

DEPARTMENT OF THE INTERIOR

Fish and Wildlife Service

50 CFR Part 17

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

[MO 92210-0-0009]

RIN 1018-AW45

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

AGENCY: Fish and Wildlife Service, Interior.

ACTION: Final rule.

SUMMARY: We, the U.S. Fish and Wildlife Service (Service), designate revised critical habitat for the Preble's meadow jumping mouse (*Zapus hudsonius preblei*) (PMJM) in Colorado, where it is listed as threatened in a Significant Portion of the Range (SPR) under the Endangered Species Act of 1973, as amended (Act). In total, approximately 411 miles (mi) (662 kilometers (km)) of rivers and streams and 34,935

acres (ac) (14,138 hectares (ha)) fall within the boundaries of revised critical habitat in Boulder, Broomfield, Douglas, El Paso, Jefferson, Larimer, and Teller Counties.

DATES: This rule becomes effective on [INSERT DATE 30 DAYS AFTER DATE OF PUBLICATION IN THE **FEDERAL REGISTER**].

ADDRESSES: This final rule, the economic analysis, the environmental assessment, comments and materials received, and supporting documentation we used in preparing this final rule, are available for viewing on the Internet at <http://www.regulations.gov> (see Docket No. FWS-R6-ES-2009-0013) and also by appointment, during normal business hours, at the U.S. Fish and Wildlife Service, Colorado Ecological Services Office, 134 Union Boulevard, Suite 670, Lakewood, CO 80225; telephone 303-236-4773; facsimile 303-236-4005.

FOR FURTHER INFORMATION CONTACT: Susan Linner, Field Supervisor, U.S. Fish and Wildlife Service, Colorado Ecological Services Office (see **ADDRESSES**). If you use a telecommunications device for the deaf (TDD), call the Federal Information Relay Service (FIRS) at 800-877-8339.

SUPPLEMENTARY INFORMATION:

Background

It is our intent to discuss only those topics relevant to the designation of revised

critical habitat in this final rule. For additional information on the biology of this subspecies, see our October 8, 2009, proposed rule to revise the designation of critical habitat for the PMJM (74 FR 52066); our July 10, 2008, final rule to amend the listing for the PMJM to specify over what portion of its range the subspecies is threatened (73 FR 39789); and our May 13, 1998, final rule to list the PMJM as threatened (63 FR 26517).

Previous Federal Actions

On August 22, 2003, the City of Greeley filed a complaint in the U.S. District Court for the District of Colorado challenging our June 23, 2003, designation of critical habitat for the PMJM (68 FR 37275) (*City of Greeley, Colorado v. United States Fish and Wildlife Service et al.*, Case No. 03–CV–01607–AP). On December 9, 2003, the Mountain States Legal Foundation filed a complaint in the U.S. District Court for the District of Wyoming challenging our 1998 listing of the PMJM and designation of critical habitat for the PMJM (*Mountain States Legal Foundation v. Gale E. Norton et al.*, Case No. 03-cv-250-J). That complaint was later expanded to include our July 10, 2008, final rule to amend the listing for the PMJM to specify over what portion of its range the subspecies is threatened (73 FR 39789) and transferred to the U.S. District Court for the District of Colorado (*Mountain States Legal Foundation v. Ken Salazar et al.*, Case No. 1:08-cv-2775-JLK). These lawsuits challenged the validity of the information and reasoning we used to designate critical habitat for the PMJM.

On July 20, 2007, we announced that we would review our June 23, 2003,

designation of critical habitat for the PMJM (68 FR 37275) after questions were raised about the integrity of scientific information we used and whether the decision we made was consistent with the appropriate legal standards (Service 2007a). Based on our review of the previous critical habitat designation, we determined that it was necessary to revise critical habitat. This rule incorporates those revisions that we found appropriate.

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

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

On October 8, 2009, we published a proposed rule in the **Federal Register** to

revise the designation of critical habitat for the PMJM (74 FR 52066), and accepted public comments for 60 days (from October 8 to December 7, 2009). On May 27, 2010, we opened a second comment period of 30 days (from May 27 to June 28, 2010) and requested comments on our draft economic analysis (DEA) (Industrial Economics 2010a), draft environmental assessment, amended Required Determinations section of the proposed rule, and any other part of our proposed revised critical habitat designation (75 FR 29700). On August 9, 2010, an agreement with the City of Greeley extended the date for submission of the final rule for revised critical habitat to the **Federal Register** to December 1, 2010 (U.S. District Court, District of Colorado 2010).

For additional information about previous Federal actions concerning the PMJM, see our July 10, 2008, rule for the PMJM to specify over what portion of its range the subspecies is threatened (73 FR 39789).

Summary of Comments and Recommendations

We requested written comments from the public on the proposed designation of revised critical habitat for the PMJM during the two comment periods. The first comment period, associated with the publication of the proposed rule to revise the designation of critical habitat for the PMJM (74 FR 52066) opened on October 8, 2009, and closed on December 7, 2009. We opened a second comment period on our DEA, draft environmental assessment, amended Required Determinations section of the proposed rule, and any other part of our proposed revised critical habitat designation (75

FR 29700) on May 27, 2010, and closed it on June 28, 2010. We also contacted peer reviewers; appropriate Federal, State, and local agencies; scientific organizations; and other interested parties, and invited them to comment on the proposed rule and supporting documents.

We received 45 comments in response to the proposed rule. Comments were received from 2 peer reviewers, 1 Federal agency, 1 State agency, and 8 local governmental entities, 7 non-government organizations, and 18 private individuals (including 14 via similar post cards). Thirty-seven comments were received during the October 8 to December 7, 2009, comment period. Eight comments were received during the May 27 to June 28, 2010, comment period, all but one from entities that had commented previously. We received no requests for public hearings. All substantive comments have been either incorporated into the final determination or are addressed below.

Peer Review

In accordance with our policy published in the **Federal Register** on July 1, 1994 (59 FR 34270), we solicited expert opinions from three knowledgeable individuals with scientific expertise that included familiarity with the species, the geographic region in which the species occurs, and conservation biology principles. We received responses from two of the peer reviewers that we contacted. The peer reviewers generally agreed that we relied on the best scientific information available, accurately described the

species and its habitat requirements, and concurred that our critical habitat proposal was well supported. The peer reviewers provided additional suggestions to improve the final critical habitat rule. Recommended editorial revisions and clarifications have been incorporated into the final rule as appropriate. We respond to all substantive comments below.

Comments from Peer Reviewers

(1) *Comment:* One peer reviewer commented that upstream and adjacent habitat, beyond designated critical habitat, requires management to decrease potential for catastrophic wildfire and flooding, and to maintain appropriate stream flow and channel integrity.

Our Response: We agree. Federal agencies are directed, under section 7(a)(1) of the Act (16 U.S.C. 1531 *et seq.*), to utilize their authorities to carry out programs for the conservation of endangered and threatened species. Proactive management on U.S. Forest Service (USFS) and other Federal lands upstream or outward from designated critical habitat should consider implications to the PMJM and its critical habitat. In addition, section 7(a)(2) of the Act requires every Federal agency to insure that any action it authorizes, funds, or carries out is not likely to jeopardize the continued existence of a listed species or result in the destruction or adverse modification of designated critical habitat. The activity does not have to take

place within PMJM habitat or critical habitat to be subject to section 7 consultation. In considering the effects of a proposed action, the Federal agency looks at both the direct and indirect effects of an action on the species or critical habitat. Indirect effects are caused by the proposed action, are later in time, and are reasonably certain to occur. If, for example, management activities on Federal land, or a Federal permit or Federal funding for an activity upstream of critical habitat, may result in increased runoff, sedimentation, or channel alteration within critical habitat, those effects must be considered by the Federal agency. Outside of Federal lands and when no Federal nexus is present, cooperative conservation efforts with State and local government, and private property owners are the most effective means of addressing appropriate land management.

(2) *Comment:* One peer reviewer commented that we should have emphasized the relationship of “subshrub cover” (low-growing woody shrubs or perennial plants with a woody base) and plant species richness with the presence of PMJM.

Our Response: We agree that these concepts are important to PMJM habitat. Low shrub cover and species richness are correlated with occupancy of riparian corridors by the PMJM. These relationships may be significant and are described in Clippinger (2002, p. 73). The primary constituent elements (PCEs) of critical habitat for the PMJM are described more broadly and

include riparian corridors, in part, “containing dense, riparian vegetation consisting of grasses, forbs, or shrubs, or any combination thereof.” We believe that this final rule appropriately captures the importance of the low, diverse vegetative cover essential to the conservation of PMJM.

(3) *Comment:* One peer reviewer maintained that our explanation of why Buffalo Creek and Wigwam Creek (Jefferson County) were not included as proposed critical habitat should be better supported.

Our Response: Areas along both Buffalo Creek and Wigwam Creek have been subject to catastrophic fires. These events caused subsequent flooding and increased sedimentation of these streams. Trapping efforts targeting PMJM have not been conducted in these areas since the fires; however, it is unlikely that severely burned areas are currently occupied by the PMJM. The areas remain degraded and for at least the near future will not support the PCEs necessary for the conservation of the PMJM in the appropriate quantity and spatial arrangement to support inclusion as critical habitat. Given the extent of critical habitat proposed elsewhere in this subdrainage, we conclude that it is not necessary or appropriate to designate critical habitat in these degraded stream reaches.

(4) *Comment:* One peer reviewer suggested that our failure to propose critical habitat on the Big Thompson River, North Fork of the Big Thompson River,

and Little Thompson River was based more on issues of land ownership than on science.

Our Response: All three of these rivers are within the Big Thompson River subdrainage (subdrainages equate to U.S. Geological Survey 8-digit hydrological unit boundaries and are hereafter referred to as HUCs). Within this HUC we are designating Buckhorn Creek (Unit 3) and Cedar Creek (Unit 4) as critical habitat, but we identified no other areas that merited designation. Public lands, especially undeveloped Federal lands and other public lands currently devoted to conservation, are more likely to support viable PMJM populations, both currently and in the future. We made our determinations after examining both quality of existing habitat and land ownership, and prioritized designation of Federal lands within this HUC.

Public Comments

Biological Concerns and Methodology

(5) *Comment:* One commenter stated that proposed critical habitat should be expanded to reflect understanding of genetic diversity within the PMJM.

Our Response: Our designation of revised critical habitat incorporates current knowledge of genetic diversity in the PMJM. Genetic analysis has revealed

significant differences between PMJM populations in northern and southern portions of the range (King *et al.* 2006, pp. 4337-4338). The Preble's Meadow Jumping Mouse Recovery Team (Jackson 2009, pers. comm.) concluded that recovery populations outlined in the Working Draft of a Recovery Plan (PMJM Recovery Team 2003), and included in the Preliminary Draft Recovery Plan (Draft Plan) (Service 2003a), were spread north and south to provide adequate representation of the genetic differences in northern and southern portions of the range examined in King *et al.* (2006). This same approximate distribution in populations north and south is reflected in this revised critical habitat designation.

(6) *Comment:* One commenter urged the Service to consider the value of expanding proposed critical habitat to provide habitat linkage for PMJM populations north and south of Denver, and among other drainages where critical habitat was proposed.

Our Response: Potential connectivity of critical habitat was considered consistent with our conservation strategy and that proposed in the Draft Plan. In most cases, revised critical habitat units exceed minimum reach lengths for large, medium, and small populations proposed in the Draft Plan. All designated critical habitat units and subunits exceed 3 mi (5 km) in stream length, the minimum length of stream the Draft Plan prescribes for a small recovery population. In some cases, we chose not to link stream reaches

through the designation of marginal habitat, or not to substantially extend critical habitat to encompass a larger PMJM population, where multiple smaller recovery populations are consistent with our conservation strategy.

(7) *Comment:* One commenter requested that, before designating revised critical habitat, the Service should consult with scientists regarding how climate change may affect PMJM movement, habitat needs, and habitat connectivity. For example, it was suggested that we should consider potential effects of changes in precipitation and earlier spring runoff.

Our Response: Variability in existing climate models suggests uncertainty as to future climate change and potential effects in Colorado, where the PMJM is listed. We have considered the potential impact of future climate change on the PMJM, and we believe that our revised designation adequately addresses likely climate change scenarios by designating critical habitat areas throughout the north-south range of the PMJM in Colorado that vary in elevation and in stream size (see *Climate Change*, below). In the Big Thompson River and Upper South Platte River drainages, we are designating critical habitat units in excess of those recovery populations called for in the Draft Plan to provide resilience, should climate change reduce the value of lower elevation habitats currently occupied by the PMJM. These units, the Cache La Poudre Unit (Unit 2) and the Upper South Platte Unit (Unit 11), are centered on Federal lands and include reaches extending to the highest

elevation the PMJM is currently known to occupy in Colorado. If, in the future, a clearer picture of the effects of climate change on the PMJM is developed, further revision of critical habitat may be appropriate (see also *Climate Change*, below).

(8) *Comment*: One commenter stated that both sites where trapping has documented PMJM presence since 2003, and sites of earlier captures, should be included in designated critical habitat.

Our Response: Not all areas where the PMJM is known to occur in Colorado are being designated as revised critical habitat. See our response to comment 44. We incorporated the best scientific and commercial information available into this final rule, including information regarding all locations where PMJM have been trapped since our 2003 final rule. These more recent capture locations did not significantly expand the known distribution of the PMJM in Colorado. However, we did consider each new capture location and its potential significance prior to our proposing revised critical habitat for the PMJM.

(9) *Comment*: One commenter stated that the Draft Plan for the PMJM, which was cited as a basis for the Service's conservation strategy and certain decisions regarding proposed designation of revised critical habitat, is 6 years old and does not include current data.

Our Response: The 2003 Draft Plan (Service 2003a) provides a conservation strategy for the PMJM. It was developed primarily by the PMJM Recovery Team and refined through comments and additional information we received. Information on range, occupancy, populations, and habitat characteristics were used in developing the Draft Plan. Recent review by the current PMJM Recovery Team has verified that concepts and strategies incorporated into the Draft Plan remain appropriate (Jackson 2010, pers. comm.). However, we also incorporated new data, as appropriate, in developing our proposal and this final rule, including trapping results, genetic and morphometric confirmation of species identification, and changes to habitat.

- (10) *Comment:* One commenter pointed out that the Service has not proposed critical habitat to address all recovery populations called for in the Draft Plan, including HUCs where the PMJM is known to occur.

Our Response: While the conservation strategy underlying our proposed revision of critical habitat was informed by the Draft Plan and the ongoing recovery planning process, areas we are designating as revised critical habitat in this rule will not be identical to areas ultimately designated as recovery populations. The Draft Plan designated location of certain recovery populations in HUCs where PMJM are known to be present. However, in some HUCs within the likely range of the PMJM, there is little or no available

information on the existence of PMJM populations or the extent of occupied habitat. In these cases, the Draft Plan only applied standard criteria to achieve recovery of the species. For example, the Draft Plan required, at minimum, three small recovery populations or one medium recovery population in several HUCs, but only if the HUC was found to be occupied by the PMJM. Since we have determined that the conservation of the PMJM can be achieved by designating critical habitat in areas that are known to support the species, rather than in areas with no confirmed occupancy by the species, we are designating no critical habitat in HUCs where occupancy has not been confirmed. In other cases, such as the Kiowa HUC in Elbert County, trapping efforts have been limited to sites of human development, and, while there is confirmed occurrence of the PMJM, it is not sufficient to inform us of distribution or abundance within the HUC. We exercised our professional judgment and determined that those limited areas of confirmed occurrence of the PMJM in and near human development are not essential to the conservation of the PMJM. We are not designating such sites as critical habitat.

- (11) *Comment:* One commenter stated that areas of critical habitat should be designated in excess of recovery goals suggested in the Draft Plan.

Our Response: In two HUCs, we are designating critical habitat units beyond those recovery populations that the Draft Plan specifies. We are designating

critical habitat capable of supporting a large PMJM population independent of, and in addition to, the large recovery populations proposed in the Draft Plan along the Cache la Poudre River (Unit 2) in the Cache La Poudre River HUC and designated reaches of the Upper South Platte River and its tributaries (Unit 10) in excess of recovery goals for the Upper South Platte River HUC. In other HUCs, we did not identify or designate additional areas that met the definition of critical habitat in excess of recovery goals stated in the Draft Plan.

- (12) *Comment:* Multiple commenters stated that the outward extent of proposed critical habitat did not accurately reflect limits of PMJM habitat. One commenter stated that distance outward from riparian vegetation is a much better predictor of PMJM habitat than is our use of distance from the stream edge, based on stream order (a classification of streams by relative size). Another commenter stated that floodplain plus 100 meters should be used as the outward boundary of critical habitat on reaches where floodplain mapping is available.

Our Response: We believe that the outward extent of critical habitat we are designating includes all PCEs required by the PMJM and effectively protects habitat essential to the conservation of the PMJM. We agree that site-specific assessment of habitat components, including extent of riparian vegetation, is a more precise method of designating critical habitat (see our response to

comment 14 below). However, site-specific mapping of PMJM habitat in Colorado is not generally available. Land use and recent site history complicate efforts to accurately assess and map riparian habitat limits. Floodplain mapping is not available for most foothill streams designated as PMJM critical habitat. Where limits of the designated 100-year floodplain have been mapped, floodplain limits are often revised, especially in the Colorado Front Range development corridor, where filling of the floodplain may occur and flood levels are altered by development. We used the best available scientific and commercial information with respect to determining the outward extent of PMJM critical habitat.

- (13) *Comment:* One commenter suggested that the Service should provide detail on the development of the average floodplain widths used to designate outward limits of critical habitat for streams of different order and stated that the calculation needs to be based on a sufficient sample of sites across PMJM range to be meaningful.

Our Response: The estimates of average floodplain width based on stream order that we use in this designation of critical habitat were previously developed in conjunction with our June 23, 2003, designation of critical habitat for the PMJM (68 FR 37275). We believe that a sufficient number of representative streams were examined to provide an appropriate estimation of average floodplain width as related to stream order.

(14) *Comment:* One commenter stated that the Riparian Conservation Zone (RCZ) mapping, developed as part of the approved Douglas County Habitat Conservation Plan (HCP), corresponds better to appropriate outward limits of critical habitat than do the boundaries that the Service proposed for revised critical habitat, and that critical habitat boundaries should align with county-wide HCP boundaries for consistency and to avoid confusion.

Our Response: We agree that it is preferable that critical habitat boundaries match HCP boundaries where HCP boundaries accurately reflect limits of habitat essential to the conservation of the PMJM. RCZ boundaries in the Douglas County HCP were developed based on conservation strategies for the PMJM provided in the Draft Plan. After consideration, we are designating the outward boundaries of revised critical habitat on non-Federal lands in Douglas County to correspond to the boundaries developed for RCZ (see the Delineation of Critical Habitat Boundaries section).

Procedural and Legal Issues

(15) *Comment:* Two commenters stated that the Service cannot propose a critical habitat revision prior to analysis of alternatives under the National Environmental Policy Act (NEPA) (42 U.S.C. 4321 *et seq.*), a draft economic analysis (DEA), and a Regulatory Flexibility Act (5 U.S.C. 601 *et seq.*)

analysis. They stated that the environmental and economic impacts of the proposed action must be considered prior to the proposal.

Our Response: By Service policy, we draft and circulate the NEPA, DEA, and Regulatory Flexibility Act analyses between the proposed and final critical habitat designation. Comments on the entire proposal, including the draft environmental assessment, DEA, and Regulatory Flexibility Act analysis, were accepted for 30 days following the May 27, 2010, publication making available these documents (75 FR 29700). The information provided in these documents and comments regarding them were fully considered prior to this final rule, in accordance with applicable regulations and statutes.

(16) *Comment:* Two commenters stated that the Service inappropriately proposed critical habitat in areas where the PMJM was not known to exist at the time of listing.

Our Response: Section 3(5)(A) of the Act defines critical habitat, in part, as those specific areas within the geographic area occupied by the species at the time of listing, and specific areas outside the geographic area occupied by the species at the time of listing upon determination that such areas are essential for the conservation of the species. Our designation constitutes our best assessment of areas determined to be within the geographical area occupied at the time of listing that contain the physical and biological features essential to

the conservation of the PMJM that may require special management, and those additional areas not occupied at the time of listing, but that have been determined to be essential to the conservation of the PMJM. Management and protection of all the areas is necessary to achieve the conservation of PMJM. Therefore, we are also designating areas that were not known to be occupied at the time of listing, but which were subsequently identified as being occupied, and which we have determined to be essential to the conservation of the PMJM in our Preliminary Draft Recovery Plan (Service 2003a). We have based our critical habitat designation on the best currently available scientific information.

- (17) *Comment:* One commenter stated that only areas “indispensible and absolutely necessary” to the PMJM should be designated as critical habitat and that the Service should include only the “minimum amount of habitat needed to avoid short-term jeopardy” (citing *Middle Rio Grande Conservancy District v. Babbitt*). Based on this reasoning, they asserted that we could not tie critical habitat to the Draft Plan, which addresses long-term recovery.

Our Response: Within the range of the listed species, critical habitat is defined to include areas occupied at the time of listing on which are found those physical or biological features essential to the conservation of the species, and which may require special management considerations or protection, and those additional areas not occupied at the time of listing but

that have been determined to be essential to the conservation of the species. Conservation is defined in the Act as the use of all methods and procedures which are necessary to bring any endangered or threatened species to the point at which the measures provided under the Act are no longer necessary. Limiting designation of critical habitat to avoiding “short-term jeopardy” would not meet the Act’s intent that critical habitat provide for the conservation (e.g., recovery) of the species.

- (18) *Comment:* One commenter expressed the concern that details of all existing HCPs involving the PMJM were not readily available for public review and that all HCPs should be available on the Service’s “ECOS” web site and the Service’s Mountain-Prairie Region web site.

Our Response: Most HCPs that address the PMJM have been available to the public on our ECOS web site. When we were made aware that certain HCPs were not posted, we provided the commenter the requested materials as expeditiously as possible.

- (19) *Comment:* One commenter stated that Geographic Information System (GIS) data depicting proposed critical habitat boundaries should have been made available for public review.

Our Response: We provided GIS depictions of proposed critical habitat when

requested. Additionally, we believe that the legal description of stream reaches and outward distances from streams that we provided in our proposal to revise the designation of critical habitat were adequate to identify the areas proposed.

(20) *Comment:* One commenter recommended that we incorporate a provision in our critical habitat designation that would exclude from critical habitat areas covered by future HCPs, when completed.

Our Response: The basis for exclusions from critical habitat under section 4(b)(2) of the Act is explained in “Exclusions” below. We cannot make a determination now to exclude areas covered by HCPs that may be developed sometime in the future, because we have no way to evaluate the effectiveness, and determine whether the benefits of exclusion outweigh the benefits of inclusion, of plans that do not yet exist and have not been implemented. If, in the future, we determine that changes in designated critical habitat for the PMJM are appropriate, we have the option to revise critical habitat.

(21) *Comment:* One commenter asked us to confirm that the existing special 4(d) rule, which exempts take of PMJM under section 9 of the Act for specified activities, including ditch maintenance and any continued use of perfected water rights, is not affected by the designation of critical habitat.

Our Response: The 4(d) rule for the PMJM (see 50 CFR 17.40 (1)) provides certain exemptions from the take prohibitions found in section 9 of the Act. Take prohibitions under section 9 are not affected by the designation of critical habitat. The primary regulatory effects of a critical habitat designation under the Act are triggered through the provisions of section 7 of the Act, which applies only to activities conducted, authorized, or funded by a Federal agency. In limited cases, an activity that is excluded from take provisions under the 4(d) rule may require a Federal permit or involve Federal funding. In these cases, while take would be exempted under the 4(d) rule, section 7 consultation would still occur to ensure that Federal actions would not jeopardize the PMJM or result in destruction or adverse modification of its critical habitat.

(22) *Comment:* One commenter stated that under the Act, the Service must re-consult on any projects within newly designated critical habitat that previously underwent section 7 consultation.

Our Response: For Federal actions, the lead Federal agency determines whether their action may affect designated PMJM critical habitat. This applies to projects previously consulted on under section 7 where the Federal agency has retained discretionary involvement or control over the action. Federal agencies may sometimes need to request reinitiation of consultation on actions for which formal consultation has been completed (see 50 CFR

402.16).

Comments on Specific Units

(23) *Comment:* One commenter requested us to connect critical habitat Units 1 (North Fork of the Cache la Poudre River) and 2 (Cache la Poudre River) in Larimer County.

Our Response: The Milton Seaman Reservoir at the downstream extent of Unit 1 is a barrier to PMJM movement and effectively prevents linking of the two units. We do not believe that it is biologically necessary or possible to link these two units. See also our response to Comment 6.

(24) *Comment:* One commenter called for us to exclude the area proposed as critical habitat in Unit 1 (North Fork of the Cache la Poudre River) on the mainstem of the North Fork of the Cache la Poudre River upstream of the Milton Seaman Reservoir and within the footprint of the proposed reservoir expansion.

Our Response: We have not excluded this reach from designated critical habitat. This area includes Federal and State property that would potentially be inundated by the City of Greeley's proposed expansion of the Milton Seaman Reservoir. Expansion under the currently proposed plan would

inundate about 3 mi (5 km) of the river. In 2002, the City of Greeley contended that the reach in question supported only patches of willow shrub, had little habitat for the PMJM, and did not meet the definition of critical habitat (Kolanzi 2003). In our on June 23, 2003, designation of critical habitat (68 FR 37275), we concluded the area in question supported those physical or biological features essential to the conservation of the species, and may require special management considerations or protection. We stated that, within the reach in question, some habitat components appeared discontinuous, and PMJM habitat was, at that time, of lower quality than habitat upstream of this reach, due to heavy grazing. However, we concluded that the area in question did include the requisite PCEs to support the PMJM, and its designation as critical habitat was essential for the conservation of the large PMJM population along the North Fork of the Cache la Poudre River. The Service chose not to exclude this reach from critical habitat in 2003. This prompted the legal actions by the City of Greeley addressed in “*Previous Federal Actions*” above.

The City of Greeley, in a letter dated May 20, 2009, outlined its concerns regarding designation of critical habitat in this area, and requested exclusion of the area from revised critical habitat under section 4(b)(2) of the Act (Kolanzi 2009a). The City of Greeley also submitted a report by ERO Resources Corporation (ERO) assessing the area to be inundated by the proposed reservoir expansion (ERO 2008). ERO concluded that of the

approximately 165 ac (66.8 ha) of designated critical habitat that would be inundated, only about 26 acres were of moderate to high quality for the PMJM. Non-habitat and low-quality habitat were attributed to the dominant upland vegetation and steep slopes, while the moderate- to high-quality habitat was associated with the narrow riparian corridor (ERO 2008, pp. 11-12). In our October 8, 2009, proposal to revise the designation of critical habitat for the PMJM (74 FR 52066), we again determined that the area met the definition of critical habitat, that it included physical and biological features that are essential to the conservation of the species and that may require special management considerations or protection. Three other letters from the City of Greeley followed, two within public comment periods for the proposed revised critical habitat, expanding on the City of Greeley's concerns (Kolanz, 2009b, 2009c, 2010).

Consistent with previously stated concerns over habitat quality, the City of Greeley contended that the area in question is not essential to the conservation of the PMJM. The City of Greeley pointed out that it was not mapped as PMJM habitat in our proposal to establish special regulations for the conservation of the PMJM (December 3, 1998, 63 FR 66777), and was not shown to be "occupied" by PMJM in a recent Colorado Division of Wildlife (CDOW) database. The reach in question is part of the USFS Greyrock Grazing Allotment, which extends from Milton Seaman Reservoir, approximately 3 mi (5 km) upstream, and includes lands owned primarily by

the USFS (about 2 mi (3 km) of the stream), as well as State lands, City of Greeley lands, and private lands (USFS 2008). The USFS 2008 Biological Assessment for management of the Greyrock Grazing Allotment explains the history of the site and past habitat limitations (USFS 2008). Heavy livestock grazing for many decades drastically reduced riparian shrubs and trees. In the last 7 years, riparian habitat quality has significantly improved in the reach. Following removal of grazing along the North Fork of the Cache la Poudre River, a notable increase in willow growth and a tall, dense herbaceous component of the plant community was observed in the riparian zone in 2007. With no further livestock grazing in the reach through 2010, a lush riparian community has developed that provides PCEs essential to the support of the PMJM, in quantity and spatial arrangement that suggests riparian habitat is now of high quality. Upland habitat in the reach has been slower to recover following heavy grazing, and weed control efforts are needed. While the PMJM had been documented upstream in this drainage, the reach above Milton Seaman Reservoir had not been trapped to establish whether the PMJM was present until 2010, when a limited trapping effort by the USFS captured a jumping mouse within the proposed reservoir expansion area (USFS 2010). The CDOW database will be updated accordingly. Restoration of habitat in this reach has advanced to the point where grazing will again take place on the allotment. Carefully managed grazing will maintain or improve PMJM habitat in this allotment into the future. The USFS has informally consulted with the Service over management of this allotment and we have

concluded that carefully managed grazing will maintain or improve PMJM habitat on the allotment into the future.

The City of Greeley also stated that designation of critical habitat in this area would create significant financial burden on the City. Our DEA (section 5.3) assigns a low incremental cost (\$20,000 to \$38,000) to the designation of critical habitat for the Halligan Reservoir and Milton Seaman Reservoir projects. However, additional costs could be incurred should designation of critical habitat affect regulatory approval of the proposed project, and cause the City of Greeley to pursue a more costly alternative. Because of their speculative nature, these costs were not included in the DEA (see our response to Comment 56), but we discuss them in the FEA and here. Under section 7 of the Act, the Service will evaluate whether any proposed alternative for Milton Seaman Reservoir expansion under permit review by the U.S. Army Corps of Engineers (Corps) will jeopardize the PMJM or result in destruction or adverse modification of its designated critical habitat. Under the City of Greeley's worst case scenario, our designation of critical habitat and subsequent consultation regarding the reservoir project could result in a finding of "destruction or adverse modification of critical habitat" by the Service, or could result in the Corps denying a permit under the Clean Water Act (33 U.S.C. 1251 *et seq.*), based on the proposed project not being the "least damaging practicable alternative." To be attributable to our designation of critical habitat, an outcome and any resultant costs would have to differ

from the results of regulatory review of the same project with no critical habitat designation. For example, the outcome would have to differ from the result of Service consultation in the absence of critical habitat that results in a jeopardy determination, or in the absence of critical habitat, the Corps denying a permit based on the presence of the PMJM, combined with an array of other considerations. The question of whether regulatory review under scenarios with or without critical habitat would produce different results contributes to the speculative nature of costs attributable to critical habitat designation. Factors relevant to possible future Service and Corps regulatory determinations follow.

