

PETITION TO CHANGE THE LISTING STATUS OF CANADA LYNX (*Lynx Canadensis*)
TO ENCOMPASS THE MOUNTAINOUS REGION OF
NORTH-CENTRAL NEW MEXICO



Submitted To: Dirk Kempthorne
Secretary, U.S. Department of the Interior
1849 C Street, N.W.
Washington, DC 20240

H. Dall Hall
Director, U.S. Fish & Wildlife Service
1849 C Street, NW
Washington, DC 20240

Geoff Haskett
Acting Director, Region 2, U.S. Fish & Wildlife Service
P.O. Box 1306
Albuquerque, New Mexico 87103

Mark Wilson
Montana Field Supervisor
U.S. Fish & Wildlife Service
585 Shepard Way
Helena, Montana 59601

Submitted By: Matthew K. Bishop
Western Environmental Law Center
P.O. Box 1507
Taos, New Mexico 87571

On *Behalf* Of:

Forest Guardians
Contact: Nicole Rosmarino
312 Montezuma, Suite A
Santa Fe, NM 87501
(505) 988-9126 (tel.)
(505) 989-8623 (fax)

Sinapu
Contact: Wendy Keefover-Ring
P.O. Box 3243
Boulder, CO 80307
(303) 447-8655 (tel.)
(303) 447-8612 (fax)

Center for Native Ecosystems
Contact: Jacob Smith
1536 Wynkoop St, Ste 303
Denver, CO 80202
(303) 546-0214 (tel.)
(303) 454-3366 (fax)

Animal Protection Institute
Contact: Nicole Paquette
P.O. Box 22505
Sacramento, CA 95814
(916) 447-3085 (tel.)
(916) 447-3070 (fax)

Animal Protection of New Mexico
Contact: Lisa Jennings
P.O. Box 11395
Albuquerque, NM 87192
(505) 286-1546 (tel.)
(505) 265-2488 (fax)

Carson Forest Watch
Contact: Joanie Berde
P.O. Box 15
Llano, NM 87543
(505) 751-4151 (tel.)

Sierra Club, Rio Grande Chapter
Contact: Susan Martin
142 Truman NE
Albuquerque, NM 87108
(505) 988-5206 (tel.)

Date: August 1, 2007

Sent Via: Federal Express (FedEx), Standard Overnight Delivery
to Secretary Kempthorne

U.S. Postal, First-Class, Postage Pre-Paid to the Director,
Region 2 Director, and Montana Field Supervisor of the
U.S. Fish & Wildlife Service

TABLE OF CONTENTS

INTRODUCTION 1

THE PETITION 4

(1) THE *LAW*: THE FWS NEEDS TO CHANGE THE LYNX’S LISTING STATUS TO ENCOMPASS NEW MEXICO IN ORDER TO BRING THE LYNX LISTING INTO COMPLIANCE WITH THE SPECIAL RULE, PREAMBLE TO THE LISTING RULE, DPS POLICY, AND THE ESA 4

 A. Inconsistency with the Preamble to the March, 2000 Listing Rule and Special Rule for Lynx 4

 B. Inconsistency with the 1996 DPS Policy 8

 C. Inconsistency with the ESA 15

(2) THE *SCIENCE*: CHANGING THE LYNX’S LISTING STATUS TO INCLUDE NEW MEXICO IS SUPPORTED BY THE “BEST SCIENTIFIC AND COMMERCIAL DATA AVAILABLE”16

 A. The Lynx Conservation Assessment and Strategy (LCAS)18

 B. A New Peer-Reviewed Paper on Lynx in North-Central New Mexico20

 1. Plausible reasons for the paucity of historic occurrence records of lynx in north-central New Mexico 20

 2. Continuous suitable habitat21

 3. Biogeographic patterns 22

 C. New Baseline Inventory of Small Mammal Prey-Base Communities in Northern New Mexico 22

 D. New Thesis on the Distribution, Habitat Characteristics, and Population Demographics of Snowshoe Hare and Mountain Cottontail in Northern New Mexico 23

 E. New Paper on Summer Habitat Use by Snowshoe Hare and Mountain Cottontail in Northern New Mexico24

F. New List of Mammals of New Mexico 24

G. Biota Information System of New Mexico (BISON). 25

H. The Colorado Division of Wildlife’s (“CDOW’s”) Lynx
Reintroduction Program 25

(3) THE *POLICY*: CHANGING THE LYNX’S LISTING STATUS TO INCLUDE
NEW MEXICO IS NECESSARY TO ENSURE THE SURVIVAL AND
RECOVERY OF LYNX IN THE SOUTHERN ROCKIES 28

CONCLUSION30

LIST OF ATTACHMENTS

- | <u>No.</u> | <u>Description</u> |
|------------|--|
| 1. | Map: Southern Rockies |
| 2. | Map: Biotic Communities of the Southwest |
| 3. | U.S. Forest Service letter (December 29, 2003) and U.S. Fish & Wildlife Service letter (January 2, 2004) |
| 4. | Lynx Conservation Assessment and Strategy (“LCAS”) |
| 5. | Frey, Jennifer. 2006. <u>Inferring species distributions in the absence of occurrence records: An example considering wolverine (<i>Gulo gulo</i>) and Canada lynx (<i>Lynx canadensis</i>) in New Mexico.</u> Biological Conservation 130 (2006) 16-24. |
| 6. | Declaration of Jennifer Frey |
| 7. | Shenk, Tanya. 2001. <u>Post-Release Monitoring of Lynx Reintroduced to Colorado, Annual Progress Report for the U.S. Fish and Wildlife Service (December 2001).</u> Colorado Division of Wildlife (“CDOW”). |
| 8. | Biota Information System of New Mexico (“BISON”), Species Account 050325 (lynx). |
| 9. | Frey, Jennifer. 2003. <u>Checklist of New Mexico Mammals; and Taxonomy and Distribution of the Mammals of New Mexico: An Annotated Checklist.</u> |
| 10. | Malaney, Jason. 2003. <u>Distribution, Habitat Characteristics, and Population Demographics of Snowshoe Hare (<i>Lepus Americanus</i>) at the Extreme Southern Edge of its Geographic Range.</u> A Thesis Presented to the Graduate Faculty of Biology, Eastern New Mexico University. |
| 11. | Malaney, Jason and Frey, Jennifer. 2005. <u>Summer Habitat Use by Snowshoe Hare and Mountain Cottontail at their Southern Zone of Sympatry.</u> Journal of Wildlife Management 00 (0):000-000;200x. |
| 12. | Frey, Jennifer. 2003. <u>Baseline Inventory of Small-Mammal Prey-base Communities on Carson National Forest, New Mexico.</u> A Final Contract R3-02-03-12 Completion Report. Submitted to Carson National Forest. |

13. Shenk, Tanya. 2006. Lynx Fact Sheet. CDOW.
14. Shenk, Tanya. 2005. Summarizing the Number of Lynx Located South of Highway 160. Addendum to the Report “Lynx (*Lynx canadensis*) Use of the Wolf Creek Pass Area along Highway 160, Mineral County, Southwestern Colorado” for: The Colorado Division of Wildlife.
15. Shenk, Tanya. 2005. General Locations of Lynx (*Lynx canadensis*) Reintroduced to Southwestern Colorado from February 4, 1999 through February 1, 2005. CDOW.

INTRODUCTION

Pursuant to section 4 (b)(3) of the Endangered Species Act (“ESA”), 16 U.S.C. § 1533 (b)(3), and 50 C.F.R. § 424.14, the Western Environmental Law Center (“WELC”) hereby submits this petition to change the listing status of Canada lynx (“lynx”) on *behalf* of the following petitioners: Forest Guardians, Sinapu, the Center for Native Ecosystems, Animal Protection of New Mexico, Animal Protection Institute, Carson Forest Watch, and the Rio Grande Chapter of the Sierra Club. With this petition, the aforementioned organizations hereby formally request that the U.S. Fish & Wildlife Service (“FWS”) take *immediate* steps to update and amend the lynx’s listing status to include the mountains of north-central New Mexico.

