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# IN THE UNITED STATES DISTRICT COURT FOR THE DISTRICT OF MONTANA, MISSOULA DIVISION

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ALLIANCE	FOR THE W	ILD ROO	CKIES, )	CV-14-M-272-DLC
NATIVE	<b>ECOSYSTEM</b>	S COU	JNCIL, )	Consolidated with
ROCKY I	MOUNTAIN	WILD,	AND)	CV-14-270-M-DLC
SIERRA CL	UB, INC.,		)	
			)	PLAINTIFFS' RESPONSE/
	Pl	aintiffs	)	REPLY BRIEF
V.			)	

MICHAEL BEAN, in his official capacity as )
Principal Deputy Assistant Secretary for )
Fish and Wildlife and Parks at the U.S. )
Department of the Interior; S.M.R. )
JEWELL, in her official capacity as )
Secretary of the U.S. Department of the )
Interior; and U.S. FISH AND WILDLIFE )
SERVICE, )
Defendants. )

Plaintiffs ("Alliance") submit this brief in support of their argument for summary judgment.

#### I. ARGUMENT

#### A. THE PCEs ARE VAGUE AND INCOMPLETE.

FWS argues that the PCE provide for maintenance and recruitment of winter habitat. FWS at 16. While the PCE address some winter habitat, they address neither maintenance nor recruitment of winter habitat. Moreover, FWS has no way to define or measure—what the "quantity and spatial arrangement" necessary to support lynx "over time," much less identify which forested areas have what it takes and those that do not. FR-5272-73.

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## B. FWS ERRED IN FAILING TO DESIGNATE OCCUPIED CRITICAL HABITAT IN COLORADO.

FWS agrees that Colorado was occupied by lynx at the time of listing, and that the "occupied" critical habitat test applies in Colorado. FWS at 17; FWS further agrees that Colorado "clearly" contains "some, (perhaps all) of the physical and biological features lynx need..." FWS at 18. Therefore, the only issue is whether the PCE are present in "the appropriate quantity and spatial arrangement" to support lynx.

# 1. FWS' USE OF PROXIES TO DISQUALIFY COLORADO IS ARBITRARY AND CAPRICIOUS

As it did in 2009, FWS refuses to base its critical habitat designation on the quantity and spatial arrangement of the PCE in the Southern Rockies. Instead, it continues to apply tests that this Court has already rejected, requiring the population to be sustainable over time and requiring the habitat to be connected to other lynx populations. 79FR54807;79FR54817. FWS also adds other improper tests, requiring historical occupancy, and requiring the Colorado population to contribute to the genetic diversity of other lynx populations. 79FR54794-95;79FR54816-17. Although Colorado does pass these tests, they cannot be used as proxies and must be set aside.

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### a. Sustainability

The *Lyder* court rejected FWS' use of the Colorado population's future viability as a proxy. 728 F.Supp.2d at 1137. Nonetheless, FWS uses the same, slightly-reworded test, disqualifying Colorado based on uncertainty whether Colorado can support a self-sustaining lynx population in the long term. *See*, *e.g.*, 79FR54816 (Colorado unlikely to "support lynx populations over time"). Requiring Colorado to demonstrate that it will support a viable lynx population "over time" is just stating that FWS will not designate critical habitat in Colorado until Colorado shows that it will support a self-sustaining lynx population. However, this test does not appear in the ESA, or the PCE definition.

Lyder questioned how FWS could apply its undefined "murky metric" "self-sustainable population" test. Lyder, 728 F.Supp.2d at 1137. The question still remains. FWS acknowledges "that the Colorado population has persisted from its 1999-2006 introduction until the present," 79FR54788, 54817, but claims that the fate of the Colorado population is "uncertain" over time, and suggests Colorado lynx must demonstrate a reproducing population for "the next 20 years" before it can be deemed "successful." Id. FWS now clarifies that the Colorado population will first be eligible for success in 2030.

FWS at 28. However, lynx have already been reproducing for *sixteen years*, and FWS does not explain why it started this 20-year test in 2010.

