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Public Comments Processing, Attn:[FWS-R6-ES-2008-0026]
Division of Policy and Directives Management
U.S. Fish and Wildlife Service
4401 N. Fairfax Drive, Suite 222
Arlington, VA 22203

Re: Comments on the U.S. Fish and Wildlife Service's Revised Critical Habitat for the Contiguous United States Distinct Population Segment of the Canada Lynx (*Lynx canadensis*), Proposed Rule. 73 Fed. Reg. 10,860 (Feb. 28, 2008)

Please accept these comments on behalf of our respective organizations[1] in response to the U.S. Fish and Wildlife Service's ("FWS" or "Service") Proposed Rule for the Revised Critical Habitat for the Contiguous United States Distinct Population Segment of the Canada Lynx (*Lynx canadensis*) ("Proposal"). 73 Fed. Reg. 10,860 (Feb. 28, 2008). Our organizations collectively are supported by more than 600,000 members nationwide, all of whom greatly value America's wildlife, which very much includes the Canada lynx, and very much support the protection of lynx and their habitat in the lower-48 states. The Service maintains in its public presentations that it is not interested in receiving comments from the public that simply exhibit support for protecting lynx and their habitat, yet we remind the Service of this groundswell of support nationwide for the agency to fulfill its duty to protect and restore our nation's precious natural heritage.

We appreciate that the Service is revising its previous lynx critical habitat rule, since the previous rule is clearly deficient under any standard. The reduction of critical habitat in the previous designation to only three national parks, and to zero acres in Maine, makes a mockery of the Endangered Species Act, and is an irresponsible waste of scarce taxpayer-funded dollars and time spent by FWS staff, not to mention the time and resources of countless other agency officials, biologists, conservationists and others who have participated in lynx recovery planning. The resources expended thus far should have been adequate to designate critical habitat, and to complete a lynx recovery plan with biologically based population goals and recovery actions recommended to achieve those goals, yet instead we find ourselves "back to the drawing board" while the lynx continues to await protections.

We support many aspects of this proposal that were deficient in the previous rule. Most important, FWS must comply with its legal obligations to designate Critical Habitat in all areas needed for the recovery of the species, regardless of other mechanisms that may (or may not) protect lynx and

[1] Defenders of Wildlife, Center for Biological Diversity, Center for Native Ecosystems, Colorado Wild, Friends of the Wild Swan, Great Old Broads for Wilderness, Klamath-Siskiyou Wildlands Center, San Juan Citizens Alliance, San Luis Valley Water Protection Coalition, Southern Rockies Ecosystem Project, Swan View Coalition, WildEarth Guardians, and Wilderness Workshop.

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lynx habitat. The Endangered Species Act ("ESA") does not permit the exclusion of lynx habitat from the Critical Habitat designation because of various other management prescriptions related to lynx and its habitat. Thus, we support FWS' inclusion of national forests and other lands regardless of the implementation of the Lynx Conservation Assessment and Strategy,[2] Northern Rockies Lynx Management Direction,[3] or other regulations currently in place (see FWS Point 4 below). We also support FWS's re-insertion of private lands in its proposal, since the biological evidence is clear that some of the most important remaining lynx habitat is on private lands, and to lose these areas as habitat would clearly jeopardize lynx recovery and survival. We also support the inclusion of a significant portion of the Greater Yellowstone area in the revised proposal, since it is clear that this area is important to lynx in the past, present and future, in its own right and also as a linkage to the Southern Rockies lynx population.