As you know, the Southern Rocky Mountains do not abruptly end at the artificial Colorado State line. See Attachment (“Attach.”) No. 1 (Map of Southern Rockies); Attach. No. 2 (Map of habitat types in the Southern Rockies). Rather, the Southern Rockies’ San Juan and Sangre de Cristo Mountains – both of which include contiguous suitable habitat for lynx – extend well into north-central New Mexico, as far south as the City of Santa Fe. See id. Indeed, according to the Federal Lynx Biology Team (the best scientific information available) the lynx’s “Southern Rocky Mountain Geographic Area encompasses the mountainous regions of Colorado, south-central Wyoming, and *north-central New Mexico*.” Attach. No. 4 at 4-13 (Lynx Conservation Assessment and Strategy (LCAS)) (emphasis added). Although “no records exist from New Mexico, suitable habitat extends into north-central New Mexico along the Sangre de Cristo mountain range and, especially, in the San Juan Mountains.” Id. at 4-14 ; see also Attach. No. 5 (published, peer-reviewed paper including New Mexico within the lynx’s range).

Given this habitat connectivity in the Southern Rockies, it is no surprise that approximately 81 lynx released into southwestern Colorado's San Juan Mountains by the Colorado Division of Wildlife ("CDOW") have traveled into north-central New Mexico's San Juan and Sangre de Cristo Mountains. See Attach. No. 14; Attach. No. 7; Attach. No. 15. In fact, the CDOW identified a number of travel corridors into New Mexico used repeatedly by more than one lynx, possibly suggesting route selection based on olfactory cues. See Attach. No. 7 at 14. For southerly movements into New Mexico, this corridor is "down the east side of Wolf Creek Pass to the southeast to the Conejos River Valley." Id. Over the last several years, we know that *at least* 6 lynx have been killed in New Mexico. Attach. No. 6 at ¶ 15. And while CDOW recognized that lynx mortalities occurred throughout the recovery area, they determined that "mortalities occurred in New Mexico in higher proportion to all [other] lynx locations." Attach. No. 7 at 14. According to the FWS, lynx mortality in areas where lynx densities are already low, as in the Southern Rockies region, is particularly disruptive. Evidence indicates that when lynx densities are low "incidental or illegal killing can *significantly* affect lynx population dynamics under some circumstances." Science Report at 453 (emphasis added).¹

Despite this fact, i.e., that contiguous, suitable lynx habitat along the Southern Rockies extends into New Mexico, that lynx are traveling into the mountainous region of north-central New Mexico, and that the species is being killed in the State, the FWS still contends the lynx's protective ESA status ends at the Colorado State line.

¹ A copy of the "Science Report," officially titled "Ecology and Conservation of Lynx in the United States," Ruggiero, L. F. et. al., 2000, is available online at: http://www.fs.fed.us/rm/pubs/rmrs_gtr030.pdf.

According to the FWS, “lynx that disperse into New Mexico *are not part of the listed population* and are not subject to section 7 consultation.” Attach. No. 3 (emphasis added); 68 Fed. Reg. 40101 (lynx are only listed in 14 states, excluding New Mexico). “We do not consider lynx recently released into Colorado that strayed into New Mexico as sufficient reason to include New Mexico within the range of native lynx [or listing status] because there is no evidence habitat in New Mexico historically supported lynx.” 68 Fed. Reg. 400083. Pursuant to the FWS’s interpretation, therefore, a radio-collared lynx that chases a snowshoe hare across the state boundary into New Mexico would lose its ESA protection the moment it crosses the state line. Two genetically identical lynx hunting side-by-side in the Southern Rockies’ San Juan Mountains can be treated differently: the lynx on the Colorado side of the boundary would receive full ESA protection while the lynx on the New Mexico side would receive no ESA protection.

Wherefore, the petitioners are hereby compelled to formally request that the FWS take immediate steps to update and change the lynx’s listing status to include the mountainous regions of north-central New Mexico. As outlined below, including the mountainous region of north-central New Mexico within the lynx’s listing status is: (1) required by law; (2) supported by the “best scientific and commercial data available;” and (3) entirely necessary to ensure the survival and recovery of lynx throughout the Southern Rockies.²

² The petitioners still maintain (and firmly believe) that pursuant to the March 24, 2000 listing rule, special rule for lynx, and the FWS’s Distinct Population Segment (“DPS”) Policy, lynx are currently listed as “threatened” throughout the *entire* contiguous United States including New Mexico. See 65 Fed. Reg. 16052 (listing a *single* lynx DPS in the entire contiguous U.S. based on the international boundary with Canada); 50 C.F.R. §§ 17.40 (k)(2), (3) (“[a]ll prohibitions and provisions of 50 CFR 17.31 and 17.32 apply to wild lynx *found in the contiguous United States.*”); 61 Fed. Reg. 4723-24 (DPS Policy) (use of state boundaries to

PETITION

- (1) THE *LAW*: THE FWS NEEDS TO CHANGE THE LYNX’S LISTING STATUS TO ENCOMPASS NEW MEXICO IN ORDER TO BRING THE LYNX LISTING INTO COMPLIANCE WITH THE SPECIAL RULE, PREAMBLE TO THE LISTING RULE, DPS POLICY, AND THE ESA

The FWS’s current position that lynx lose their ESA “protective status” as soon as they travel across the Colorado State line into north-central New Mexico (i.e., that FWS only listed a “14 State lynx DPS” which excludes New Mexico) needs to be changed because it is inconsistent with the special listing rule and preamble to the March 24, 2000 final listing rule, the FWS’s 1996 DPS Policy, and the ESA.

A. Inconsistency with the Preamble to the March, 2000 Listing Rule and Special Rule for Lynx

On March 24, 2000 FWS published its decision to list a single “*contiguous U.S.* Distinct Population Segment (DPS) of the Canada lynx” as threatened under the ESA. 65 Fed. Reg. 16052 (emphasis added); see also Defenders of Wildlife v. Norton, 239 F. Supp. 2d 9, 14 (D.D.C. 2002) (discussing listing history for the lynx DPS).

Specifically, FWS determined the lynx in the contiguous United States: (1) to be discrete from lynx in Canada and Alaska based on the international boundary with Canada; (2) to be significant based on biological and ecological differences between lynx in Canada and lynx in the contiguous United States; and (3) to qualify throughout the contiguous United States for listing under the ESA as a threatened species. See 65 Fed. Reg. 16059-61. On the use of the

demarcate boundary of DPS and divide one biological population is not allowed). However, because the FWS maintains that lynx have no “ESA status” in New Mexico (see 68 Fed. Reg. 40101, Attach. No.3) the petitioners are compelled to submit this formal request to update and change the lynx’s listing status to include the mountainous region of north-central New Mexico.

international boundary with Canada to demarcate the limits of the DPS, FWS explains that in Canada:

[there is no] overarching forest practices legislation . . . governing the management of national lands and/or providing for consideration of wildlife habitat requirements. Additionally, in Canada, lynx harvest regulations . . . vary, being regulated by individual Provinces or, in some cases, individual trapping districts. Therefore, *we conclude that the contiguous United States population of the lynx is discrete based on the international boundary between Canada and the contiguous United States* due to the difference in management of lynx and lynx habitat.

65 Fed. Reg. 16060 (emphasis added).

In fact, when pressed to make distinctions among lynx within the contiguous United States, i.e., among lynx in the Northwest, Southern Rockies, Great Lakes, and Northeastern United States or among lynx within these regions (i.e., on a state by state basis), FWS declined, stating that while each of the four regions are “isolated from each other by expanses of unsuitable habitats that limit or preclude lynx movement between these regions . . . we determined that none of these regions individually constitute significantly unique or unusual ecological settings; therefore, they could not be separated from the contiguous U.S. DPS as a whole.” 65 Fed. Reg. 16060; see also Defenders of Wildlife, 239 F. Supp. 2d at 9 (FWS postulating that distinctions among lynx below the contiguous United States level not be made).

