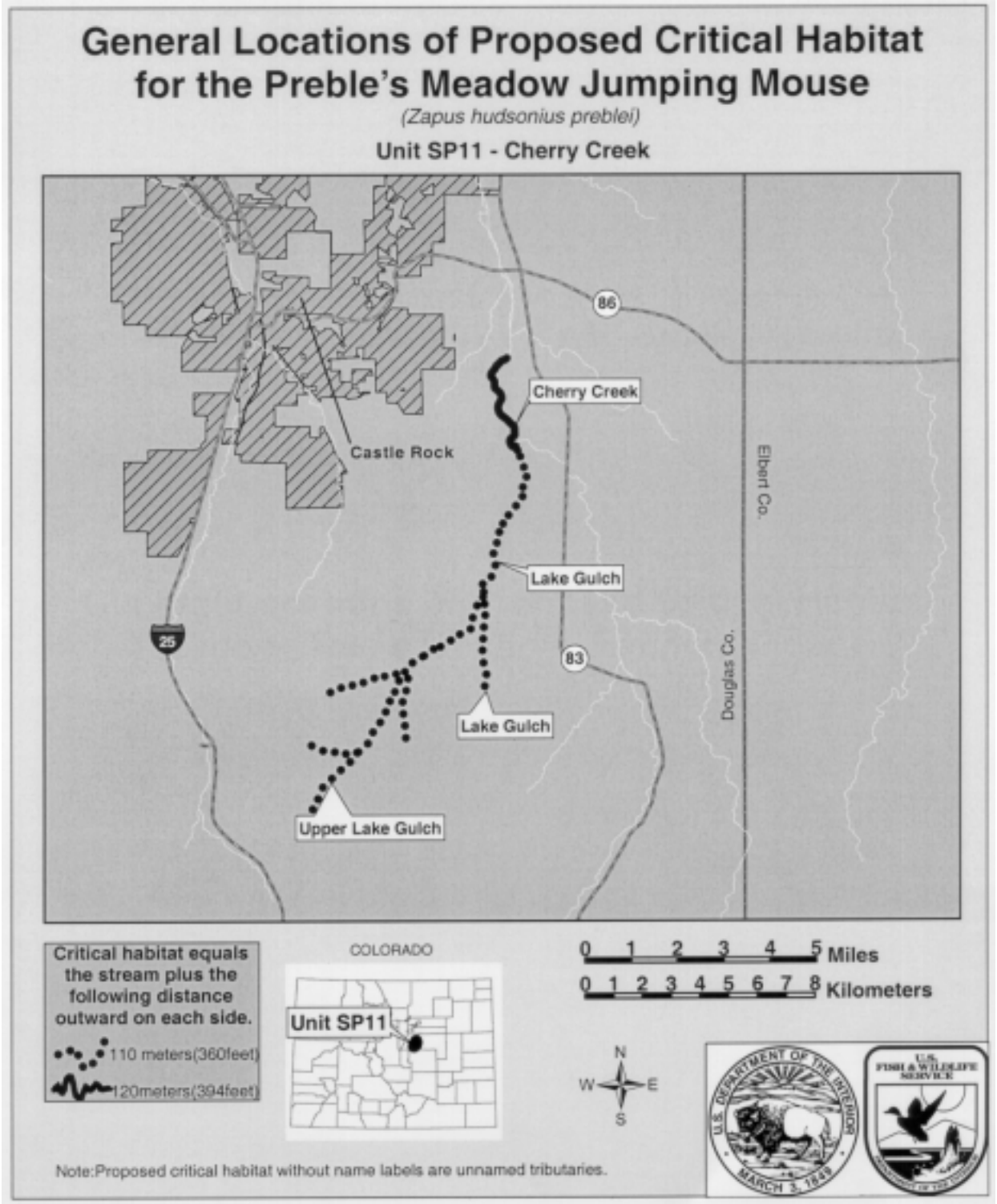
(19) Map Unit SP11: Cherry Creek, Douglas County, Colorado.