Substantial planning has taken place between the City of Greeley, the Service, The Nature Conservancy, and other entities, to address potential impacts to the PMJM and its habitat from the planned reservoir expansion. The City of Greeley has expressed an interest in implementing conservation measures to offset impact of the proposed project to the PMJM prior to project construction. Conservation measures have been identified that could serve to offset project impacts to the PMJM, should the planned project move forward. These conservation measures are targeted at PMJM populations and supporting ecological processes in critical habitat Unit 1, which includes the reservoir expansion area. Further development of conservation measures and their incorporation into plans for proposed reservoir expansion could help maintain the value of this critical habitat unit to the recovery of the PMJM and

reduce or eliminate the possibility of a jeopardy or adverse modification determination by the Service.

Our designation of critical habitat for the PMJM should be considered by the Corps as indicative of the high natural resource value of the lands designated. A decision that the area does not meet the definition of critical habitat would imply a lesser resource value. However, if the Service were to exclude the reach in question from critical habitat for reasons of relevant non-biological factors (economic, social, etc.), it would not change our determination that the area meets the definition of critical habitat, nor would it change the inherent resource value of the reach or its contribution to the conservation and recovery of the PMJM. Therefore, from a resource perspective, the Corps' assessment of the value of this reach and its role in their consideration of issuing a permit to the City of Greeley may not differ between the cases of critical habitat designation and exclusion from designation based on non-biological factors.

Any future Milton Seaman Reservoir expansion may differ from the project currently proposed. The City of Greeley is an active participant in the Halligan-Seaman Water Management Project. To efficiently manage their supplies, the cities of Fort Collins and Greeley have proposed the Halligan-Seaman Water Management Project as a regional water storage and management project on the North Fork of the Cache la Poudre River. Both cities and their partners are working together to increase water storage

capacity for their communities through coordinated enlargements of Halligan and Milton Seaman reservoirs. The participants are using an innovative Shared Vision Planning process, which brings together stakeholders in a collaborative planning and model building exercise. The Service is supportive of this process, has participated as resources allow, and anticipates that its results will inform the Halligan-Seaman Water Management Project. The eventual proposal for Milton Seaman Reservoir expansion may vary from the proposal currently envisioned, to facilitate coordinated management of these reservoirs.

Onsite alternatives to the project currently proposed by the City of Greeley may result from the Halligan-Seaman Water Management Project. Such alternatives could reduce the probability of a Service determination of adverse modification of critical habitat, or Corps permit denial based on presence of critical habitat. Any such alternatives could, however, also result in less water storage or storage at a higher cost.

The most costly possible result of our designation of critical habitat would be a case where the City of Greeley would have to abandon expansion plans for the Milton Seaman Reservoir, and develop storage options at one or more alternate sites. Assuming a current estimated cost of \$116 million for the proposed project (Kolanzi 2010, p. 4) and the Corps' estimated costs of alternate storage cited in the DEA (up to 8 times the cost of storage through Milton Seaman Reservoir expansion), additional cost due to designation of

critical habitat could range to \$812 million. The Corps' estimates relate to comparative costs incurred by other Front Range Colorado water projects (Peter, pers. comm. 2010).

Under the scenarios above, the additional cost to the City of Greeley associated with critical habitat designation upstream of the Milton Seaman Reservoir could range from \$20,000 to as high as \$812 million. We have considered both the potential costs due to designation of critical habitat, and the relative likelihood of their occurrence, when evaluating the City of Greeley's request for exclusion.

The reach of river above the Milton Seaman Reservoir is part of critical habitat Unit 1, established to be consistent with a large recovery population along the North Fork of the Cache La Poudre River and its tributaries, as designated in the Draft Plan. The entire reach of the North Fork between the Halligan Reservoir to the north and Milton Seaman Reservoir to the south is within this unit. The two reservoirs create barriers to PMJM movement along the river, and the population of PMJM between the reservoirs and on adjoining tributaries is thought to be relatively isolated from populations elsewhere. The City of Greeley contends that loss of up to 3 mi (5 km) of the approximately 88 mi (140 km) in this critical habitat unit will have little relative impact on the unit's ability to conserve and recover the PMJM. We do not know the extent of habitat needed to support a large recovery

population as described in the Draft Plan. At a minimum, a total of 50 mi (80 km) of connected streams and tributaries is suggested for a large PMJM population in the Draft Plan. But the Draft Plan bases size of PMJM recovery populations on the numbers of PMJM present, not the extent of habitat. Until such time as population estimates for the area are developed, we will not know whether 50 mi (80 km), or even 88 mi (140 km), of streams will be sufficient. In this context, loss of 3 of the 88 mi (5 of the 140 km) may significantly impact the ability of the critical habitat unit to support a large population and meet the recovery goal outlined in the Draft Plan.

The City of Greeley suggested that an exclusion would support ongoing Federal and local cooperation in the development of water resources in the drainage. Water use and storage issues continue to generate close scrutiny in Colorado. The Milton Seaman Reservoir expansion, Halligan Reservoir expansion, and other proposed projects have both their proponents and critics. While an exclusion could lead to the continuation and strengthening of partnerships between the City of Greeley, certain other public and private entities, and the Service, it would likely alienate others. Despite our decision not to exclude the area above Milton Seaman Reservoir from critical habitat designation, we anticipate a continued working relationship with the City of Greeley to address both their needs and those of the PMJM.

If approved, the proposed reservoir expansion would occur well in the

future. The required review under NEPA and the permit issuance by the Corps under the section 404 of the Clean Water Act, necessary for reconstruction of the reservoir's dam, are likely to take years. Because of this, considerable uncertainty exists regarding when and in what form an expansion of Milton Seaman Reservoir might occur. Given the uncertainties regarding timing, design, and future conservation commitments associated with reservoir expansion, exclusion of the area, even if it should be determined to be appropriate someday in the future, is premature.

Exclusion of this reach from critical habitat would do little to relieve the costs of regulatory review and associated permitting (delays, administrative costs, consulting costs, and cost of developing additional conservation measures) for the City of Greeley. The area of the proposed expansion includes Federal land owned by the USFS. All alternatives impacting this land will involve USFS approval. In addition, any dam replacement or reconstruction would require a permit from the Corps under the Clean Water Act. Even without critical habitat, section 7 review appears unavoidable. Exclusion from critical habitat would not alleviate the need for section 7 consultation, or appreciably increase the administrative costs involved.

Designation of critical habitat (the identification of lands that are necessary for the conservation of the species) is beneficial in the recovery planning for a species. In this case, the Draft Plan has helped inform critical

habitat designation by designating a large recovery population in this area. This final rule may, in turn, contribute to the development of a final recovery plan for the North Fork of the Cache La Poudre River.

We have determined that this portion of the North Fork of the Cache la Poudre River contains the physical and biological features essential to the conservation of the PMJM in accordance with 4(a)(3) of the Act. We conclude that it is inappropriate to exclude this reach from critical habitat under section 4(b)(2) of the Act.

(25) *Comment:* Two commenters pointed out that critical habitat proposed along Spring Brook and South Boulder Creek in Unit 5 (South Boulder Creek), Boulder County, is discontinuous as mapped.

Our Response: PMJM have been found on both Spring Brook and South Boulder Creek. Spring Brook has been diverted into a canal; therefore, it does not follow its historical course directly into South Boulder Creek. The limits of critical habitat we are designating for the two reaches are separated by approximately 100 ft (30 m) through a rural residential upland area which may not contain the physical and biological features essential for the conservation of PMJM, as defined. However, we do not believe that this discontinuity significantly affects the species' ability to move between these portions of this critical habitat unit.

(26) *Comment:* The City of Boulder requested that we coordinate with the City to “fine tune” the boundaries of Unit 5 (South Boulder Creek) to expedite regulatory review of future projects with a Federal nexus.

Our Response: As in other units, based on the scale of our mapping, there may be some areas within the general boundaries of designated critical habitat in Unit 5 that do not support PCEs required by the PMJM. For example, specific areas that support existing buildings, roads, and parking lots are not considered critical habitat. These areas are excluded by text in this rule. We will continue to be available to work with the City of Boulder to determine boundaries of areas that do not meet the definition of critical habitat.

(27) *Comment:* The U.S. Department of Energy (DOE) commented that it controls much of the “Rocky Flats Site,” described by the Service as the Rocky Flats National Wildlife Refuge (NWR) (Unit 6), in Jefferson and Broomfield Counties, and noted that proposed critical habitat would include portions of DOE’s Central Operable Unit (COU) of 1,300 ac (530 ha), where a former facility processed and manufactured nuclear weapons. Many DOE operational maintenance and monitoring activities continue to take place within the COU under closure and cleanup agreements. The DOE urged the Service to exclude the COU from designation of critical habitat within this unit because designation could adversely impact actions required under these

agreements.

Our Response: We have modified this final rule to more accurately reflect DOE presence on the Rocky Flats Site. The Rocky Flats Site (Unit 6) is managed by the Service (Rocky Flats NWR) and DOE (the Central Operating Unit and certain other lands). Buildings and other structures at the site have been decommissioned and demolished, and the disturbed areas have been restored, or are undergoing restoration. Clean-up and closure of the COU was completed in 2005. Many operational maintenance and monitoring activities continue to take place in the COU, to maintain the CERCLA (the Comprehensive Environmental Response, Compensation, and Liability Act, also known as Superfund, 42 U.S.C. 9601 *et seq.*) and RCRA (Resource Conservation and Recovery Act, 42 U.S.C. 6901 *et seq.*) remedies implemented in accordance with the Rocky Flats Management Agreement.

The final Rocky Flats NWR Comprehensive Conservation Plan (CCP) was announced in the **Federal Register** on April 18, 2005 (70 FR 20164). The CCP outlines the management direction and strategies for NWR operations, habitat restoration, and visitor services, for a period of 15 years. The CCP provides a vision for the NWR; guidance for management decisions; and the goals, objectives, and strategies to achieve the NWR's vision and purpose. One objective of the CCP is to protect, maintain, and improve approximately 1,000 ac (400 ha) of PMJM habitat on the NWR. A

programmatic section 7 consultation with DOE for their cleanup and maintenance activities was completed in 2004 (Service 2004c). This consultation addressed removal of manmade structures in and adjacent to PMJM habitat, and ongoing operations in the COU in support of the CERCLA/RCRA remedy.

We invited information and comments on potential exclusion of the Rocky Flats Site in part because of the previous exclusion of the site from critical habitat in our June 23, 2003, final rule (68 FR 37275). That exclusion appeared at odds with the recent interpretation of critical habitat designation on Federal lands. Federal agencies have an affirmative conservation mandate under section 7(a)(1) of the Act to contribute to the conservation of listed species. On the Rocky Flats Site, as with other Federal lands, we anticipate that effective land management strategies can and will be employed by Federal agencies to conserve PMJM populations. We have determined that lands on the Rocky Flats Site are essential to the conservation of the species. Designation of critical habitat on the Rocky Flats Site highlights the importance of the area to the PMJM, while encouraging the NWR and DOE to provide a consistent and effective approach to conserve the PMJM. These lands require special management considerations or protection, as evidenced by and incorporated in management plans and the programmatic consultation referenced above. Potential effects to habitat on the site that may be addressed under programs, practices, and activities within the authority and

jurisdiction of Federal land management agencies include, but are not limited to, weed management, wildland fire management, recreation, construction and maintenance of roads and trails, and operational maintenance and monitoring activities within the COU. For the above reasons, we conclude that the entire Rocky Flats site, including the COU, contains the physical and biological features essential to the conservation of the PMJM and merits designation as critical habitat.

(28) *Comment:* One commenter requested that the easternmost portion of the Rocky Flats Site (Unit 6) in Jefferson and Broomfield Counties, the site of proposed roadway expansion along Indiana Street, be excluded from critical habitat, because it is planned for development. They cited the Rocky Flats National Wildlife Refuge Act of 2001, and Rocky Flats National Wildlife Refuge Comprehensive Conservation Plan and Environmental Impact Statement (CCP/EIS) as addressing the roadway expansion and anticipating its future construction in spite of potential PMJM presence. Two other commenters urged that the specific area in question be included in designated critical habitat.

Our Response: The areas in question contain the physical and biological features essential to conservation of the PMJM and have not been excluded from critical habitat. Should project plans for the road expansion go forward, the Service has concluded that subsequent environmental review, including

compliance with the Act, will be required of any future project proponent to address any impacts to the PMJM, its habitat, and designated critical habitat. The Service has made no conclusions as to how any transfer of Federal land or roadway expansion would affect the PMJM. The Service only found that transfer of a corridor up to 300-ft (92-m) wide would not adversely affect management of the NWR (Service 2004, p. 191).

- (29) *Comment:* Denver Water requested exclusion of their properties covered under the Denver Water HCP, provided maps of their properties, and pointed out apparent Service mapping errors.

Our Response: The eight properties in question include a total of approximately 250 ac (113 ha) in 4 critical habitat units (Units 5, 7, 9, and 10). We have excluded these properties from critical habitat designation under section 4(b)(2) of the Act (see the **Exclusions** section below), and corrected maps and acreages as appropriate.

- (30) *Comment:* Douglas County requested exclusion of non-Federal lands within Douglas County based on their 2006 HCP.

Our Response: We have not excluded the non-Federal lands in Douglas County. On May 11, 2006, we issued a section 10 incidental take permit that covers the PMJM for the Douglas County HCP (Service 2006a). The Douglas

County HCP addresses only specified activities conducted by Douglas County and the towns of Castle Rock and Parker, within Douglas County, Colorado, on private and other non-Federal lands within the RCZ, as mapped by Douglas County. Impacts to the RCZ associated with the covered activities are mitigated by the permanent protection of portions of the RCZ and the restoration of habitat from temporary impacts. Stream segments totaling 15 mi (24 km) in length and 1,132 ac (458 ha) of the RCZ have been permanently protected as part of the Douglas County HCP. Management plans exist or are in development for these protected properties (Dougherty 2009). The majority of proposed critical habitat in Units 8 and 9, and a small amount of non-Federal property in Unit 10 are within the boundaries of the Douglas County HCP.

While the Douglas County HCP includes the extensive mapped RCZ that encompasses areas believed to support the PMJM, the plan does not provide a means by which habitat within these zones will be effectively managed into the future. Only about 5 percent of the lands within the RCZ are set aside for conservation under the plan. The vast majority of lands in the RCZ receive no specific protection under the HCP. Potential impacts to physical and biological features essential to the PMJM from entities other than Douglas County and the cities of Parker and Castle Rock, including those by private landowners, are not addressed in the plan.

(31) *Comment:* One commenter proposed that we link the two subunits proposed in Unit 8 (Cherry Creek), Douglas County.

Our Response: The Draft Plan calls for a medium recovery population in Lower South Platte - Cherry Creek HUC. Each of the two subunits appears large enough to support a medium recovery population. We determined that linking them was not appropriate, after considering the variable quality of intervening habitat on private lands and determining that a much larger critical habitat unit with more reaches in low-quality habitat would not provide additional benefit to the PMJM.

(32) *Comment:* One commenter stated that we should limit the downstream extent of designated critical habitat along Plum Creek in Unit 9 (West Plum Creek), Douglas County, to the point of maximum reservoir storage under the U.S. Army Corps of Engineers' (Corps') Chatfield Reservoir Reauthorization Project preferred alternative (maximum storage at 5,444 feet (ft) (1,660 meters (m)) in elevation).

Our Response: The reach in question is federally owned, has been documented to support the PMJM, and has PCEs of appropriate quantity and spatial arrangement to qualify as critical habitat. We have determined that Plum Creek downstream to Chatfield Reservoir contains the physical and biological features essential to the conservation of the PMJM, and we have

identified no basis to exclude this area from critical habitat under section 4(b)(2) of the Act. Substantial planning has taken place to address potential impacts to the PMJM should the reservoir expansion proceed, in part because proposed expansion of reservoir storage capacity would impact existing critical habitat on the Upper South Platte River (Unit 10). While designation of critical habitat along Plum Creek will provide additional regulatory protection to PMJM habitat in the area, the project sponsors are developing alternatives to address impacts to designated critical habitat on Plum Creek should the planned project move forward.

- (33) *Comment:* One commenter stated that we should exclude the Penley Ranch property along Indian Creek, Unit 9 (West Plum Creek) from critical habitat, on the basis that trapping conducted in 2007 did not document the PMJM on the property and the Service agreed at the time the PMJM was “not likely to be present” on the site. The commenter further stated that if the property was not excluded, we should develop more appropriate (less extensive) site-specific boundaries of critical habitat on the site.

Our Response: While the PMJM was not captured during the 2007 trapping effort, habitat on the site appeared to support the physical and biological features essential to the conservation of the PMJM. We concurred in 2007 that the PMJM was not likely present and that a proposed rural residential development on the property would not be likely to adversely affect the

PMJM. We stated that our concurrence was valid only for one year. The residential development proposed did not take place. Captures of the PMJM have occurred in areas of comparable or lower quality habitat downstream on Indian Creek. PCEs are present along this reach of Indian Creek. While no further trapping efforts have taken place, we believe that the PMJM likely uses the reach, at a minimum as a movement corridor, and may occupy portions of the property. We therefore conclude that this reach of Indian Creek is occupied and merits designation as critical habitat. Indian Creek on the Penley Ranch is within the RCZ established under the Douglas County HCP. Outward extent of critical habitat on the property is being designated consistent with the boundaries of the Douglas County RCZ (see the Delineation of Critical Habitat Boundaries section below). See also related comment 61 and our response.

(34) *Comment:* One commenter stated that the upstream extent of critical habitat along Bear Creek in Unit 9 (West Plum Creek) should terminate at the Lake Waconda Dam, as the lake and Perry Park Golf Course create a barrier to PMJM movement, and any PMJM population upstream from the golf course is isolated.

Our Response: After we considered the extent to which the dam, lake, adjacent golf course, and associated development form a barrier to PMJM movement up and down stream, and assessed the quantity and spatial

arrangement of PCEs on the reach upstream of the lake, we elected to limit the upstream extent of designated critical habitat along Bear Creek to the base of the Lake Waconda Dam (see the Summary of Changes from the Proposed Rule section below). Based on review of aerial photographs, we determined that the area upstream of the dam does not contain the physical and biological features essential to the conservation of the PMJM in the necessary spatial arrangement and distribution.

(35) *Comment:* One commenter suggested that we designate critical habitat to link all four proposed subunits of Unit 10 (Upper South Platte River), Jefferson and Douglas Counties, and also designate their tributaries as critical habitat.

Our Response: The Service has determined that connecting these subunits to form one very large critical habitat unit is not necessary. Land ownership and land uses vary along the South Platte River and its tributaries. While areas designated as critical habitat largely consist of National Forest System lands, many of the intervening reaches do not. Quality of PMJM habitat is not consistent. Reaches of lesser quality that are not being designated as critical habitat generally correspond to those that are not federally owned. In addition, the large West Plum Creek Unit (Unit 9), which corresponds to a large recovery population required in the Draft Plan, is also being designated in the same HUC. Tributaries have been examined, and we are designating

only those that we determined meet the definition of critical habitat based on occurrence of physical and biological features essential to the conservation of the PMJM and proximity to known PMJM occurrence. (See also our response to comment 6.)

(36) *Comment:* One commenter requested that we exclude critical habitat in Teller County because no PMJM have been documented there.

Our Response: The PMJM has been documented on Trout Creek, Unit 10 (South Platte River), at or very near the Douglas County–Teller County line (Service 2010). Based on contiguous habitat along Trout Creek in Teller County, we are designating critical habitat upstream to 7,600 ft (2,300 m) in elevation. We believe that this elevation provides a reasonable estimate of the upstream extent of habitat likely to be occupied by the PMJM in this reach.

(37) *Comment:* Two commenters requested exclusion of Unit 11 (Monument Creek), El Paso County, from critical habitat based on potential economic impacts and because protections for the PMJM are already in place as a result of the 1998 listing and local limits on development.

Our Response: Our DEA addressed the extent of economic impacts likely to occur in this unit as the result of critical habitat designation. The updated final economic analysis (FEA) (Industrial Economics 2010b) concludes that

\$10.4 million to \$17.7 million in incremental impacts due to designation of critical habitat may occur in Unit 11 over the next 20 years, resulting almost entirely from increased costs associated with section 7 consultation on residential and commercial development. However, the FEA (Chapter 3) explains why these estimates may be higher than what will likely occur. Based on the results of the FEA, we have not excluded any areas from designation of critical habitat based on economic impacts (see the Required Determinations section). Current protections afforded the PMJM by its threatened status under the Act and by local regulations have not protected the PMJM and its habitat from the cumulative impacts of development. Degradation of creeks and riparian vegetation in this unit from recent development and associated stormwater runoff presents an ongoing issue. This degradation and projected future development in the area indicate that the unit requires special management consideration and protection.

(38) *Comment:* One commenter urged us not to exclude El Paso County from critical habitat based on any countywide HCP not finalized.

Our Response: We have not excluded El Paso County from critical habitat. The county has been developing a countywide HCP for the PMJM in coordination with the Service for several years. A countywide plan would likely cover most or all of the area in critical habitat Unit 11 (Monument

Creek). When we proposed revised critical habitat, we anticipated that we would receive a draft HCP prior to final revised critical habitat designation. To date, we have not received a draft of an HCP for our review, nor do we have any assurance as to if, when, or in what form, any countywide HCP will be submitted, or whether an incidental take permit for the PMJM under section 10 would be issued. Since any potential El Paso County plan remains in its formative stages, we have no basis to address possible benefits of exclusion.

Other Comments

(39) *Comment:* One commenter noted that we had no basis to revise the 2003 rule that designated critical habitat for the PMJM.

Our Response: We stand by our determination that revising critical habitat for PMJM is appropriate. Based on our review of the June 23, 2003, final rule to designate critical habitat for the PMJM (68 FR 37275), we determined that it is necessary to revise critical habitat. Our review found that we excluded three counties from critical habitat based on countywide HCPs under development. The 2003 rule stated, “If pending HCPs are not completed, we will determine whether areas designated in this final rule need further refinement” (68 FR 37290). Seven years later, only one of the three counties excluded from critical habitat has completed an HCP, and coverage under the

Douglas County HCP is limited to actions by three local governments.

Therefore, the basis upon which these exclusions were made, that countywide HCPs would be completed in the near future, was faulty, and revision is appropriate.

- (40) *Comment:* Two commenters pointed out that our 2003 rule downplayed the value of critical habitat designation. One commenter stated critical habitat designation is unhelpful, duplicative, and unnecessary, and that it provides little additional value given that areas proposed are believed to be occupied and currently subject to section 7 review under the Act. Based on this, they contended that the value of including additional critical habitat through our revision was negligible.

Our Response: Designation of critical habitat is mandated by the Act. The purpose of critical habitat designation is to contribute to the conservation of endangered and threatened species and the ecosystems upon which they depend. It alerts Federal agencies and the public to areas essential for the conservation of the species and provides the species added regulatory protection under section 7 of the Act when Federal actions occur. (See *Benefits of Designating Critical Habitat*, below.)

- (41) *Comment:* We received comments that critical habitat provides little additional protection for the PMJM over various layers of existing protections,

including local land use regulations, and that this negates the need for critical habitat designation.

Our Response: Protections under the Act, including those afforded by designation of critical habitat, for the listed SPR of the PMJM in Colorado are necessary in part because local regulations and conservation efforts have proven insufficient to conserve the species. Our July 10, 2008, final rule that refined the listing of the PMJM (73 FR 39789) specifies over what portion of its range the subspecies is threatened.

(42) *Comment:* One commenter stated that designation of critical habitat should be limited to Federal lands.

Our Response: As defined, critical habitat is not limited by land ownership, but rather based on areas essential to the conservation of the species and in need of special management or protection. Federally owned lands are more likely to contribute to conservation of the PMJM than private lands that are not subject to the Act's affirmative conservation mandate of 7(a)(1), which imposes on Federal agencies a duty to conserve listed species. Therefore, we prioritized the inclusion of Federal lands when deciding what quantity and distribution of lands containing the physical and biological features essential to the conservation of the PMJM are necessary. However, even with this prioritization, the amount of Federal lands alone is insufficient to provide for

the conservation of the PMJM, as these lands are limited in geographic location, size, and habitat quality within Colorado. We are designating both Federal lands and non-Federal land as critical habitat where they meet the definition of critical habitat.

- (43) *Comment:* One commenter urged us not to exempt HCPs from critical habitat, based on the contentions that their purpose differs from that of critical habitat and that HCPs are less protective. The commenter suggested that the Service should conduct a detailed analysis of past protection of the PMJM afforded by HCPs, as opposed to that afforded by critical habitat designation, including the degree of habitat loss and take of the PMJM. The commenter added that exclusions based on HCPs would fragment habitat corridors otherwise designated as critical habitat.

Our Response: Critical habitat and HCPs differ in their purpose, but both have a similar role in conservation of the species. In general, critical habitat designation affords an added layer of regulatory protection with regard to Federal actions, while an HCP provides a mechanism to permit take caused by non-Federal entities. We exclude areas covered by HCPs from critical habitat when the benefits of exclusion are greater than the benefits of inclusion. As part of this determination, we analyzed whether the HCP in place affords equal or greater conservation of the species than critical habitat designation would afford. These HCPs were developed to address the conservation needs

of the PMJM and maintain its habitat. Issuance of associated section 10 permits by the Service required section 7 consultations. Exclusion of these HCPs is not expected to affect movement corridors, because the HCPs were developed in coordination with the Service and address the conservation requirements of the PMJM.

(44) *Comment:* One commenter believed that, at a minimum, all habitat occupied by PMJM should be designated as critical habitat, and called on us to provide a rationale for any occupied areas not designated.

Our Response: The Act does not require that we designate critical habitat on all lands occupied by the species. We used the best scientific and commercial data available in our determination of this final designation of revised critical habitat. In addition, we considered peer review comments, public comments, and any additional information we received. We determined a subset of all known occupied areas that contain PCEs is sufficient to provide for the conservation of the PMJM. This conclusion is based on the recommendations in the Draft Plan that a mix of small, medium, and large populations can conserve the species. We are designating all areas that we found to be essential.

(45) *Comment:* One commenter stated that the Service must consider whether habitat outside that occupied by the listed entity is justified for designation as

critical habitat and stated the opinion that occupied habitat in Wyoming must be considered for inclusion.

Our Response: In accordance with section 3(5)(C) of the Act, not all areas that can be occupied by a species will be designated critical habitat. We designate as critical habitat areas outside the geographical area presently occupied by a listed species only when a designation limited to its present range would be inadequate to ensure the conservation of the species. Given the extent and distribution of known PMJM populations, we believe that protection within certain areas currently occupied will be sufficient to conserve the PMJM in Colorado, where the PMJM is listed under the Act.

(46) *Comment:* One commenter suggested that we should conduct research to prove that the PMJM can live in all 418 mi of stream proposed as critical habitat.

Our Response: We base our designation of critical habitat on the best scientific and commercial information available. The best information available to us indicates that the units we are designating as critical habitat are occupied. In addition, all PCEs upon which the PMJM depends are present within each unit of critical habitat. At any given site within a unit, one or more PCEs must be present for the site to qualify as critical habitat. For example, it may be determined that a reach qualifies as critical habitat based

only on its ability to provide connectivity between more extensive habitat upstream and downstream. Determination of the limits of critical habitat at a specific site based on absence of any PCEs will be made by the Service on a site-by-site basis where needed.

(47) *Comment:* One commenter noted the potential impact of critical habitat designation to grazing on Federal lands, which the commenter stated has been shown to be compatible with maintenance of PMJM populations.

Our Response: The impact of the designation of critical habitat on Federal lands includes consultation under section 7 of the Act to determine if Federal actions would result in adverse modification of critical habitat. Where grazing is compatible with the maintenance and recovery of PMJM populations, we would determine that adverse modification would not be likely. Agriculture, including grazing, can be managed in many different ways, some of which may be beneficial to PMJM habitat, others harmful. Some PMJM habitat on Federal lands is currently grazed in a manner that appears to maintain good habitat for the PMJM. However, there may be areas managed in a manner that is not conducive to the development or maintenance of PMJM habitat. As defined, critical habitat is essential to conserve the species and may require special management considerations or protection. The areas designated as critical habitat have been determined to be essential to the conservation of the PMJM. During consultation required under section 7 of the Act, grazing

practices on these areas would receive increased scrutiny by Federal land managing agencies and the Service. In those areas where current management results in maintenance of good PMJM habitat, there is a need to continue such practices, so future management considerations or protections may be required. In other instances, protections of designated critical habitat would help ensure that livestock management practices potentially harmful to the conservation of PMJM are not conducted without required consultation.

(48) *Comment:* One commenter stated that based on any future change to our definition of “adverse modification,” third parties may mount legal challenges to Service consultations under section 7 of the Act and HCPs that address critical habitat.

Our Response: Section 7(a)(2) of the Act requires Federal agencies, including the Service, to ensure that actions they fund, authorize, or carry out are not likely to destroy or adversely modify critical habitat. Decisions by the Fifth and Ninth Circuits Court of Appeals have invalidated our definition of destruction or adverse modification (50 CFR 402.02) (see *Gifford Pinchot Task Force v. U.S. Fish and Wildlife Service*, 378 F.3d 1059 (9th Cir. 2004) and *Sierra Club v. U.S. Fish and Wildlife Service et al.*, 245 F.3d 434, 442 (5th Cir. 2001)), and we do not rely on this regulatory definition when we analyze whether an action is likely to destroy or adversely modify critical habitat. In response to these decisions, we are reviewing the regulatory

definition of adverse modification in relation to conservation. We cannot speculate about future change to the definition of adverse modification, how it may impact conservation of the PMJM, or litigation that could follow. Threat of future lawsuits should not influence our designation of appropriate critical habitat.