Indeed, during the listing process various states pressed FWS on this precise issue, arguing that they “are in a better position to manage the lynx in the future.” 65 Fed. Reg. 16069. FWS rejected the states’ position, noting that while the lynx’s *historic range* in the contiguous United States may be limited to 14 individual states, the role of FWS, as mandated by the ESA, “is more encompassing than the role of individual States, or even groups of States.” 65 Fed. Reg. 16069. In FWS’s own words, “as a Federal agency, [we are] responsible for coordinating

recovery for a species such as the lynx that *crosses State boundaries* and occupies substantial amounts of habitat on Federal land.” 65 Fed. Reg. 16069 (emphasis added).

Notably, while FWS does discuss 14 individual states within the contiguous United States in the preamble, it does so *only* in the context of describing the lynx’s historic range or occurrences and not as a limitation on the lynx’s listing status. See 65 Fed. Reg. 16052 (lynx historically occurred in 14 States); at 16054 (“lynx range extends” into 14 states); 68 Fed. Reg. 40083 (“New Mexico [is not] within the range of lynx”). It is well understood, that information on a DPS’s historic range or occurrence is separate and distinct from the DPS’s listing status. Information on historic range or occurrences simply “indicates the known general distribution of the species or subspecies as reported in the current scientific literature . . . [and] does not imply any limitation on the application of the prohibitions in the [ESA] or implementing rules.” 50 C.F.R. § 17.11 (e).³

In other words, whether lynx historically occurred in New Mexico is irrelevant to whether lynx receive ESA listing status in the State. The special rule determining threatened status for the contiguous U.S. lynx DPS dictate that lynx receive protective status in New Mexico *even if* (at the time of listing) there was not sufficient evidence to establish that lynx historically occurred in the State. See 50 C.F.R. § 17.11 (e) (information on historic range not a limitation on listing status); 50 C.F.R. § 17.40 (k) (lynx listed in entire “contiguous United States”).⁴

³ With respect to lynx, the author of the March 24, 2000 listing rule and subsequent clarification to the listing rule – Ms. Lori Nordstrom - mistakenly took this information on the lynx’s historic range in the rule (14 states) and used it to demarcate the legal protections or listing status of lynx within the contiguous United States.

⁴ In fact, as outlined below (see Section (2)) there was evidence to include New Mexico within the range of lynx *at the time of listing*. The Lynx Conservation Assessment and Strategy

The preamble to the final listing rule could not be more clear on this point: “We have determined that the contiguous United States population of lynx is a DPS under the Act and warrants listing as a threatened species. This determination, therefore, includes all lynx within the contiguous United States, whether they be transient lynx or resident populations.” 65 Fed. Reg. 16063. This language is also consistent with the special listing rule for lynx. See 50 C.F.R. § 17.40 (k). According to FWS’s regulations, whenever a “special rule in §§ 17.40 to 17.48 applies to a threatened species . . . [t]he special rule will contain all the applicable prohibitions and exceptions.” 50 C.F.R. § 17.31 (c). The special rule for lynx explicitly states that the ESA’s prohibitions apply to all lynx “found in the contiguous United States.” 50 C.F.R. § 17.40 (k).⁵

(LCAS) – the best scientific information available – includes north-central New Mexico within the lynx’s Southern Rocky range. The LCAS *does not* post-date the Final Rule and Clarification. The LCAS is discussed throughout the final listing rule (see 65 Fed. Reg. 16078) and published in August, 2000 – well before the July 3, 2003 Clarification.

⁵ Given *how* the lynx DPS was listed and the repeated references to a “contiguous” or “lower 48” U.S. lynx DPS, it is no surprise that there has been a significant amount of confusion and competing interpretations from members of the public and even FWS staffers about the lynx’s listing status in the contiguous U.S. For instance, in a subsequent clarification to the final rule, a wildlife biologist with the FWS – Ms. Lori Nordstrom – stated that lynx are only “threatened in [14 individual States].” 68 Fed. Reg. 40101. Ms. Nordstrom suggests there is only a 14 State lynx DPS. See id. Yet, in other parts of the clarification, Ms. Nordstrom suggests just the opposite. See id. at 40081 (“we reaffirm our determination in the final rule to list the lynx in the contiguous United States as a single DPS”); at 40082 (“listable entity is the contiguous United States DPS of the lynx”). To rationalize the inconsistency of her statements, Ms. Nordstrom asserts that “[w]e do not include New Mexico within the range of the lynx . . . because we have no evidence [that] habitat in New Mexico historically supported lynx.” 68 Fed. Reg. 40083. Based on this interpretation of *historic range*, therefore, Ms. Nordstrom excludes New Mexico from the “area where listed.” See 68 Fed. Reg. 40101. Yet, Ms. Anne Vandehey (Ms. Nordstrom’s colleague at FWS’s Mountain-Prairie Regional Office) and 12 other members of the Lynx Biology Team state just the opposite: “Suitable habitat extends into north-central New Mexico along the Sangre de Cristo mountain range and especially in the San Juan Mountains.” Attach. No. 4 at 4-14. Once again contradicting Ms. Nordstrom’s conclusions, the LCAS accurately states that: (1) lynx were listed as a single DPS in the entire “contiguous” or “conterminous” U.S.; (2) the discussion about 14 individual States in the Final Rule is limited to

B. Inconsistency with the 1996 DPS Policy

The FWS's current interpretation that lynx are receive protective "ESA status" in 14 individual states (excluding New Mexico) within the contiguous United States is inconsistent, and in direct conflict, with the FWS's own 1996 DPS Policy and needs to be changed.

In giving FWS the authority to list distinct population segments ("DPSs"), "Congress did not define the term 'distinct population segment' and, as the [FWS] has noted, the term is not commonly used in scientific discourse." Maine v. Norton, 257 F. Supp. 2d 357, 376 (D. Me. 2003). As such, after the ESA was amended to include the term DPS, the "question of how to treat populations in listing decisions and in other contexts arose and was the question of considerable discussion and internal debate within the [FWS]." Id. at 377.

One major unresolved issue was the "extent to which political boundaries should be considered in identifying [DPSs]." Id. Some "FWS regions advocated the use of political boundaries 'regardless of their significance to the biology of the species in question,' while others argued that 'such boundaries are usually very artificial and should only be used when they closely approximate natural boundaries separating adjacent populations.'" Id. at 378 n.9.

During the 1980s and first half of the 1990s, therefore, there was significant disagreement and inconsistency over the use of political boundaries in listing DPSs. Some FWS regional offices refused to recognize political boundaries in the listing process, while others used State and even county lines to demarcate the limits of a DPS. Indeed, "prior to 1996, at least two

areas where the lynx was considered "to have been historically resident;" and (3) north-central New Mexico is part of the lynx DPS's "Southern Rocky Mountains Geographic Area." See Attach. No. 4.

dozen [DPSs] were defined solely upon political boundaries” Maine, 257 F.Supp.2d at 383; see also U.S. v. McKittrick, 142 F.3d 1170, 1173 (9th Cir. 1998) (describing pre-1996 wolf listing using State boundaries); Wyoming Farm Bureau Federation v. Babbitt, 199 F.3d 1224, 1236 n. 4 (10th Cir. 2000) (describing use of political boundaries for DPSs listed *before* 1996). As recognized by the Tenth Circuit in discussing pre-1996 DPSs, the “line dividing protected and unprotected (or differently protected) [DPSs] is sometimes an international boundary . . . a state boundary. . . a county boundary . . . a measure of latitude. . . a point on the coast . . . a distance from a coastline . . . or even a point on a river.” Wyoming Farm Bureau, 199 F. 3d at 1236 n. 4. If “an ‘endangered wolf in Wisconsin crosses the [State] border into Minnesota it becomes ‘threatened,’ and therefore has fewer [ESA] protections.” Id.