(i) This unit consists of the following:

32 km (19.9 mi) of streams. Cherry Creek from the northern boundary of Castlewood Canyon State Recreation Area (39 21 56N 104 45 31W, 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 38N 104 46 03W, T.9S., R.66W., south boundary Sec. 15). Includes Upper Lake Gulch from its confluence with Lake Gulch (39 17 26N 104 46 07W, T.9S., R.66W., Sec. 3) upstream to (39 13 25N 104 50 18W, T.9S., R.67W., mid-point Sec. 36). Also includes a unnamed tributary from its confluence with Upper Lake Gulch (39 16 06N 104 47 55W, T.9S., R.66W., Sec. 17) upstream to Upper Lake Gulch Road (39 14 45N 104 48 02W, T.9S., R.66W., south boundary Sec. 20). Also includes unnamed tributary from its confluence with Upper Lake Gulch (39 16 01N 104 48 02W, T.9S., R.66W., Sec. 17) upstream to (39 15 37N 104 49 51W, T.9S., R.67W., Sec. 13). Includes another unnamed tributary from its confluence with Upper Lake Gulch (39 14 30N 104 49 12W, T.9S., R.66W., Sec. 30) upstream to (39 14 39N 104 50 19W, T.9S., R.67W., Sec. 25).

(ii) Map Unit SP11 follows:



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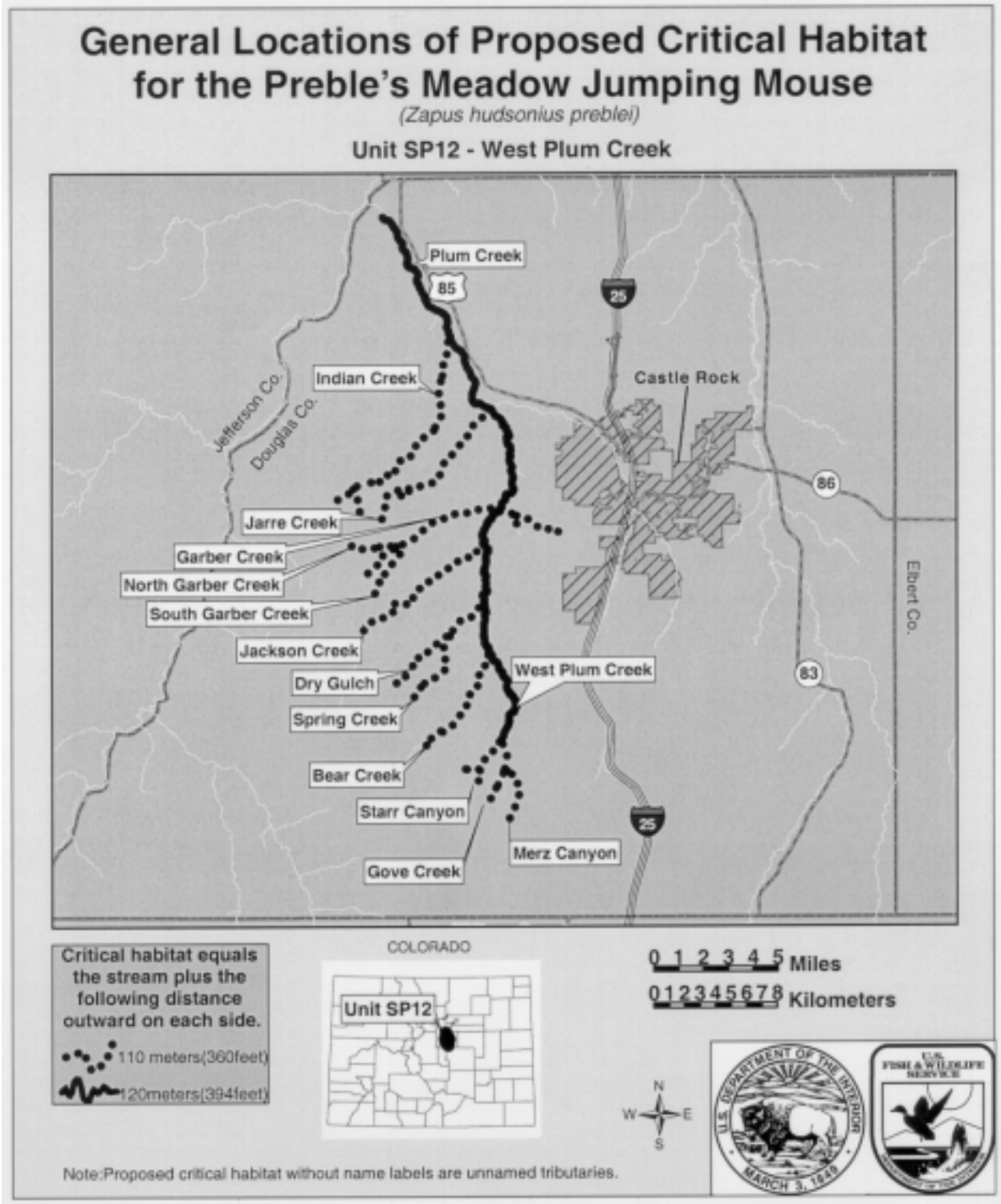
(20) Map Unit SP12: West Plum Creek, Douglas County, Colorado.