Requiring Colorado to demonstrate a self-sustaining lynx population "over time," let alone until 2030, is arbitrary and capricious, and violates the ESA and *Lyder*. Under this test, it will be impossible for any occupied Colorado lynx habitat to be designated until at least 30 years after the species was listed (from 2000 to 2030). Therefore, it violates the ESA's clear mandate to designate as critical habitat "the specific areas within the geographic area occupied by the species, at the time it is listed." 16 U.S.C. §1532(5)(A)(i).

Defendants argue that FWS only "analyzed the status of Colorado's lynx population" without *requiring* it to be self-sustaining; and that its critical habitat designation was based entirely on the presence of the PCE. FWS at 28-29. However, FWS contradicts this by admitting that it uses historical and future viability of the Colorado lynx population as "evidence which suggests that these areas may not" contain the PCE in adequate quantity and spatial arrangement. FWS at 25-26.. *Lyder* rejected FWS's attempt to "link this uncertainty to the lack of physical and biological features of Colorado habitat," and this Court should also. *See Lyder*, 728 F.Supp.2d at 1136-37.

Regardless, the best available evidence suggests lynx will persist in Colorado "over time." At least 116 lynx kittens were born from 2003-2006;

Colorado-born lynx have been giving birth to new generations of lynx kittens; and researchers have found high initial post-release survival, followed by long-term survival, site fidelity, reproduction, and recruitment of Colorado-born lynx into the breeding population. SUF¶148-162.

FWS does not explain why the evidence of the population's success is not considered as best available science in determining whether Colorado lynx will succeed over time. Instead, it cherry-picked evidence (e.g., number of original lynx killed) in order to claim that the success of the Colorado population over time remains "uncertain." 79FR54817. But the future viability of any ESA-listed population is never "certain," and cannot be grounds to disqualify Colorado lynx.

## **b.** Historical occupation

FWS has long-acknowledged that "lynx historically occurred in ... Colorado." 65FR16052. However, in an attempt to bolster its "viable population over time" test, FWS now downplays the historic presence of lynx in Colorado, claiming that Colorado has never supported a resident lynx population, and only supported an "occasional lynx" in the past. *See* 79FR54795;54789. FWS thus adds another proxy for habitat quality: "verified evidence suggests that Colorado ...did not historically support a naturally resident lynx population over time." 79FR54788;54794;54817.

The historical presence of lynx is not a test in the ESA or the PCE. This test contradicts the language of the ESA. The statute could have, but does not, direct FWS to designate critical habitat in the specific areas within the geographic area *historically occupied* by the species. Thus, FWS' requirement that critical habitat must have historically supported a lynx population is arbitrary and capricious.

FWS argues it did not use historical occupancy as a proxy, but admits that it used it as "one piece of evidence which suggests that these areas may not contain the physical and biological features essential to the conservation of lynx in adequate quantity and spatial arrangement to support a lynx population over time." FWS at 25-26. Thus FWS admits use of this test as an indicator of habitat quality. But simply adding this new proxy to others that *Lyder* already rejected (*i.e.*, future viability and connectivity) does not make it an appropriate indicator of habitat quality. See 728 F.Supp.2d at 1137.

FWS continues to rely on the unfounded assumption that the supposed inability of Colorado to support a resident lynx population in the past *can only mean* one of two things: "the quantity and/or spatial arrangement of one or more physical or biological features is inadequate," or "the area's distance and relative isolation from other lynx habitats" prevents consistent immigration. 79FR54794. But as *Lyder* explained, other factors such as human-caused

mortalities, rather than insufficient quantity and/or spatial arrangement of the PCE, could very likely be the cause of any sporadic occupancy in the past. *Lyder*, 728 F.Supp.2d at 1137. Regardless, the overwhelming majority of available evidence shows that lynx *have* historically occupied Colorado. SUF¶115-141.