In response to FWS’s inconsistent and at times arbitrary use of political boundaries in the DPS listing process, and at the urging of the National Academy of Sciences’ National Research Council (NRC), FWS issued a national DPS Policy on February 7, 1996 to “clarify [the Agency’s] interpretation of the phrase ‘distinct population segment of any species’ . . . for the purposes of listing, delisting, and reclassifying species under the [ESA].” 61 Fed. Reg. 4722. FWS’s goal in developing the DPS Policy was simple: to adopt a “clear and consistent” standard for listing DPSs . . . [and a] general policy framework governing the recognition of DPSs that can be disseminated and understood by the affected public.” 61 Fed. Reg. 4723.⁶

Pursuant to FWS’s DPS Policy, three factors *must* now be complied with when listing a DPS. See 61 Fed. Reg. 4725; 68 Fed. Reg. 40081 (DPS Policy “identifies criteria that must be

⁶ For a good overview of the administrative history of FWS’s DPS Policy, see Maine, 257 F. Supp.2d at 377.

met”); National Assoc. of Home Builders v. Norton, 340 F.3d 835, 852 (9th Cir. 2003) (FWS must follow DPS Policy); Defenders of Wildlife v. Secretary, U.S. Department of the Interior, 354 F. Supp. 2d 1156 (D. Or. 2005) (same). First, the DPS must be *discrete* from the other populations of the species. A DPS is only considered discrete if it is either: (1) markedly separate from other populations of the same species as a consequence of physical, physiological, ecological, or behavioral factors; or (2) separated from other populations by international governmental boundaries within which differences in control or exploitation, management of habitat, conservation status, or regulatory mechanisms exist. 61 Fed. Reg. 4725. On the use of international boundaries, FWS explained that, although the “use of international boundaries as a measure of discreteness may introduce an artificial and non-biological element to the recognition of DPS’s,” it nevertheless “appears reasonable for national legislation, which has its principal effects on a national scale.” Id. at 4723. Use of international boundaries also recognizes the “differences [between sovereign national governments] in the management, status, or exploitation of the species.”Id.

The second factor is significance. Once deemed discrete, the DPS must also be significant” to the species to which it belongs (i.e., must live in a unique ecological setting or, if lost, result in a gap in the species’ range). Id. This significance factor was inserted by FWS “in light of Congressional guidance (see Senate Report 151, 96th Congress, 1st Session) that the authority to list DPS’s be used ‘sparingly’ while encouraging the conservation of genetic diversity.” 61 Fed. Reg. 4725. Third, FWS looks at the conservation status of the DPS in relation to the ESA’s standards, i.e., does the population segment (as opposed to the species as a whole) qualify as a threatened or endangered species under the ESA. See 61 Fed. Reg. 4725. All three

of these requirements must be satisfied before a DPS can be listed. See id.; National Assoc. of Home Builders, 340 F. 3d at 842 (FWS’s failure to follow DPS Policy in listing pygmy owl DPS was arbitrary and capricious).

Thus, following issuance of the February 7, 1996 DPS Policy, FWS is now prohibited from using, and no longer uses, political boundaries *below* the international level when listing DPSs. See 61 Fed. Reg. 4725 (discreteness factor). In FWS’s own words, use of “political boundaries other than those between Nations” are inappropriate in delimiting DPSs. Id. at 4724. The “recognition of other political boundaries such as state lines within the U.S. . . . [while an ‘attractive possibility’] would . . . [be] inappropriate as a focus for a National program.” 61 Fed. Reg. 4723, 4724. The ESA “provides no basis” for recognizing State boundaries in the DPS listing process. Id. at 4724. For all *post*-1996 DPS listings, therefore, State or county boundaries cannot be used in the listing process, which is to say they cannot be used to divide a DPS or deprive a DPS of protections under the ESA. Id.; see also 68 Fed. Reg. 15804, 15821 (“cannot use boundary between States to subdivide a single biological population”); 63 Fed. Reg. 69008, 69015 (“DPS cannot be defined by State Boundaries”); 66 Fed. Reg. 22984 (DPS listing cannot be based on State boundaries); 68 Fed. Reg. 11574, 11577 (same); 62 Fed. Reg. 59605, 59613 (“boundary between States” not considered when listing DPS); National Wildlife Federation v. Norton, 386 F. Supp. 2d 553, 564 (D. Vt. 2005) (recognizing DPS Policy’s prohibition on the use of “infra national boundaries”).

Indeed, since adopting its 1996 DPS Policy, approximately 39 DPSs have been listed by FWS. *Not one* of these approximately 39 DPS listings use State boundaries to divide a biological population, delimit the legal boundaries of the DPS, and deprive a DPS of protection under the

ESA. For DPSs listed *before* the 1996 DPS Policy took effect, FWS explains that it will “reevaluate [such DPSs] on a case by case basis” to bring them into compliance with the new DPS Policy, i.e., to do away with the use of State boundaries. 61 Fed. Reg. 4725.

By way of example, FWS recently reevaluated its 1978 gray wolf listing – the species at issue in the Wyoming Farm Bureau case – to bring it into compliance with the 1996 DPS Policy. See 68 Fed. Reg. 15804.⁷ In so doing, FWS stated that the “previous listing of the gray wolf, in which wolves in Minnesota were listed as threatened while wolves in adjacent States, including Wisconsin, are endangered, was done prior to our 1996 [DPS Policy], and that previous listing did not conform to the 1996 Policy.” 68 Fed. Reg. 15804, 15818. FWS acknowledged that it can no longer “use a boundary between States to subdivide a single biological population in an effort to artificially create a discrete population.” Id. at 15821.⁸

Relevant here, in listing the lynx DPS, FWS explains how they followed their DPS Policy: “We follow [DPS] Policy when considering listing a vertebrate species as endangered or

⁷ FWS’s April 1, 2003 reevaluation of the gray wolf was recently enjoined and vacated on other grounds in Defenders of Wildlife, 354 F. Supp. 2d 1156 (D. Or. 2005).

⁸ Use of state boundaries as “boundaries of convenience” or information tools to “facilitate law enforcement and promote public understanding of the [DPS] listing” is still appropriate. 68 Fed. Reg. 15825; App. at 362. Using “boundaries between States . . . that are located *beyond the area currently occupied* by [the DPS, enables FWS] to clearly identify the geographic extent of the DPS listing . . . while avoiding splitting the existing biological unit that [FWS] intend[s] to recover.” 68 Fed. Reg. 15825. To avoid violating the DPS Policy, however, a State boundary of convenience: (1) cannot be used to split or divide one “biological grouping” of a population; and (2) can only be used if the “State boundary incidentally separates two DPSs that are judged to be discrete on other grounds.” See 68 Fed. Reg. 15821; see also e.g., 62 Fed. Reg. 10730 (pygmy owl DPS); National Assoc. of Home Builders, 340 F. 3d 835 (9th Cir. 2003) (referring to the lowland central Arizona pygmy-owl DPS more broadly as the “Arizona” pygmy-owl DPS).

threatened in only a portion of its range. In developing the proposed rule and final rule for lynx, *we used the [DPS] Policy* to evaluate whether the lynx population in the contiguous United States constitutes a DPS under the [ESA].” 65 Fed. Reg. 16059-60 (emphasis added).

Specifically, FWS states that it complied with their own DPS Policy by: (1) determining that “the contiguous United States population of lynx is discrete based on the international boundary with Canada;” and (2) avoiding the use of political boundaries below the international level (i.e., State boundaries) to delimit the DPS. See 65 Fed. Reg. 16060 (applying the DPS Policy factors to the lynx DPS listing); 61 Fed. Reg. 4725 (DPS Policy). We agree.