(i) This unit consists of the following:

146.6 km (91.1 mi) of streams. Plum Creek from Chatfield Lake (39 32 35N 105 03 02W, T.6S., R.68W., Sec. 7) upstream to its confluence with West Plum Creek and East Plum Creek (39 25 48N 104 58 12W, T.7S., R.68W., Sec. 23). West Plum Creek from the aforementioned confluence (39 25 48N 104 58 12W, T.7S., R.68W., Sec. 23) upstream to the boundary of Pike—San Isabel National Forest and 7,600 feet elevation (39 13 07N 104 59 18W, T.9S., R.68W., Sec. 34). Includes Indian Creek from its confluence with Plum Creek (39 28 26N 105 00 00W, T.7S., R.68W., Sec. 4) upstream to Silver State Youth Camp (39 22 34N 105 05 10W, T.8S., R.69W., Sec. 2). Indian Creek includes an unnamed tributary from its confluence with Indian Creek at Pine Nook (39 23 00N 105 04 23W, T.8S., R.69W., Sec. 2) upstream to (39 22 10N 105 04 05W, T.8S., R.69W., Sec. 12). Also includes Jarre Creek from its confluence with Plum Creek (39 25 50N 104 58 13W, T.7S., R.68W., Sec. 23) upstream to 7,600 feet elevation (39 21 52N 105 03 15W, T.8S., R.69W., Sec. 12). Jarre Creek includes an unnamed tributary from its confluence with Jarre Creek (39 22 58N 105 01 51W, T.8S., R.68W., Sec. 5) upstream to (39 22 44N 105 02 12W, 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 6320 feet elevation (39 21 27N 104 55 00W, T.8S., R.67W., Sec. 17). Which includes an unnamed tributary from its confluence with this aforementioned unnamed tributary (39 22 06N 104 57 07W, T.8S., R.68W., Sec. 12) upstream to (39 21 43N 104 56 56W, T.8S., R.68W., south boundary Sec. 12).Unit SP12 also includes Garber Creek from its confluence with West Plum Creek (39 22 16N 104 57 43W, T.8S., R.68W., Sec. 11) upstream to its confluence with South Garber Creek and Middle Garber Creek (39 21 02N 105 02 10W, T.8S., R.68W., Sec. 18). Including South Garber Creek from its confluence with Garber Creek (39 21 02N 105 02 10W, T.8S., R.68W., Sec. 18) upstream to 7,600 feet elevation (39 19 15N 105 03 28W, T.8S., R.69W., Sec. 25). Including Middle Garber Creek from its confluence with Garber Creek (39 21 02N 105 02 10W, T.8S., R.68W., Sec. 18) upstream to (39 19 48N 105 04 07W, T.8S., R.69W., west boundary Sec. 25). Including North Garber Creek from its confluence with Middle Garber Creek (39 20 55N 105 02 32W, T.8S., R.68W., Sec. 18) upstream to 7,600 feet elevation (39 20 45N 105 04 35W, T.8S., R.69W., Sec. 23). Includes Jackson Creek from its confluence with West Plum Creek (39 21 02N 104 58 28W, T.8S., R.68W., Sec. 14) upstream to 7,600 feet elevation (39 17 58N 105 03 56W, T.9S., R.69W., Sec. 1). Includes Spring Creek from its confluence with West Plum Creek at (39 18 59N 104 58 24W, T.8S., R.68W., Sec. 35) upstream to (39 15 21N 105 01 38W, T.9S., R.68W., Sec. 20). Including Dry Gulch from its confluence with Spring Creek (39 17 54N 104 59 57W, T.9S., R.68W., Sec. 4) upstream to 7,600 feet elevation (39 16 08N 105 02 27W, T.9S., R.68W., Sec. 18). Including Bear Creek from its confluence with West Plum Creek (39 17 26N 104 58 20W, T.9S., R.68W., Sec. 2) upstream to 7,600 feet elevation (39 13 58N 105 01 06W, T.9S., R.68W., Sec. 29). Including Gove Creek from its confluence with West Plum Creek (39 14 07N 104 57 40W, T.9S., R.68W., Sec. 26) upstream to 7,600 feet elevation (39 11 50N 104 58 30W, T.10S., R.68W., Sec. 11). Includes Merz Canyon stream from its confluence with Gove Creek (39 13 06N 104 57 30W, T.9S., R.68W., Sec. 36) upstream to 7,600 feet elevation (39 11 21N 104 57 18W, T.10S., R.68W., Sec. 12). Includes Starr Canyon stream from its confluence with West Plum Creek (39 13 07N 104 58 39W, T.9S., R.68W., Sec. 35) upstream to 7,600 feet elevation (39 12 34N 104 58 58W, T.10S., R.68W., Sec. 3).

(ii) Map Unit SP12 follows:



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(21) Map Unit SP13: Upper South Platte River, Jefferson and Douglas Counties, Colorado.

(i) This unit consists of the following:

83.1 km (51.6 mi) of rivers and streams. Consists of 5 subunits. 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).