Despite these improvements, the revised proposal still fails to meet the basic obligations of the ESA, since it fails to include all areas of occupied and unoccupied habitat that are essential for the recovery of the species. These areas include:

- The entire Southern Rockies range of the lynx;
- Portions of southern Wyoming and eastern Idaho that connect from the Southern Rockies to the Greater Yellowstone area;
- Portions of southwestern Montana and central Idaho that provide dispersal and connecting habitats between Greater Yellowstone and more northerly lynx populations;
- Lynx habitat in north-central Idaho and Idaho Panhandle, and the Salmo-Priest, Little Pend-Oreille, the "Wedge," and the Kettle Range areas in northeastern Washington;
- Those portions of northeastern Minnesota with a known history of lynx reproduction, other Minnesota areas likely to have significant lynx presence (like the Little Fork and Big Fork River drainages); plus other areas south of Duluth to the Wisconsin border, which are essential to connect lynx to suitable habitat in northern Wisconsin and Michigan's Upper Peninsula; and
- Suitable habitat in New Hampshire and Vermont with historical lynx use that will be essential to support a recovered lynx population in northern New England.

The remainder of these comments will describe these and other concerns with the revised proposal in detail, including responses to the fourteen points that FWS specifically requests feedback about. We appreciate the opportunity to comment on this proposal and please contact us for any additional information pertaining to these comments.

Overview of Canada Lynx Habitat in the Contiguous United States

The United States represents the southernmost reaches of the Canada lynx (*Lynx canadensis*). As documented in the proposed rule, breeding populations of lynx are known to currently exist in Maine, Minnesota, Colorado, Montana, Wyoming, and Washington. In addition, recent, verified sightings have

[2] Ruediger, Bill, Jim Claar, Steve Gniadek, Bryon Holt, Lyle Lewis, Steve Mighton, Bob Naney, Gary Patton, Tony Rinaldi, Joel Trick, Anne Vandehey, Fred Wahl, Nancy Warren, Dick Wenger, and Al Williamson. 2000. Canada lynx conservation assessment and strategy. USDA Forest Service, USDI Fish and Wildlife Service, USDI Bureau of Land Management, and USDI National Park Service. Missoula, MT, 2nd edition, August 2000.

[3] USDA 2007. Northern Rockies Lynx Management Direction Record of Decision. U.S. Department of Agriculture Forest Service. National Forests in Montana, and parts of Idaho, Wyoming and Utah., March 2007.

occurred in Michigan, Wisconsin, Idaho, Oregon, and the states surrounding Colorado, primarily New Mexico and Utah. Additional areas with past lynx occurrences that may be suitable and necessary for restoration include New Hampshire, Vermont, and New York. McKelvey, K.S. et al. 2000. Chapter 8: History and distribution of lynx in the contiguous United States. Pp. 207 – 264. In L.F. Ruggiero et al. eds. *Ecology and Conservation of Lynx in the United States*. University Press of Colorado: Boulder, CO, USA. Trapping and other observation data compiled by McKelvey et al. (2000) may provide the best indication of the potential abundance and distribution of a recovered lynx population in the contiguous United States. As recently as the 1970's, significant resident lynx populations were known to occur in Minnesota, Montana, and Washington. These states plus the two other areas known to still support resident lynx populations—Maine and Colorado—should form the core of a national lynx recovery program, with additional habitat secured for dispersal and travel corridors in adjacent states with suitable habitat, with an emphasis on those areas that can connect the current lynx populations.

FWS Point 1. The reasons why we should or should not designate specific habitat as "critical habitat" under section 4 of the Act (16 U.S.C. 1531 et seq.).

When enacting the ESA Congress understood that the loss of suitable habitat was one of the primary factors driving many species toward extinction, and thus designed the ESA to "provide a means whereby the ecosystems upon which endangered species and threatened species depend may be conserved." 16 U.S.C. § 1531(b). To meet this objective, the ESA mandates that FWS designate "critical habitat," for all listed species, based on the best scientific data available, after considering the economic and other relevant impacts of such a designation. *See* 16 U.S.C. § 1533(b)(3). By definition, "critical habitat" includes the "specific areas within the geographical area occupied by the species, at the time it is listed . . . 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," 16 U.S.C. § 1532(5)(A)(i), and unoccupied habitat that is "essential for the conservation of the species." 16 U.S.C. § 1532(5)(A)(ii). "Conservation", in turn, is defined as the means necessary to bring a species to the point it no longer needs the protection of the ESA, 16 U.S.C. § 1532(3) – *i.e.* recover. Congress thus emphasized that critical habitat should not be limited to the minimum amount of habitat necessary for the species' survival, but rather should include enough area for the species to return to healthy population levels.