Comments on Economic Analysis and Environmental Assessment

(49) *Comment:* One commenter stated that providing only a “revision” of our 2003 economic analysis and environmental assessment, alluded to in our revised critical habitat proposal, is insufficient and circumvents NEPA.

Our Response: The DEA and NEPA analysis that we conducted for the 2009 proposed rule updated our 2003 analysis. Our FEA and final environmental assessment differ substantially from documents produced in support of our 2003 designation of critical habitat. As all address designation of critical habitat for the PMJM, there are similarities.

(50) *Comment:* One commenter indicated that the DEA underestimated the actual costs of critical habitat designation by applying an incremental approach to identify only those impacts attributable solely to the proposed rule. Because the SPR in Colorado, where the PMJM is listed, lies within the U.S. Tenth Circuit Court of Appeals, its ruling in *New Mexico Cattle Growers*

Association v. United States Fish and Wildlife Service, 248 F.3d 1277 (10th Cir. 2001) should be followed. In this case, the court instructed the Service to conduct a full analysis of the economic impacts of proposed critical habitat, regardless of whether those impacts are attributable co-extensively to other causes.

Our Response: The economic analysis estimates the total cost of species conservation activities, without subtracting the impact of pre-existing baseline regulations (*i.e.*, the cost estimates are fully co-extensive). In addition, the economic analysis breaks the costs down into the baseline costs of all conservation activities resulting from the listing of PMJM under the Act, and the incremental costs of designation of critical habitat, which are above and additional to the baseline costs. We considered both the coextensive as well as the incremental costs when performing the 4(b)(2) exclusion analysis. In 2001, the U.S. 10th Circuit Court of Appeals instructed the Service to conduct a full analysis of all of the economic impacts of proposed critical habitat designation, regardless of whether those impacts are attributable co-extensively to other causes (*New Mexico Cattle Growers Ass'n v. USFWS*, 248 F.3d 1277 (10th Cir. 2001)). The economic analysis for the PMJM complies with direction from the U.S. 10th Circuit Court of Appeals.

In developing this final rule, we considered our February 12, 2008, Draft Critical Habitat Exclusions Guidance. This guidance was developed by the

Service in response to critical habitat case law, which documents the Courts' interpretations of the requirements of the Act. This rule is also consistent with the October 3, 2008, opinion from the Solicitor titled, "The Secretary's Authority to Exclude Areas from a Critical Habitat Designation under Section 4(b)(2) of the Endangered Species Act."

In this rule, the Service declines to exercise its discretion to exclude any areas based on co-extensive or incremental impacts in this rule. Two courts have found the Secretary's decision not to exclude is completely within the Service's discretion and is not reviewable by a court (*Home Builders Association of Northern California v. U. S. Fish & Wildlife Serv.*, 2006 U.S. Dist. Lexis 80255, *66 (E.D. Cal. 2006), *reconsideration granted in part on other grounds*, 2007 U.S. Dist. Lexis 5208 (Jan. 24, 2007); *Cape Hatteras Access Preservation Alliance v. DOI*, 2010 U.S. Dist. Lexis 84515 (D.D.C. Aug. 17, 2010).

- (51) *Comment:* One commenter stated that the Service has not adequately quantified and analyzed the myriad potential economic benefits of critical habitat designation.

Our Response: The purpose of critical habitat is to support the conservation of the PMJM. Quantification and monetization of species' conservation benefits requires information on the incremental change in the probability of

PMJM conservation that is expected to result from the designation. No studies exist that provide such information for this species. Even if this information existed, the published valuation literature does not support the monetization of incremental changes in conservation probability for this species. Therefore, the primary benefits of this rule cannot be quantified or monetized based on the best, readily available scientific and economic information. Depending on the project modifications ultimately implemented as a result of the regulation, other ancillary benefits that are not the stated objective of critical habitat may also be achieved. Chapter 9 of the DEA describes the categories of potential benefits, including improvements in the value of adjacent or proximate properties, improvements in water quality, aesthetic benefits, increased recreational opportunities, increased regional expenditures and employment resulting from increased visitation to the region, and educational benefits. Because these categories of benefits are not the primary intention of the rule, and quantification and monetization of these benefits would require significant effort and provide limited value to the Service's decision-making process, we provide only a qualitative discussion of these potential benefits.

- (52) *Comment:* One commenter stated that the DEA underestimates the potential impacts in Unit 11 (Monument Creek), El Paso County, by excluding from analysis the following types of parcels not likely to require a section 7 consultation: (1) Those parcels under county or government

ownership; (2) those parcels occupied by existing buildings; and (3) those parcels under 100 ac (40 ha) in area. Further, the commenter stated that this assumption is inconsistent with other conclusions reached by the DEA, where (1) The costs to small governmental jurisdictions are analyzed and estimated in the initial regulatory flexibility analysis (IRFA), (2) cost impacts to parcels occupied by existing buildings as a result of building maintenance activities are considered, and (3) parcels under 100 ac (40 ha) have undergone section 7 consultations for PMJM.

Our Response: In section 3.6 of the DEA, the Service acknowledges that those parcels removed from further consideration could eventually be developed in such a way that would require a Federal permit or funding, resulting in a section 7 consultation and mitigation. However, the DEA focuses on estimating the potential economic impacts to new residential and commercial development on readily developable, private, and large open parcels of land. As evidenced by the Service's consultation history for the PMJM, such parcels are more likely to have a Federal nexus and undergo a section 7 consultation. As a result, parcels under government ownership were removed from further consideration. In Chapter 4 and Appendix A, the DEA estimates the impacts to governmental entities, including those that are small, and that are associated with other activities, namely road/bridge, utility, and bank stabilization construction and maintenance. These activities do not necessarily occur on parcels of land owned by the government.

With respect to maintenance activities at existing buildings, the Service's consultation history does not suggest such activity requires consultation for the PMJM. However, the Service recognizes that large parcels with existing buildings could eventually be redeveloped (e.g., large ranch parcels), and therefore these parcels were analyzed in Chapter 3 of the FEA. Finally, parcels under 100 ac (40 ha) in size were removed from further consideration in the analysis, because the smallest residential development project that required a formal section 7 consultation since 2003 was 173 units on a 107-ac parcel (Struthers Ranch). The Service's consultation record demonstrates that projects under 100 ac (40 ha) typically undergo informal section 7 consultations and technical assistance with the Service. In section 3.3.2, the DEA estimates the costs for these types of consultations.

(53) *Comment:* One commenter indicated that the DEA underestimates the true economic impact of the proposed rule on the residential sector by not considering the impacts to the local, State, and national economy.

Our Response: In section 3.5, the DEA estimates the regional economic impacts that may result from a potential reduction in residential home construction in Douglas and El Paso Counties due to the critical habitat designation. These regional impacts include estimates of the indirect (changes

in output industries that supply goods and services to those directly affected), induced effects (changes in household consumption resulting from a change in employment), and job loss. To assess the potential impact of the proposed rule on the national economy, the FEA considers estimating the social welfare losses that result from changes in the price and quantity of available housing. However, such an analysis could not be conducted due to insufficient information to reliably model the markets for housing in areas affected by critical habitat. We assume these costs are in addition to the compliance costs incurred by developers or existing landowners or both.

(54) *Comment:* One commenter indicated that the DEA does not include consultation costs for 15 road, bridge, utility, and bank stabilization projects that may not be covered by the existing Douglas County HCP. If these projects occur outside of the RCZ established by the HCP, the commenter indicated that they would incur these costs in full (estimated \$60,000 to \$150,000), rather than just the incremental costs estimated in the DEA.

Our Response: As described in section 4 of the DEA, the projected number of road, bridge, utility, and bank stabilization projects potentially impacted by the designation of critical habitat is based on estimates provided by the Colorado Department of Transportation and the consultation history provided by the Corps. Using this information, the DEA projects between approximately 21 and 24 formal consultations associated with these activities

in Douglas County over the next 20 years. Because there was no available information that indicated specifically whether these projects would occur inside or outside the RCZ, the analysis calculates and applies unit-specific, area-based factors to estimate the probability that projects would occur outside the RCZ and within critical habitat, and would therefore require consultation as a result of the designation (see pages 2-15 through 2-17 of the DEA). For Douglas County, these factors are between 6 and 16 percent. Using this methodology, we estimate in the DEA that the total incremental consultation cost (undiscounted) for the 21 to 24 projects ranges between \$119,000 and \$135,000.

(55) *Comment:* Douglas County commented that the DEA does not account for the costs to purchase additional mitigation lands in Douglas County to support their HCP. Mitigation beyond that already established by the Douglas County HCP may be required for activities that occur in critical habitat. These costs could be significantly higher because the mitigation land already banked under the HCP would be exhausted more rapidly, the banked mitigation lands are unevenly distributed across critical habitat units, and land must be purchased in large blocks to acquire a relatively small percentage of PMJM habitat.

Our Response: As described in section 4.2.3 of the DEA, the estimated cost of mitigation ranges from \$3,580 to \$35,800 per ac. The Service believes this

tenfold range in unit costs is likely sufficient to cover the costs of additional mitigation land purchases that may result from designation of critical habitat in Douglas County. Since we have adopted the RCZ developed for the Douglas County HCP as the outward extent of critical habitat, additional mitigation required for projects covered by the HCP is not likely to increase greatly in extent. Measures to offset impacts to critical habitat may be restricted to the same unit where impacts occur. Exhibit 3-13 of the DEA provides an assessment of the quantity of land available for mitigation within each unit.

(56) *Comment:* One commenter indicated that the DEA does not estimate a cost associated with the regulatory uncertainty created by the critical habitat label for the City of Greeley's proposed expansion at the Milton Seaman Reservoir.

Our Response: Because of data limitations, as well as factors other than the designation of critical habitat (such as political, financial, and general environmental impacts) that will influence the outcome of the proposed expansion project at the Milton Seaman Reservoir, the costs associated with regulatory uncertainty attributable to the presence of the PMJM or its designated critical habitat are difficult to quantify. As described in section 5.3.3 of the DEA, a representative of the Corps suggested that the cost to the City of Greeley to pursue an offsite alternative to the preferred Milton Seaman

Reservoir project may be as much as three to eight times higher than that of the expansion project that is currently contemplated. This range of increased costs was provided by the Corps, based on their rough estimate of the costs to develop water supply (on a per ac-ft basis) in the study area. It was not intended to be used to quantify the cost impacts of regulation uncertainty due to critical habitat designation, but rather to qualitatively characterize the relative costs of water supply development alternatives. However, we address this issue further in our FEA, and our discussion of the proposed Milton Seaman Reservoir in comment 24, above.

(57) *Comment:* One commenter indicated that the DEA did not calculate the economic impact to the proposed Penley Reservoir (Unit 9) in Douglas County.

Our Response: The economic analysis focuses on an estimate of impacts to economic activities that are reasonably foreseeable. The DEA did not consider potential impacts to the Penley Reservoir because the project is in the very early stages of planning. Due to insufficient information about this project, and considerable uncertainty as to whether it will be constructed within the next 20 years, the FEA does not quantify the potential impacts to this project, but does acknowledge it as potentially affected by the designation.

(58) *Comment:* One commenter indicated that the DEA does not take into account the full range of activities required as part of the CERCLA and RCRA remedy for the DOE's COU on the Rocky Flats Site (Unit 6), Jefferson and Broomfield counties, and the costs to revise or develop a new programmatic biological assessment and an accompanying biological opinion.

Our Response: The FEA includes an extended list of the ongoing maintenance and monitoring activities required as part of the CERCLA/RCRA remedy for the COU. Costs to the DOE to initiate one new programmatic consultation with the Service to cover all of these recurring remedial activities within critical habitat are estimated in section 7.2.1.

(59) *Comment:* One commenter indicated that the DEA should recognize that the management and operations of the COU and Rocky Flats NWR areas on the Rocky Flats Site are conducted by two different Federal agencies with different and distinct regulatory requirements and objectives.

Our Response: In our FEA, we have revised section 7 to clarify and distinguish the respective management and operation of the two areas by the DOE Office of Legacy Management and the Service.

(60) *Comment:* Some commenters questioned the adequacy of the draft environmental assessment. Commenters either suggested that analysis of a wider range of alternatives was required or suggested detailed analysis of a specific alternative. Suggested alternatives included designation as critical habitat on all habitat occupied by the PMJM, designation of critical habitat consistent with all recovery populations called for in the Draft Plan, and designation of lesser amounts of critical habitat than proposed in our action alternative.

Our Response: Designation as critical habitat of all habitat occupied by the PMJM, and designation of critical habitat consistent with recovery populations called for in the Draft Plan, were alternatives considered but not fully evaluated in the draft environmental assessment. In the first case, based on the Draft Plan, our professional judgment, and the best science available, we determined that only a subset of all occupied habitat was required for conservation of the PMJM. As explained in our July 10, 2008, rule to specify over what portion of its range the PMJM is threatened (73 FR 39789), listing under the Act is largely based on widespread threats to PMJM's habitat from current and future human development. Current populations and distribution of PMJM are more than sufficient to maintain the species if threats are successfully addressed. Protecting all existing PMJM populations and their supporting habitat from development into the future is not required to conserve the species. In the second case, recovery populations specified in the

Draft Plan do not necessarily equate to specific areas that meet the definition of critical habitat. For example, many proposed recovery populations were identified by HUC, but not tied to a specific location. Recovery populations were also assigned to HUCs where the PMJM has not yet been verified as present. Insufficient information on PMJM presence and distribution is available to support designation of critical habitat in all HUCs addressed in the Draft Plan. See also our response to comments 10 and 11.

(61) *Comment:* One commenter believed that the proposed action merits an environmental impact statement (EIS).

Our Response: An EIS is required only in instances where a major Federal action is expected to have a significant impact on the human environment. Based on our draft environmental assessment, DEA, and the comments we received from the public, we prepared a final environmental assessment and determined that revised critical habitat for the PMJM does not constitute a major Federal action expected to have a significant impact on the human environment. That determination is documented in our Finding of No Significant Impact (FONSI). The final environmental assessment, FEA, and FONSI provide our rationale for our determination that this revised critical habitat designation will not have a significant impact on the human environment.

(62) *Comment:* One commenter urged us to address an alternative consistent with the use of the Douglas County RCZ boundaries as the outward extent of designated critical habitat in our environmental assessment.

Our Response: Our final environmental assessment addresses the RCZ boundaries as part of the preferred alternative. RCZ boundaries encompass slightly less area but more accurately define appropriate limits of critical habitat. The effects of using RCZ boundaries on three critical habitat units where such boundaries occur differ negligibly from effects of the action alternative in our draft environmental assessment.

(63) *Comment:* One commenter stated that under the NEPA cumulative impacts analysis, the Service should include effects from past permitted take of the PMJM.

Our Response: Under NEPA, cumulative impacts are impacts to the environment that result from the incremental effects of the action in question when added to past, present, and reasonably foreseeable future actions. Designation of revised critical habitat does not result in take of the PMJM, so evaluation of past, present, and future take is not required in our environmental assessment. Section 7 consultations involving the PMJM and its critical habitat will evaluate past impact and future take during the consultation process.

Summary of Changes from the Proposed Rule

Our final designation of revised critical habitat for the PMJM results in a decrease of 7 mi (11 km) of rivers and streams and a decrease of 4,207 ac (1,702 ha) of land area from what we proposed in our October 8, 2009, proposed rule to revise the designation of critical habitat (74 FR 52066). The following changes account for the difference.

(1) The areas designated as critical habitat in Units 1, 5, 7, 9, 10, and 11 have changed from those areas proposed. We excluded portions of these units from the final designation of critical habitat, because we believe that the benefits of excluding these specific areas from the designation outweigh the benefits of including these areas. We have also concluded that the exclusion of these areas from the final designation of critical habitat will not result in the extinction of the PMJM. These exclusions are discussed in detail in the **Exclusions** section below.

(2) In Unit 9 in Douglas County, we have reduced the extent of designated critical habitat from that proposed on Bear Creek, a tributary to West Plum Creek. The upstream terminus of designated critical habitat is located at the base of the Waconda Lake Dam, because Waconda Lake and surrounding development present a barrier to PMJM movement along Bear Creek.

(3) We have determined that it is appropriate to use boundaries of the RCZ

mapped by Douglas County for their HCP as the outward boundary of revised critical habitat in portions of Units 8, 9, and 10. See the Delineation of Critical Habitat Boundaries section below for a discussion of this change.

(4) Area totals within various units have been recalculated. Area totals described in the proposed rule for various units included slight inaccuracies, which resulted from the GIS methodology that counted overlapping stream segments twice. Therefore, the area within some units has decreased.

(5) We agreed to modify the outward boundaries of proposed critical habitat within Douglas County's mapped RCZ boundaries (see the Delineation of Critical Habitat Boundaries section), as the RCZ represents a site-specific mapping of PMJM habitat boundaries.

Critical Habitat

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

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

(a) Essential to the conservation of the species, and

(b) Which may require special management considerations or protection;

and

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

Conservation, as defined under section 3 of the Act, means the use of all methods and procedures that are necessary to bring any endangered or threatened species to the point at which the measures provided under the Act are no longer necessary. Such methods and procedures include, but are not limited to, all activities associated with scientific resources management, such as research, census, law enforcement, habitat acquisition and maintenance, propagation, live trapping, transplantation, and, in the extraordinary case where population pressures within a given ecosystem cannot otherwise be relieved, may include regulated taking.

Critical habitat receives protection under section 7 of the Act through the prohibition against Federal agencies carrying out, funding, or authorizing activities that are likely to result in the destruction or adverse modification of critical habitat. Section 7(a)(2) of the Act requires consultation on Federal actions that may affect critical habitat. The designation of critical habitat does not affect land ownership or establish a refuge, wilderness, reserve, preserve, or other conservation area. Such designation does not allow the government or public to access private lands. Such designation does not require implementation of restoration, recovery, or enhancement measures by non-Federal landowners. Where a landowner seeks or requests Federal agency funding or authorization for an action that may affect a listed species or critical habitat, the

consultation requirements of section 7(a)(2) of the Act would apply, but even in the event of a destruction or adverse modification finding, the Federal action agency's and the applicant's obligation is not to restore or recover the species, but to implement reasonable and prudent alternatives to avoid destruction or adverse modification of critical habitat.

For inclusion in a critical habitat designation, the habitat within the geographical area occupied by the species at the time of listing must contain physical and biological features that are essential to the conservation of the species, and be included only if those features may require special management considerations or protection. Critical habitat designations identify, to the extent known using the best scientific and commercial data available, habitat areas supporting the essential physical or biological features that provide essential life cycle needs of the species; that is, areas on which are found the physical or biological features laid out in the appropriate quantity and spatial arrangement for the conservation of the species. Under the Act and regulations at 50 CFR 424.12, we can designate critical habitat in areas outside the geographical area occupied by the species at the time it is listed only when we determine those areas are essential for the conservation of the species and that designation limited to those areas occupied at the time of listing would be inadequate to ensure the conservation of the species. When the best available scientific data do not demonstrate that the conservation needs of the species require such additional areas, we will not designate critical habitat in areas outside the geographical area occupied by the species at the time of listing. An area currently occupied by the species but that was not occupied at the time of listing may, however, be essential to the conservation of the species and may be included in the

critical habitat designation.

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

When we are determining which areas should be designated as critical habitat, our primary source of information is generally the information developed during the listing process for the species. Additional information sources may include the recovery plan for the species, articles in peer-reviewed journals, conservation plans developed by States and counties, scientific status surveys and studies, biological assessments, or other unpublished materials and expert opinion or personal knowledge. Substantive comments we receive in response to proposed critical habitat designations are also considered.

Habitat is often dynamic, and species may move from one area to another over time. Furthermore, we recognize that critical habitat is designated at a particular point in

time; with changes in the future, we may find that the designation no longer includes all of the habitat areas necessary for the recovery of the species to respond to these changes. For these reasons, a critical habitat designation does not signal habitat outside the designated area is unimportant or may not be required for recovery of the species.

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

Climate Change

According to the Intergovernmental Panel on Climate Change (IPCC), “Warming of the climate system in recent decades is unequivocal, as is now evident from observations of increases in global average air and ocean temperatures, widespread melting of snow and ice, and rising global sea level” (IPCC 2007, p. 1). Climate change

will be a particular challenge for biodiversity because the interaction of additional stressors associated with climate change and current stressors may push species beyond their ability to survive (Lovejoy and Hannah 2005, pp. 325-326). The synergistic implications of climate change and habitat fragmentation are the most threatening aspect of climate change for biodiversity (Hannah *et al.* 2005, p. 4).

For the southwestern region of the United States, which includes Colorado, warming is occurring more rapidly than elsewhere in the country (Karl *et al.* 2009, p. 129). In Colorado, Statewide temperatures have increased 2 °F (3.6 °C) over the past 30 years, but high variability in annual precipitation precludes the detection of long-term trends (Ray *et al.* 2008, p. 5).

While there is uncertainty about the exact nature and severity of climate change-related impacts anticipated within the Colorado range of the PMJM, a trend of climate change in the mountains of western North America is expected to decrease snowpack, hasten spring runoff, and reduce summer flows (IPCC 2007, p. 11). This could impact the PMJM habitat in a variety of direct and indirect ways. With increases in temperature, species' ranges are likely to move higher in elevation and northward (Karl *et al.* 2009, p. 132). Changes could cause a greater PMJM dependence on higher elevation, cooler, and potentially moister areas for survival in Colorado. The highest elevation at which the PMJM has been documented in Colorado is approximately 7,600 ft (2,317 m) (Service 2010). The preponderance of lands near to or higher than this elevation in the Colorado Front Range are in Federal ownership and are likely subject to fewer threats from human

development than non-Federal lands. These Federal lands may serve as an important refuge should PMJM populations shift higher into the mountains.

Changes in stream flow intensity and timing may affect riparian habitats on which the PMJM depends. For example, earlier runoff could impact the smaller high-elevation streams within the upper reaches of drainages, which are maintained primarily by melted snow. Reduced or no flow during summer and fall could make these streams less hospitable to the PMJM and limit their seasonal use. Changes in timing and amount of runoff may also influence human diversion, storage, and conveyance of water (Ray *et al.* 2008, p. 41), which in turn could impact riparian habitats required by the PMJM.

Primary Constituent Elements

In accordance with section 3(5)(A)(i) of the Act and the regulations at 50 CFR 424.12(b), in determining which areas occupied at the time of listing to designate as critical habitat, we consider the physical and biological features that are essential to the conservation of the species and that may require special management considerations or protection. These features are the primary constituent elements (PCEs), laid out in the appropriate quantity and spatial arrangement for conservation of the species. In general, physical and biological factors include, but are not limited to:

- (1) Space for individual and population growth and for normal behavior;
- (2) Food, water, air, light, minerals, or other nutritional or physiological requirements;

- (3) Cover or shelter;
- (4) Sites for breeding, reproduction, or rearing (or development) of offspring; and
- (5) Habitats that are protected from disturbance or are representative of the historic, geographical, and ecological distributions of a species.

We derive the PCEs required for the PMJM from its biological needs. The areas included in this revised critical habitat designation for the species contain the essential features to fulfill the species life-history requirements. The PCEs and the resulting physical and biological features essential to the conservation of the PMJM are derived from studies of this species' habitat, ecology, and life history as described in our proposed rule to revise the designation of critical habitat for the PMJM, published in the **Federal Register** October 8, 2009 (74 FR 52066).

All units designated as critical habitat for the PMJM are currently believed to be occupied, are within the geographical area occupied by the species at the time of listing, and contain sufficient PCEs to support one or more life-history functions. Individual stream reaches within each unit contain at least one of the PCEs, and are either believed to be occupied by the PMJM, or provide crucial opportunities for connectivity to facilitate dispersal and genetic exchange within the unit.

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

(1) Riparian corridors:

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

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

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

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

Existing human-created features and structures within the boundaries of the mapped units, such as buildings, roads, parking lots, other paved areas, manicured lawns, other urban and suburban landscaped areas, regularly plowed or disked agricultural areas,

and other features not containing any of the PCEs that support the PMJM, are not considered critical habitat.

Special Management Considerations or Protection

When designating critical habitat, we assess whether the occupied areas contain the physical and biological features that are essential to the conservation of the species, and whether these features may require special management considerations or protection. Special management considerations or protection means any methods or procedures useful in protecting physical and biological features of the environment for the conservation of listed species. The areas we are designating as revised critical habitat will require some level of management to address the current and future threats to the physical and biological features essential to the conservation of the PMJM, and to ensure the recovery of the species. In all units, special management considerations or protection of the essential features may be required to provide for the sustained function of the riparian corridors on which the PMJM depends.

The PMJM is closely associated with riparian ecosystems that are relatively narrow and represent a small percentage of the landscape. Our July 10, 2008, final rule for the PMJM to specify over what portion of its range the subspecies is threatened (73 FR 39789) concluded that the decline in the extent and quality of PMJM habitat is the main factor that threatens the subspecies. Special management considerations and protection may be required to address the threats of habitat alteration, degradation, loss,

and fragmentation that results from urban development, flood control, water development, agriculture, and other human land uses that adversely impact PMJM populations. Habitat destruction may affect the PMJM directly or by destroying nest sites, food resources, and hibernation sites; by disrupting behavior; or by forming a barrier to movement.

Criteria Used To Identify Critical Habitat

As required by section 4(b) of the Act, we used the best scientific and commercial data available to designate critical habitat. We are designating critical habitat in specific areas that include river and stream reaches, and their adjacent floodplains and uplands, that are within the known geographic and elevational range of the PMJM in the SPR in Colorado where it is listed and that contain the features essential to the conservation of the PMJM. All areas included in critical habitat contain at least one of the PCEs, and are currently occupied by the PMJM or provide crucial opportunities for connectivity to facilitate dispersal and genetic exchange.

Our critical habitat designation identifies the appropriate quantity and spatial arrangement of the requisite PCEs that we have determined to be essential to the conservation of the subspecies. We determined that there are more areas currently occupied by the PMJM than are necessary to conserve the subspecies within the SPR in Colorado. We base this on the known occurrence and distribution of the PMJM (Service 2010) and upon the conservation strategy in the Draft Plan, which indicates that when

specified criteria are met for a subset of existing populations throughout the range of the PMJM, the subspecies can be delisted (Service 2003a, p. 19). To recover the PMJM to the point where it can be delisted, the Draft Plan identifies the need for a specified number, size, and distribution of wild, self-sustaining PMJM populations. On the basis of the above described criteria, we have chosen a subset of the areas occupied by the PMJM within the SPR in Colorado that have the physical and biological features essential to the PMJM for inclusion in critical habitat.

We only consider including unoccupied areas within critical habitat designations if they are essential to the conservation of the species, and we determine that we cannot conserve the species by only including occupied areas in the critical habitat. Because we have determined that the conservation of the PMJM can be achieved through the designation of currently occupied lands, we find that no unoccupied areas are essential at this time. The subspecies was listed primarily due to the threat of impending development to the existing remaining habitat for the species within the Front Range of Colorado. We have determined that recovery of the subspecies can be achieved by protecting a subset of the currently occupied habitat from the threat of development. Recolonization of former parts of the range, while beneficial to the subspecies, is not currently believed to be necessary to conserve the PMJM in the long term.

When determining critical habitat boundaries within this final rule, we made every effort to avoid including developed areas such as lands covered by buildings, pavement, and other structures because such lands lack PCEs for the PMJM. The scale

of the maps we prepared under the parameters for publication within the Code of Federal Regulations may not reflect the exclusion of such developed lands. Any such lands inadvertently left inside critical habitat boundaries shown on the maps of this final rule have been excluded by text in the rule and are not designated as critical habitat. Therefore, a Federal action involving these lands will not trigger section 7 consultation with respect to critical habitat and the requirement of no adverse modification unless the specific action would affect the PCEs in the adjacent critical habitat.

Available Information

Our June 23, 2003, final rule designating critical habitat for the PMJM (68 FR 37275) cited the March 11, 2003, Working Draft of a Recovery Plan for the PMJM, and the concepts described within (PMJM Recovery Team 2003), as a source of the best scientific and commercial data available on the PMJM. For designating revised critical habitat, we relied heavily on the information, concepts, and conservation recommendations contained in the Working Draft and the slightly modified Draft Plan (Service 2003a), as well as the current efforts of the recently formed Recovery Team. We used these as a starting point for identifying those areas for inclusion in critical habitat that contain the requisite PCEs in the appropriate quantity and spatial arrangement that are essential for the conservation of the PMJM. The Draft Plan is based on the work of scientists and stakeholders who met regularly over a period of more than 3 years. The plan was developed by incorporating principles of conservation biology and all available knowledge regarding the PMJM. Recovery Team meetings were open to the public, and

drafts of the plan were discussed in public meetings held in Colorado and Wyoming. We forwarded a draft of the Draft Plan to species experts for review, and their comments (Armstrong 2003, pers. comm.; Hafner 2003, pers. comm.) were considered prior to the Draft Plan being made available on the Service website.