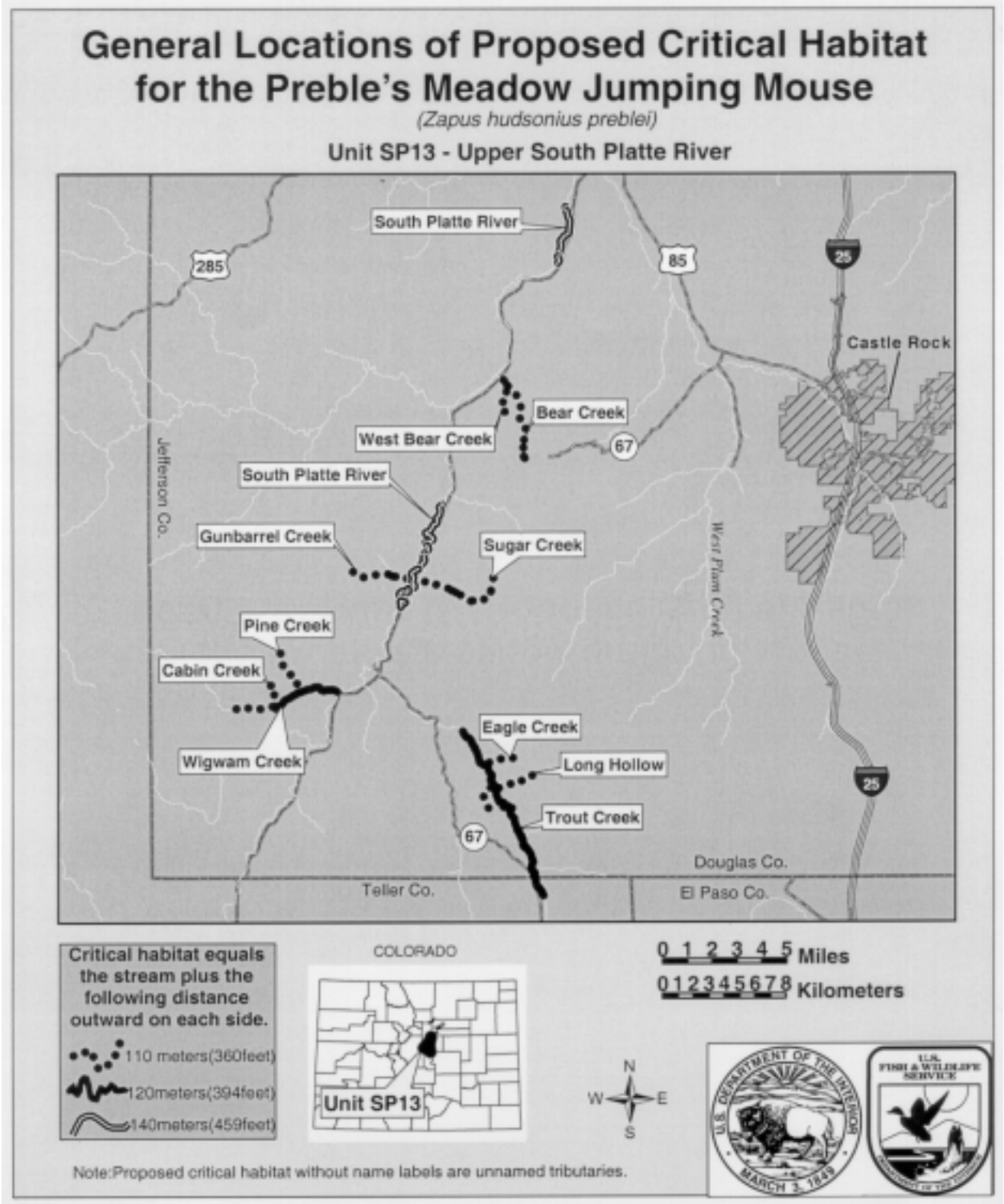
Subunit Bear Creek, Douglas County from Pike—San Isabel National Forest boundary (39 25 27N 105 07 40W, T.7S., R.69W., west boundary Sec. 21) upstream to (39 22 32N 105 06 40W, T.8S., R.69W., south boundary Sec. 4). Includes West Bear Creek from its confluence with Bear Creek (39 25 15N 105 07 30W, T.7S.,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

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 feet 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).

Subunit Wigwam Creek, Jefferson County from its confluence with South Platte River (39 14 26N 105 15 15W, T.9S., R.70W., Sec. 29) upstream to 7,600 feet elevation (39 13 50N 105 19 51W, T.9S., R.71W., Sec. 27). Includes Pine Creek from its confluence with Wigwam Creek (39 14 25N 105 16 52W, T.9S., R.71W., Sec. 25) upstream to 7,600 feet elevation (39 15 48N 105 17 51W, T.9S., R.71W., Sec. 14). Also includes Cabin Creek from its confluence with Wigwam Creek (39 13 55N 105 18 06W, T.9S., R.71W., Sec. 26) upstream to 7,600 feet elevation (39 14 41N 105 18 17W, T.9S., R.71W., Sec. 23).