Specifically, when designating critical habitat, FWS must identify sufficient habitat to provide for the essential life cycle needs of the species, including, but not limited to: Space for individual and population growth and for normal behavior; food, water, air, light, minerals, or other nutritional or physiological requirements; cover or shelter; sites for breeding, reproduction, and rearing (or development) of offspring; and habitats that are protected from disturbance or are representative of the historic geographical and ecological distributions of a species. 50 C.F.R. § 424.12(b)(1)-(5). In addition, the Service must describe the "primary constituent elements" such as "roost sites, nesting grounds, spawning sites, feeding sites, seasonal wetland or dryland, water quality or quantity, host species or plant pollinator, geological formation, vegetation type, tide, and specific soil types." 50 C.F.R. § 424.12(b).

Critical habitat provides several important protections for listed species. For example, pursuant to section 7 of the ESA, each federal agency must insure that any action authorized, funded, or carried out by the agency is not likely to jeopardize the continued existence of a listed species or "result in the destruction or adverse modification" of designated critical habitat. 16 U.S.C. § 1536(a)(2). In meeting this requirement federal agencies must consult with FWS in the early stages of any federal action to ensure that any potential risks to a listed species or critical habitat are adequately considered and

addressed. The consultation process applies to all actions by federal agencies and to all actions with a federal nexus through an approval, permit, or funding, if a listed species or its habitat may be affected by the project. In those instances where a project may harm the species or its habitat, if, after a thorough investigation into the potential effects of the project, FWS determines that "jeopardy" or "adverse modification" may result, the agency will, if possible, suggest reasonable and prudent alternatives to the action that will have a less harmful impact. Also, there are educational and informational benefits associated with the designation of critical habitat, as the designation of critical habitat serves to inform the public about areas that are important for species recovery, and where conservation actions would be most effective. Moreover, the identification of the primary constituent elements can help focus conservation activities. Finally, while the "take" provisions of section 9, 16 U.S.C. § 1538, are not altered as a result of critical habitat designation, it is possible that the existence of critical habitat may be used in an evidentiary manner to support a "take" claim.[4]

FWS Point 2. Specific information on:

- **The amount and distribution of lynx habitat,**
- **What areas occupied at the time of listing and that contain features essential for the conservation of the species we should include in the designation and why that might be so, and**
- **What areas not occupied at the time of listing are essential to the conservation of the species and why that might be so.**

Generally, the Proposal falls well short of providing sufficient habitat necessary to ensure the recovery of the lynx. Under the ESA, FWS must designate all occupied habitat which contains the biological and physical features essential to the conservation of a listed species and may need special management considerations or protections. 16 U.S.C. § 1532(5)(A)(i). Notwithstanding this clear mandate, however, in this instance FWS unlawfully fails to designate large portions of the lynx's occupied range.

A. FWS's criteria for determining "occupied" habitat is overly restrictive

FWS has again proposed critical habitat for those areas that were "occupied at the time of listing [and] currently support the most abundant, reproducing lynx populations in the contiguous United States . . .." 73 Fed. Reg. at 10,873. FWS's limitation of what constitutes occupied habitat finds no support in the ESA's definition of critical habitat, which refers only to "occupied" habitat. Next, the term "occupied" while not defined in the ESA or FWS's implementing regulations, means "'to take up *residence* in: settle in,' 'to hold possession of,' and 'to reside in as an owner or tenant.'" *See* *Home Builders Ass'n of N. Cal. v. United States Fish & Wildlife Serv.*, 268 F. Supp. 2d 1197, 1219 (E.D. Cal. 2003), citing Webster's Third New International Dictionary 1561 (1993) (emphasis in original). On its face, this definition does not contemplate that there are degrees of occupancy; either an individual has occupied the space or it hasn't. Thus, the Service's attempt to require that the area be "occupied" by the most "abundant" populations impermissibly narrows the areas that are considered for designation of critical