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

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

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

The Draft Plan identifies specific criteria for reaching recovery and the delisting of the PMJM. An important change since our 2003 designation of critical habitat was the 2008 final rule limiting the listing of the PMJM to the SPR in Colorado. The Draft Plan identified areas as necessary for recovery throughout the range of the PMJM, including areas in Wyoming where the PMJM was listed at the time. Identified areas within the

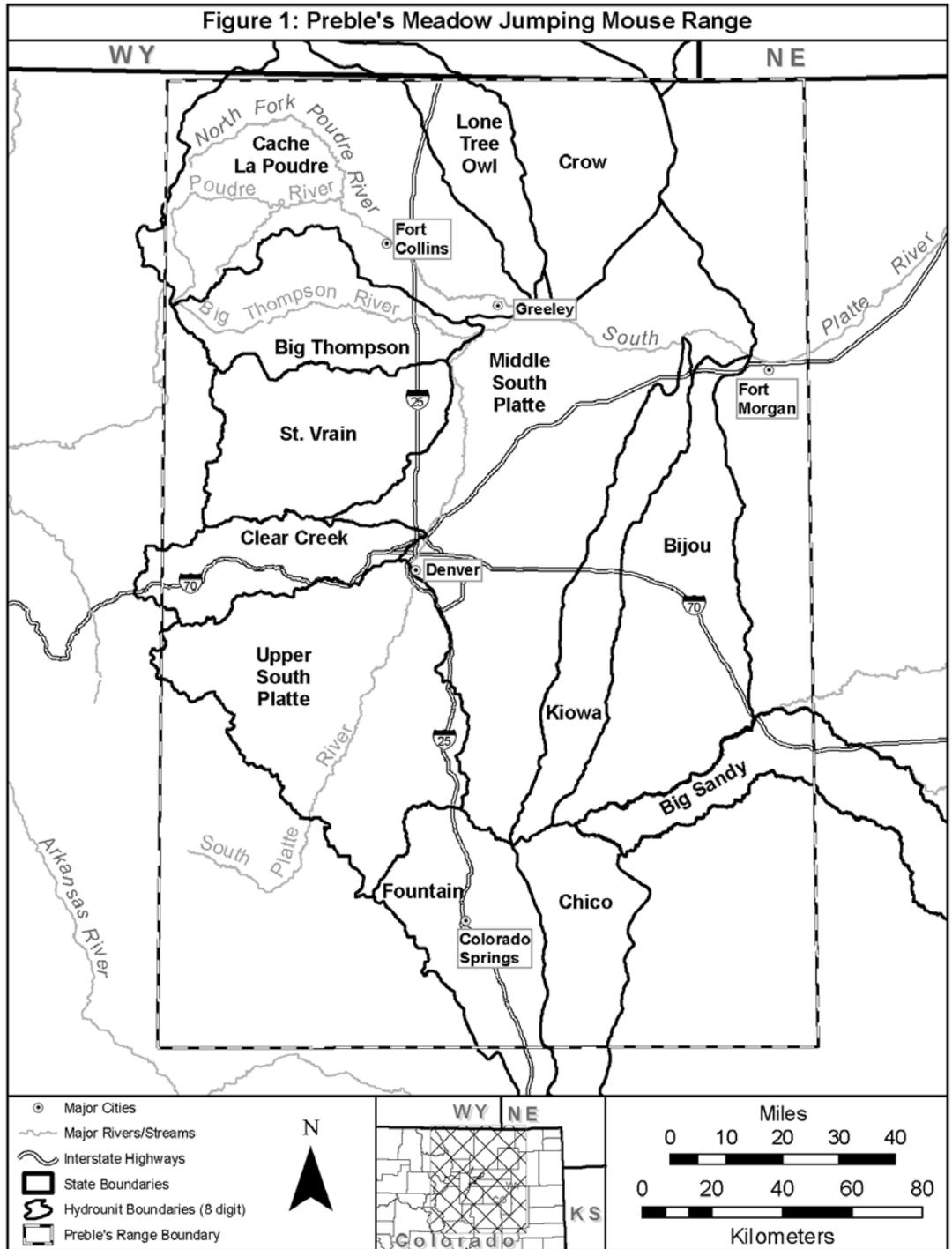
SPR in Colorado were based on the best available information and continue to reflect our best judgment of what we believe to be necessary for recovery. While elements of the Draft Plan may change prior to finalization of a recovery plan, our review of the Draft Plan and the ongoing Recovery Team review leads us to conclude that the concepts described within it continue to represent the best scientific and commercial data available regarding steps needed for the recovery of the PMJM.

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

The distribution of these recovery populations is intended both to reduce the risk of multiple PMJM populations being negatively affected by natural or manmade events at any one time, and to preserve the existing genetic variation within the PMJM. The Draft Plan states, “species well-distributed across their historical range are less susceptible to extinction and more likely to reach recovery than species confined to a small portion of

their range.” The document also states that “spreading the recovery populations across hydrologic units throughout the range of the subspecies also preserves the greatest amount of the remaining genetic variation, and may provide some genetic security to the range-wide population” (Service 2003a, p. 20). The Draft Plan emphasizes the value of retaining disjunct or peripheral populations that may be important to recovery (Lomolino and Channell 1995, p. 481) and may have diverged genetically from more central populations due to isolation, genetic drift, and adaptation to local environments (Lesica and Allendorf 1995, pp. 754-755).

While the Draft Plan addresses the entire range of the PMJM, the SPR in Colorado where the PMJM remains listed includes multiple subdrainages that are addressed individually in the Draft Plan (Figure 1). Within Colorado, the Draft Plan identifies recovery criteria for the two major river drainages where the PMJM occurs (the South Platte River drainage and the Arkansas River drainage), and for each subdrainage judged likely to support the PMJM. In some cases, the Draft Plan identifies recovery criteria for subdrainages where limited trapping has not confirmed the presence of the PMJM. Boundaries of drainages and subdrainages have been mapped by the USGS. For the Draft Plan, 8-digit hydrologic unit boundaries were selected to define subdrainages. A total of 13 HUCs in the SPR of PMJM in Colorado are identified in the Plan as occupied or potentially occupied by the PMJM. Ten are identified in the South Platte River drainage and three in the Arkansas River drainage.



One issue raised by the Recovery Team was whether the conservation strategy that specified the number, size, and distribution of PMJM recovery populations in Colorado remained valid despite the 2008 removal of the Wyoming portion of PMJM's range from listing. In Colorado, the strategy has been to establish at least three large populations and three medium populations spread over six subdrainages. Recovery of the PMJM would require these populations to be protected from threats. Additionally, the Plan suggests establishing at least three small populations or one medium population in seven other subdrainages, if the PMJM is present. Another issue raised was whether the strategy required modification based on DNA testing that revealed that the PMJM in northern and southern areas of the subspecies' range (Wyoming and Larimer County in Colorado vs. Douglas and El Paso Counties in Colorado) exhibited significant genetic differences (King *et al.* 2006, pp. 4337-4338). The Recovery Team concluded (Jackson 2009, pers. comm.) that the 2003 conservation strategy adequately addresses recovery across the PMJM's range in Colorado, and would maintain the genetic diversity reported by King *et al.* (2006).

Biological Factors

Presence of the PMJM was determined based largely on the results of trapping surveys, the vast majority of which were conducted in the 12 years since listing the PMJM under the Act. Consistent with our July 10, 2008, final rule to amend the listing for the PMJM (73 FR 39789), subdrainages judged to be occupied by the PMJM in Colorado include those that: (1) Have recently been documented to support jumping

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

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

Despite numerous surveys, the PMJM has not been found in the Denver metropolitan area since well before its 1998 listing, and is believed to be extirpated from much of the Front Range urban corridor as a result of extensive urban development. The area does not support the spatial arrangement and quantity of requisite PCEs to support PMJM populations, and, as a consequence, we have determined that this area does not contain the features essential to the conservation of the species.

Additional Factors Considered

Based on the Draft Plan, we believe that we can achieve conservation of the PMJM with only a subset of areas currently occupied or containing essential features. To identify the specific subset of areas for inclusion in critical habitat, we considered several qualitative criteria in addition to the presence of the PCEs. These criteria were used to judge the current status, conservation needs, and probable persistence of the essential features of PMJM populations in specific areas, and included: (1) The quality, continuity, and extent of habitat components present; (2) the presence of lands devoted to conservation (either public lands such as parks, wildlife management areas, and dedicated open space, or private lands under conservation easements); and (3) the landscape context of the site, including the overall degree of current human disturbance and presence, and likelihood of future development based on local planning and zoning.

Where specific areas met the definition of critical habitat under section 3 of the Act (within the geographical area occupied by the species and containing features essential to the conservation of the species which may require special management considerations or protection) and other criteria were comparable, we evaluated land ownership as a selection criterion for inclusion in critical habitat. Consistent with the Draft Plan (Service 2003, p. 52), we first selected Federal lands where effective land management strategies can be employed by Federal agencies to conserve PMJM populations. Federal agencies already have an affirmative conservation mandate under

the Act to contribute to the conservation of listed species. Therefore, we determined that federally owned lands are more likely to meet the requirements for recovery of the species than private lands that are not subject to the Act's affirmative conservation mandate. However, we cannot depend solely on federally owned lands for critical habitat, as these lands are limited in geographic location, size, and habitat quality within the SPR in Colorado where the PMJM is listed. In addition to the federally owned lands, we included some non-Federal public lands, including lands owned by the State of Colorado or by local governments, and some privately owned lands.

This revised designation of critical habitat in Colorado consists of 11 units, 6 of which are designed to support three large and three medium PMJM recovery populations, corresponding to those designated in the Draft Plan. While the Draft Plan designates the approximate location of these large and medium recovery populations, it does not delineate specific boundaries.

In addition, the Draft Plan establishes a goal of three small recovery populations (including at least 3 mi (5 km) of rivers or streams) or one medium recovery population in seven other HUCs within the PMJM's range in Colorado. The Draft Plan does not identify the locations of recovery populations within these remaining seven HUCs. It also provides an exception to the above goal; no recovery populations are required in those HUCs that, when adequately surveyed, are found to have no PMJM populations. In some HUCs, presence of the PMJM has not been confirmed and the quality, continuity, and extent of physical and biological features essential to the PMJM appear lacking. In

others, insufficient surveys have been conducted to establish distribution of PMJM populations or to determine where recovery populations should be located. Due to insufficient information, we are unable to designate critical habitat units corresponding to Draft Plan requirements in all of these remaining seven HUCs.

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

In some HUCs identified in the Draft Plan, little is known regarding the status of the PMJM. For example, PMJM has not been confirmed to occur in the Crow Creek, Lone Tree, and Bijou HUCs within the South Platte River drainage in Colorado or in the Big Sandy HUC in the Arkansas River drainage. If the PMJM is not present, designation of recovery populations in these HUCs may not be necessary, and these HUCs may be deleted from any future recovery plan. We do not believe that these areas contain

features that are essential to the conservation of the species, so we are not designating critical habitat within these four HUCs.

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

We believe that the designation of areas of critical habitat outside of those areas identified for recovery populations, on both non-Federal and additional Federal lands, is essential for the conservation of the PMJM. Should unforeseen events cause the continued decline of PMJM populations throughout the SPR in Colorado, PMJM populations and the PCEs on which they depend are more likely to persist and remain viable on Federal lands, where consistent and effective land management strategies can be more easily employed. These additional PMJM populations on Federal lands could

serve as substitute recovery populations should designated recovery populations decline or fail to meet recovery goals. In addition, some PMJM populations on Federal lands have been the subject of ongoing research that could prove vital to the conservation of the PMJM. Therefore, in addition to designating critical habitat for sites consistent with those listed in the Draft Plan, we reviewed other sites of PMJM occurrence, especially Federal lands, and are designating certain additional units as critical habitat that include the requisite PCEs and are known to support the PMJM.

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

Delineation of Critical Habitat Boundaries

We are designating revised critical habitat for the PMJM based on the interpretation of multiple sources used during our June 23, 2003, designation of critical habitat (68 FR 37275); new information developed in the preparation of our October 8,

2009, proposed rule (74 FR 52066); and information we received in response to our request for public comments on our October 8, 2009, proposed rule (74 FR 52066) and our May 27, 2010, publication (75 FR 29700). For this rule, we used GIS-based mapping using ESRI ArcGIS software incorporating USGS National Hydrography Dataset streams along with stream order (by Strahler code), Colorado Department of Transportation roads, U.S. Census Bureau cities, USGS topographic maps, 2005 Farm Service Agency, National Agricultural Inventory Program 1m color imagery, and the COMaP dataset (Theobald *et al.* 2008). We divided lands we are designating as critical habitat into specific mapping units, i.e., critical habitat units, often corresponding to individual HUCs. For the purposes of this rule, these units are described primarily by latitude and longitude, and by Public Land Survey, Township, Section, and Range, to mark the upstream and the downstream extent of critical habitat along rivers and streams.

As in 2003, we were faced with making a decision concerning the outward extent of critical habitat into uplands. Studies suggest that the PMJM uses uplands at least as far out as 328 ft (100 m) beyond the 100-year floodplain (Shenk and Sivert 1999a, p. 11; Ryon 1999, p. 12; Schorr 2001, p. 14; Shenk 2004; Service 2003a, p. 26). Apparent hibernacula (wintering chambers) have been documented outward to 335 ft (102 m) of a perennial stream bed or intermittent tributary (Ruggles *et al.* 2003, p. 19). We have typically described potential PMJM habitat as extending outward 300 ft (90 m) from the 100-year floodplain of rivers and streams (Service 2004a, p. 5). The Draft Plan (Service 2003a, p. 26) defines PMJM habitat as the 100-year floodplain plus 328 ft (100 m) outward on both sides, but allows for alternative delineations that provide for all the

needs of the PMJM and include the alluvial floodplain, transition slopes, and appropriate upland habitat.

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

In 2003, we also considered determining the outward extent of critical habitat based on a distance outward from features such as the stream edge, associated wetlands, or riparian areas. We judged wetlands an inconsistent indicator of habitat extent and found no consistent source of riparian mapping available across the SPR of Colorado where the PMJM is listed. We also considered using an outward extent of critical habitat established by a vertical distance above the elevation of the river or stream to approximate the floodplain and adjacent uplands likely to be used by the PMJM. This proved unacceptable over the diverse topography that surrounds stream reaches occupied by the PMJM.

For this revised designation, we generally maintain consistency with our 2003 designation of critical habitat in delineating the upland extent of critical habitat boundaries as a set distance outward from the river or stream edge (as defined by the ordinary high water mark) varying with the size (order) of a river or stream. We compared known floodplain widths to stream order over a series of sites and approximated average floodplain width for various orders of streams. To that average we added 328 ft (100 m) outward on each side. For example, this analysis determined the average floodplain for streams of order 1 and 2 (the smallest streams) is approximately 33 ft (10 m). Based on this calculation, for streams of order 1 and 2, we are designating critical habitat as 361 ft (110 m) outward from the stream edge; for streams of order 3 and 4, we are designating critical habitat as 394 ft (120 m) outward from the stream edge; and for stream orders 5 and above (the largest streams and rivers), we are designating critical habitat as 459 ft (140 m) outward from the stream edge. In each case we are approximating average floodplain width plus 328 ft (100 m). While critical habitat will not extend outward to all areas used by individual mice over time, we believe that these corridors of critical habitat ranging from 722 ft (220 m) to 918 ft (280 m) in width (plus the river or stream width) will support the full range of PCEs essential for conservation of PMJM populations in these reaches, and should help protect the PMJM and its habitat from secondary impacts of nearby disturbance.

Following both our July 17, 2002, proposal of critical habitat (67 FR 47154), and our October 8, 2009, proposal to revise critical habitat (74 FR 52066), we received comments regarding the appropriate outward limits of critical habitat and means of

establishing them. Most comments suggested one of two alternative methods: (1) Site-specific mapping of critical habitat for each reach; or (2) one outward limit for all rivers and streams. We determined that the first alternative was not feasible with the resources available to us, and that the second alternative less accurately reflected limits of habitat than the methodology employed above.

An exception is our delineation of the outward boundary of designated critical habitat in those portions of Units 8, 9, and 10, where a Riparian Conservation Zone has been mapped in conjunction with development of the Douglas County HCP and delineates the limits of PMJM habitat. The RCZ depicts known or potential PMJM habitat over 283 stream mi (456 km) and over 18,000 ac (7,000 ha) in Douglas County. Mapping of the RCZ relied on geomorphology and existing vegetation to assess presence and extent of required habitat components (i.e., those physical and biological features essential for the conservation of the PMJM). It followed the alternative habitat delineation suggested in the Draft Plan (Service 2003a), and provides for the needs of the PMJM by including the alluvial floodplain, transition slopes, and appropriate upland habitat along stream reaches. When we approved the Douglas County HCP, we reviewed the methodology and concluded that the RCZ reflected the best information available for establishing the limits of PMJM habitat.

Beyond the conclusion that the RCZ boundary provides a more accurate depiction of the appropriate boundary of critical habitat than what we proposed, we also considered the potential confusion that designation of critical habitat that differs from the established

RCZ boundary might cause. The RCZ has been widely publicized in Douglas County and is used as a guide to help avoid impacts to PMJM and its habitat. Establishing critical habitat through standard setbacks from streams would have created a confusing pattern of dual lines that depict PMJM habitat limits. For these reasons we are designating the outward boundary of critical habitat on non-Federal lands in Units 8, 9, and 10 to correspond to the boundaries set by the RCZ, where the RCZ is present. In some instances this increases the width of critical habitat designated; in others it decreases the width. Overall, it results in a decrease in critical habitat than that which would otherwise have been designated, but it more accurately reflects on-site habitat conditions. On Federal properties designated as revised critical habitat in Douglas County, and on a very few non-Federal properties not included in the RCZ, outward boundaries of critical habitat units include standard distances from streams based on stream order.

Revised Critical Habitat Designation

We are designating 11 units that total approximately 411 mi (662 km) of rivers and streams and 34,935 ac (14,138 ha) of lands in Colorado, including land under Federal, State, local government, and private ownership. No lands designated as critical habitat are under tribal ownership. The areas we describe below constitute our best assessment at this time of areas that meet the definition of critical habitat for the PMJM. The units are those areas that are most likely to substantially contribute to conservation of the PMJM, will contribute to the long-term survival and recovery of the species, and

require special management considerations or protection. These units, in many cases, correspond to the same geographic area of the units in Colorado delineated in the 2003 designation. However, there are multiple revisions and unit additions. This designation of revised critical habitat replaces the former critical habitat designation for the PMJM in 50 CFR 17.95(a).

Table 1 shows each unit, approximate area, and land ownership. Estimates reflect the total river or stream length and area of lands within critical habitat unit boundaries. Limited areas within these boundaries may not include any of the requisite PCEs. Any such developed areas or other areas not supporting any of the requisite PCEs are excluded by text of this rule, and the total area we are designating may, therefore, be less than what is indicated in Table 1.

TABLE 1. Critical Habitat Units Designated for the Preble’s Meadow Jumping Mouse by Stream Length and Area, and Land Ownership by Area.

Unit	Stream Length, Area	Federal Area	State Area	Local Municipal Area	Other Area
1. N. Fork of the Cache la Poudre River	87 mi (140 km) 8,365 ac (3,385 ha)	1,244 ac (503 ha)	3,457 ac (1,399 ha)	57 ac (23 ha)	3,607 ac (1,460 ha)
2. Cache la Poudre River	51 mi (82 km) 4,929 ac (1,995 ha)	4,702 ac (1,903 ha)	83 ac (34 ha)	12 ac (5 ha)	132 ac (53 ha)
3. Buckhorn Creek	45 mi (73 km) 3,912 ac (1,583 ha)	1,346 ac (545 ha)	54 ac (21 ha)	0	2,512 ac (1,017 ha)
4. Cedar Creek	8 mi (12 km) 641 ac (259 ha)	510 ac (207 ha)	0	0	131 ac (53 ha)
5. South Boulder Creek	8 mi (12 km) 798 ac (323 ha)	0	0	512 ac (207 ha)	286 ac (116 ha)
6. Rocky Flats Site	12 mi (20 km) 1,108 ac (448 ha)	1,094 ac (443 ha)	0	3 ac (1 ha)	11 ac (5 ha)
7. Ralston Creek	9 mi (14 km) 773 ac (313 ha)	0	57 ac (23 ha)	308 ac (125 ha)	408 ac (165 ha)
8. Cherry Creek	30 mi (48 km) 2,536 ac (1,026 ha)	0	126 ac (51 ha)	175 ac (71 ha)	2,235 ac (905 ha)
9. West Plum Creek	90 mi (145 km) 5,518 ac (2,233 ha)	802 ac (325 ha)	330 ac (133 ha)	375 ac (152 ha)	4,012 ac (1,623 ha)
10. Upper South Platte River	34 mi (54 km) 3,060 ac (1,238 ha)	2,674 ac (1,082 ha)	282 ac (114 ha)	0	105 ac (42 ha)
11. Monument Creek	38 mi. (61 km) 3,295 ac (1,333 ha)	59 ac (24 ha)	0	160 ac (65 ha)	3,067 ac (1,245 ha)
Total	411 mi (662 km) 34,935 ac (14,138 ha)	12,432 ac (5,031 ha)	4,388 ac (1,776 ha)	1,602 ac (648 ha)	16,513 ac (6,682 ha)

(Note: Some columns and rows may not add exactly, due to rounding.)

Lands that we are designating as revised critical habitat are divided into 11 critical habitat units that contain all of the PCEs necessary to meet the essential biological needs of the PMJM throughout the SPR in Colorado, where PMJM is listed.

We present a brief description of each unit, and reasons why it meets the definition of critical habitat for the PMJM, below. The units are generally based on geographically distinct river drainages and subdrainages (HUCs). These units have been subject to, or are threatened by, varying degrees of degradation from human use and development. For these reasons, the essential features within each of the specific areas we are designating as critical habitat may require special management considerations or protection. Management may include measures in addition to those that may already be in place to preserve such areas to avoid, reduce, or offset human-induced and natural impacts, and to restore such areas following unavoidable adverse impacts, including fire and flooding.

South Platte River Drainage - North of Denver

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

Unit 1 encompasses approximately 8,365 ac (3,385 ha) on 87 mi (140 km) of streams within the North Fork of the Cache la Poudre River HUC. We are designating critical habitat along the lower portions of the North Fork of the Cache la Poudre River and its tributaries, to provide for the large recovery population specified in the Draft Plan.

The unit includes the North Fork of the Cache la Poudre River from the Milton Seaman Reservoir upstream to the 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 Eagle's Nest Open Space area, proposed as critical habitat within Unit 1, has been excluded from this critical habitat designation (see the Exclusions section below). Much of the unit is covered by the 2006 Livermore Area HCP (Service 2006b). The HCP covers certain incidental take of the PMJM related to ongoing agriculture and compatible activities, and conservation and stewardship activities in the Livermore area. However, the HCP does not address take resulting from most development.

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. In the Cache la Poudre HUC, stream reaches that contain requisite PCEs are widespread. The area remains largely rural and agricultural with habitat components likely to support relatively high densities of the PMJM.

Pressure for residential development is increasing within the area. Management of livestock grazing in the unit is often, but not in all cases, compatible with maintenance of quality PMJM habitat. Proposed reservoir projects and associated water management may impact portions of this unit but may also present conservation opportunities. Based on these and other threats, special management considerations and protection are needed. This unit is essential to the conservation of the PMJM because it contains habitat

essential to a population of the PMJM that supports the conservation principles of redundancy and resiliency throughout the SPR in Colorado where the PMJM is listed.

Unit 2: Cache la Poudre River, Larimer County

Unit 2 encompasses approximately 4,929 ac (1,995 ha) on 51 mi (82 km) of streams within the Cache la Poudre River watershed. This unit is within the Cache la Poudre HUC and south of Unit 1. It includes the Cache la Poudre River from Poudre Park upstream to the 7,600 ft (2,317 m) elevation below Rustic. Major tributaries within the unit include Hewlett Gulch, Young Gulch, Skin Gulch, Poverty Gulch, Elkhorn Creek, Pendergrass Creek, and Bennett Creek. The unit is primarily composed of Federal lands of the Arapaho-Roosevelt National Forest, including portions of the Cache la Poudre Wilderness, but includes limited non-Federal lands as well. The unit supports the appropriate spatial arrangement of the requisite PCEs to ensure the conservation of the PMJM. Since this unit is located in the same Cache la Poudre HUC as Unit 1, it is unlikely to serve as an initial recovery population. However, it encompasses a significant area of habitat likely to support a sizeable population of the PMJM. Due to Federal ownership, residential or commercial development pressure is minimal; however, the area is subject to substantial recreational use (rafting, kayaking, fishing) in the Cache la Poudre River corridor. Non-Federal lands include existing development that may limit the habitat components present. Such reaches may serve the PMJM mostly as connectors between areas that contain all of the necessary PCEs. Maintenance of connectivity for PMJM movement through such areas is important. Based on these and other threats,

special management considerations and protection are needed. This unit is essential to the conservation of the PMJM because it contains habitat essential to a population of the subspecies that supports the conservation principles of redundancy and resiliency throughout the SPR in Colorado where the PMJM is listed.

Unit 3: Buckhorn Creek, Larimer County

Unit 3 encompasses approximately 3,912 ac (1,583 ha) on 45 mi (73 km) of streams within the Buckhorn Creek watershed. It includes Buckhorn Creek from just west of Masonville, upstream to the 7,600-ft (2,317-m) elevation. Major tributaries within the unit include Little Bear Gulch, Bear Gulch, Stringtown Gulch, Fish Creek, and Stove Prairie Creek. The unit is located in the Big Thompson HUC, and we are designating it as critical habitat to address the medium recovery population called for this area in the Draft Plan (Service 2003a). The unit includes both public lands, mostly on portions of the Arapaho-Roosevelt National Forest, and private lands. Requisite PCEs are present. Pressure for expanded rural development exists on non-Federal lands within the unit while recreational use is centered on public lands. Based on these and other development pressures, special management considerations and protection are needed. This unit is essential to the conservation of the PMJM because it contains habitat essential to a population of the subspecies that supports the conservation principles of redundancy and resiliency throughout the SPR in Colorado where the PMJM is listed.

Unit 4: Cedar Creek, Larimer County

Unit 4 encompasses approximately 641 ac (259 ha) on 8 mi (12 km) of streams within the Cedar Creek watershed, including Dry Creek and Jug Gulch. Cedar Creek is a tributary of the Big Thompson River and enters the Big Thompson River at Cedar Cove. The unit is centered on Federal lands of the Arapaho-Roosevelt National Forest, but includes some stream reaches on non-Federal lands. This unit is located in the Big Thompson HUC and, while unlikely to serve as an initial recovery population, it supports a population on mostly Federal lands of the upper Big Thompson River. Requisite PCEs are present, but the unit is isolated, at least in terms of riparian connection, from the PMJM population on nearby Buckhorn Creek drainage (Unit 3) to the north. This site is upstream of The Narrows of the Big Thompson Canyon, a barrier to PMJM movement, while the confluence of the Big Thompson River and Buckhorn Creek is downstream from The Narrows. However, the close proximity of the headwaters of Jug Gulch within this unit to the headwaters of Bear Gulch within the Buckhorn Creek critical habitat unit suggests that some PMJM may pass between the two populations and thus between the two significant watersheds within this HUC. Non-Federal lands within this unit support existing development and will likely experience continued residential development pressure. Therefore, special management considerations and protection are needed. This unit is essential to the conservation of the PMJM because it contains habitat essential to a population of the subspecies that supports the conservation principles of redundancy and resiliency throughout the SPR in Colorado where the PMJM is listed.

Unit 5: South Boulder Creek, Boulder County

Unit 5 encompasses approximately 798 ac (323 ha) on 8 mi (12 km) of streams within the South Boulder Creek watershed. It includes South Boulder Creek from Baseline Road upstream to Eldorado Springs, and includes the Spring Brook tributary. Denver Water lands proposed as critical habitat within Unit 5 have been excluded from this critical habitat designation (see the Exclusions section). 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 we are designating it as critical habitat to address the medium recovery population designated for this area in the Draft Plan (Service 2003a). Requisite PCEs are present, and portions of the area have been the subject of PMJM research funded by the City of Boulder. At some sites high densities of the PMJM have been documented (Meaney et al. 2003, pp. 616 - 617). A wide floodplain, complex ditch system, and the irrigation of pastures make habitat within the lower portions of this unit unique. Pressure for expanded development is occurring on the limited private, undeveloped land within the unit. Recreational use of the City of Boulder lands is considerable and could adversely impact the PMJM if not properly managed. Based on these and other threats, special management considerations and protection are needed. This unit is essential to the conservation of the PMJM because it contains habitat essential to a population of the subspecies that supports the conservation principles of redundancy and resiliency throughout the SPR in Colorado where the PMJM is listed.

Unit 6: Rocky Flats Site, Jefferson, Boulder, and Broomfield Counties

Unit 6 encompasses approximately 1,108 ac (448 ha) on 12 mi (20 km) of streams, and includes the Rock Creek Subunit, Woman Creek Subunit, and Walnut Creek Subunit. Greater than 99 percent of Unit 6 is within the Rocky Flats Site and consists of Federal lands managed by the Service and DOE. The Rocky Flats Site was a nuclear industrial facility for the DOE between 1951 and the end of the Cold War. Later it became the DOE Environmental Technology Site. Much of the Rocky Flats Site became the Rocky Flats NWR in 2005, but DOE maintains control over the Central Operable Unit (1,300 ac, 530 ha) and other lands near the western boundary of the site.

The Rock Creek Subunit is located in the St. Vrain HUC, and the Woman Creek and Walnut Creek subunits are in the Middle South Platte-Cherry Creek HUC. Since the unit includes portions of two HUCs, both of which support designated critical habitat corresponding with recovery populations designated elsewhere in the Draft Plan, this unit is unlikely to serve as an initial recovery population. However, this unit is unique and important because it is limited almost entirely to Federal lands of the Rocky Flats Site, and populations on the site have been the subject of the longest span of research of any PMJM populations.

This unit is essential to the conservation of the PMJM because requisite PCEs are present and the site supports small streams largely unimpacted by human development.

This unit is essential to the conservation of the PMJM because it contains habitat essential to a population of the subspecies that supports the conservation principles of redundancy and resiliency throughout the SPR in Colorado where the PMJM is listed. In addition, the site presents an opportunity to study small populations and their viability over time. However, the small populations present and their apparent isolation suggest that the PMJM population on the unit may be vulnerable. Continuation of existing management and adapting future management to support conservation of the PMJM on site is necessary on both NWR and DOE lands.

Unit 7: Ralston Creek, Jefferson County

Unit 7 encompasses approximately 773 ac (313 ha) on 9 mi (14 km) of streams within the Ralston Creek watershed. It includes Ralston Creek from Ralston Reservoir upstream to the 7,600-ft (2,317-m) elevation. Denver Water lands proposed as critical habitat within Unit 7 have been excluded from this critical habitat designation (see the Exclusions section). The unit includes both public and private lands including lands in Golden Gate Canyon State Park and White Ranch County Park.

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

required by the PMJM located upstream and downstream. Protection and management considerations are required for both the mine area and public lands within the unit. This unit is essential to the conservation of the PMJM because it contains habitat essential to a population of the subspecies that supports the conservation principles of redundancy and resiliency throughout the SPR in Colorado where the PMJM is listed.