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 feet elevation which is 1.3 km (0.8 mi) 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 feet 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 feet elevation (39 11 30N 105 06 19W, T.10S., R.69W., Sec. 10).

(ii) Map Unit SP13 follows:



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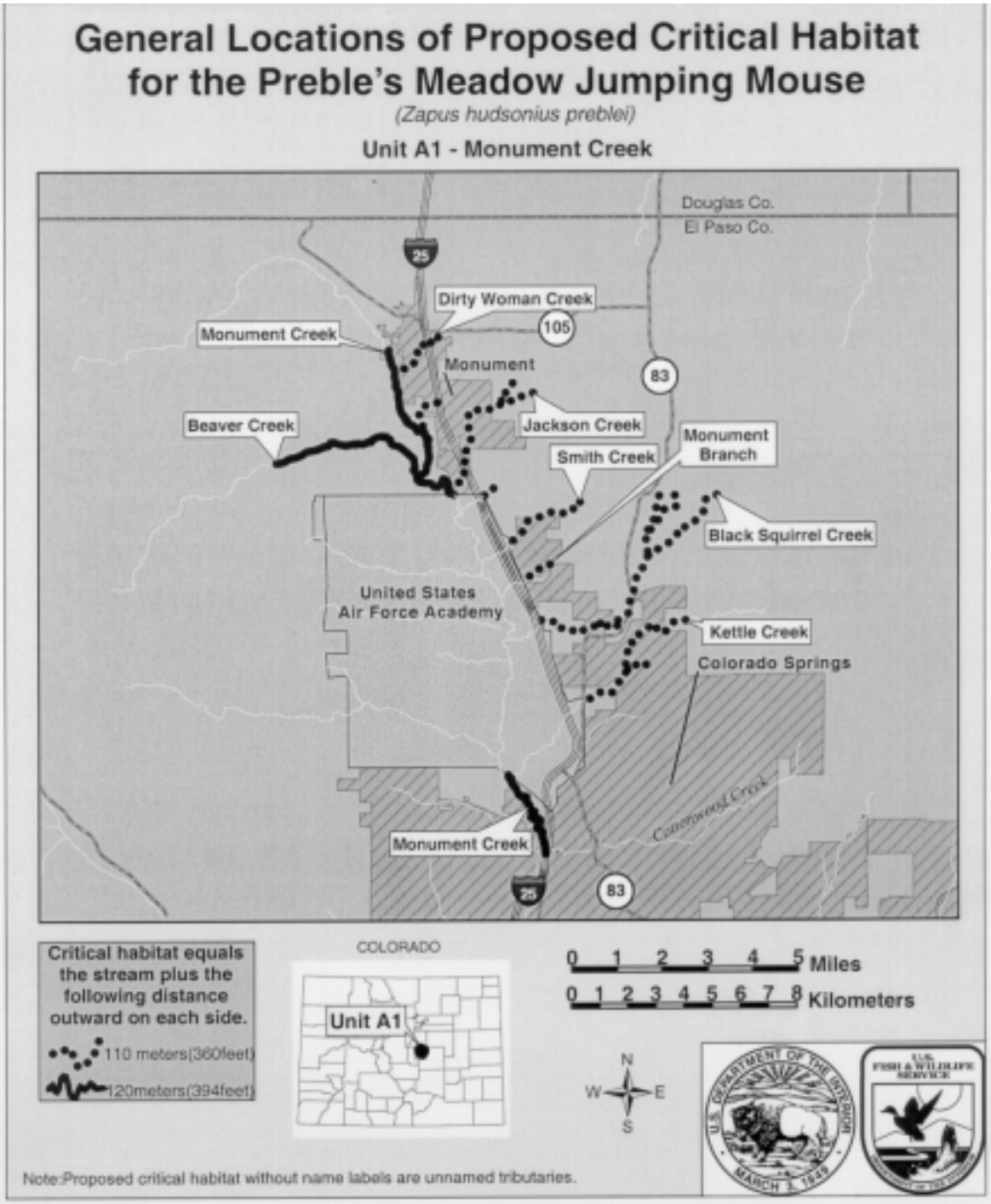
(22) Map Unit A1: Monument Creek, El Paso County, Colorado.