Defendants simply argue that it was reasonable for FWS to rely solely on McKelvey 2000 as the best available science, which uses only verified data. FWS at 6. *Lyder*, however, criticized FWS' exclusive reliance on the 2000 McKelvey study as best available science. 728 F.Supp.2d at 1135-36. FWS does not address this issue, or explain why other historic records were not used as best available science. In fact, the record shows that lynx occurrences in Colorado were likely much higher than previously thought. *See*, *e.g.*, PI-8075.

## c. Connectivity with other populations.

FWS claims Colorado is "unlikely to receive the demographic and genetic exchange thought necessary to maintain a lynx population over time." FWS at 30. However, these connectivity requirements are not contained in the ESA or the PCE, and thus they are invalid tests for designating (or failing to designate) occupied critical habitat. Once it is determined that habitat is

occupied, the only question is whether the habitat contains the PCEs in the appropriate quantity and spatial arrangement.

In fact, *Lyder* squarely held that "it is arbitrary to use proximity to another population as a basis to exclude Colorado as critical habitat lacking the necessary physical and biological features in the designation area." 728 F.Supp.2d at 1138. Thus, FWS' use of connectivity to other lynx populations as a means to exclude Colorado is again arbitrary and capricious.

### d. Essential to the conservation of the species

FWS' use of the connectivity test is related to another error: it applies the *unoccupied* critical habitat test to disqualify *occupied* habitat in Colorado, finding that Colorado "is not essential for the conservation of the lynx DPS." 79FR54817. FWS finds that "[t]he potential contribution of Colorado to lynx recovery does not mean... that the habitat there is essential for the conservation of the DPS." 79FR54817. "In other words, the lynx population in Colorado is beneficial, but not essential, for recovery." *Id.* FWS acknowledges it applied this test to Colorado. FWS at 28. However, since it is undisputed that Colorado was occupied by lynx at the time of listing, the only remaining question is whether the PCEs are present in sufficient quantity and spatial arrangement.

## C. Colorado Contains the PCE in Appropriate Quantity and Spatial Arrangement

#### 1. Colorado habitat contains sufficient snowshoe hare densities

The only actual discussion of the quantity and/or spatial arrangement of the PCE in Colorado is the discussion of snowshoe hare densities. FWS concludes that "[t]he generally low hare densities reported in most cases in what is considered good hare habitat in western Colorado... suggest that even the best potential lynx habitat in the Southern Rocky Mountains is marginal and unlikely to support lynx populations over time." 79FR54817. FWS fails to identify a clear density level that would be sufficient, and ignores or downplays studies that do suggest sufficient hare densities in some areas. The evidence in the record demonstrates that large parts of Colorado contain sufficient snowshoe hare densities to support a lynx population. Therefore, FWS' exclusion of Colorado based on snowshoe hare data fails to articulate a "rational connection between the facts found and the choice made," and is arbitrary and capricious. Motor Vehicle Manufacturers Ass'n of the U.S., Inc. v. State Farm Mutual Auto Ins. Co., 463 U.S. 29, 44 (1962).

#### a. No threshold level

If FWS intends to base its critical habitat designation on snowshoe hare densities, it must clarify how many snowshoe hares are required, and provide a basis for that test. *Lyder*, 728 F.Supp.2d at 1137. FWS fails to articulate a

threshold snowshoe hare density level that specific areas of habitat in Colorado must meet to qualify as critical habitat. FWS at 18.

FWS mentions Ruggiero *et al.*, 2000, which "concluded that a snowshoe hare density greater than 0.2 hares per ac (0.5 hares per ha) may be necessary for lynx persistence." 79FR54817. See also LIT-11438; Lyder at 1133. FWS also cites Steury and Murray 2004, suggesting that hare densities must be in the range of 0.4–0.7 hares per ac (1.1–1.8 hares per ha) for reintroduced lynx populations. Regardless, FWS does not explain which of these density estimates it used, or why it might hold reintroduced lynx populations to a higher standard. Thus, the FWS test for quantity and spatial arrangement of snowshoe hare is arbitrary and capricious, as it excludes Colorado based on an undefined and unattainable metric.