South Platte River Drainage - South of Denver

Unit 8: Cherry Creek, Douglas County

Unit 8 encompasses approximately 2,536 ac (1,026 ha) on 30 mi (48 km) of streams within the Cherry Creek watershed. Unit 8 includes two subunits. The first, the Lake Gulch Subunit, includes Cherry Creek from the downstream boundary of the Castlewood Canyon State Recreation Area, upstream to its confluence with Lake Gulch. Tributaries within the subunit include Lake Gulch and Upper Lake Gulch. It includes portions of the Castlewood Canyon State Recreation Area, as well as portions of Douglas County's Green Mountain Ranch property. The second, the Antelope Creek Subunit, includes Antelope Creek from its confluence with West Cherry Creek upstream and a tributary, Haskel Creek. The outward boundaries of critical habitat in this subunit have been modified from those proposed to conform to boundaries of the Douglas County RCZ on non-Federal lands where the RCZ has been mapped (see the Delineation of Critical Habitat Boundaries section above). The two subunits include both public and private lands. These subunits are located in the Middle South Platte-Cherry Creek HUC

and address the medium recovery population designated for this area in the Draft Plan (Service 2003a). PCEs essential to the conservation of the PMJM in the upper reaches of the Cherry Creek basin appear widespread, and there are multiple options as to where we could designate critical habitat for a medium recovery population. This unit is also essential to the conservation of the PMJM because it provides critical habitat to support populations of the subspecies to meet the conservation principles of redundancy and resiliency throughout the SPR in Colorado where the PMJM is listed. Some development pressure is occurring from expanding rural development on private lands within these areas. Management considerations are required for development within this unit, as well as for grazing and recreational activities.

Unit 9: West Plum Creek, Douglas County

Unit 9 encompasses approximately 5,518 ac (2,233 ha) on 90 mi (145 km) of streams within the Plum Creek watershed. It includes Plum Creek from Chatfield Reservoir upstream to the confluence with West Plum Creek then continues upstream on West Plum Creek to its headwaters. Major tributaries within the unit include Indian Creek, Jarre Creek, Garber Creek (including North, Middle, and South Garber Creek), Jackson Creek, Spring Creek, Dry Gulch, Bear Creek, Starr Canyon, Gove Creek, and Metz Canyon. We have reduced the extent of final critical habitat on Bear Creek from that proposed, ending it at the base of the Waconda Lake Dam (see the Summary of Changes from the Proposed Rule section above). Denver Water lands proposed as critical habitat within Unit 9 have been excluded from this critical habitat designation

(see the Exclusions section below). The outward boundaries of critical habitat in this unit have been modified from those proposed to conform to boundaries of the Douglas County RCZ on non-Federal lands where the RCZ has been mapped (see the Delineation of Critical Habitat Boundaries section above).

The unit encompasses both public and private lands. It includes portions of the Pike-San Isabel National Forest, as well as Chatfield State Recreation Area (Corps property), and Colorado Division of Wildlife's Woodhouse Ranch property. This unit is located in the Upper South Platte HUC, and it addresses the large recovery population designated for this area in the Draft Plan (Service 2003a). Aside from a portion of lower Plum Creek, the unit remains rather rural, requisite PCEs are present, and it includes habitat components likely to support relatively high densities of the PMJM. Pressure for expanded suburban and rural development is occurring within the area. On some private and public lands, management considerations are required for livestock grazing. This unit is essential to the conservation of the PMJM because it contains habitat essential to a population of the subspecies that supports the conservation principles of redundancy and resiliency throughout the SPR in Colorado where the PMJM is listed.

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

Unit 10 encompasses approximately 3,060 ac (1,238 ha) on 34 mi (54 km) of streams within the South Platte River watershed. It includes four subunits. The Chatfield Subunit includes a section of the South Platte River upstream of Chatfield Reservoir

within Chatfield State Recreation Area (Corps property). The Bear Creek Subunit includes Bear Creek and West Bear Creek, tributaries to the South Platte River. The South Platte Subunit includes a segment of the South Platte River upstream from Nighthawk, including the tributaries Gunbarrel Creek and Sugar Creek. This subunit is centered on Federal lands of the Pike-San Isabel National Forest but includes some intervening non-Federal lands. The Trout Creek Subunit includes portions of Trout Creek, a tributary to Horse Creek, and also portions of Eagle Creek, Long Hollow, Fern Creek, Illinois Gulch, and Missouri Gulch. This subunit is centered on Federal lands of the Pike-San Isabel National Forest but includes some intervening non-Federal lands along Trout Creek. Denver Water lands proposed as critical habitat within Unit 10 have been excluded from this critical habitat designation (see the Exclusions section below). The outward boundaries of critical habitat in this unit have been modified from those proposed to conform to boundaries of the Douglas County RCZ on non-Federal lands in Douglas County where the RCZ has been mapped (see the Delineation of Critical Habitat Boundaries section above).

This unit is located in the same Upper South Platte HUC as West Plum Creek, where the Draft Plan designated a large recovery population and, therefore, is unlikely to serve as an initial recovery population. The unit encompasses four areas of primarily Federal land spread through the drainage, three within the Pike-San Isabel National Forest boundary. While requisite PCEs are present, habitat components present and the likely density of PMJM populations vary. The Trout Creek Subunit appears to have high quality PMJM habitat and may provide a continued opportunity to research relationships

between the PMJM and the western jumping mouse (*Z. princeps*), both of which have been verified from the same trapping effort on Trout Creek. The four subunit areas should ensure that populations of the PMJM sufficient for its conservation are maintained in the portion of this HUC upstream of Chatfield Reservoir on the South Platte River and its tributaries. This unit is essential to the conservation of the PMJM because it contains habitat essential to populations of the subspecies that supports the conservation principles of redundancy and resiliency throughout the SPR in Colorado where the PMJM is listed. Due to Federal ownership, residential or commercial development pressure is minimal; however, the area is subject to substantial recreational use. Proposed reservoir projects may impact portions of this unit. Based on these and other development pressures, special management considerations and protection are needed.

Arkansas River Drainage

Unit 11: Monument Creek, El Paso County

Unit 11 is located in the Arkansas River drainage. It encompasses approximately 3,295 ac (1,333 ha) on 38 mi (61 km) of streams within the Monument Creek watershed. It includes Monument Creek from the confluence of Cottonwood Creek upstream to the southern boundary of the U.S. Air Force (USAF) Academy (Academy) and from the northern boundary of the Academy upstream to the dam at Monument Lake. Major tributaries within the unit include Kettle Creek, Black Squirrel Creek, Monument Branch, Middle Tributary, Smith Creek, Jackson Creek, Beaver Creek, Teachout Creek, and Dirty

Woman Creek. The unit is primarily on private lands. It includes a small portion of the Pike-San Isabel National Forest. Lands within the Struthers Ranch, Dahle Property, and Lefever Property HCPs, which were proposed as critical habitat within this unit, have been excluded from this critical habitat designation (see **Exclusions**, below).

This unit is located in the Fountain Creek HUC, and we are designating it as critical habitat to address part of the large recovery population designated for this area in the Draft Plan (Service 2003a). The area is unique in that it represents the only known PMJM population of significant size within the Arkansas River drainage and the southernmost known occurrence of the PMJM. The Draft Plan (Service 2003a) specifies a large recovery population along Monument Creek and its tributaries including lands within the Academy. While the Academy lands support the requisite PCEs, support a significant PMJM population, and are essential to maintenance of this proposed recovery population, we determined that the Academy lands merit exemption under section 4(a)(3) of the Act because an integrated natural resources management plan is in place that addresses conservation of the PMJM.

Requisite PCEs are present throughout this unit, but development pressure is extremely high on some private lands within the unit. Development has resulted in changes in base flows and increased stormwater runoff, and has adversely impacted stream channels and associated riparian systems (Mihlbachler 2007). Comprehensive management measures to address habitat degradation are needed.

Effects of Critical Habitat Designation

Section 7 Consultation

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

If a species is listed or critical habitat is designated, section 7(a)(2) of the Act requires Federal agencies to ensure that activities they authorize, fund, or carry out are not likely to jeopardize the continued existence of the species or to destroy or adversely modify its critical habitat. If a Federal action may affect a listed species or its critical habitat, the responsible Federal agency (action agency) must enter into consultation with

us. As a result of this consultation, we document compliance with the requirements of section 7(a)(2) through our issuance of:

(1) A concurrence letter for Federal actions that may affect, but are not likely to adversely affect, listed species or critical habitat; or

(2). A biological opinion for Federal actions that may affect, and are likely to adversely affect, listed species or critical habitat.

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

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

- (1) Can be implemented in a manner consistent with the intended purpose of the action;
- (2) Can be implemented consistent with the scope of the Federal agency's legal authority and jurisdiction;
- (3) Are economically and technologically feasible; and
- (4) Would, in the Director's opinion, avoid jeopardizing the continued existence of the listed species or destroying or adversely modifying critical habitat.

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

Regulations at 50 CFR 402.16 require Federal agencies to reinitiate consultation on previously reviewed actions in instances where we have listed a new species or subsequently designated critical habitat that may be affected and the Federal agency has retained discretionary involvement or control over the action (or the agency's discretionary involvement or control is authorized by law). Consequently, Federal agencies may sometimes need to request reinitiation of consultation with us on actions

for which formal consultation has been completed, if those actions with discretionary involvement or control may affect subsequently listed species or designated critical habitat.

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

The designation of critical habitat does not imply that lands outside of critical habitat do not play an important role in the conservation of the PMJM. Federal actions that may affect areas outside of critical habitat, such as development, agricultural activities, and road construction, are still subject to review under section 7 of the Act if they may affect the PMJM, because Federal agencies must consider both effects to the species and effects to critical habitat independently. The prohibitions of section 9 of the Act applicable to the PMJM under 50 CFR 17.31 also continue to apply both inside and outside of designated critical habitat.

Application of the Jeopardy and Adverse Modification Standards

Jeopardy Standard

Currently, the Service applies an analytical framework for PMJM jeopardy analyses that relies heavily on the importance of known populations to the species' survival and recovery. The analysis required by section 7(a)(2) of the Act is focused not only on these populations but also on the habitat conditions necessary to support them.

The jeopardy analysis usually expresses the survival and recovery needs of the PMJM in a qualitative fashion without making distinctions between what is necessary for survival and what is necessary for recovery. Generally, the jeopardy analysis focuses on the rangewide status of the SPR where the PMJM is threatened, the factors responsible for that condition, and what is necessary for this species to survive and recover. An emphasis is also placed on characterizing the condition of the PMJM in the area affected by the proposed Federal action and the role of affected populations in the survival and recovery of the PMJM. That context is then used to determine the significance of adverse and beneficial effects of the proposed Federal action and any cumulative effects for purposes of making the jeopardy determination.

Adverse Modification Standard

The key factor related to the adverse modification determination is whether, with

implementation of the proposed Federal action, the affected critical habitat would continue to serve its intended conservation role for the species, or retain those PCEs that relate to the ability of the area to periodically support the species. Activities that may destroy or adversely modify critical habitat are those that alter the PCEs to an extent that appreciably reduces the conservation value of critical habitat for the PMJM. As discussed above, the role of critical habitat is to support the life-history needs of the species and provide for the conservation of the species.

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

Activities that, when carried out, funded, or authorized by a Federal agency, may adversely affect critical habitat and, therefore, should result in consultation for the PMJM include, but are not limited to, the following:

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

(2) Any activity that results in changes in the hydrology of the unit, including: construction, operation, and maintenance of levees, dams, berms, and channels; activities

associated with flow control, such as releases, diversions, and related operations; irrigation; sediment, sand, or gravel removal; and other activities resulting in the draining or inundation of a unit.

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

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

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

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

We consider all of the units we are designating as critical habitat to contain features essential to the conservation of the PMJM and which require special management. All of the units are within the geographic range of the species and the SPR in Colorado where it is listed, and they are believed to be currently occupied. To ensure that their actions do not jeopardize the continued existence of the PMJM, Federal agencies already consult with us on activities in areas currently occupied by the PMJM,

or in unoccupied areas if the species may be affected by the action. 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.

Exemptions - Application of Section 4(a)(3) of the Act

The Sikes Act Improvement Act of 1997 (Sikes Act) (16 U.S.C. 670a) required each military installation that includes land and water suitable for the conservation and management of natural resources to complete an integrated natural resources management plan (INRMP) by November 17, 2001. An INRMP integrates implementation of the military mission of the installation with stewardship of the natural resources found on the base. Each INRMP includes:

- An assessment of the ecological needs on the installation, including the need 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.

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

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

We consult with the military on the development and implementation of INRMPs for installations with federally listed species. We analyzed INRMPs developed by military installations that are located within the SPR in Colorado where the PMJM is listed and that contain those features essential to the species’ conservation to determine if they are exempt under the authority of section 4(a)(3)(B) of the Act.

U.S. Air Force Academy

The Academy, in El Paso County, is the lone Department of Defense property that supports a population of the PMJM in habitat that we determined contains physical and biological features that are essential to the conservation of the species. The Academy completed an INRMP in 1998, and updated it in 2008 (USAF 1998, 2008). The Academy’s INRMP describes habitats found at the Academy, including habitats used by

the PMJM (USAF 1998, 2008). It addresses management concerns, provides goals and objectives regarding the PMJM, and describes management actions designed to accomplish those objectives. The INRMP also requires monitoring, evaluation of the plan's effectiveness, and modification of management actions when appropriate.

The Academy also developed a Conservation Agreement with the Service and an accompanying "Conservation and Management Plan for the Preble's Meadow Jumping Mouse at the U.S. Air Force Academy" in 1999 (USAF 1999). The Conservation agreement was extended for 5 years in 2009. The plan provides guidance for USAF management decisions. In addition, the Service completed a programmatic section 7 consultation in 2000, addressing certain activities at the Academy that may affect the PMJM (Service 2000), and concurred with 2008 changes to the INRMP.

We have reviewed these measures and have concluded the INRMP addresses the four criteria identified above. As a result, we did not propose Academy lands as critical habitat and have not included Academy lands in this final designation. Based on the above considerations, and in accordance with section 4(a)(3)(B)(i) of the Act, we have determined that the Academy lands are subject to the Academy's INRMP, and that conservation efforts identified in the INRMP will provide a benefit to PMJM occurring in habitats within or adjacent to these facilities. Therefore, lands within this installation are exempt from critical habitat designation under section 4(a)(3) of the Act. As a result, we are not including a total of approximately 3,300 ac (1,300 ha) of habitat in this Department of Defense installation in this final critical habitat designation.

Exclusions - Application of Section 4(b)(2) of the Act

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

Under section 4(b)(2) of the Act, we may exclude an area from designated critical habitat based on economic impacts, impacts on national security, or any other relevant impacts. In considering whether to exclude a particular area from the designation, we must identify the benefits of including the area in the designation, identify the benefits of excluding the area from the designation, and determine whether the benefits of exclusion outweigh the benefits of inclusion. If, based on this analysis, the Secretary makes this determination, then he can exercise his discretion to exclude the area only if such exclusion would not result in the extinction of the species.

When considering the benefits of inclusion for an area, we consider the additional regulatory benefits under section 7 of the Act that area would receive from the protection from adverse modification or destruction as a result of actions with a Federal nexus, the educational benefits of mapping essential habitat for recovery of the listed species, and any benefits that may result from a designation due to State or Federal laws that may apply to critical habitat.

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

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

In evaluating the existence of a conservation plan when considering the benefits of exclusion, we consider a variety of factors, including but not limited to, whether the plan is finalized; how it provides for the conservation of the essential physical and biological features; whether there is a reasonable expectation that the conservation management strategies and actions contained in a management plan will be implemented

into the future; whether the conservation strategies in the plan are likely to be effective; and whether the plan contains a monitoring program or adaptive management to ensure that the conservation measures are effective and can be adapted in the future in response to new information.

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

Based on the information provided by entities seeking exclusion, as well as additional public comments we received, we evaluated whether certain lands in the proposed critical habitat were appropriate for exclusion from this final designation. We considered the areas discussed below for exclusion under section 4(b)(2) of the Act, and present our detailed analysis below. For those areas in which the Secretary has exercised his discretion to exclude, we believe that:

(1) Their value for conservation will be preserved for the foreseeable future by existing protective actions, or

(2) The benefits of excluding the particular area outweigh the benefits of their inclusion, based on the “other relevant factor” provisions of section 4(b)(2) of the Act.

Exclusions Based on Economic Analysis

Under section 4(b)(2) of the Act, we consider the economic impacts of specifying any particular area as critical habitat. In order to consider economic impacts, we prepared a DEA, based on the October 8, 2009, proposed rule (74 FR 52066), which we made available for public review on May 27, 2010, (75 FR 29700). We opened a comment period on the DEA for 30 days, until June 28, 2010. Following the close of the comment period, an FEA of the potential economic effects of the designation was developed, taking into consideration these comments and any new information.

The intent of the FEA is to identify and analyze the potential economic impacts associated with the final revised critical habitat designation for the PMJM in the SPR in Colorado where it is listed under the Act. The FEA quantifies the economic impacts of all potential conservation efforts for the PMJM, which are the co-extensive costs. The majority of these costs will likely be incurred regardless of whether or not we designate revised critical habitat. The economic impact of the revised critical habitat designation is analyzed by comparing scenarios both “with critical habitat” and “without critical habitat.” The “without critical habitat” scenario represents the baseline for the analysis, considering protections already in place for the species (e.g., under the Federal listing and other Federal, State, and local regulations), but not including critical habitat designated in 2003. Therefore, the baseline represents the costs incurred regardless of whether critical habitat is designated. The “with critical habitat” scenario describes the incremental impacts associated specifically with the proposed designation of revised critical habitat

for the species. The incremental conservation efforts and associated impacts are those not expected to occur absent the designation of critical habitat for the species. In other words, the incremental costs are those attributable solely to the designation of critical habitat above and beyond the baseline costs; these are the costs we considered in the final designation of revised critical habitat. The analysis looked retrospectively at baseline impacts incurred since the species was listed, and forecasted both baseline and incremental impacts likely to occur with the final revised critical habitat designation.

The FEA also addresses how potential economic impacts are likely to be distributed, including an assessment of any local or regional impacts of habitat conservation and the potential effects of conservation activities on government agencies, private businesses, and individuals. The FEA measures lost economic efficiency associated with residential and commercial development, public projects, and activities, such as economic impacts on water management and transportation projects, Federal lands, small entities, and the energy industry. Decision-makers can use this information to assess whether the effects of the designation might unduly burden a particular group or economic sector. Finally, the FEA looks retrospectively at costs that have been incurred since May 13, 1998, when the PMJM was listed under the Act (63 FR 26517), and considers those costs that may occur in the 20 years following the designation of critical habitat, which was determined to be the appropriate period for analysis because limited planning information was available for most activities to forecast activity levels for projects beyond a 20-year timeframe. The FEA quantifies economic impacts from PMJM conservation efforts associated with the following categories of activity:

residential and commercial development; roads/bridges, utilities, and bank stabilization projects; water supply development; USFS land management; Rocky Flats Site land management; and gravel mining.

Based on the FEA, co-extensive costs (the economic impacts of all potential conservation efforts for the PMJM) are expected to be from \$89 million to \$202 million, assuming a 7 percent discount rate, over the next 20 years. Potential incremental impacts associated with the revised critical habitat designation are estimated to be \$28.2 million to \$63.4 million (approximately \$2.66 million to \$5.98 million on an annualized basis), assuming a 7 percent discount rate, over the next 20 years. These incremental impacts generally consist of those incremental administrative costs of conducting section 7 consultations with the Service, and additional costs of project modifications undertaken to avoid adverse modification of critical habitat and avoid or minimize adverse impacts to critical habitat. In the high-end scenario, potential impacts to residential and commercial development represent 92 percent of the co-extensive costs and 96 percent of the incremental impacts, assuming a 7 percent discount rate. The largest contributor to incremental costs is residential and commercial development in Unit 9 (West Plum Creek), Unit 10 (Upper South Platte), and Unit 11 (Monument Creek). The following table provides estimates of co-extensive impacts and those attributable to designation of critical habitat, by activity, over the next 20 years. Table 2 (below) gives a comparison and summary of both the total (co-extensive) costs estimated for all PMJM conservation activities, and the incremental costs resulting from the revised designation of critical habitat for the PMJM, projected over 20 years, at a 7 percent discount rate.

TABLE 2. Estimated post-designation, co-extensive, and incremental impacts over 20 years, by activity (present value, 2009 dollars), showing high and low estimates, assuming a 7 percent discount rate.

Activity	Co-extensive High	Co-extensive Low	Incremental High	Incremental Low
Residential and Commercial Development	\$186,000,000	\$82,000,000	\$61,100,000	\$26,900,000
Road/Bridge, Utility, and Bank Stabilization	\$2,910,000	\$1,500,000	\$946,000	\$497,000
Water Supply Development	\$11,500,000	\$3,890,000	\$937,000	\$323,000
USFS Lands Management	\$977,000	\$977,000	\$357,000	\$357,000
Rocky Flats Site	\$149,000	\$149,000	\$70,800	\$70,800
Total	\$201,536,000	\$88,516,000	\$63,410,800	\$28,147,800

Our economic analysis did not identify any disproportionate costs that are likely to result from the designation. Consequently, the Secretary has determined not to exert his discretion to exclude any areas from this designation of critical habitat for the PMJM based on economic impacts. A copy of the FEA with supporting documents may be obtained by contacting the Colorado Ecological Services Office (see **ADDRESSES**) or by downloading from the Internet at <http://www.regulations.gov>.

Exclusions Based on National Security Impacts

Under section 4(b)(2) of the Act, we consider whether there are lands owned or managed by the Department of Defense (DOD) where the designation of critical habitat might present an impact to national security. In preparing this final rule, we have determined that the lands within the revised designation of critical habitat for the PMJM are not owned or managed by the DOD, and, therefore, we anticipate no impact to national security. The Secretary has determined not to exert his discretion to exclude any areas from this final designation based on impacts on national security.

Exclusions Based on Other Relevant Impacts

Under section 4(b)(2) of the Act, we consider other relevant impacts, in addition to economic impacts and impacts on national security. We consider a number of factors, including whether landowners have developed any HCPs or other resource management plans for the areas proposed for designation, or whether there are conservation partnerships that would be encouraged by designation of, or exclusion from, critical habitat. In addition, we look at any Tribal issues, and consider the government-to-government relationship of the United States with Tribal entities. We also consider any social impacts that might occur because of the designation.

Our NEPA analysis may also disclose impacts we may consider in our analysis under section 4(b)(2) of the Act. In order to consider environmental impacts of the designation of critical habitat, we prepared a draft environmental assessment, based on

the October 8, 2009, proposed rule (74 FR 52066), and made it available for public review on May 27, 2010, (75 FR 29700). We opened a comment period on the draft environmental assessment for 30 days, until June 28, 2010. Following the close of the comment period, a final environmental assessment of the potential environmental effects of the designation was developed, taking into consideration comments and any new information. A copy of the final environmental assessment and Finding of No Significant Impact (FONSI) may be obtained by contacting the Colorado Ecological Services Office (see **ADDRESSES**), or by downloading from the Internet at <http://www.regulations.gov>.

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

Benefits of Designating Critical Habitat

Regulatory Benefits

The consultation provisions under section 7(a) of the Act constitute the regulatory benefits of critical habitat. As discussed above, Federal agencies must consult with us on actions that may affect critical habitat and must avoid destroying or adversely modifying

critical habitat. Prior to our designation of critical habitat, Federal agencies consult with us on actions that may affect a listed species and must refrain from undertaking actions that are likely to jeopardize the continued existence of the species. Thus, the analysis of effects to critical habitat is a separate and different analysis from that of the effects to the species. The difference in outcomes of these two analyses represents the regulatory benefit of critical habitat. For some species, and in some locations, the outcome of these analyses will be similar, because effects on habitat will often result in effects on the species. However, the regulatory standard is different: the jeopardy analysis looks at the action's impact on survival and recovery of the species, while the adverse modification analysis looks at the action's effects on the designated habitat's contribution to the species' conservation. This will, in many instances, lead to different results and different regulatory requirements.

Once an agency determines that consultation under section 7 of the Act is necessary, the process may conclude informally when we concur in writing that the proposed Federal action is not likely to adversely affect critical habitat. However, if we determine through informal consultation that adverse impacts are likely to occur, then we would initiate formal consultation, which would conclude when we issue a biological opinion on whether the proposed Federal action is likely to result in destruction or adverse modification of critical habitat.

For critical habitat, a biological opinion that concludes in a determination of no destruction or adverse modification may contain discretionary conservation

recommendations to minimize adverse effects to PCEs, but it would not contain any mandatory reasonable and prudent measures or terms and conditions. We suggest reasonable and prudent alternatives to the proposed Federal action only when our biological opinion results in an adverse modification conclusion.

In providing the framework for the consultation process, the previous section applies to all the following discussions of benefits of inclusion or exclusion of critical habitat.

The process of designating critical habitat as described in the Act requires that the Service identify those lands on which are found the physical or biological features essential to the conservation of the species which may require special management considerations or protection. In identifying those lands, the Service must consider the recovery needs of the species, such that the habitat that is identified, if managed, could provide for the survival and recovery of the species. Furthermore, once critical habitat has been designated, Federal agencies must consult with the Service under section 7(a)(2) of the Act to ensure that their actions will not adversely modify designated critical habitat or jeopardize the continued existence of the species. As noted in the Ninth Circuit's *Gifford Pinchot* decision, the Court ruled that the jeopardy and adverse modification standards are distinct, and that adverse modification evaluations require consideration of impacts to the recovery of species. Thus, through the section 7(a)(2) consultation process, critical habitat designations provide recovery benefits to species by ensuring that Federal actions will not destroy or adversely modify designated critical habitat.

The identification of lands that are necessary for the conservation of the species can assist in the recovery planning for a species, and therefore is beneficial. In this case the Draft Plan has helped inform critical habitat designation, and this final rule may, in turn, contribute to development of a final recovery plan. The process of proposing and finalizing a critical habitat rule provides the Service with the opportunity to determine lands essential for conservation as well as identify the physical and biological features essential for conservation on those lands. The designation process includes peer review and public comment on the identified features and lands. This process is valuable to land owners and managers in developing conservation management plans for identified lands, as well as any other occupied habitat or suitable habitat that may not have been included in the Service's determination of essential habitat.

However, the designation of critical habitat does not require that any management or recovery actions take place on the lands included in the designation. Even in cases where consultation has been initiated under section 7(a)(2) of the Act, the end result of consultation is to avoid jeopardy to the species and adverse modification of its critical habitat, but not specifically to manage remaining lands or institute recovery actions on remaining lands. Conversely, management plans institute intentional, proactive actions over the lands they encompass to remove or reduce known threats to a species or its habitat and, therefore, implement recovery actions. We believe that the conservation of a species and its habitat that could be achieved through the designation of critical habitat, in some cases, is less than the conservation that could be achieved through the

implementation of a management plan that includes species-specific provisions and considers enhancement or recovery of listed species as the management standard over the same lands. Consequently, implementation of any HCP or management plan that considers enhancement or recovery as the management standard will often provide as much or more benefit than a consultation for critical habitat designation conducted under the standards required by the Ninth Circuit in the *Gifford Pinchot* decision.

Educational Benefits

A benefit of including lands in critical habitat is that designation of critical habitat serves to educate landowners, State and local governments, and the public regarding the potential conservation value of an area. This helps focus and promote conservation efforts by other parties by clearly delineating areas of high conservation value for the PMJM. Because the critical habitat process includes a public comment period, opportunities for public hearings, and announcements through local venues, including radio and other news sources, the designation of critical habitat provides numerous occasions for public education and involvement. Through these outreach opportunities, land owners, State agencies, and local governments can become more aware of the plight of listed species and conservation actions needed to aid in species recovery. Through the critical habitat process, State agencies and local governments may become aware of areas that could be conserved under State laws, local ordinances, or specific management plans.

Benefits of Exclusion

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

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

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

Conservation Partnerships on Non-Federal Lands

Most federally listed species in the United States will not recover without cooperation of non-Federal landowners. More than 60 percent of the United States is privately owned (National Wilderness Institute 1995), and at least 80 percent of endangered or threatened species occur either partially or solely on private lands (Crouse *et al.* 2002, p. 720). Stein *et al.* (1995, p. 400) found that only about 12 percent of listed species were found almost exclusively on Federal lands (90 to 100 percent of their known occurrences restricted to Federal lands) and that 50 percent of federally listed species are not known to occur on Federal lands at all.

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

Many non-Federal landowners derive satisfaction from contributing to endangered species recovery. We promote these private-sector efforts through the

Department of the Interior's Cooperative Conservation philosophy. Conservation agreements with non-Federal landowners (safe harbor agreements, other conservation agreements, easements, and State and local regulations) enhance species conservation by extending species protections beyond those available through section 7 consultations. We encourage non-Federal landowners to enter into conservation agreements, based on a view that we can achieve greater species conservation on non-Federal land through such partnerships than we can through regulatory methods (December 2, 1996; 61 FR 63854).

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

However, many private landowners are wary of possible consequences of encouraging endangered species to their property. Mounting evidence suggests that some regulatory actions by the Federal government, while well-intentioned and required by law, can (under certain circumstances) have unintended negative consequences for the conservation of species on private lands (Wilcove *et al.* 1996, pp. 5-6; Bean 2002, pp. 2-3; Conner and Mathews 2002, pp. 1-2; James 2002, pp. 270-271; Koch 2002, pp. 2-3;

Brook *et al.* 2003, pp. 1639-1643). Many landowners fear a decline in their property value due to real or perceived restrictions on land-use options where endangered or threatened species are found. Consequently, harboring endangered species is viewed by many landowners as a liability. This holds true for PMJM presence on private lands in Colorado. This perception results in anti-conservation incentives because maintaining habitats that harbor endangered species represents a risk to future economic opportunities (Main *et al.* 1999, pp. 1264-1265; Brook *et al.* 2003, pp. 1644-1648). We attempt to ease these concerns through communication and outreach with landowners; however, we recognize that these efforts are not always successful.

The purpose of designating critical habitat is to contribute to the conservation of endangered and threatened species and the ecosystems upon which they depend. The outcome of the designation, triggering regulatory requirements for actions funded, authorized, or carried out by Federal agencies under section 7(a)(2) of the Act, can sometimes be counterproductive to its intended purpose on non-Federal lands. In cases where conservation actions are currently employed but anxiety regarding the potential impacts of critical habitat designation exists, we may find that excluding non-Federal lands from critical habitat designation results in improved partnerships and conservation efforts.