[4] *See, e.g., Defenders of Wildlife v. Bernal*, 204 F.3d 920, 930 (9th Cir. 1999) (Fletcher, concurring) (While the section 9 take claim was dismissed for lack of evidence, Judge Fletcher wrote separately to point out that "future cases . . . will be informed by the critical habitat designation" and to state that the court did not "hold that the designation of critical habitat will never having any bearing on actions on private lands within designated habitat.").

habitat. Finally, the ESA does not distinguish between heavily occupied areas and those that are sparsely occupied.[5]

For similar reasons, requiring evidence of a "reproducing lynx population[]" before an area is deemed "occupied," and thus considered for designation, violates the letter and intent of the critical habitat provisions. As demonstrated above, the term "occupy," by definition, does not require that the residing individual be reproductively active to establish occupancy. To the contrary, critical habitat must encompass those habitats that provide for the life cycle needs of the species as identified in 50 C.F.R. § 424.12(b)(1)-(5), and the "primary constituent elements" identified in 50 C.F.R. § 424.12(b), neither of which are limited by reproduction, in fact both are specifically broader. Further, lynx survey protocols can detect the presence of lynx, but not verify their absence or lack of productivity, and therefore may not even identify all areas of active reproduction. Therefore, FWS can not require evidence of active reproduction here.

Similarly, nowhere in the statute or regulations is the concept of whether the existing population is a reproducing one articulated as a criteria that can be used to limit the designation of the area. This makes sense given that the purpose of critical habitat is to provide protections for the areas and habitat types that will allow the species to recover, not a mechanism to draw circles around the last remaining viable populations of a disappearing species.

B. Unoccupied habitat essential to the conservation of the lynx must be designated

The Service has wholly failed to designate unoccupied habitat essential to ensure the species' recovery. Congress directed that critical habitat include "specific areas outside the geographical area occupied by the species . . ., [determined] by the Secretary [to be] essential for the conservation of the species." 16 U.S.C. § 1532(5)(A)(ii). Despite the best available science on the needs of the lynx, FWS failed to determine what currently unoccupied habitat is essential to the survival and ultimate recovery of the lynx asserting that only those areas with the most robust populations of lynx will receive the protection. 73 Fed Reg at 10871. However, to ensure the conservation of the species, FWS must protect sufficient habitat to allow lynx to move between suitable habitat areas as population dynamics and habitat qualities change, thus necessitating the designation of some currently unoccupied habitat. Further, failure to protect currently unoccupied habitat that a recovering lynx population will need to expand its range will arbitrarily restrict the range of the lynx and not permit the species to recover.

The failure to determine what unoccupied habitat is essential to the conservation of the species is improper for several reasons. First, as FWS has stated previously the "[l]oss of suitable habitat for Canada lynx reduces the potential for population growth or recolonization of the lynx and further confines lynx to smaller, more isolated habitat units . . .. Isolation increases the susceptibility of the lynx to human-caused threats, natural stochastic events, and effects of genetic bottlenecks . . .." 63 Fed. Reg. 36,694, 37,005 (July 8, 1998) (Proposal to List the Contiguous United States Distinct Population Segment of the Canada Lynx as a Threatened Species). FWS's approach to the critical habitat designation is directly at odds with this prior determination. Here FWS is doing little more than

[5] It is also important to note that the lynx protocol, which forms the basis of most recent sightings, can only verify lynx presence, it can not verify lynx absence. Its limited application in certain lynx habitats is insufficient to dismiss these areas as unoccupied. Moreover, FWS must establish that the lack of verified lynx sighting are not the result of a lack of survey efforts.

providing protections to a few of the remaining population centers. Rather, critical habitat must be established across a broad geographic range within each of the various regions that support lynx populations in order to reduce the threats of habitat fragmentation at the regional and local levels.