The problem here, however, is not *how* lynx were actually listed or demarcated as a DPS in the final listing rule, but rather how FWS is currently interpreting and applying the legal limits of the lynx DPS. As outlined above, FWS’s current interpretation of the lynx listing is erroneous because it uses the boundaries of the 14 individual states mentioned in the final rule – including the Colorado State line – to demarcate the legal limits of the lynx DPS. In short, FWS maintains they listed a 14 State lynx DPS as opposed to a contiguous U.S. lynx DPS.⁹ FWS maintains that the boundary of the 14 states and not the international boundary with Canada is the legal boundary of the lynx DPS. As such, according to FWS, if a lynx travels across the Colorado

⁹ To get around the repeated references to a “contiguous” U.S. lynx DPS, FWS contends that use of the term is just short hand for 14 States. By definition, however, the terms contiguous U.S., conterminous U.S. and lower 48 U.S. cannot logically be interpreted to mean only 14 States. Contiguous means “sharing a common border; touching: *the 48 contiguous states.*” New Oxford American Dictionary at 371 (2001) (emphasis in original). Likewise, conterminous means “sharing a common boundary: *the forty-eight conterminous United States.*” Id. (emphasis in original). Also, lower 48 cannot, by any stretch of imagination, be interpreted to mean lower 14.

State boundary into north-central New Mexico (as at least 81 lynx have done so far) they travel “outside the lynx DPS” and lose their protective ESA status.¹⁰

This interpretation not only distorts the final listing rule by using the lynx’s historic range (14 states) as the lynx’s listing status (contiguous U.S.), but also flies in the face of FWS’s own DPS Policy. In order for lynx entering New Mexico to be deprived of ESA protections they would have to be deemed *outside the DPS* and thus “discrete” from lynx in Colorado. This means lynx entering New Mexico would have to either be: (1) markedly separated from lynx in Colorado by some physical, physiological, ecological, or behavioral factors; or (2) separated by an international boundary. See 61 Fed. Reg. 4725; NAHB, 340 F. 3d at 842 (discussing how DPS must be listed). Neither of these two factors apply. Lynx entering New Mexico are not “markedly separated” from lynx in Colorado. On the contrary, they are part of the same biological grouping traveling along contiguous, suitable lynx habitat in the Southern Rockies’

¹⁰ The general rule under the ESA is that all protections afforded to threatened and endangered species go with the individual animal of the species, wherever found. See 16 U.S.C. § 1538 (prohibiting “take” of species wherever found, even on private land); 50 C.F.R. § 17.11 (e) (prohibitions of the ESA “apply to all individuals of the species, wherever found.”); Babbitt v. Sweet Home, 515 U.S. 687, 719 (1995) (same); McKittrick, 142 F.3d at 1173-74 (same). As recognized by the Tenth Circuit, the “protection of individual animals is one [of the] obvious means of achieving [the ESA’s] goal[s].” Wyoming Farm Bureau, 199 F. 3d at 1237. There are, however, two exceptions to this general rule – two instances in which a species will lose its ESA protective status “simply by moving about the landscape.” Id. at 1235. First, a species will typically lose ESA protections if it travels into an “experimental population area” established pursuant to section 10 (j) of the ESA. See 16 U.S.C. § 1539 (j); 50 C.F.R. § 17.80; Wyoming Farm Bureau, 199 F.3d at 1233 (discussing section 10 (j)). This section 10 (j) exception does not apply to lynx. Lynx released into southwestern Colorado “are considered resident lynx [that] *do not qualify as an experimental population* . . . [as such, these] reintroduced lynx are included as part of the listed entity and placed on the list of threatened . . . species.” Id. (emphasis added). Second, a DPS will lose its protective status if it travels *outside the boundaries* of the DPS. See e.g., Wyoming Farm Bureau, 199 F. 3d at 1235 n. 4 (discussing boundaries for various DPSs). In order to determine whether or not a member of a DPS loses its protective ESA status under this exception, therefore, one must first determine the boundaries of the particular DPS.

San Juan and Sangre de Cristo Mountains. See App. at 137 -139 (habitat maps). Nor do such lynx cross an international boundary when entering New Mexico. As such, lynx entering New Mexico are not discrete from lynx in Colorado and are not traveling *outside* the protective lynx DPS. See 61 Fed. Reg. 4725.

FWS's current interpretation of the final listing rule is therefore plainly erroneous because it creates an artificially discrete population of lynx in New Mexico that is in direct violation of its own DPS policy. See e.g., NAHB, 340 F. 3d at 852 (rejecting agency interpretation because it was inconsistent with DPS Policy); National Wildlife Federation, 386 F. Supp. 2d at 564-68 (same); Defenders of Wildlife v. Secretary, U.S. Dept. of Interior, 354 F. Supp. 2d 1156, 1170-71 (D. Or. 2005) (same).

C. Inconsistency with the ESA

The Endangered Species Act ("ESA") is "the most comprehensive legislation for the preservation of endangered species ever enacted by any nation." Tennessee Valley Authority (TVA) v. Hill, 437 U.S. 153, 179 (1978). The "plain intent of Congress in enacting [the ESA] was to halt and reverse the trend towards species extinction, whatever the cost. This is reflected not only in the stated policies of the Act, but literally every section of the statute." 437 U.S. at 184; see also Wyoming Farm Bureau, 199 F. 3d at 1231 (Congress "enacted the [ESA] in 1973 to "provide for the conservation, protection, and restoration, and propagation of species . . .facing extinction."). The ESA's essential purpose is the "conservation of species." McKittrick, 142 F.3d at 1174.

Pursuant to the ESA, the FWS is *only* authorized the listing of an entire species, subspecies, or distinct population segment ("DPS"). See 16 U.S.C. § 1532 (16). Distinctions

below the DPS level “are not allowed under the ESA.” Alsea Valley Alliance v. Evans, 161 F. Supp. 2d 1154, 1162 (D. Or. 2001) (citing Southwest Center for Biological Diversity v. Babbitt, 980 F. Supp. 1080, 1085 (D. Ariz. 1997)). FWS “must include or exclude all members of a distinct population segment, as opposed to only some members of a distinct population segment.” Id. at 1161. “Once a DPS is formed, it [must be] treated uniformly throughout the DPS.” National Wildlife Federation, 386 F. Supp. 2d at 564 n. 9.

With respect to lynx, once FWS unequivocally determined “threatened status for the contiguous U.S. distinct population segment of the Canada Lynx” based on the *international boundary with Canada*, no further distinctions between members of this contiguous U.S. lynx DPS can legally be made. See 65 Fed. Reg. 16059-61 (DPS section of the final listing rule). *All* lynx within the contiguous U.S. must be treated uniformly because they are all part of a single DPS. See Alsea Valley Alliance, 161 F. Supp. 2d at 1163. The FWS’s current interpretation of the final listing rule which makes precisely this type of distinction is therefore plainly erroneous and needs to be immediately updated and amended to include north-central New Mexico. See National Wildlife Federation, 386 F. Supp. 2d at 563 (rejecting Agency’s interpretation because it was inconsistent with the regulations and the ESA); Alsea Valley Alliance, 161 F. Supp. 2d at 1163 (same).

(2) THE *SCIENCE*: CHANGING THE LYNX’S LISTING STATUS TO INCLUDE NEW MEXICO IS SUPPORTED BY THE “BEST SCIENTIFIC AND COMMERCIAL DATA AVAILABLE”

In the Southern Rockies – a high elevation, mountainous area that extends from south-central Wyoming, through Colorado, and into north-central New Mexico – lynx habitat typically occurs in the subalpine and upper montane forest zones, typically between 8,000 and 12,000 feet

in elevation. See Attach. No. 4 at 4-13, 4-15; see also Attach. No. 1, Attach. No. 2 (maps). These forest zones exist throughout the Southern Rockies' San Juan and Sangre de Cristo mountain ranges and into north-central New Mexico. See Attach. No. 2 (habitat map).

At the time of the lynx's listing, however, FWS did not carefully review the forest zones or suitable habitat in northern New Mexico. Instead, FWS focused on historic occurrence records and website lists and, in the end, conceded that very little was known about lynx habitat types and range in the Southern Rockies: The "complexities of lynx life-history and population dynamics, combined with a general *lack of reliable historic or current lynx data . . .* makes it difficult for [FWS] to ascertain the past and present population status of lynx." 65 Fed. Reg. 16054 (emphasis added). Many "[s]tates did not differentiate between bobcats and lynx in trapping records, referring to both as 'lynxcats.'" Id. Additionally, surveys "designed specifically for lynx were rarely conducted, and many reports (e.g., visual observations, snow tracks) of lynx were collected incidental to other activities . . . [making] the *reliability of many of these records unknown.*" Id. (emphasis added). These factors "hamper [FWS's] understanding of lynx population dynamics and status in the United States and preclude [FWS] from drawing definitive conclusions about lynx population trends." Id.