Benefits of Excluding Lands with Habitat Conservation Plans

The benefits of excluding lands with approved HCPs from critical habitat

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

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

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

under section 7(a)(2) of the Act, and we would review these actions for possibly significant habitat modification in accordance with the definition of harm referenced above.

Habitat Conservation Plans Evaluated for Exclusion

The information provided in the previous section applies to the following analysis of exclusions under section (4)(b)(2) of the Act. Portions of the revised critical habitat units and their subunits warrant exclusion from the designation of revised critical habitat under section 4(b)(2) of the Act based on the partnerships, management, and protection afforded under these approved and legally operative HCPs.

We consider a current plan (HCPs as well as other types) to provide adequate management or protection for PMJM and its habitat if it meets the following criteria:

- (1) The plan is complete and provides the same or better level of protection from adverse modification or destruction than that provided through a consultation under section 7 of the Act;
- (2) There is a reasonable expectation that the conservation management strategies and actions will be implemented for the foreseeable future and be effective, based on past practices, written guidance, or regulations; and
- (3) The plan provides adaptive management and conservation strategies and measures consistent with currently accepted principles of conservation biology.

Section 10(a)(1)(B) of the Act authorizes us to issue to non-Federal entities a

permit for the incidental take of endangered and threatened species. This permit allows a non-Federal landowner to proceed with an activity that is legal in all other respects, but that results in the incidental taking of a listed species (i.e., take that is incidental to, and not the purpose of, the carrying out of an otherwise lawful activity). The Act specifies that an application for an incidental take permit must be accompanied by a habitat conservation plan (HCP), and specifies the content of such a plan. The purpose of conservation agreements is to describe and ensure that the effects of the permitted action on covered species are adequately minimized and mitigated, and that the action does not appreciably reduce the survival and recovery of the species. In our assessment of conservation agreements associated with this final rulemaking, the analysis required for these types of exclusions involves careful consideration of the benefits of designation versus the benefits of exclusion. The benefits of designation typically arise from additional section 7 protections, as well as enhanced public awareness once specific areas are identified as critical habitat. The benefits of exclusion generally relate to relieving regulatory burdens on existing conservation partners, maintaining good working relationships with them, and encouraging the development of new partnerships.

We have weighed the benefits of excluding lands in the following HCPs from critical habitat against the benefits of inclusion. We determined that the benefits of excluding the lands covered by the Denver Water HCP, Struthers Ranch HCP, Eagle's Nest Open Space HCP, the Lefever Property HCP, and the Dahle Property HCP from designation as PMJM critical habitat outweigh the benefits of including these areas and that these exclusions would not result in extinction of the PMJM. Thus, as allowed by

section 4(b)(2) of the Act, we have excluded them from the critical habitat designation.

Denver Water Habitat Conservation Plan

On May 1, 2003, we issued a section 10 incidental take permit to Denver Water for the Denver Water HCP (Service 2003b). This permit covers the PMJM. Denver Water owns various properties (including easements), facilities, and infrastructure within the SPR in Colorado where the PMJM is listed. The Denver Water HCP covers the water facilities and infrastructure owned and operated by Denver Water, including: the Foothills, Marston, and Moffat treatment plants; 17 pump stations; 29 treated water storage reservoirs; and 2,464 mi (3,968 km) of pipe. The permit area includes approximately 6,000 ac (2,700 ha) of occupied and potential PMJM habitat on Denver Water properties in Boulder, Jefferson, and Douglas Counties. Denver Water properties covered by the HCP include portions of Units 5, 7, 9, and 10 proposed as revised critical habitat.

The HCP promotes implementation of applicable best management practices to benefit the PMJM that avoid, minimize, and eliminate impacts to occupied and potential PMJM habitat. Where unavoidable impacts occur, Denver Water conducts mitigation as required in the HCP. Denver Water is authorized to take up to 25 ac (10 ha) of occupied and potential habitat through impacts from the covered activities at any one time with a maximum of 75 ac (30 ha) total disturbed over the 30-year term of the HCP.

This HCP provides long-term assurances that Denver Water's covered activities are permitted and in compliance with the Act and provides the Service with a tool to minimize and mitigate take on occupied and potential habitat. To accomplish these goals, the plan requires the following special management and protection:

(a) Before conducting a covered activity (principally operations and maintenance activities) on occupied and potential habitat, Denver Water will determine whether avoidance and minimization efforts are applicable, practicable, and can be used to avoid, reduce, or eliminate take. Generally, the use of best management practices will be the most practicable avoidance or minimization tool. Appendix 5 of the HCP lists best management practices that may be applicable to Denver Water's routine operation and maintenance activities and projects. In some cases, the use of best management practices will avoid take. In other situations, best management practices will minimize take. Where take still results, mitigation will be used to offset the impacts.

(b) As required by section 10 regulations (50 CFR 17.22), the HCP requires Denver Water to perform compliance monitoring and effectiveness monitoring to determine whether the terms and conditions of the HCP are being met. Monitoring activities include: document pre- and post-impact site conditions; determine the extent of take of occupied and potential habitat; determine the success of PMJM habitat revegetation efforts; report on additional Denver Water actions, including initiation of mitigation, discussion of best management practices utilized, if any, and other management decisions that address implementation of the HCP; hold an annual meeting between Denver Water and the Service; and prepare an annual monitoring report.

(c) Adaptive management will be employed to gain new data, or research new

information regarding the biology of the PMJM. The use of adaptive management in areas of questionable PMJM habitat suitability, PMJM use, or PMJM presence will likely increase the potential for success within the HCP and increase the potential for new and useful information on PMJM biology to be acquired.

(d) The HCP will result in the protection of over 6,000 ac (2,400 ha) of potential and occupied habitat. Denver Water must limit temporary impacts to 25 ac (10 ha) of occupied and potential habitat at any one time. Temporary impacts will not exceed 75 ac (30 ha) over the term of the HCP. Denver Water will also track all impacts, restore disturbed vegetation, and track all successful restorations to ensure the above limits are not exceeded.

(e) To offset foreseeable permanent impacts to 1 ac (0.4 ha) of habitat, Denver Water will create 0.25 ac (0.10 ha) of riparian shrub, create 2.25 ac (0.91 ha) of upland occupied and potential habitat, and revegetate a number of trails and dirt roads. Should permanent impacts exceed the 1.0 ac (0.4 ha) (this HCP covers a maximum of 10 ac (4 ha) of permanent impacts), Denver Water will mitigate this through: a conservation easement at a ratio of 8:1; by enhancements at a ratio of 2:1; or a combination of preservation at 6:1 and enhancements at 1:1.

(f) Other mitigation includes: weed management; education, training, and the distribution of information to Denver Water employees to promote avoidance, minimization, or best management practices as applicable and practicable; restoration of habitat linkage corridors; population monitoring and research; and provision of trapping data to the Service.

Denver Water provides annual reports to the Service of activities conducted under the HCP. These reports document that conservation and management have been effective and consistent with provisions of the HCP. We believe that the Denver Water HCP is protective of the PMJM, is likely to be effective into the future, and is consistent with our regulatory objectives for protection of PMJM.

Section 4(b)(2) Weighing Analysis

Denver Water controls a large complex of treatment plants, pump stations, pipelines, and reservoirs, some including habitat occupied by the PMJM. Through their HCP, Denver Water agreed to follow best management practices to benefit the PMJM on 6,000 ac (2,700 ha) of potential PMJM habitat, whether the PMJM is present or not. The principal benefit of any designated critical habitat is that Federal activities that may affect critical habitat require consultation under section 7 of the Act. There is little benefit to designating critical habitat on Denver Water properties because: (a) Denver Water has an HCP in place covering the same properties proposed for designation; (b) Denver Water is a private landowner conducting primarily private (non-Federal) actions in these areas; (c) less than 240 ac (100 ha) of the Denver Water HCP overlaps with areas proposed as critical habitat (the HCP covers a much larger area than would have been covered on Denver Water lands by the proposed critical habitat); (d) educational benefits from designation of critical habitat on areas within the Denver Water HCP (through mapping of essential habitat) would be minimal, as the areas in question are owned or leased by Denver Water, and Denver Water is well aware of the value to the PMJM of

those areas proposed as critical habitat; (e) designation of critical habitat on private property may discourage private landowners from participating in an HCP; and (f) beyond regulatory benefits of critical habitat designation, we know of no additional protections (such as additional Federal or State laws or regulations) that would be triggered by critical habitat designation.

The benefits of exclusion on Denver water properties, however, are that: (a) Denver Water's HCP will provide greater assurances and conservation benefits to the PMJM than critical habitat designation, because the HCP will assure the long-term protection (totaling 30 years, after which it may be extended) and management of the species and its habitat, with funding, through the standards in the HCP; (b) exclusion of properties within Denver Water's HCP reduces the requirements for additional regulatory review and associated permitting costs (delays, administrative costs, consulting costs, and costs of developing additional conservation measures); (c) exclusion of critical habitat will allow more flexibility to a municipal water supplier with private lands and privately owned facilities to operate as needed in order to meet its mission of supplying water to its customers; and (d) Denver Water's HCP provides an integrated and comprehensive approach to species conservation, rather than the piecemeal approach of multiple section 7 consultations that only address activities with a Federal nexus.

Development and implementation of this HCP has promoted a conservation partnership between Denver Water and the Service and benefitted the PMJM. Exclusion of areas within the HCP from proposed critical habitat would preserve this current

partnership and encourage future cooperation on projects and programs effecting the PMJM, other listed species, and a broad array of fish and wildlife resources.

After evaluating the benefits of exclusion and the benefits of inclusion, we have determined that the benefits of exclusion outweigh those of inclusion.

Exclusion Will Not Result in Extinction of the Species

The HCP covers only small portions of four proposed critical habitat units that total over 10,000 ac (4,000 ha). The HCP allows, at maximum, 10 ac (4 ha) of permanent impacts through the 30-year life of the permit. Both permanent and temporary impacts will be mitigated as discussed above. We conclude that exclusion will not result in extinction of the PMJM, nor will it preclude conservation or recovery of the species.

Struthers Ranch Habitat Conservation Plan

On December 12, 2003, we issued a section 10 incidental take permit covering the PMJM for the Struthers Ranch residential development along Black Forest Creek, El Paso County, consistent with the Struthers Ranch HCP (Service 2003c). The site supported approximately 49 ac (20 ha) of PMJM habitat. Parts of the Struthers Ranch property are within Unit 11 of the area proposed as revised critical habitat. Flooding has heavily impacted the middle and upper portions of Black Forest Creek. A 1999 flood event inundated the middle fork and deposited a large amount of sand and silt

downstream. The HCP was designed to minimize the possibility of future severe flooding events, substantially improve remaining PMJM habitat, and minimize adverse effects resulting from developed areas nearby. Under the HCP, approximately 35.5 ac (14.4 ha) of undeveloped land along Black Forest Creek was withdrawn from cattle grazing, was returned to a more natural condition, and is maintained as a preserve with conservation measures to restore and enhance vegetation for wildlife. An adaptive management strategy was addressed in the HCP. Monitoring has documented the successful restoration of the property in accordance with provisions of the HCP. Lands preserved as PMJM habitat are deed-restricted and managed for the PMJM. The deed restriction prohibits any activities that would adversely impact PMJM habitat. Conservation and management has been effective and consistent with provisions of the HCP. We conclude that the HCP is protective of the PMJM, is likely to be effective into the future, and is consistent with our regulatory objectives.

Section 4(b)(2) Weighing Analysis

Through their HCP, Struther's Ranch agreed to follow best management practices to benefit the PMJM on 35.5 ac (14.4 ha) of PMJM habitat. The principal benefit of any designated critical habitat is that Federal activities that may affect the habitat require consultation under section 7 of the Act. There is little benefit to designating critical habitat on Struther's Ranch property because: (a) An HCP is in place covering the same area proposed for designation; (b) Struther's Ranch is private land with primarily private (non-Federal) actions in this area; (c) the area covered by the HCP encompasses only a

small fraction of a unit (i.e., most of the designation in this unit will remain intact); (d) educational benefits from designation of critical habitat on areas within the Struther's Ranch HCP (through mapping of essential habitat) would be minimal, as the owners of the area in question are well aware of the value to the PMJM of the area proposed as critical habitat; (e) designation of critical habitat on private property may discourage private landowners from participating in an HCP; and, (f) beyond regulatory benefits of critical habitat designation, we know of no additional protections (such as additional Federal or State laws or regulations) that would be triggered by critical habitat designation.

The benefits of exclusion of the Struther's Ranch HCP land are: (a) The Struther's Ranch HCP will provide greater assurances and conservation benefits to the PMJM than critical habitat designation, because the HCP assures the area is deed restricted and managed for the PMJM; and (b) The Struther's Ranch HCP provides an integrated and comprehensive approach to species conservation on site rather than the piecemeal approaches of section 7 consultation that only addresses activities with a Federal nexus.

After evaluating the benefits of exclusion and the benefits of inclusion, we have determined that the benefits of exclusion outweigh those of inclusion.

Exclusion Will Not Result in Extinction of the Species

Habitat impacts allowed under this HCP have already occurred. We conclude that exclusion will not result in extinction of the PMJM, nor will it preclude conservation or recovery of the species.

Eagle's Nest Open Space Habitat Conservation Plan

On August 5, 2004, we issued Larimer County a section 10 incidental take permit covering the PMJM consistent with the county's HCP for their Eagle's Nest Open Space (ENOS) property, located in the Laramie Foothills region of Larimer County (Service 2004b). The ENOS is partially within Unit 1 of the area that was proposed as revised critical habitat. The ENOS encompasses 755 ac (306 ha) of rolling foothills and steep slopes and includes 1.0 mi (1.6 km) of the North Fork of the Cache la Poudre River. There are approximately 261 ac (106 ha) of PMJM habitat on the ENOS, the vast majority of which is managed for PMJM conservation under the HCP. Less than 3 ac (1 ha) can be permanently affected under the ENOS HCP for a natural-surface hiking and equestrian trail, and cattle access to the river. Agreed-upon habitat improvement for the PMJM included fencing off of riparian areas to control cattle grazing, shrub planting, limiting management activities during the PMJM active season, and control of public access and allowed activities. This area is protected as open space by the Larimer County Open Lands program. The protection and enhancement of wildlife habitat is one of the primary goals on ENOS. The area is used for educational programs by the county, demonstrating PMJM and riparian habitat management. Mitigation is paid for through the county's Help Preserve Open Space Sales Tax revenues guaranteed through 2018.

Success criteria, monitoring, and a process to address unforeseeable events are addressed in the HCP. Monitoring reports submitted from 2004 through 2008 documented the success of mitigation efforts.

Section 4(b)(2) Weighing Analysis

Through their HCP, Larimer County agreed to follow best management practices to benefit the PMJM through protection and management of 261 ac (106 ha) of PMJM habitat. The principal benefit of any designated critical habitat is that Federal activities that may affect the habitat require consultation under section 7 of the Act. There is little benefit to designating critical habitat on ENOS property because: (a) An HCP is in place covering the same area proposed for designation; (b) ENOS is owned by Larimer County with primarily private (non-Federal) actions in this area; (c) the area covered by the HCP encompasses only a small fraction of Unit 1; (d) educational benefits from designation of critical habitat on areas within the ENOS HCP (through mapping of essential habitat) would be minimal, as Larimer County is aware of the value to the PMJM of the area proposed as critical habitat and is using it to educate the public about PMJM and its habitat; (e) designation of critical habitat on non-Federal property may discourage local government from participating in an HCP; and (f) beyond regulatory benefits of critical habitat designation, we know of no additional protections (such as additional Federal or State laws or regulations) that would be triggered by critical habitat designation.

The benefits of exclusion of the ENOS HCP land, however, are that: (a) The

ENOS HCP will provide greater assurances and conservation benefits to the PMJM than critical habitat designation because the HCP will assure the area is managed for the PMJM; (b) The ENOS HCP provides an integrated and comprehensive approach to species conservation rather than the piecemeal approach of section 7 consultations that only addresses activities with a Federal nexus; and (c) development and implementation of this HCP has promoted a conservation partnership between Larimer County and the Service, and has benefitted the PMJM. Exclusion of areas within the HCP from proposed critical habitat would preserve this current partnership and encourage future cooperation on projects and programs effecting the PMJM, other listed species, and a broad array of fish and wildlife resources.

After evaluating the benefits of exclusion and the benefits of inclusion, we have determined that the benefits of exclusion outweigh those of inclusion.

Exclusion Will Not Result in Extinction of the Species

Impacts to habitat (3 ac (1 ha)) allowed by the ENOS HCP have already occurred. Remaining PMJM habitat is managed as described above. We conclude that exclusion will not result in extinction of the PMJM, nor will it preclude conservation or recovery of the species.

Other Habitat Conservation Plan Lands

On November 19, 2002, we approved an HCP, and we issued a section 10 incidental take permit covering the PMJM for a single family residence on the Lefever Property along Black Squirrel Creek in Black Forest, El Paso County (Service 2002b). The Lefever Property is within Unit 11 of the area proposed as revised critical habitat. Under the HCP, 0.56 ac (0.25 ha) of PMJM habitat was permitted to be disturbed, and 4.52 ac (1.83 ha) of the property was placed in a conservation easement and deeded to El Paso County, to be managed as foraging habitat for the PMJM according to specific requirements laid out in the HCP. The following activities are expressly prohibited by the property easement: Construction or reconstruction of any building or other structure or improvement on portions of the property; any division or subdivision of the title to the property; commercial timber harvesting; mining or extraction of soil, sand, gravel, rock, oil, natural gas, fuel, or any other mineral substance; paving or otherwise covering with concrete, asphalt, or any other paving material; and the dumping or uncontained accumulation of any trash, refuse, or debris on the property. As further compensation for the impacted habitat, 0.89 ac (0.36 ha) of the 4.52 ac (1.83 ha) were planted with 100 shrubs to enhance PMJM habitat. Three years of monitoring demonstrated success of the planting effort. The permit expires November 19, 2012, but the conservation easement and requirements of the HCP call for the property to be managed consistent with the needs of the PMJM in perpetuity.

On July 23, 2002, we approved a low-effect HCP, and we issued a section 10 incidental take permit covering the PMJM for a single family residence on the Dahle Property, Thunderbird Estates, near Monument Creek in Colorado Springs, El Paso

County (Service 2002c). The Dahle Property is within Unit 11 of the area proposed as revised critical habitat. Under the HCP, 0.15 ac (0.060 ha) of upland PMJM habitat was permitted to be disturbed for the construction of a single-family residence and 0.5 ac (0.2 ha) of the property was preserved in a native and unmowed condition and enhanced through weed control and *Salix* (willow) planting. Required monitoring has documented success of these measures. The take permit expired July 29, 2007; however, preservation of PMJM habitat continues in perpetuity.

Section 4(b)(2) Weighing Analysis

The Lefever Property and Dahle Property HCPs address single residences on small properties. The applicants expended significant resources to develop these HCPs. Relieving these landowners of any real or perceived regulatory burden that might accompany designation of critical habitat supports partnerships between the private property owners and the Service. The principal benefit of any designated critical habitat is that Federal activities that may affect the habitat require consultation under section 7 of the Act. There is little benefit to designating critical habitat on properties covered by these two HCPs because: (a) The HCPs cover the same area proposed for designation; (b) it is unlikely that future Federal actions will occur on these small private areas; (c) the areas covered by the HCPs encompass a small fraction of Unit 11; (d) educational benefits from designation of critical habitat on areas within the HCPs (through mapping of essential habitat) would be minimal, as the two single landowners are aware of the value to the PMJM of the area proposed as critical habitat; (e) designation of critical

habitat on non-Federal property may discourage private entities from participating in an HCP; and (f) beyond regulatory benefits of critical habitat designation, we know of no additional protections (such as additional Federal or State laws or regulations) that would be triggered by critical habitat designation.

The benefits of exclusion of land in these two HCPs, however, are that: (a) The HCPs will provide greater assurances and conservation benefits to the PMJM than critical habitat designation because the HCPs assure the areas are managed to preserve habitat for the PMJM; and (b) development and implementation of these HCPs has promoted a conservation partnership between private landowners and the Service, and has benefitted the PMJM. Exclusion of areas within the HCPs from proposed critical habitat may serve as an example to private landowners and encourage future cooperation on projects and programs effecting the PMJM, other listed species, and other fish and wildlife resources.

After evaluating the benefits of exclusion and the benefits of inclusion, we have determined that the benefits of exclusion outweigh those of inclusion.

Exclusion Will Not Result in Extinction of the Species

The Lefever Property and Dahle Property HCP permits allowed 0.71 ac (0.31 ha) of permanent habitat impacts, which have already occurred. Offsets and mitigation included additional lands that have been set aside for the PMJM, with habitat improvement and conservation easement, as described above. We conclude that

exclusion of the lands in these HCPs will not result in extinction of the PMJM, nor will it preclude conservation or recovery of the species.

Summary of Habitat Conservation Plan Lands Excluded

Based on our evaluation of special management considerations and protection provided by the Denver Water HCP, the Struthers Ranch HCP, the Eagle's Nest Open Space HCP, the Lefever Property HCP, and the Dahle Property HCP, and in light of the definition of critical habitat in section 3(5)(A) of the Act, we have considered, but are not, designating these areas as revised critical habitat. We believe that these HCPs meet the criteria used by the Service to determine whether a plan provides adequate special management or protection to a listed species. The conservation strategies and measures are likely to be effective, because they were developed based on the best scientific data available and they required monitoring and reporting to ensure compliance and success. The lands excluded total 6,315.73 ac (2,328.34 ha), in portions of Units 1, 5, 7, 9, 10, and 11.

Required Determinations

Regulatory Planning and Review - Executive Order 12866

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

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

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

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

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

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

Under the Regulatory Flexibility Act (RFA, 5 U.S.C. 601 *et seq.*), as amended by the Small Business Regulatory Enforcement Fairness Act (SBREFA) of 1996 (5 U.S.C. 801 *et seq.*), whenever an agency must publish a notice of rulemaking for any proposed or final rule, it must prepare and make available for public comment a regulatory flexibility analysis that describes the effects of the rule on small entities (i.e., small businesses, small organizations, and small government jurisdictions). However, no regulatory flexibility analysis is required if the head of the agency certifies the rule will not have a significant economic impact on a substantial number of small entities. The SBREFA amended the RFA to require Federal agencies to provide a certification statement of the factual basis for certifying that the rule will not have a significant economic impact on a substantial number of small entities. As part of our DEA for the proposed designation, we provided our initial regulatory flexibility analysis for

determining whether the proposed rule would result in a significant economic impact on a substantial number of small entities. Based on comments we received, we have revised the FEA and finalized our regulatory flexibility analysis (FRFA), as part of our final rulemaking. In this final rule, we are certifying that the critical habitat designation for the PMJM will not have a significant economic impact on a substantial number of small entities. The following discussion explains our rationale.

According to the Small Business Administration, small entities include small organizations, such as independent nonprofit organizations, and small governmental jurisdictions, including school boards and city and town governments that serve fewer than 50,000 residents, as well as small businesses (13 CFR 121.201). Small businesses include manufacturing and mining concerns with fewer than 500 employees, wholesale trade entities with fewer than 100 employees, retail and service businesses with less than \$5 million in annual sales, general and heavy construction businesses with less than \$27.5 million in annual business, special trade contractors doing less than \$11.5 million in annual business, and agricultural businesses with annual sales less than \$750,000. To determine if potential economic impacts to these small entities are significant, we considered the types of activities that might trigger regulatory impacts under the rule, as well as the types of project modifications that may result. In general, the term “significant economic impact” is meant to apply to a typical small business firm’s business operations.

To determine if the final designation of revised critical habitat for the PMJM

would affect a substantial number of small entities, we considered the number of small entities affected within particular types of economic activities (e.g., housing development, grazing, oil and gas production, timber harvesting). In order to determine whether it is appropriate for our agency to certify that this rule will not have a significant economic impact on a substantial number of small entities, we considered each industry or category individually. However, the SBREFA does not explicitly define substantial number or significant economic impact. Consequently, to assess whether a substantial number of small entities is affected by this revised designation, this analysis considers the relative number of small entities likely to be impacted in an area. In some circumstances, especially with critical habitat designations of limited extent, we may aggregate across all industries and consider whether the total number of small entities affected is substantial. In estimating the numbers of small entities potentially affected, we also considered whether their activities have any Federal involvement. Critical habitat designation will not affect activities that do not have any Federal involvement; designation of critical habitat affects activities conducted, funded, permitted, or authorized by Federal agencies.

Under the Act, designation of critical habitat only affects activities carried out, funded, or permitted by Federal agencies. Following this revised critical habitat designation, Federal agencies must consult with us under section 7 of the Act if their activities may affect designated critical habitat. Consultations to avoid the destruction or adverse modification of critical habitat will be incorporated into the existing consultation process.

Some kinds of activities are unlikely to have any Federal involvement and so will not result in any additional effects under the Act. However, there are some State laws that limit activities in designated critical habitat even where there is no Federal nexus. If there is a Federal nexus, Federal agencies will be required to consult with us under section 7 of the Act on activities they fund, permit, or carry out that may affect critical habitat. If we conclude, in a biological opinion, that a proposed action is likely to destroy or adversely modify critical habitat, we can offer “reasonable and prudent alternatives.” Reasonable and prudent alternatives are alternative actions that can be implemented in a manner consistent with the scope of the Federal agency’s legal authority and jurisdiction, that are economically and technologically feasible, and that would avoid destroying or adversely modifying critical habitat.

Within the revised critical habitat designation, the types of actions or authorized activities that we have identified as potential concerns and that may be subject to consultation under section 7 if there is a Federal nexus are: Residential and commercial development; roads/bridges, utilities, and bank stabilization projects; water supply development; USFS land management practices; Rocky Flats Site management practices; and gravel mining. As discussed in Appendix A of the FEA, of the activities addressed in the analysis, only residential and commercial development, and construction and maintenance of roads/bridges, utilities, and bank stabilization projects, are expected to experience incremental, administrative consultation costs that may be borne by small businesses.

Any existing and planned projects, land uses, and activities that could affect the revised critical habitat but have no Federal involvement would not require section 7 consultation with the Service, so they are not restricted by the requirements of the Act. Federal agencies may need to reinitiate a previous consultation if discretionary involvement or control over the Federal action has been retained or is authorized by law and the activities may affect critical habitat.

In the FEA, we evaluated the potential economic effects on small entities resulting from implementation of conservation actions related to the designation of critical habitat for the PMJM. Please refer to our FEA of the revised critical habitat designation for a more detailed discussion of potential economic impacts; we will summarize key points of the analysis below.

The FEA, and its associated FRFA, estimate that total potential incremental economic impacts in areas designated as revised critical habitat over the next 20 years will be \$2.66 million to \$5.98 million annually, assuming a 7-percent discount rate. Approximately 96 percent of the incremental impacts attributed to the designation of critical habitat are expected to be related to section 7 consultations with Federal agencies for residential and commercial development. Expected impacts to residential and commercial development include added costs primarily due to administrative consultations and required modifications to development project scope or design, including mitigation (or setting aside conservation lands), habitat restoration and enhancement, and project delays. Small entities represent 97 percent of all entities in the

residential and commercial development industry that may be affected. Incremental costs also are expected related to road/bridge, utility, and bank stabilization construction and maintenance activities throughout the revised critical habitat. Small entities represent 90 percent of all entities in the road/bridge, utility, and bank stabilization construction and maintenance industries that may be affected. The Small Business Size Standard for the industry sectors that could potentially be affected by the revised critical habitat designation are as follows:

- New Housing Operative Builders—\$33.5 million in annual receipts.
- Land Subdivision—\$7 million in annual receipts.
- Natural Gas Distribution—500 employees.
- Water Supply and Irrigation Systems—\$7 million annual receipts.
- Pipeline Transportation of Natural Gas—\$7 million annual receipts.

In addition, government entities in the area may be affected. Of these, approximately 70 percent are small government jurisdictions (i.e., cities, counties, towns, townships, villages, school districts, or special districts with a population of less than 50,000).

Of principal interest is residential and commercial development, and associated land subdivision, as an estimated 96 percent of potential incremental impacts may affect that industry sector. The small businesses in this industry sector may bear a total of \$26.2 to \$60.3 million (at a 7-percent discount rate) in incremental impacts related to section 7 consultations over the next 20 years (through 2029). However, when expressed as a

percentage of a small developer's annual sales revenue, assuming that one small developer is required for each of the development projects, these monetary incremental impacts are likely to be small. The incremental impact due to revised critical habitat designation is estimated to range from \$171,000 to \$393,000 per project. An average of eight projects is anticipated to occur in critical habitat per year. For new home builders, estimated annual sales in 2007 per developer in Colorado were \$6.51 million. Therefore, in years where a developer has a project in critical habitat, the estimated incremental impact represents 2.6 to 6.0 percent of that developer's annual sales in this industry. However, we expect these costs to be incurred over a period of more than one year, as most developments will take longer than one year to complete (i.e., if a project takes 2 or more years to complete, the impact as a proportion of revenue in any one year will be substantially less).

For land subdividers, the FEA assumes that annual sales per establishment are limited to the small business threshold of \$7 million annually. The estimated annual incremental impact therefore represents 2.4 to 4.6 percent of a subdivider's annual sales. As discussed above, the incremental impact associated with each project is expected to be incurred over a period of more than one year. Thus, this analysis overstates the actual annual impact on a small entity.

There are additional factors that may cause this analysis to overstate the actual impact on small residential and commercial developers, and on land subdividers. First, it is likely that a portion of the impact will be realized by landowners in the form of higher

housing prices. The proportion of the total impact borne by landowners is unknown. We believe the analysis gives a high estimate of possible development and that it is likely the actual amount of development will be less. As described in Chapter 3 of the FEA, the analysis likely overstates the amount of development activity and, therefore, the total incremental impact associated with residential and commercial development. Lastly, anecdotal evidence and existing county building restrictions suggest that fewer properties within revised critical habitat are being developed than are quantified by the FEA. This will likely further reduce the annual incremental impact borne per small entity.

For road/bridge, utility, and bank stabilization construction and maintenance, the FEA estimates that incremental impacts will range from \$322,000 to \$748,000 over 20 years, or \$30,400 to \$76,000 annually. Given an estimated average of four projects impacting critical habitat and requiring section 7 consultation each year, and assuming one small entity (municipality, wastewater district, etc.) conducts each activity, the impact to each small government entity involved would be \$7,600 to \$17,700.