#### b. Snowshoe hare densities

FWS arbitrarily excludes the *entire* Southern Rockies on the basis that it does not contain sufficient densities of snowshoe hare, relying on a series of studies conducted primarily in the central and west-central regions of the state. 79FR54817. However, lynx were reintroduced in the San Juan National Forest in southwestern Colorado. A 1998 pellet plot survey, which FWS ignores, found snowshoe hare densities in the San Juan and Rio Grande National Forests to be 1.24 hares per hectare, a density comparable to that in

the range of lynx in Wyoming, Alberta, and the Northwest Territories. SUF¶170. Moreover, FWS cites Zahratka and Shenk 2008, which finds areas "used by introduced lynx in west central Colorado" to have snowshoe hare densities in the range of 0.03 to 0.5 hares per ac (0.08 to 1.32 hares per ha), which satisfies both density tests articulated by FWS. 79FR54817. Thus, FWS failed to use the best available science as it pertains to snowshoe hare densities in specific areas of occupied lynx habitat in Colorado.

Defendants now attempt to discredit the studies, FWS at 19. However, Dr. Shenk addressed these same arguments. SUF¶172. Regardless, these criticisms of the snowshoe hare studies were not articulated in FWS's rule, and thus cannot be the basis to uphold the rule now. *Fed. Power Comm'n v. Texaco, Inc.*, 417 U.S. 380, 397 (1974).

### 2. Other evidence that the PCEs are present

FWS' previous critical habitat designation explicitly found that "evidence of breeding populations is the best way to verify that the physical and biological features essential to lynx are present in sufficient quantity and spatial configuration to meet the needs of the species." 74FR8640. *see also Lyder*, 728 F.Supp.2d at 1135. Thus, using FWS' own test, the sixteen years of lynx reproduction in Colorado is "the best way to verify that the physical and biological features essential to lynx are present in sufficient quantity and

spatial configuration to meet the needs of the species." 74FR8640. However, FWS fails to even consider this. Next, the Recovery Outline uses the identical PCE (compare 79FR54811-12 with LIT-019377) as the Final Rule, and concludes that Colorado has sufficient quantity and quality of the PCE to support lynx. LIT-019377-78; SUF¶186-89.

Defendants attempt to dismiss all of these documents on a single basis: that the standard for determining whether a species "may be present" under \$7 of the ESA is different than determining "occupancy" for critical habitat. FWS at 23-24. However, that is a red herring, since the occupancy test has already been met in Colorado. Thus, the sole question here is whether Colorado contains the PCE in the "appropriate quantity and spatial arrangement," and FWS states in these documents that Colorado does.

## D. DEFENDANTS' EXCLUSION OF UNOCCUPIED AREAS IS CONTRARY TO THE RECORD

The ESA's definition of "critical habitat" includes the "specific areas outside the geographical area occupied by the species at the time it is listed . . . upon a determination by the Secretary that such areas are essential for the conservation of the species." 16 U.S.C. §1532(5)(A)(ii). Alliance's opening brief identified two categories of areas that should be included here: (1) areas to account for climate change; and (2) certain corridors and linkages between lynx populations.

FWS states these are the same arguments Alliance lost in *Lyder*, but the record here differs from *Lyder*. First, on climate change, the record now contains the expert opinion of Dr. Healy Hamilton, COR000107, and key documents on corridors. PI-006260-261; Alliance at 25-26. FWS claims it knew of "no models that predict specific areas not currently of value for lynx that will become so as a result of climate-induced changes," hence FWS "found no reason to designate critical habitat to account for climate change." FWS at 48. This indicates FWS ignored Dr. Hamilton's declaration in its rulemaking. *See* PI-006202.