Based on this lack of reliable lynx data and surveys, at the time of listing FWS refused to recognize north-central New Mexico's San Juan and Sangre de Cristo Mountains as part of the lynx's range. See 65 Fed. Reg. 16059. FWS described the lynx's historic range as abruptly ending at the Colorado State line: "Colorado represents the extreme southern edge of the range of lynx." 65 Fed. Reg. 16059. In a subsequent clarification, FWS explicitly excludes north-central New Mexico from the lynx's Southern Rocky mountain *range*:

We do not include New Mexico *within the range* of lynx because we have no reliable records of native lynx occurring in New Mexico.” 68 Fed. Reg. 40083. “Lynx are not included on the list of Mammals of New Mexico (American Society of Mammalogists (ASM) Web site). We do not consider lynx recently released into Colorado that strayed into New Mexico as sufficient reason to include New Mexico *within the range* of native lynx because there is no evidence habitat in New Mexico historically supported lynx.”

68 Fed. Reg. 40083 (emphasis added).

As outlined below, the exclusion of north-central New Mexico from the lynx’s range is no longer considered accurate and has since been corrected by the “best scientific and commercial data” on lynx in the Southern Rockies.¹¹

A. The Lynx Conservation Assessment and Strategy (LCAS)

The Interagency Lynx Biology Team’s (hereinafter “Lynx Biology Team’s”) Lynx Conservation Assessment and Strategy (“LCAS”) was developed “to provide a consistent and effective approach to conserve Canada lynx on federal lands in the conterminous United States.” Attach. No. 4 at 1. The conservation measures presented in the LCAS are “to be used as tools for conferencing and consultation, as a basis for evaluating the adequacy of current programmatic plans, and for analyzing effects of planned and on-going projects on lynx and lynx habitat.” Id.

¹¹ The American Society of Mammalogists (ASM) website list, relied upon in part by FWS at the time of the lynx’s listing to exclude New Mexico, was intended for “Kindergarten-12 teachers and students; the lists are not peer-reviewed documents and are not intended to be used for research or decision making.” Attach. No. 6 at ¶ 9. According to one of the contributors to the list – Dr. Jennifer Frey – the ASM list “was never intended to be a list upon which to base a decision not to include New Mexico within the historic range of Canada lynx. The version of the New Mexico mammal list that the [FWS] used to reach their decision was put together by a beginning graduate student (Ms. Amy Ditto) at the University of New Mexico who had little knowledge or experience with the mammalian fauna of New Mexico. Although two professional mammalogists (myself and Dr. David Hafner) provided advise on certain aspects of the list, the list never received a formal peer review. This lack of peer review is evident by the numerous errors and omissions in the list. In addition to the errors, the list is now seriously incomplete and out of date. Id. Dr. Jennifer Frey goes on to note that the updated ASM list will include Canada lynx on the list of New Mexico mammals.” Attach No. 6 at ¶ 9.

A guiding principle of the LCAS is to use “the best scientific information available about lynx.” Id. Towards this end, in compiling the LCAS, the Lynx Biology Team “relied on information from research throughout the range of the species, recognizing that behavior and habitat use may be different in the southern portion of its range.” Id. The Lynx Biology Team also “incorporated information about the ecology of the primary lynx prey species, snowshoe hare, and an important secondary prey species, red squirrel. Where no information exists, [the Team] made assumptions or inferences, based on the collective experience and professional judgment of team members and other scientists.” Id.

At present, information in the LCAS reveals that FWS’s original findings regarding the lynx’s *range* in north-central New Mexico were incorrect and illogical (lynx habitat does not abruptly end at the Colorado State line). See Attach. No. 4 at 4-14; Attach. No. 1, No. 2 (maps). Rather, it is now well understood that the lynx’s “Southern Rocky Mountain Geographic Area encompasses the mountainous regions of Colorado, south-central Wyoming, and north-central New Mexico.” Attach. No. 4 at 4-14. Although “no records exist from New Mexico, *suitable habitat extends into north-central New Mexico* along the Sangre de Cristo mountain range and, especially, in the San Juan Mountains.” Id. (emphasis added).

According to the Lynx Biology Team, “[u]ntil recently, it was generally assumed that the lynx was an indigenous but uncommon species in the Southern Rockies Mountain Geographic Area” which includes the mountainous region of north-central New Mexico. Attach. No. 4 at 4-13. “However, records are coming to light that paint a different picture. Both Allen (1874) and Cary (1911) indicate that lynx may have been relatively common in Colorado, at least near or prior to the turn of the century. Recently discovered are cumulative records of predatory animals

. . . [u]nlike many trapping records, numbers for bobcat and lynx are separated.” Id. Based on these findings, and due to the reintroduction efforts launched by the Colorado Division of Wildlife (“CDOW”), the Lynx Biology Team states that eventually, “it is assumed and hoped that lynx will reestablish in *all portions* of the Southern Rockies, consistent with historical distribution patterns.” Id. at 4-15.

B. A New Peer-Reviewed Paper on Lynx in North-Central New Mexico

On January 25, 2006 a new, peer-reviewed paper in Biological Conservation was published: Inferring species distributions in the absence of occurrence records: An example considering wolverine (*Gulo gulo*) and Canada lynx (*Lynx canadensis*) in New Mexico. See Attach. No. 5.

Notably, the paper concludes that the “mountains of north-central New Mexico should be considered with the natural range of . . . Canada lynx.” Id. This conclusion was based on consideration of three factors: (1) plausible reasons for the paucity of historic occurrence records; (2) the existence of continuous suitable habitat between the area of interest (i.e., north-central New Mexico) and the localities of reliable occurrence (i.e., southern Colorado); and (3) the absence of biogeographic breaks in the distribution of other organisms with similar evolutionary histories. See id.

1. Plausible reasons for the paucity of historic occurrence records of lynx in north-central New Mexico

According to the peer-reviewed paper, there are numerous compelling reasons for the paucity of lynx occurrence records in New Mexico. These include that fact that: (1) northern New Mexico is a relatively small area at the periphery of the lynx’s range; (2) the biology of lynx

is such that occurrence records are sparse (they are associated with remote high elevation habitats, are difficult to capture, are naturally rare, exhibit solitary behavior, and extensive movements); and (3) there was heavy exploitation of lynx by hunters and trappers prior to any significant biological exploration of the region (often, these trappers did not differentiate between bobcats and lynx, referring to both generally as “lynx cats”). Attach. No. 5 at 20. Lynx were highly valued for their fur and northern New Mexico was a focal point of European activity for more than 450 years. The Taos region became the nucleus for the fur trade in the first decades of the 19th century. Indeed, by the mid-1840’s the trapping era ended due to resource depletion. The first comprehensive study of the mammals of New Mexico, however, did not occur until 1889 to 1924 by Vernon Bailey and colleagues. Id.

2. Continuous suitable habitat

The second factor is the habitat connectivity. As mentioned earlier, habitats associated with occurrence records of lynx in the San Juan and Sangre de Cristo Mountains of Colorado are contiguous with the higher elevations of the New Mexico portion of these ranges. See Attach. No. 5 at 20-21; Attach. No. 1, 2 (maps). In fact there are a number of verified occurrence records of lynx just north of the New Mexico border in contiguous habitat. In total, there are 196 historic occurrence records of lynx in Colorado before the recent reintroduction of Canada lynx into that state. These records include multiple records from the San Juan range including a specimen near Cumbres Pass, Conejos Co., approximately 3 km of the New Mexico border in the San Juan Mountains. Multiple occurrence records for lynx are also available for the Sangre de Cristo range including a skin taken in either the Sangre de Cristo or adjacent Greenhorn Mountains. Given this habitat connectivity, the paper concludes that it is not surprising that lynx being

reintroduced into southwestern Colorado's San Juan Mountains are traveling into north-central New Mexico's San Juan Mountains.