(i) This unit consists of the following:

56.3 km (35 mi) of streams. Monument Creek from its confluence with Cottonwood Creek (38 55 36N 104 48 51W, T.13S., R66W., Sec. 7) upstream to the southern property boundary of the U.S. Air Force Academy (38 57 06N 104 49 46W, 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 06W, T.12S., R.67W., north boundary Sec. 2) upstream to Monument Lake (39 05 19N 104 52 41W, T.11S., R.67W., Sec. 15). Includes Kettle Creek from its confluence with Monument Creek (38 57 01N 104 49 42W, T.13S., R.66W., Sec 6) upstream to the property boundary of the U.S. Air Force Academy (38 57 04N 104 49 41W, T.13S., R.66W., Sec 6). Then continues 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 06N 104 45 21W, T.12S., R.66W., east boundary Sec. 15). Which includes an unnamed tributary from its confluence with Kettle Creek (38 59 06N 104 46 51W, 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 34W, T.12S., R.66W., north boundary Sec. 2). Including an unnamed tributary from its confluence with Black Squirrel Creek (39 01 20N 104 46 17W, T.12S., R.66W., Sec. 10) upstream to (39 02 30N 104 45 39W, T.12S., R.66W., north boundary Sec. 3). Which includes another unnamed tributary from (39 01 49N 104 46 17W, T.12S., R.66W., Sec. 3) upstream to (39 02 30N 104 46 01W, T.12S., R.66W., north boundary Sec. 3). Unit A1 also includes Monument Branch from the property boundary of the U.S. Air Force Academy (39 00 49N 104 49 23W, T.12S., R.66W., Sec. 7) upstream to (39 01 11N 104 48 42W, 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 30N 104 49 46W, T.12S., R.66W., Sec. 7) upstream to (39 02 23N 104 47 57W, 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 feet elevation (39 02 45N 104 49 54W, 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 06W, T.11S., R.66W., Sec. 19). Includes an unnamed tributary from its confluence with Jackson Creek (39 04 11N 104 50 02W, T.11S., R.67W., Sec. 25) upstream to Higby Road (39 04 41N 104 49 38W, T.11S., R.66W., Sec. 19). Also includes Beaver Creek from its confluence with Monument Creek (39 02 53N 104 52 00W, T.11S., R.67W., Sec. 35) upstream to 7,600 feet elevation (39 03 08N 104 55 29W, T.11S., R.67W., Sec. 31). Also includes Teachout Creek from its confluence with Monument Creek (39 03 45N 104 51 50W, T.11S., R.67W., Sec. 26) upstream to Interstate 25 (39 04 19N 104 51 27W, T.11S., R.67W., Sec. 23). Also includes Dirty Woman Creek from its confluence with Monument Creek (39 04 48N 104 52 48W, T.11S., R.67W., Sec 22) upstream to Highway 105 (39 05 35N 104 51 28W, T.11S., R.67W., Sec 14).

(ii) Map Unit A1 follows:



DISCLAIMER

This map is a graphical representation of (*Zapus hudsonius preblei*) critical habitat and is provided for illustrative purposes only. The map and [GIS (vector and/or raster)] files used to create this map are not the definitive source for determining critical habitat boundaries. While the Service makes every effort to represent the critical habitat shown on this map as completely and accurately as possible (given existing time, resource, data and display constraints), the USFWS gives no warranty, expressed or implied, as to the accuracy, reliability, or completeness of these data.

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Dated: July 9, 2002.

Paul Hoffman,

Acting Assistant Secretary for Fish and Wildlife and Parks.

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