Dr. Hamilton has produced multiple geographic range shift models for many ecologically important species, including snowshoe hare and lynx. COR000107. Dr. Hamilton identifies the predicted distribution, current protected areas, and current important linkage areas for lynx in 2090 under two CO<sub>2</sub> emissions scenarios established by the Intergovernmental Panel on Climate Change. *Id.* Dr. Hamilton found significant potential climate refugia for lynx in areas of Colorado, Utah, Wyoming, Idaho and Montana. COR000108. Attachment B to her declaration is specific to western Montana and identifies areas that will be among the remaining habitat and the linkages between these areas. Comparing Attachment B to Attachment C, the FWS's map of critical habitat designation in Montana, shows there are large areas of

projected habitat and linkages in Montana and Idaho that are not included in the FWS's critical habitat designation. COR000109, 111-112. Her study also identifies areas of refuge habitat in Colorado, COR000110, omitted by FWS. *See also* SUF¶95-96; LIT-1437-44.

Dr. Hamilton explains that protecting the projected habitat in the present is important so that it can serve as a climate refuge in the future, and connecting populations across landscapes by protecting key linkages is crucial to the continuing health of this wide ranging, sparsely distributed species. COR000109. FWS's failure to address the Hamilton findings in the rulemaking was arbitrary and capricious because it "entirely failed to consider an important aspect of the problem [and/or] offered an explanation for its decision that runs counter to the evidence before the agency." *State Farm*, 463 U.S. at 43. FWS' arguments that Hamilton's declaration was not "peer reviewed" or not "best available science" are *post hoc* rationalization submitted for the first time in litigation. They do not appear in the record or rulemaking. *See Arrington v. Daniels*, 516 F.3d 1106, 1113 (9th Cir. 2008).

FWS is wrong that because climate change involves science this Court "must be highly deferential" to the agency. FWS at 51. An agency's decision is entitled to a presumption of regularity, "but that presumption is not to shield [the agency's] action from a thorough, probing, in-depth review." *Citizens to* 

Protect Overton Park v. Volpe, 401 U.S. 402, 415 (1971). Because the FWS made no mention of Hamilton in its rulemaking, there is nothing to which this Court can defer on that subject. Or. Natural Desert Ass'n v. Bureau of Land Management, 531 F.3d 1114, 1142 (9th Cir. 2008)("We cannot defer to a void.").

FWS is also incorrect that Alliance has not identified lynx corridors or linkages. FWS at 51 n.17. In addition to the corridors identified by Hamilton, Alliance identifies numerous Forest Service documents in the record that were not in Lyder that identify corridors FWS arbitrarily omitted from critical habitat designation. Alliance at 25-26; SUF¶¶100,233. For example, the Forest Service's 2008 Final EIS on the Southern Rockies Lynx Management Direction lists by name and location 38 linkage areas identified by a federalstate interagency team to "ensure population viability through population connectivity." LIT-021494-98. See also PI-007980; PI-006232-245; PI -006259(ex. gg); PI-0006260-261. The Forest Service also mapped Colorado's potential habitat, breeding habitat, and travel corridors. PI-2575-77. The record here also includes evidence of corridors linking the New Mexico lynx population to the Colorado population. SUF¶100-01,151-53,201,235.

Lyder noted corridors are "key to maintaining a lynx population over the long term," but upheld the FWS's exclusion of corridors linking Canada to Colorado since Alliance did not show that Colorado included the PCEs. 728

F.Supp.2d at 1140. Similarly, FWS's brief discounts Hamilton's corridors

because she allegedly does not indicate what areas will contain the PCE in the

future. FWS at 48. But that is the wrong test: Whether the PCEs exist in an

area is the test for designating occupied areas critical habitat, not unoccupied

habitat, which does not require the presence of the PCEs. Cf. 16 U.S.C.

§1532(5)(A)(i) to (ii). Lyder's other reason for excluding these corridors, that

Colorado allegedly is a "sink population," is also not borne out by the record.

Lynx in Colorado have high survival rates and are populating other areas.

SUF¶¶153,179-180,201.

E. Northern Rockies

FWS arbitrarily discounted evidence of occupancy at the time of listing in

Montana and Idaho. *See* SUF ¶¶212-222.

II. CONCLUSION

Alliance respectfully requests summary judgment against Defendants.

Respectfully submitted this 30th day of October, 2015.

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