3. Biogeographic patterns

The third reason outlined in the paper for including New Mexico's San Juan and Sangre de Cristo Mountain ranges within the historic range of lynx are the biogeographic patterns. See Attach. No. 5 at 21. To properly assess a species distribution, one must assess the biogeographic patterns of other organisms that have similar environmental requirements as the focal species in question. For example, there are 20 species of mammals in the Southern Rocky Mountains that primarily are associated with conifer forests and tundra zones and that have boreal-cordilleran or cordilleran distribution patterns. Two of these are limited to areas north of the Gunnison Basin in west-central Colorado. However, these range limits are not relevant to the occurrence of lynx in New Mexico because the species has occurrence records on either side of this biogeographic break. See id. Further, all species that occur in the San Juan Mountains also occur in the Sangre de Cristo Mountains except for *Microtus montanus*. See id. Also, with the exception of the lynx and wolverine, *all species* documented from the Colorado portion of the San Juan and Sangre de Cristo ranges also have been verified from the New Mexico portion of those ranges. Thus, there does not appear to be a biogeographic break between New Mexico and Colorado habitats in these mountain ranges.

C. New Baseline Inventory of Small Mammal Prey-Base Communities in Northern New Mexico

On December 31, 2003 a new "Baseline Inventory of Small Mammal Prey-base Communities on the Carson National Forest, New Mexico" was completed for the U.S. Forest

Service. See Attach. No. 12. The purpose of the inventory was to obtain baseline data about small mammal prey-base communities on the Carson National Forest in north-central New Mexico. The inventory documented an abundant and diverse community (21 species) of prey species including, but not limited to, deer mice, meadow voles, least chipmunks, woodrats, western jumping mice, shrews, Colorado chipmunks, western harvest mice, montane voles, and golden-mantled ground squirrels. Id. Relevant here, the survey also includes a “preliminary checklist of the Mammals of the Carson National Forest.” See id. at Appendix 2 (p.45). Both snowshoe hare and lynx are included on the list as a “verified” species “by specimen record or published record to occur on [the Carson National Forest].” Id.

D. New Thesis on the Distribution, Habitat Characteristics, and Population Demographics of Snowshoe Hare and Mountain Cottontail in Northern New Mexico

On November 24, 2003 a new thesis on the distribution, habitat characteristics, and population demographics of snowshoe hare (the lynx’s primary prey species) in northern New Mexico was completed . See Attach. No. 10. The first goal of the study was “to better determine the distribution and habitat associations of snowshoe hare in New Mexico and assess the degree of ecological segregation between snowshoe hare and mountain cottontail . . .at the southern edge of their zone of sympatry. The second goal was to test between the primary productivity and habitat quality hypotheses, which may account for latitudinal gradients in demographic features in snowshoe hare.” Id. at iv.

Based “on museum records, literature records, and surveys” the study revealed that “snowshoe hare were verified as occurring in both the San Juan and Sangre de Cristo

mountains.” See Attach. No. 10 at 15. The surveys provided 29 new records of snowshoe hare in the mountains of north-central New Mexico and “verified the persistence of several populations.” Id. Records of mountain cottontail were also “obtained in the Sangre de Cristo, San Juan, and Jemez mountains. [The] 62 new records [of mountain cottontail] verify the persistence and wide geographic range of this species” in north-central New Mexico.” Id.; see also id. at 16-17 (maps depicting locations where snowshoe hare and mountain cottontail were documented by spotlight and trapping transect surveys).

E. New Paper on Summer Habitat Use by Snowshoe Hare and Mountain Cottontail in Northern New Mexico

On April 11, 2005 a new paper (based, in part, on the results of the thesis mentioned above) was published in the Journal of Wildlife Management entitled: Summer Habitat Use by Snowshoe Hare and Mountain Cottontail at their Southern Zone of Sympatry. See Attach. No. 11. In addition to documenting the presence of snowshoe hare and mountain cottontail populations throughout northern New Mexico’s San Juan and Sangre de Cristo Mountains, the paper notes that “[m]ountain cottontail occupied a broad range of habitats within the subalpine conifer forest zone, which resulted in considerable habitat overlap and syntopy with snowshoe hare.” Attach. No. 11 at 10-11. The paper notes, however, that “snowshoe hare nearly exclusively used high elevation, closed canopy spruce-fir forests with high horizontal foliage cover.” Id.

F. New List of Mammals of New Mexico

After the March 24, 2000 listing, a new list of New Mexico Mammals was published. See Attach. No. 9 (A Checklist of New Mexico Mammals (November 11, 2003) and Taxonomy and

Distribution of the Mammals of New Mexico: An Annotated Checklist). This new list includes lynx within the list of mammals of New Mexico. “Although no specimens are available of the species in New Mexico, it undoubtedly was a member of the fauna . . . It occurred in adjacent areas of Colorado and animals recently reintroduced into the San Juan Mountains in Colorado occasionally enter New Mexico. Its range undoubtedly included the San Juan and Sangre de Cristo Mountains based on its occurrence in contiguous habitat in these ranges in adjacent areas of Colorado (Armstrong 1972).” Id.

G. Biota Information System of New Mexico (BISON)

The New Mexico Game and Fish Department’s “Biota Information System of New Mexico” or “BISON” was developed for wildlife biologists and contains “accounts for all vertebrate and many invertebrate species of wildlife occurring in New Mexico.” Attach. No. 8. With respect to lynx, BISON states that the species “almost certainly occurred in New Mexico in [the] San Juan and Sangre de Cristo Mountains but there are no specimens and no verified reports.” Id. The lynx “was extirpated [in New Mexico] before it could be verified.” Id.

H. The Colorado Division of Wildlife’s (“CDOW’s”) Lynx Reintroduction Program

The mountainous regions of north-central New Mexico are now part of the lynx’s current range in the Southern Rockies thanks to the CDOW’s reintroduction efforts. In an effort to establish and restore a viable population of lynx to the Southern Rockies, the CDOW began releasing lynx into a “core recovery area” in southwestern Colorado’s San Juan Mountains in 1999 (just before the March 24, 2000 listing).¹² Attach. No. 7 at 1. CDOW picked this area

¹² The core lynx recovery area is “the area of the San Juan and Rio Grande National Forests and associated lands above 9,000 feet extending from Del Norte west to Dolores and

because of its outstanding lynx habitat. The San Juan Mountains include relatively large populations of snowshoe hare (the lynx's primary prey), low road densities, and large forested areas of public land. Evidence also indicates that the San Juan Mountains were also historically occupied by lynx. See CDOW's February 1, 2005 Lynx Update (hereinafter "Lynx Update").¹³

The recovery efforts began with the release of 41 lynx in the winter and spring of 1999 and 55 lynx in April and May of 2000. CDOW released an additional 33 lynx (17 females and 16 males) into the San Juan Mountains in April, 2003 and 37 lynx (17 females and 20 males) in April 2004. Id. The lynx were released with dual VHF/satellite radio collars that allow CDOW to monitor their movement and mortality. From 1999-2005, 204 lynx were released into southwestern Colorado's San Juan Mountains. Fourteen additional animals (8 males and 6 females) were released last spring resulting in a total of 218 lynx reintroduced into the wild. See Attach. No. 13 (November 8, 2006 Update and press release).

Notably, in the spring of 2003, CDOW discovered – for the first time – that the released lynx were reproducing in the wild. Six lynx dens and a total of 16 kittens were discovered in southwestern Colorado's San Juan Mountains. Id. During May-June 2004, CDOW found an additional "11 dens and a total of 30 kittens." Id. Recently, CDOW reported the discovery of 46 more lynx kittens – the largest lynx reproduction numbers to date.¹⁴ Field researchers "found 16

north to include the Uncompahgre and Gunnison National Forests in the Gunnison basin (as far north as Taylor Park east to the Collegiate Range)."