In summary, we have considered whether this revised designation will result in a significant economic impact on a substantial number of small entities. Given the analysis above, the expected annual impacts to small businesses in the affected industries are significantly less than the annual revenues that could be garnered by a single small operator in those industries, and as such, impacts are low relative to potential revenues. Based on the above reasoning and currently available information, we conclude that this rule will not have a significant economic impact on a substantial number of small

business entities. Therefore, we are certifying that the revised designation of critical habitat for the PMJM will not have a significant economic impact on a substantial number of small entities.

Energy Supply, Distribution, and Use—Executive Order 13211

On May 18, 2001, the President issued E.O. 13211 (Actions Concerning Regulations That Significantly Affect Energy Supply, Distribution, or Use) on regulations that significantly affect energy supply, distribution, and use. E.O. 13211 requires agencies to prepare Statements of Energy Effects when undertaking certain actions. The Office of Management and Budget's guidance for implementing this Executive Order outlines nine outcomes that may constitute "a significant adverse effect" when compared to no regulatory action. The only criterion that may be relevant to this analysis is increases in the cost of energy distribution in excess of one percent. As described in the FEA, constructing and maintaining electrical and natural gas distribution and transmission systems is a type of utility project potentially occurring in the revised critical habitat. The FEA concludes that incremental impacts may be incurred; however, they are unlikely to reach the threshold of one percent. Therefore, designation of revised critical habitat is not expected to lead to any adverse outcomes (such as a reduction in electricity production or an increase in the cost of energy production or distribution), and a Statement of Energy Effects is not 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.*), we make the following findings:

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

voluntary Federal program.”

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

(2) As discussed in the FEA of the designation of revised critical habitat for the PMJM, we do not believe that the rule will significantly or uniquely affect small governments because it will not produce a Federal mandate of \$100 million or greater in any year; that is, it is not a “significant regulatory action” under the Unfunded Mandates Reform Act. The FEA concludes that incremental impacts may occur due to project modifications that may need to be made for development activities; however, these are not expected to affect small governments to the extent described above. Consequently, we do not believe that this final revised critical habitat designation will significantly or uniquely affect small government entities. As such, a Small Government Agency Plan is

not required.

Takings—Executive Order 12630

In accordance with E.O. 12630 (Government Actions and Interference with Constitutionally Protected Private Property Rights), we have analyzed the potential takings implications of designating critical habitat for the PMJM in a takings implications assessment. Critical habitat designation does not affect landowner actions that do not require Federal funding or permits, nor does it preclude development of habitat conservation programs or issuance of incidental take permits to permit actions that do require Federal funding or permits to go forward. The takings implications assessment concludes that this designation of critical habitat for the PMJM does not pose significant takings implications for lands within or affected by the designation.

Federalism – Executive Order 13132

In accordance with E.O. 13132, this rule does not have significant Federalism effects. A Federalism assessment is not required. In keeping with Department of the Interior and Department of Commerce policy, we requested information from, and coordinated development of, our revised critical habitat designation with appropriate State resource agencies in Colorado. We received no comments from the State of Colorado or State resource agencies in Colorado. The designation of critical habitat in areas currently occupied by the PMJM may impose nominal additional regulatory

restrictions to those currently in place and, therefore, may have little incremental impact on State and local governments and their activities. The designation may have some benefit to these governments, in that the areas that contain the physical and biological features essential to the conservation of the species are more clearly defined, and the PCEs of the habitat necessary to the conservation of the species are specifically identified. This information does not alter where and what federally sponsored activities may occur. However, it may assist local governments in long-range planning (rather than having them wait for case-by-case section 7 consultations to occur).

Civil Justice Reform – Executive Order 12988

In accordance with E.O. 12988 (Civil Justice Reform), this rule meets the applicable standards set forth in sections 3(a) and 3(b)(2) of the Order. We are designating critical habitat in accordance with the provisions of the Act. This final rule uses standard property descriptions and identifies the physical and biological features essential to the conservation of the subspecies within the designated areas to assist the public in understanding the habitat needs of the PMJM.

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

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

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

National Environmental Policy Act (42 U.S.C. 4321 et seq.)

We completed a NEPA analysis for this revised critical habitat designation. We notified the public of availability of the draft environmental assessment for the proposed rule on May 27, 2010 (75 FR 29700). The final environmental assessment, as well as the Finding of No Significant Impact, is available upon request from the Field Supervisor, Colorado Ecological Services Office (see **FOR FURTHER INFORMATION CONTACT** section) or on our Web site at <http://mountain-prairie.fws.gov/species/mammals/preble/>

Government-to-Government Relationship with Tribes

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

responsibilities to work directly with Tribes in developing programs for healthy ecosystems, to acknowledge that tribal lands are not subject to the same controls as Federal public lands, to remain sensitive to Indian culture, and to make information available to Tribes. We determined that there are no Tribal lands in Colorado occupied at the time of listing that contain the features essential for the conservation of the PMJM, and no unoccupied Tribal lands that are essential for the conservation of the PMJM. Therefore, we are not designating critical habitat for the PMJM on Tribal lands.

References Cited

A complete list of all references cited in this rulemaking is available online at <http://mountain-prairie.fws.gov/species/mammals/preble/>, or upon request from the Field Supervisor, Colorado Ecological Services Office (see **ADDRESSES**).

Authors

The primary authors of this package are the staff members of the Colorado Ecological Services Office.

List of Subjects in 50 CFR Part 17

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

Regulation Promulgation

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

PART 17—[AMENDED]

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

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

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

§ 17.95 Critical habitat—fish and wildlife.

(a) *Mammals.*

* * * * *

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

(1) Critical habitat units are depicted for Boulder, Broomfield, Douglas, El Paso, Jefferson, Larimer, and Teller Counties in Colorado on the maps below.

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

(i) Riparian corridors:

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

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

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

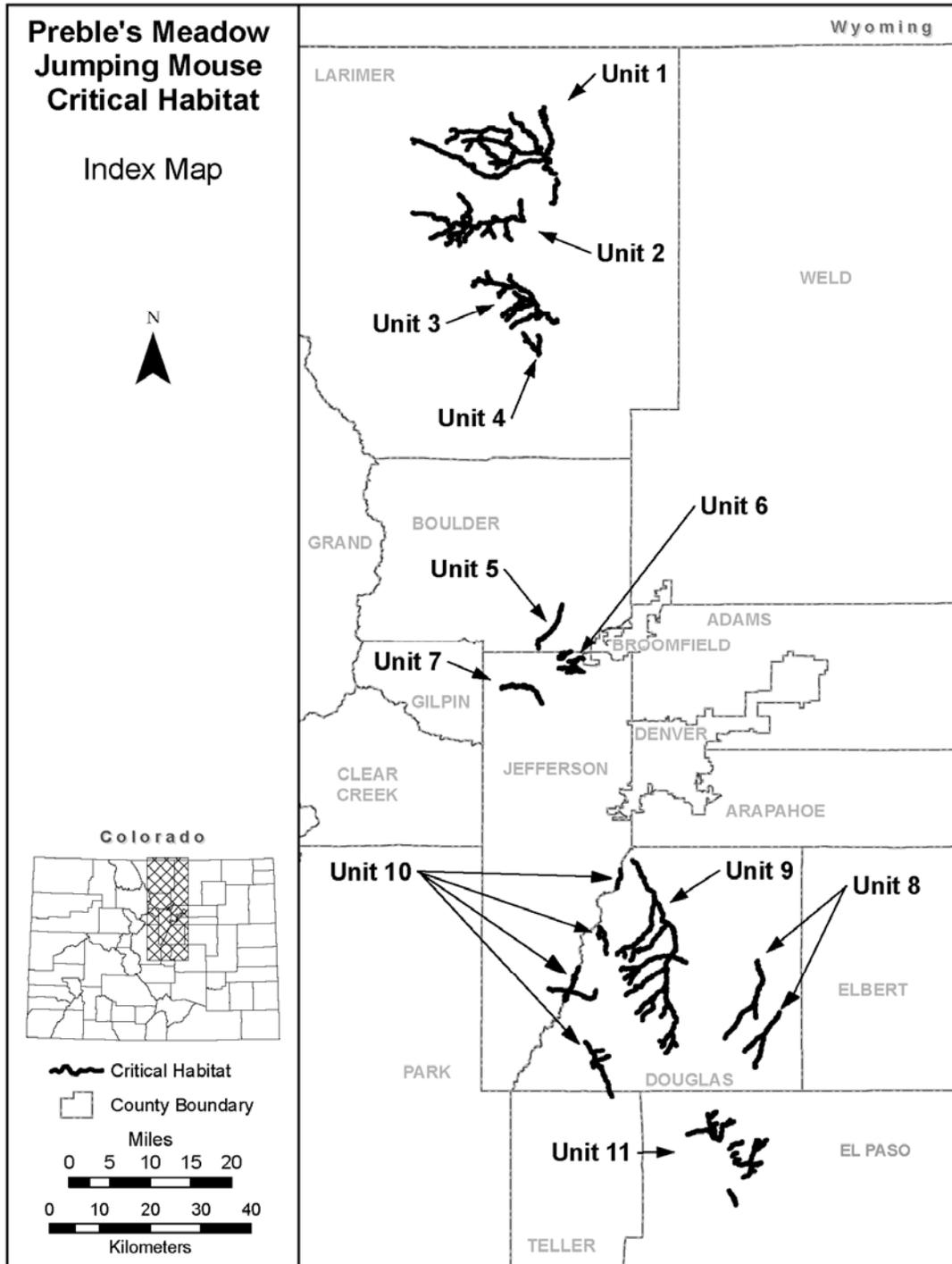
(ii) Additional adjacent floodplain and upland habitat with limited human disturbance (including hayed fields, grazed pasture, other agricultural lands that are not plowed or disked regularly, areas that have been restored after past aggregate extraction, areas supporting recreational trails, and urban-wildland

interfaces).

(3) Critical habitat does not include buildings, roads, parking lots, other paved areas, lawns, other urban and suburban landscaped areas, regularly plowed or disked agricultural areas, and the land on which they are located existing within the legal boundaries on the effective date of this rule.

(4) Critical habitat map units. Data layers defining map units were created on a base of USGS digital ortho-photo quarter-quadrangles, and critical habitat units were then mapped using Universal Transverse Mercator (UTM) Zone 15N coordinates.

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



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

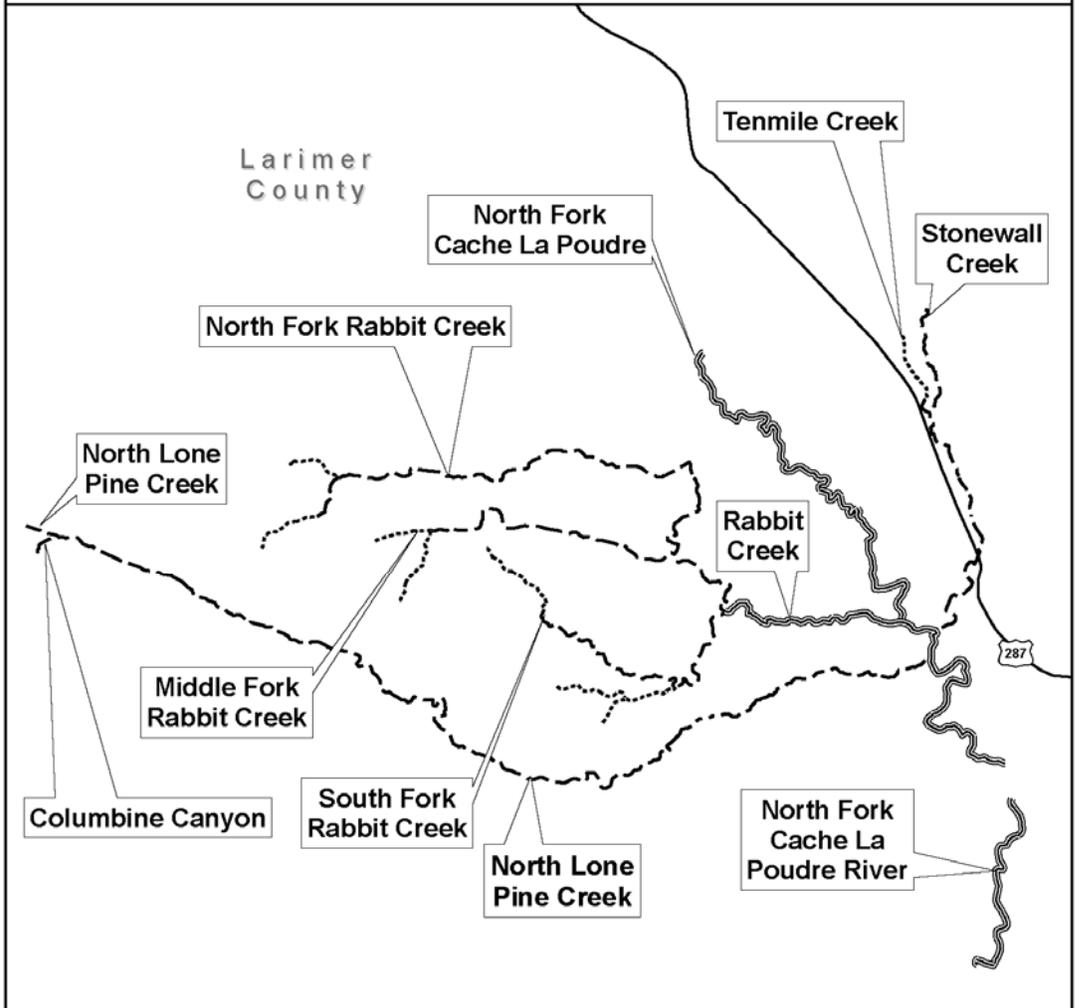
(i) This unit consists of 87.2 mi (140.4 km) of streams and rivers. North Fork Cache la Poudre River from Seaman Reservoir (40 43 7N 105 14 32W, T.9N., R.70W., Sec. 28) upstream to Halligan Reservoir spillway (40 52 44N 105 20 15W, T.11N., R.71W., Sec. 34) excluding 1.06 mi (1.71 km) of the North Fork Cache la Poudre River within the Eagles Nest Open Space (from 40 45 44N 105 13 50W, T. 9N, R.70W., Sec. 9 to 40 46 17N 105 13 59W, T. 9N, R.70W., Sec. 4). Includes Lone Pine Creek from its confluence North Fork Cache la Poudre River (40 47 54N 105 15 30W, T.10N., R.70W., Sec. 32) upstream and continuing upstream into North Lone Pine Creek to 7,600 ft (2,317 m) elevation (40 49 58N 105 34 09W, T.10N., R.73W., Sec. 15). Includes Columbine Canyon from its confluence with North Lone Pine Creek (40 49 47N 105 33 31W, T.10N., R.73W., Sec. 15) upstream to 7,600 ft (2,317 m) elevation (40 49 32N 105 33 58W, T.10N., R.73W., Sec. 15). Also includes Stonewall Creek from its confluence with North Fork Cache la Poudre River (40 48 19N 105 15 21W, T.10N., R.70W., Sec. 29) upstream to (40 53 26N 105 15 40W, T.11N., R.70W., Sec. 29). Includes Tenmile Creek from its confluence with Stonewall Creek (40 51 49N 105 15 32W, T.10N., R.70W., Sec. 5) upstream to Red Mountain Road (40 53 00N 105 16 09W, T.11N., R.70W., Sec. 31). Also includes Rabbit Creek from its confluence with North Fork Cache la Poudre River (40 48 30N 105 16 07W, T.10N., R.70W., Sec. 30) upstream to the confluence with North and Middle Forks of Rabbit Creek (40 49 34N 105 20 49W, T.10N., R 71W., Sec. 21). Also includes South Fork Rabbit Creek from its confluence with Rabbit Creek (40 48 39N 105 19 45W, T.10N., R.71W., Sec. 27) upstream to (40 49 39N 105 24 40W, T.10N., R.72W., north boundary Sec. 24). Includes an unnamed tributary from its

confluence with South Fork Rabbit Creek (40 47 28N 105 20 47W, T.10N., R.71W., Sec. 33) upstream to (40 47 28N 105 23 12W, T.10N., R.71W., Sec. 31). Which in turn has an unnamed tributary from their confluence at (40 47 17N 105 21 48W, T.10N., R.71W., east boundary Sec. 32) upstream to (40 46 55N 105 22 16W, T.9N., R.71W., Sec. 5). Also includes Middle Fork Rabbit Creek from its confluence with Rabbit Creek (40 49 34N 105 20 49W, T.10N., R.71W., Sec. 21) upstream to 7,600 ft (2,317 m) elevation (40 49 46N 105 26 59W, T.10N., R.72W., Sec. 15). This includes an unnamed tributary from its confluence with Middle Fork Rabbit Creek (40 49 56N 105 25 51W, T.10N., R.72W., Sec. 14) upstream to 7,600 ft (2,317 m) elevation (40 48 48N 105 26 29W, T.10N., R.72W., Sec. 23). This unit includes North Fork Rabbit Creek from its confluence with Rabbit Creek (40 49 34N 105 20 49W, T.10N., R.71W., Sec. 21) upstream to 7,600 ft (2,317 m) elevation (40 49 38N 105 29 19W, T.10N., R.72W., Sec. 17). Includes an unnamed tributary from its confluence with North Fork Rabbit Creek (40 50 45N 105 27 44W, T.10N., R.72W., Sec. 9) upstream to 7,600 ft (2,317 m) elevation (40 50 57N 105 28 46W, T.10N., R.72W., Sec. 9).

(ii) Note: Map of Unit 1 follows:

Critical Habitat for the Preble's Meadow Jumping Mouse

Unit 1 - North Fork Cache La Poudre River



Critical habitat equals the stream plus the following distance outward on each side.

- 110 meters (361 ft)
- 120 meters (394 ft)
- ~~~~~ 140 meters (459 ft)
- ~~~~~ Major Roads



0 1 2 3

Miles

N

0 1 2 3 4 5

Kilometers

Note: Critical Habitat without name labels are unnamed tributaries.

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

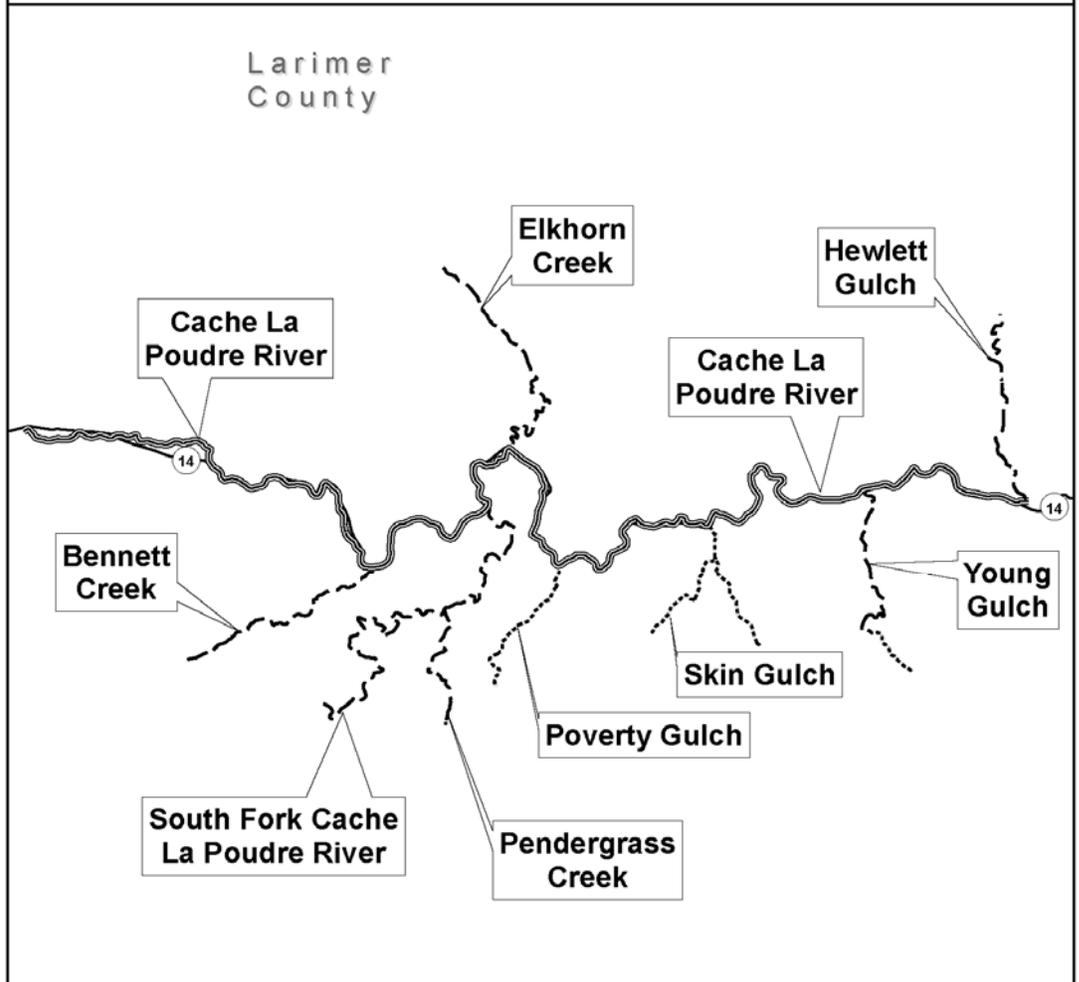
(i) This unit consists of 50.8 mi (81.7 km) of streams and rivers. Cache la Poudre River from Poudre Park (40 41 16N 10 18 2W, T.8N., R.71W., Sec. 2) upstream to (40 42 02N 105 34 04W, T.9N., R.73W., west boundary Sec. 34). Includes Hewlett Gulch from its confluence with Cache la Poudre River (40 41 16N 105 18 24W, T.8N., R.71W., Sec. 2) upstream to the boundary of Arapahoe-Roosevelt National Forest (40 43 29N 105 18 51W, T.9N., R.71W., Sec. 23). Also includes Young Gulch from its confluence with Cache la Poudre River (40 41 25N 105 20 57W, T.8N., R.71W., Sec. 4) upstream to (40 39 14N 105 20 13W, T.8N., R.71W., south boundary Sec. 15). Also includes an unnamed tributary from its confluence with Cache la Poudre River at Stove Prairie Landing (40 40 58N 105 23 23W, T.8N., R.71W., Sec. 6) upstream to (40 39 31N 105 22 34W, T.8N., R.71W., Sec. 17). Includes Skin Gulch from its confluence with the aforementioned unnamed tributary at (40 40 33N 105 23 16W, T.8N., R.71W., Sec. 7) upstream to (40 39 40N 105 24 16W, T.8N., R.72W., Sec. 13). Unit 2 also includes Poverty Gulch from its confluence with Cache la Poudre River (40 40 28N 105 25 44W, T.8N., R.72W., Sec. 11) upstream to 7,600 ft (2,317 m) elevation (40 39 01N 105 26 40W, T.8N., R.72W., Sec. 22). Also includes Elkhorn Creek from its confluence with Cache la Poudre River (40 41 50N 105 26 24W, T.9N., R.72W., Sec. 34) upstream to (40 44 03N 105 27 34W, T.9N., R.72W., Sec. 21). Also includes South Fork Cache la Poudre River from its confluence with Cache la Poudre River (40 41 11N 105 26 50W, T.8N., R.72W., Sec. 3) upstream to 7,600 ft (2,317 m) elevation (40 38 48N 105 29 22W, T.8N., R.72W., Sec. 20). Includes Pendergrass Creek from its confluence with South Fork Cache la Poudre River (40 39 56N 105 27 30W, T.8N., R.72W., Sec. 15) upstream

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

(ii) Note: Map of Unit 2 follows:

Critical Habitat for the Preble's Meadow Jumping Mouse

Unit 2 - Cache La Poudre River



Critical habitat equals the stream plus the following distance outward on each side.

..... 110 meters (361 ft)

~ ~ ~ 120 meters (394 ft)

~~~~~ 140 meters (459 ft)

~~~~~ Major Roads



0 1 2 3

Miles

N

0 1 2 3 4 5

Kilometers

Note: Critical Habitat without name labels are unnamed tributaries.

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

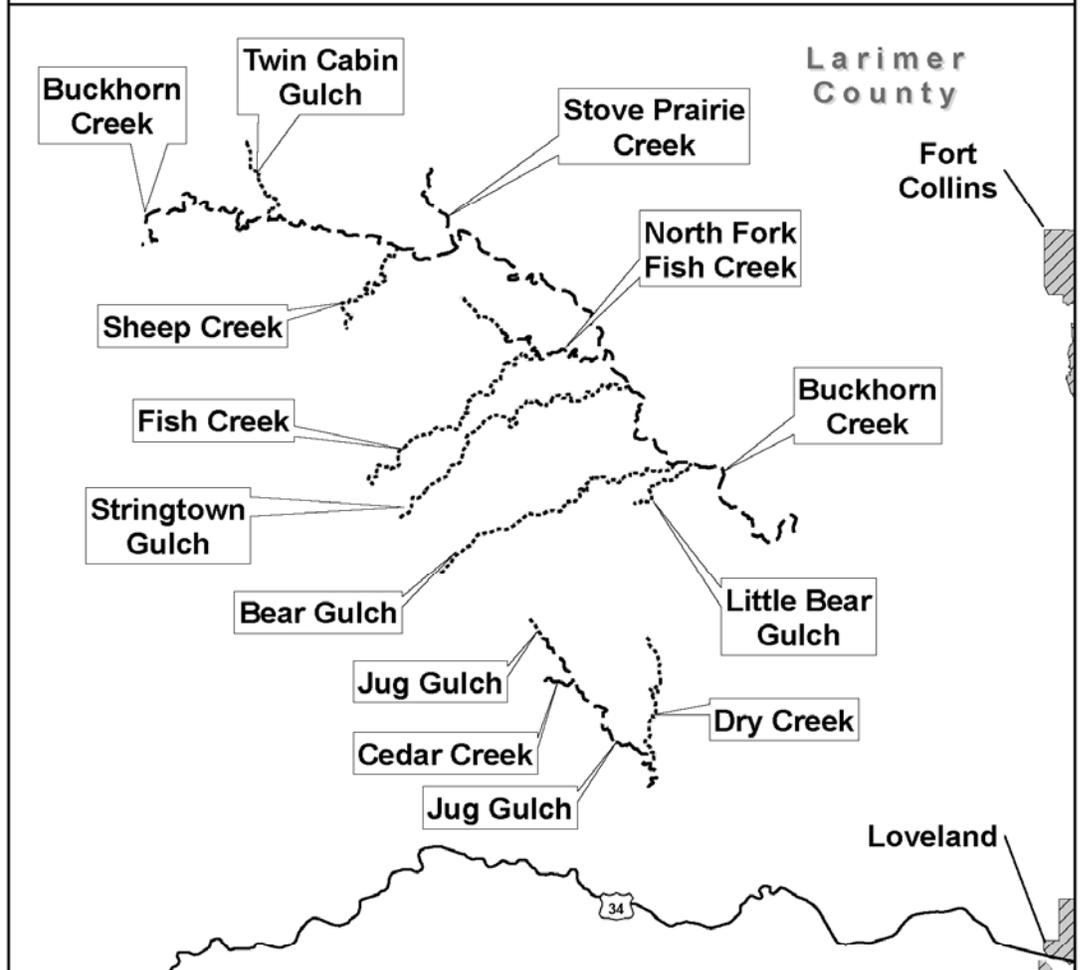
(i) This unit consists of 45.5 mi (73.2 km) of streams. Buckhorn Creek from (40 30 20N 105 13 39W, T.6N., R.70W., east boundary Sec. 9) upstream to 7,600 ft (2,317 m) elevation (40 34 17N 105 25 31W, T.7N., R.72W., Sec. 14). Includes Little Bear Gulch from its confluence with Buckhorn Creek (40 31 17N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

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

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

Critical Habitat for the Preble's Meadow Jumping Mouse

Unit 3 - Buckhorn Creek, Unit 4 - Cedar Creek



Critical habitat equals the stream plus the following distance outward on each side.