¹³ Contemporaneous lynx updates are available at: http://wildlife.state.co.us/species_cons/lynx.asp.

¹⁴ A copy of CDOW's July 12, 2005 press release (as well as photos of the lynx kittens) is available online at: <http://dnr.state.co.us/news/press.asp?pressid=3538>.

litters spread throughout the central and southern mountains.” Id. (CDOW’s July 12, 2005 press release). The new discovery gives CDOW “strong indication that lynx are adopting well to Colorado’s mountains and are again thriving in their historical range.” Id. A total of 37 lynx dens have been found from 2003-2006. Attach. No. 13.

Today, CDOW estimates that there are approximately 138 lynx now living in the Southern Rockies. Id. Of these lynx, CDOW is currently tracking 95 lynx with active radio collars. Id. There are currently 43 “missing” lynx. By missing, the CDOW means that they have not heard a signal from the lynx for at least one year, likely because their collar batteries have died, long distance dispersal, or destruction of the radio. Id. (Lynx update). The CDOW reports that the majority of lynx released remain in the San Juan Mountains – from north-central New Mexico north to Gunnison, west as far as Taylor Mesa and east to Monarch Pass. Id. Lynx released into the core recovery area continue to migrate south along the San Juan Mountains into northern New Mexico. “Telemetry data reveals that at least 28 individual lynx were located at 184 locations in 8 New Mexico counties.” Attach. No. 6 at ¶ 15. Most “telemetry locations were during the summer with a concentration in the San Juan Mountains, although at least one lynx spent the summer of 2003 in the New Mexico portion of the Sangre de Cristos.”Id. The most recent data from the CDOW states that approximately *81 individual lynx* have been located in north-central New Mexico. See Attach. No. 14 (Summarizing Number of Lynx Located South of Highway 160); see also Attach. No. 15 (General Locations of Lynx Reintroduced to Southwestern Colorado from February 4, 1999 through February 1, 2005).

As mentioned earlier, CDOW identified a number of travel corridors used repeatedly by more than one lynx, possibly suggesting route selection based on olfactory cues. Attach. No. 7 at

14. For southerly movements into New Mexico, this corridor is “down the east side of Wolf Creek Pass to the southeast to the Conejos River Valley.” *Id.* Over the last few years, we also know that *at least* 6 lynx have been killed in New Mexico (two were shot near Chama, New Mexico, one was hit by a car, and a cut radio collar was found in a dump near Taos, New Mexico). CDOW recognized that lynx mortalities occurred throughout the recovery area. However, CDOW determined that “mortalities occurred in New Mexico in higher proportion to all lynx locations in that area than elsewhere.” Attach. No. 7 at 14. According to FWS, lynx mortality in areas where lynx densities are low, as in the Southern Rockies region, is particularly disruptive. Evidence indicates that when lynx densities are low “incidental or illegal killing can *significantly* affect lynx population dynamics under some circumstances.” Science Report at 453.¹⁵

(3) THE *POLICY*: CHANGING THE LYNX’S LISTING STATUS TO INCLUDE NEW MEXICO IS NECESSARY TO ENSURE THE SURVIVAL AND RECOVERY OF LYNX IN THE SOUTHERN ROCKIES

As a matter of policy, the FWS’s current interpretation of the lynx listing makes no sense. Based on FWS’s current interpretation of the listing, a lynx that wakes up in Colorado’s San Juan Mountains, goes hunting, and chases a snowshoe hare across the Colorado/New Mexico border would be unprotected for the few hours it chases the hare in New Mexico. Radio-collared lynx that have been reintroduced into southwestern Colorado’s San Juan Mountains could be shot and hunted upon crossing the State boundary into New Mexico. A federally protected species

¹⁵ A copy of the “Science Report,” officially titled “Ecology and Conservation of Lynx in the United States,” Ruggiero, L. F. et. al., 2000, is available online at: http://www.fs.fed.us/rm/pubs/rmrs_gtr030.pdf.

traveling on federal land, i.e., from Colorado’s San Juan and Rio Grande National Forests into New Mexico’s Carson and Santa Fe National Forests, would lose protective “ESA status” simply by crossing the invisible state boundary. This result is as absurd as it is contrary to the very purpose and goals of the ESA.

The purpose of the ESA is to “provide a means whereby the ecosystems upon which endangered species and threatened species depend may be conserved, to provide a program for the conservation of such endangered species and threatened species.” 16 U.S.C. § 1531 (b). It is “further declared to be the policy of Congress that all Federal departments and agencies shall seek to *conserve* endangered and threatened species and shall utilize their authorities in furtherance of the purposes of [the ESA].” 16 U.S.C. § 1531(c) (emphasis added). The term “conserve” means to “use and the use of all methods and procedures which are necessary to bring any endangered species or threatened species to the point at which the measures provided pursuant to [the ESA] are no longer necessary.

Without question, the *only way* to “conserve” lynx in the Southern Rockies to ensure that lynx are protected throughout their range and given room to roam in suitable lynx habitat throughout the Southern Rockies. As explained by Dr. Jennifer Frey, “legal protections for lynx in New Mexico is especially important because lynx originating from releases in Colorado frequently cross the state border into New Mexico where there are no clear regulations affording the species protection.” Attach. No. 5 at 21. The FWS’s current interpretation of the final listing rule would allow these reintroduced, radio collared lynx to be killed and even hunted in north-central New Mexico. And why? According to FWS’s logic, simply because the FWS failed to include north-central New Mexico within the “historic range” of lynx in the final listing rule.

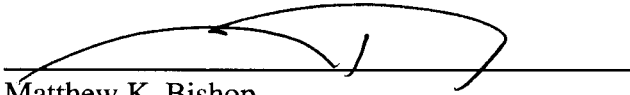
This hyper-technical, legally flawed position is an affront to lynx recovery efforts in the Southern Rockies and the very spirit and purpose of the ESA.

CONCLUSION

In closing, thank you in advance for taking the time to carefully consider and respond to this petition. We sincerely appreciate the opportunity to participate in this and other important decisions affecting the management and status of lynx in the contiguous United States and hope you find this petition to be helpful, informative, and useful in your efforts to comply with the ESA and conserve lynx in the contiguous U.S.. If you have any questions or comments, or wish to discuss the issues raised in this petition in greater detail, please do not hesitate to contact me. Thank you.

Respectfully submitted this 1st day of August, 2007.

WESTERN ENVIRONMENTAL LAW CENTER



Matthew K. Bishop
P.O. Box 1507
Taos, New Mexico 87571
(505) 751-0351 (tel.)
(505) 751-1775 (fax)
bishop@westernlaw.org

On *behalf* of the following petitioners:

Forest Guardians
Contact: Nicole Rosmarino
312 Montezuma, Suite A
Santa Fe, NM 87501
(505) 988-9126 (tel.)
(505) 989-8623 (fax)

Sinapu

Contact: Wendy Keefover-Ring

P.O. Box 3243

Boulder, CO 80307

(303) 447-8655 (tel.)

(303) 447-8612 (fax)

Center for Native Ecosystems

Contact: Jacob Smith

1536 Wynkoop St, Ste 303

Denver, CO 80202

(303) 546-0214 (tel.)

(303) 454-3366 (fax)

Animal Protection Institute

Contact: Nicole Paquette

P.O. Box 22505

Sacramento, CA 95814

(916) 447-3085 (tel.)

(916) 447-3070 (fax)

Animal Protection of New Mexico

Contact: Lisa Jennings

P.O. Box 11395

Albuquerque, NM 87192

(505) 286-1546 (tel.)

(505) 265-2488 (fax)

Carson Forest Watch

Contact: Joanie Berde

P.O. Box 15

Llano, NM 87543

(505) 751-4151 (tel.)

Sierra Club, Rio Grande Chapter

Contact: Susan Martin

142 Truman NE

Albuquerque, NM 87108

(505) 988-5206 (tel.)