..... 110 meters (361 ft)

~~~~~ 120 meters (394 ft)

———— Major Roads

▨ Municipal Lands



0 1 2 3

Miles

N

0 1 2 3 4 5

Kilometers

Note: Critical Habitat without name labels are unnamed tributaries.

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

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

(ii) Note: Map of Unit 4 appears at paragraph (8)(ii) of this entry.

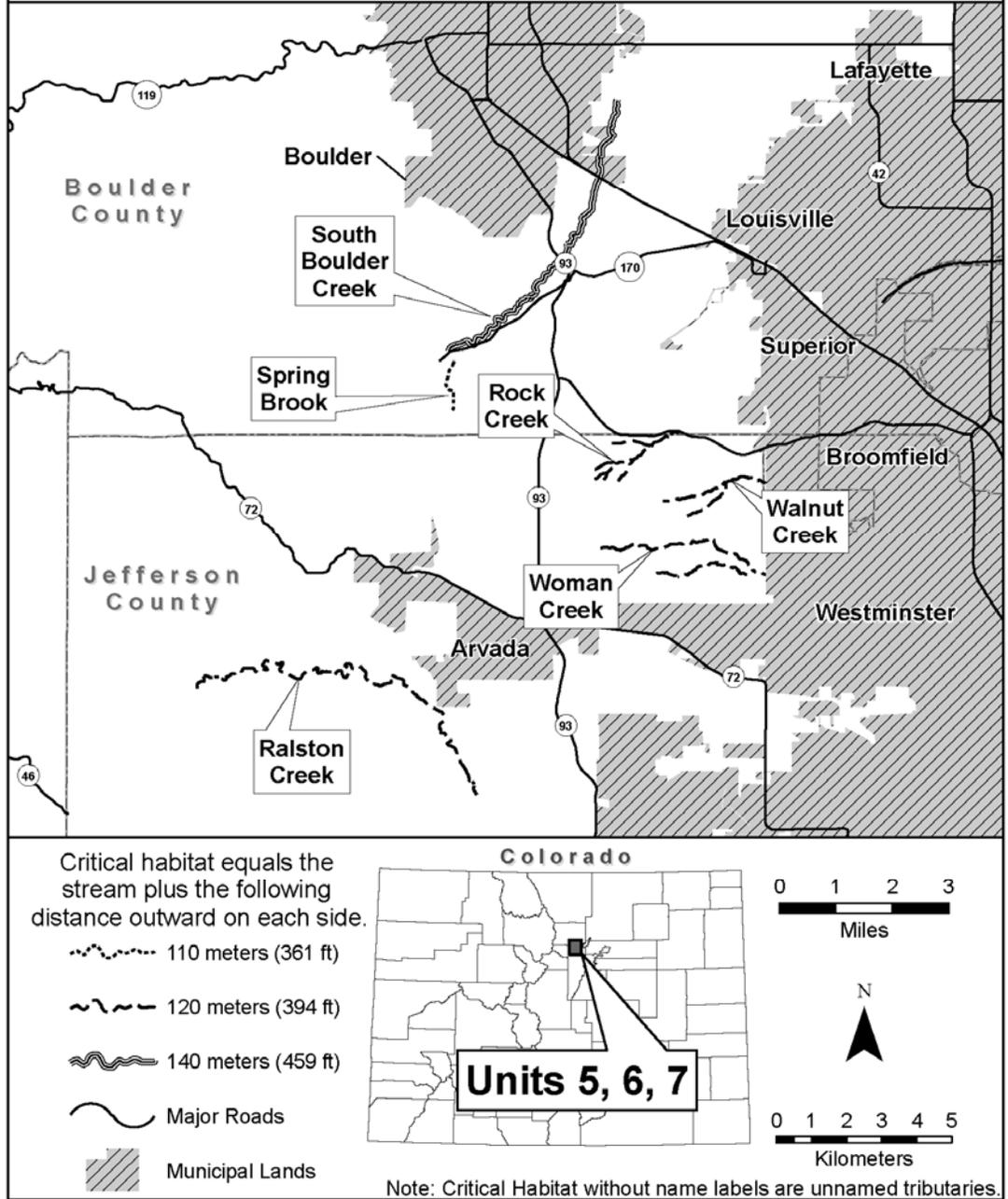
(10) Unit 5: South Boulder Creek, Boulder County, Colorado.

(i) This unit consists of 7.6 mi (12.2 km) of streams. Including South Boulder Creek from Baseline Road (40 0 0N 105 12 55W, T.1S., R.70W., Sec. 3) upstream to near Eldorado Springs, Colorado (39 56 7N 105 16 16W, T.1S., R.70W., Sec. 30). Unit 5 also includes Spring Brook from the Community Ditch near Eldorado Springs (39 55 59N 105 16 10W, T.1S., R.70W., Sec. 30) upstream to the Denver Water boundary at the South Boulder Diversion Canal (39 55 13N 105 16 12W, T.1S., R.70W., Sec. 31).

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

# Critical Habitat for the Preble's Meadow Jumping Mouse

Unit 5 - South Boulder Creek, Unit 6 - Rocky Flats Site, Unit 7 - Ralston Creek



(11) Unit 6: Rocky Flats Site, Jefferson County and Broomfield Counties, Colorado.

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

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

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

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

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

(ii) Note: Map of Unit 6 appears at paragraph (10)(ii) of this entry.

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

(i) This unit consists of 8.5 mi (13.7 km) of streams. Ralston Creek from 6,065 ft (1,849 m) elevation at the northern edge of Denver Water property just upstream of Ralston Reservoir (39 49 12N 105 15 35W, T.3S., R.70W., Sec. 6) upstream into Golden Gate Canyon State Park to 7,600 ft (2,300 m) elevation (39 50 53 105 21 16W, T.2S., R.71W., Sec. 29).

(ii) Note: Map of Unit 7 appears at paragraph (10)(ii) of this entry.

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

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

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

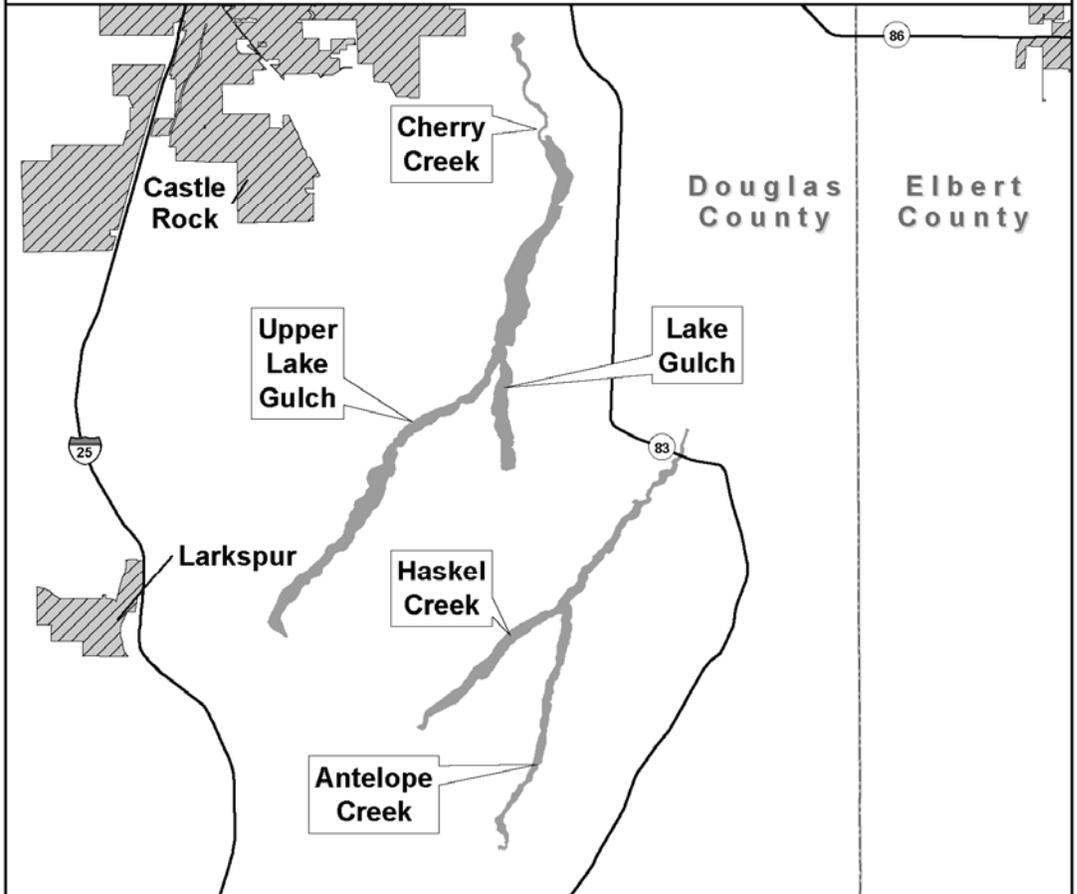
(B) The Antelope Creek Subunit from its confluence with West Cherry Creek (39 16 11N 104 42 49W, T.9S R.65W., S18) upstream to the Franktown Parker Reservoir (39 10 20N 104 46 16W, T.10S R.66W., S22). It also includes Haskel Creek from its

confluence with Antelope Creek (39 13 43N, 104 45 5W, T.9S R.66W., S35) upstream to the Haskel Creek Spring Pond at 7,000 ft (2,134 m) elevation (39 11 60N 104 47 40N, T.10S R.66W., S8).

(ii) Note: Map of Unit 8 follows:

# Critical Habitat for the Preble's Meadow Jumping Mouse

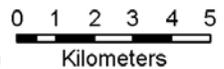
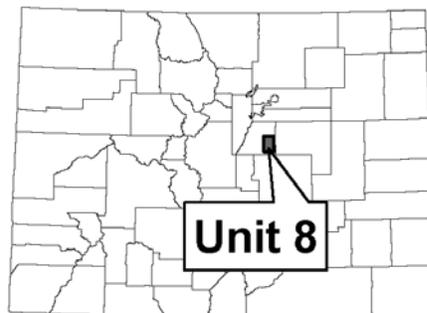
## Unit 8 - Cherry Creek



Critical habitat equals the stream plus the following distance outward on each side.

-  Major Roads
-  110 meters (361 ft)
-  120 meters (394 ft)
-  140 meters (459 ft)
-  Riparian Conservation Zone (RCZ)
-  Municipal Lands

Colorado



Note: Critical Habitat without name labels are unnamed tributaries.

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

(i) This unit consists of 90.3 mi (145.3 km) of streams. Plum Creek from Chatfield Lake (39 32 35N 105 03 07W, T.6S., R.68W., Sec. 7) upstream to its confluence with West Plum Creek and East Plum Creek (39 25 49N 104 58 8W, T.7S., R.68W., Sec. 23), excluding 0.14 mi (0.23 km) of Plum Creek owned by Denver Water at the Highline Canal crossing (excluding from 39 30 44N 105 01 41W, T.6S., R.68W., Sec. 20 downstream to 39 30 41N 105 01 32W, T.6S., R.68W., Sec. 20). West Plum Creek from the aforementioned confluence (39 25 49N 104 58 8W, T.7S., R.68W., Sec. 23) upstream to the boundary of Pike-San Isabel National Forest and 7,600 ft (2,317 m) elevation (39 13 07N 104 59 20W, T.9S., R.68W., Sec. 34). Includes Indian Creek from its confluence with Plum Creek (39 28 22N 104 59 57W, T.7S., R.68W., Sec. 4) upstream to Silver State Youth Camp (39 22 24N 105 05 13W, T.8S., R.69W., Sec. 11). Indian Creek includes an unnamed tributary from its confluence with Indian Creek at Pine Nook (39 23 01N 105 04 24W, T.8S., R.69W., Sec. 2) upstream to (39 22 10N 105 04 08W, T.8S., R.69W., Sec. 12). Also includes Jarre Creek from its confluence with Plum Creek (39 25 50N 104 58 15W, T.7S., R.68W., Sec. 23) upstream to 7,600 ft (2,317 m) elevation (39 21 50N 105 03 20W, T.8S., R.69W., Sec. 12). Jarre Creek includes an unnamed tributary from its confluence with Jarre Creek (39 22 58N 105 01 52W, T.8S., R.68W., Sec. 5) upstream to (39 22 44N 105 02 14W, T.8S., R.68W., Sec. 8). Also includes an unnamed tributary from its confluence with West Plum Creek (39 22 20N 104 57 39W, T.8S., R.68W., Sec. 11) upstream to (39 21 36N 104 55 40W, T.8S., R.67W., Sec. 18). Unit 9 also includes Garber Creek from its confluence with Plum Creek (39 22 10N 104 57 49W, T.8S., R.68W., Sec. 11) upstream to its confluence with South Garber

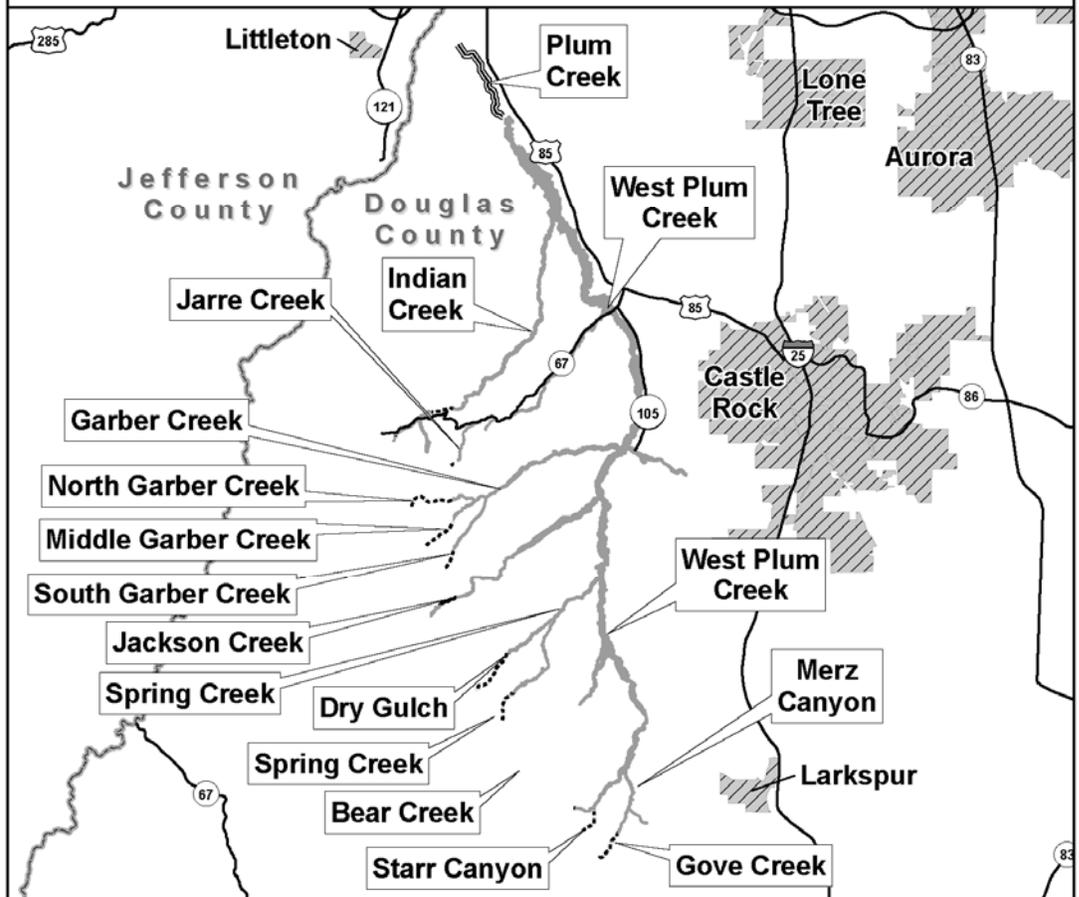
Creek and Middle Garber Creek (39 21 02N 105 02 13W, T.8S., R.68W., Sec. 18). Including South Garber Creek from its confluence with Garber Creek (39 21 02N 105 02 13W, T.8S., R.68W., Sec. 18) upstream to 7,600 ft (2,317 m) elevation (39 19 14N 105 03 13W, T.8S., R.69W., Sec. 25). Including Middle Garber Creek from its confluence with Garber Creek (39 20 55N 105 02 35W, T.8S., R.68W., Sec. 18) upstream to (39 19 48N 105 04 09W, T.8S., R.69W., west boundary Sec. 25). Including North Garber Creek from its confluence with Middle Garber Creek (39 20 55N 105 02 35W, T.8S., R.68W., Sec. 18) upstream to 7,600 ft (2,317 m) elevation (39 20 47N 105 04 37W, T.8S., R.69W., Sec. 23). Includes Jackson Creek from its confluence with Plum Creek (39 21 02N 104 58 30W, T.8S., R.68W., Sec. 14) upstream to 7,600 ft (2,317 m) elevation (39 17 59N 105 03 57W, T.9S., R.69W., Sec. 1). Includes Spring Creek from its confluence with West Plum Creek at (39 19 04N 104 58 26W, T.8S., R.68W., Sec. 35) upstream to (39 15 21N 105 01 40W, T.9S., R.68W., Sec. 20). Including Dry Gulch from its confluence with Spring Creek (39 17 54N 104 59 58W, T.9S., R.68W., Sec. 4) upstream to 7,600 ft (2,317 m) elevation (39 16 07N 105 02 33W, T.9S., R.68W., Sec. 18). Including Bear Creek from its confluence with West Plum Creek (39 17 30N 104 58 25W, T.9S., R.68W., Sec. 2) upstream to the base of the Waconda Lake dam (39 15 43 N, 104 59 09 W, T.9S, R.68W, Sec.15). Including Gove Creek from its confluence with West Plum Creek (39 14 07N 104 57 42W, T.9S., R.68W., Sec. 26) upstream to 7,600 ft (2,317 m) elevation (39 11 50N 104 58 32W, T.10S., R.68W., Sec. 11). Includes Merz Canyon stream from its confluence with Gove Creek (39 13 05N 104 57 33W, T.9S., R.68W., Sec. 36) upstream to (39 12 39N 104 57 04 W, T.10S., R.68W., Sec.1). Includes Starr Canyon stream from its confluence with West Plum Creek (39 13 07N 104

58 41W, T.9S., R.68W., Sec. 35) upstream to 7,600 ft (2,317 m) elevation (39 12 32N  
104 59 01W, T.10S., R.68W., Sec. 3).

(ii) Note: Map of Unit 9 follows:

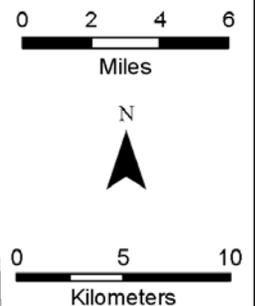
# Critical Habitat for the Preble's Meadow Jumping Mouse

## Unit 9 - West Plum Creek



Critical habitat equals the stream plus the following distance outward on each side.

-  Major Roads
-  110 meters (361 ft)
-  120 meters (394 ft)
-  140 meters (459 ft)
-  Riparian Conservation Zone (RCZ)
-  Municipal Lands



Note: Critical Habitat without name labels are unnamed tributaries.

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

(i) This unit consists of four subunits including 33.6 mi (54.1 km) of rivers and streams as follows:

(A) The Chatfield Subunit, on the border of Jefferson County and Douglas County entirely within Chatfield State Park from Chatfield Lake (39 31 32N 105 04 45W, T.6S., R.69W., Sec. 14) upstream to the northern boundary of the Kassler Center land owned by Denver Water (39 29 35N 105 05 14W, T.6S., R.69W., Sec. 26).

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

(C) The South Platte River Subunit, on the border of Jefferson County and Douglas County from the southern boundary of Denver Water land near Nighthawk (39 21 04N 105 10 28W, T.8S., R.70W., Sec. 13) upstream to the north eastern boundary of Denver Water land at (39 18 47N 105 11 33W, T.8S., R.70W., Sec. 35), excluding Denver Water lands along this stretch (39 19 10N 105 11 17W, T.8S., R.70W., Sec. 26), and utilizing the Douglas County Riparian Conservation Zones on non-Federal lands. Also included in this subunit from the southwestern boundary of Denver Water property at (39 18 04N 105 12 03W, T.9S., R.70W., Sec. 2) to the north eastern boundary of Denver Water property at (39 17 27N 105 12 24W, T.9S., R.70W., Sec. 3). Includes

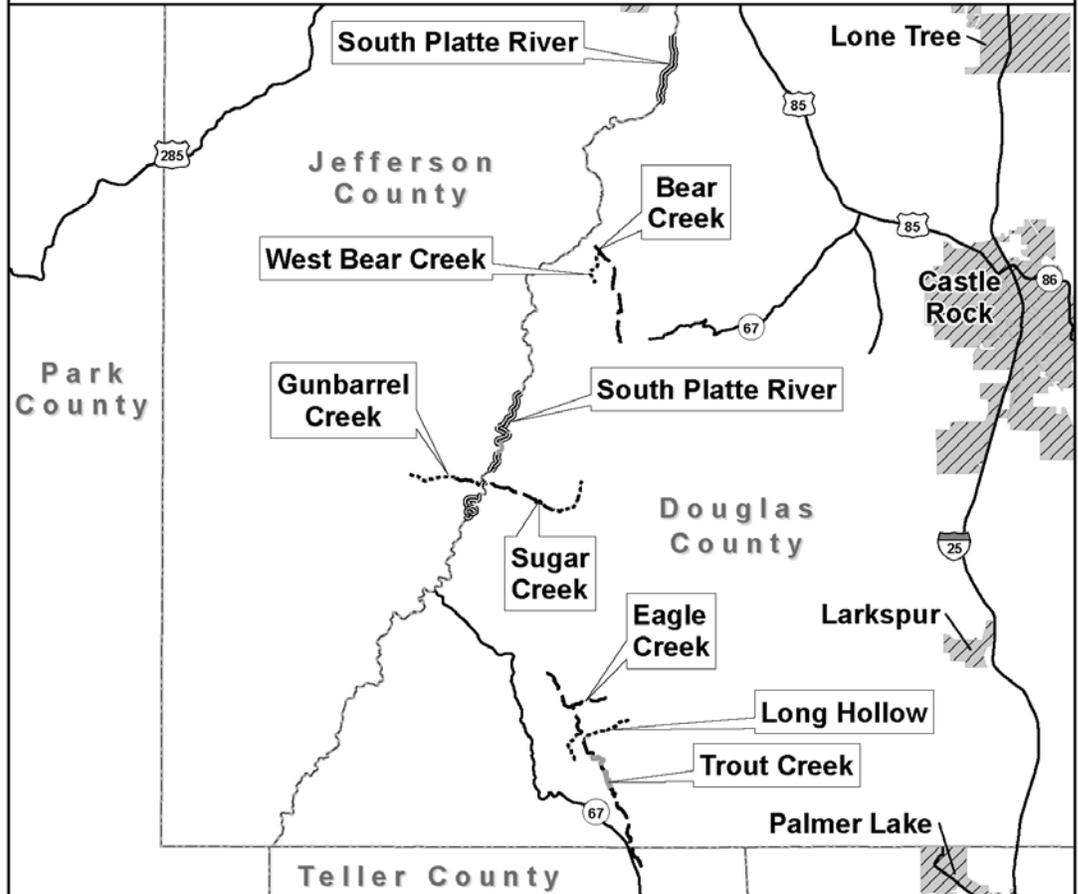
Sugar Creek, within Douglas County from the eastern boundary of Denver Water land near Oxyoke (39 18 24N 105 11 32W, T.8S., R.70W., Sec. 35) upstream to 7,600 ft (2,317 m) elevation (39 18 31N 105 08 09W, T.8S., R.69W., Sec. 32). Includes Gunbarrel Creek, within Jefferson County from the western boundary of Denver Water land near Oxyoke (39 18 27N 105 12 06W, T.8S., R.70W., Sec. 34) upstream to (39 18 41N 105 14 36W, T.8S., R.70W., Sec. 32).

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

(ii) Note: Map of Unit 10 follows:

# Critical Habitat for the Preble's Meadow Jumping Mouse

## Unit 10 - Upper South Platte River



Critical habitat equals the stream plus the following distance outward on each side.

-  Major Roads
-  110 meters (361 ft)
-  120 meters (394 ft)
-  140 meters (459 ft)
-  Riparian Conservation Zone (RCZ)
-  Municipal Lands

Colorado



0 2 4 6  
Miles



0 5 10  
Kilometers

Note: Critical Habitat without name labels are unnamed tributaries.

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

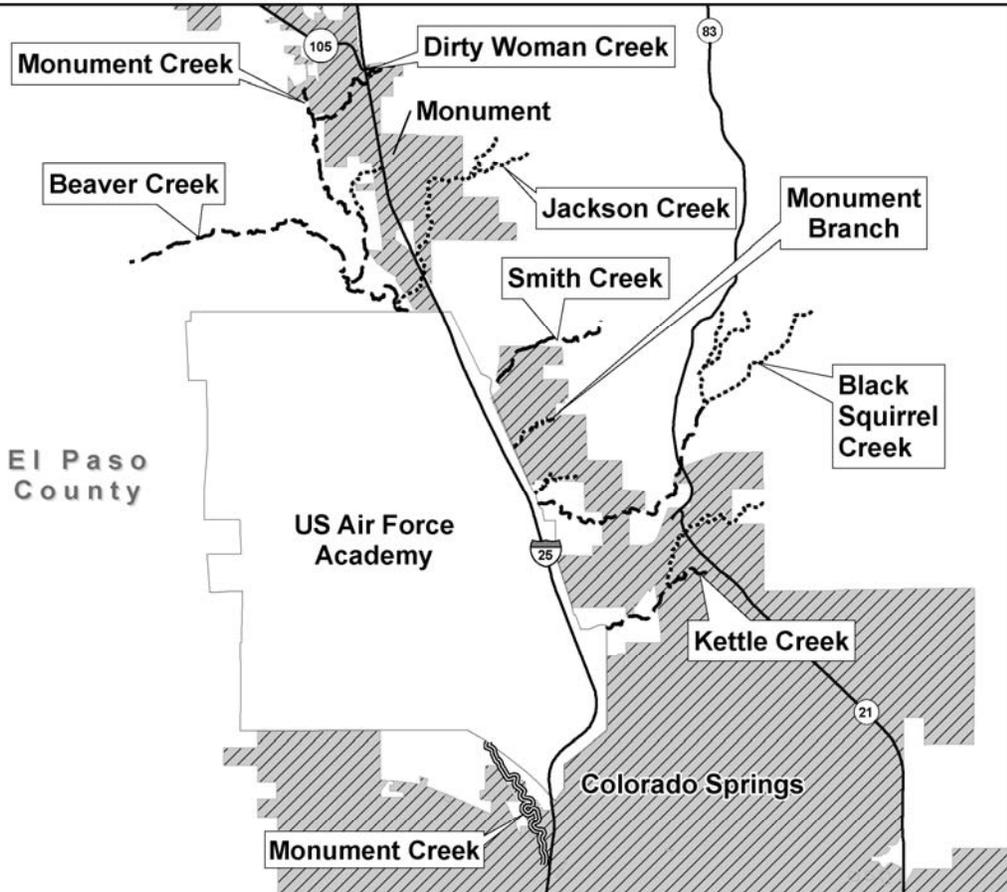
(i) This unit consists of 38.0 mi (61.1 km) of streams. Monument Creek from its confluence with Cottonwood Creek (38 55 36N 104 48 55W, T.13S., R66W., Sec. 7) upstream to the southern property boundary of the U.S. Air Force Academy (38 57 08N 104 49 49W, T.13S., R.66W., Sec. 6), excluding 0.82 ac (0.33 ha) on the Dahle property (38 56 56N 104 49 39W, T.13S., R66W., Sec. 6). Then Monument Creek from the northern property boundary of the U.S. Air Force Academy (39 02 31N 104 51 05W, T.12S., R.67W., north boundary Sec. 2) upstream to Monument Lake (39 05 19N 104 52 43W, T.11S., R.67W., Sec. 15). Includes Kettle Creek from the property boundary of the U.S. Air Force Academy (38 58 33N 104 47 55W, T.12S., R.66W., Sec. 29) upstream to its intersection with a road at (39 00 07N 104 45 24W, T.12S., R.66W., east boundary Sec. 15). Which includes an unnamed tributary from its confluence with Kettle Creek (38 59 06N 104 46 55W, T.12S., R.66W., Sec. 21) upstream to (38 59 14N 104 46 19W, T.12S., R.66W., Sec. 22). Also includes Black Squirrel Creek from the property boundary of the U.S. Air Force Academy (39 00 06N 104 49 00W, T.12S., R.66W., Sec. 18) upstream to (39 02 30N 104 44 38W, T.12S., R.66W., north boundary Sec. 2). Including an unnamed tributary from its confluence with Black Squirrel Creek (39 01 19N 104 46 21W, T.12S., R.66W., Sec. 10) upstream to (39 02 30N 104 45 42W, T.12S., R.66W., north boundary Sec. 3). Which includes another unnamed tributary from (39 01 50N 104 46 20W, T.12S., R.66W., Sec. 3) upstream to (39 02 30N 104 46 03W, T.12S., R.66W., north boundary Sec. 3), excluding approximately 5 ac (2 ha) on the Lefever property (39 00 57N 104 46 33W, T.12S., R.66W., Sec. 9). Also includes an unnamed tributary from the property boundary of the U.S. Air Force Academy (39 00 14N 104 49

3W, T.12S., R.66W., Sec. 18) upstream to 6,700 ft (2,043 m) elevation (39 0 29N 104 48 24W, T.12S., R.66W., Sec. 17). Including an unnamed tributary from (39 0 19N 104 48 55W, T. 12S., R.66W., Sec. 18) upstream to (39 0 30N 104 48 48N, T. 12S., R.66W., Sec. 18). Unit 11 also includes Monument Branch from the property boundary of the U.S. Air Force Academy (39 00 50N 104 49 24W, T.12S., R.66W., Sec. 7) upstream to (39 01 10N 104 48 45W, T.12S., R.66W., east boundary Sec. 7). Also includes Smith Creek from the property boundary of the U.S. Air Force Academy (39 01 36N 104 49 46W, T.12S., R.66W., Sec. 7) upstream to (39 02 24N 104 48 00W, T.12S., R.66W., Sec. 5). Also includes Jackson Creek from its confluence with Monument Creek (39 02 33N 104 51 13W, T.11S., R.67W., Sec. 35) upstream to (39 04 30N 104 49 10W, T.11S., R.66W., Sec. 19). Includes an unnamed tributary from its confluence with Jackson Creek (39 04 12N 104 50 05W, T.11S., R.67W., Sec. 25) upstream to Higby Road (39 04 42N 104 49 40W, T.11S., R.66W., Sec. 19). Also includes Beaver Creek from its confluence with Monument Creek (39 02 52N 104 52 02W, T.11S., R.67W., Sec. 35) upstream to 7,600 ft (2,317 m) elevation (39 03 08N 104 55 32W, T.11S., R.67W., Sec. 31). Also includes Teachout Creek from its confluence with Monument Creek (39 03 44N 104 51 53W, T.11S., R.67W., Sec. 26) upstream to Interstate 25 (39 04 19N 104 51 29W, T.11S., R.67W., Sec. 23). Also includes Dirty Woman Creek from its confluence with Monument Creek (39 04 55N 104 52 34W, T.11S., R.67W., Sec 22) upstream to Highway 105 (39 05 35N 104 51 28 W, T.11S., R.67W., Sec 14).

(ii) Note: Map of Unit 11 follows:

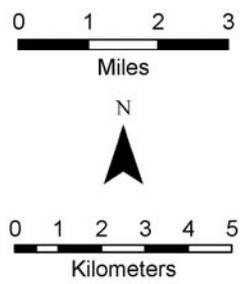
# Critical Habitat for the Preble's Meadow Jumping Mouse

## Unit 11 - Monument Creek



Critical habitat equals the stream plus the following distance outward on each side.

-  110 meters (361 ft)
-  120 meters (394 ft)
-  140 meters (459 ft)
-  Major Roads
-  Municipal Lands



Note: Critical Habitat without name labels are unnamed tributaries.

\* \* \* \* \*

Dated: November 24, 2010

Signed: /s/ Will Shafroth

Acting Assistant Secretary for Fish and Wildlife and Parks

**Billing Code 4310-55-P**

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