In addition, as a result of the patchiness and temporal nature of suitable lynx habitat, lynx populations require "large boreal forest landscapes to ensure that sufficient high-quality snowshoe hare habitat is available at any point in time and to ensure that lynx may move freely among patches of suitable habitat and among subpopulations of lynx." 73 Fed. Reg. at 10,862; *Id.* at 10,865 ("The overall quality of the boreal forest landscape matrix and juxtaposition of stands in suitable condition within the landscape is important for both lynx and snowshoe hares in that it can influence connectivity or movements between suitable stands, availability of food and cover and spatial structuring of populations or subpopulations") (citations omitted). Indeed, the naturally dynamic boreal forest landscape changes constantly as a result of natural or human-caused disturbances, such as fire, insect epidemics, wind, ice, disease, forest management and the present and growing impacts of global climate change. Thus, FWS must account for those areas of lynx habitat heavily influenced by both localized and broad scale habitat changes by designating areas that, while currently unoccupied, may be able to support lynx as conditions change.

Finally, lynx are long distance dispersers that can potentially travel up to six hundred miles in times of prey scarcity. FWS has previously stated that habitat which appears to support only dispersing lynx is important "because of the possibility lynx could establish a small, local population and contribute to the persistence of the metapopulation." 68 Fed. Reg. at 40,075. Thus, FWS has in fact acknowledged that the protection of currently unoccupied habitat and dispersal habitat is essential to the conservation of the species.[6]

FWS's decision to not include unoccupied habitat that is essential to the conservation of the lynx is thus arbitrary and capricious and contrary to the best available science, in violation of the ESA.

FWS Point 3. Comments or information that may assist us with identifying or clarifying the primary constituent element.

In its discussion of lynx foraging habitat, FWS mistakenly asserts that the Greater Yellowstone Area ("GYA") is deficient, e.g.: "In most cases, lynx home ranges in the GYA will by necessity incorporate habitat that is not typically considered lynx foraging habitat, and is used primarily for travel…." 73 Fed. Reg. at 10,866. A comprehensive survey of snowshoe hare occupancy and densities across the Bridger-Teton National Forest is now underway, and the Wyoming Range is yielding some of the highest snowshoe hare densities in the contiguous United States (Nate Berg, personal communication, Jackson, Wyoming, February 2008). FWS also asserts that hare density estimates are site- and time-specific-- "only applicable for the immediate area and time frame for which the study was conducted" 73 Fed. Reg. at 10,866 – but the same researcher reports that this area of Wyoming consistently outperforms other parts of the state in its productivity of snowshoe hares. FWS acknowledges Wyoming's relative isolation from more northerly lynx populations, so the documentation of breeding lynx in Wyoming as

[6] The final designation states that "[a] secondary consideration is that, in addition to supporting breeding populations, these areas provide connectivity among patches of suitable habitat (*e.g.*, patches containing abundant snowshoe hares), whose locations in the landscape shift through time." 73 Fed. Reg. at 10,873.

recently as the late 1990's provides sufficient evidence that the GYA supports bona fide resident lynx.

In its discussion of lynx denning habitat, FWS fails to incorporate new information on lynx selection of denning habitat at different scales. Some results of this research are described as follows (Nick DeCesare, presentation at the Montana Chapter of the Wildlife Society annual meeting, Missoula, Montana, February 28, 2008).

- A total of 57 lynx dens were analyzed by 2006; current total is 68 dens
- Site level characteristics: 61% downed logs, 19% root wads, 10% boulder field (Garnets), 6% slash, 4% live tree.
- 2 important variables emerged common to these sites:
  - horizontal cover (similar to lynx foraging habitat, see below)
  - downed log volume

Stand level characteristics:

- Age/Structure: 80% mature forest, 13% mid-seral, 5% young, 2% "thin" forest
- Species/Composition: 59% spruce fir, 13% snags.
- Other: 50% canopy closure average; 23 cm dbh average

3 significant variables emerged at the stand level:

- horizontal cover
- high dbh
- spruce fir component

- Landscape scale characteristics: significant variables were distance from edge and topographic position (lynx favor valleys for denning).
- The level of significance of the three scales analyzed decreased from fine to coarse (site = 0.82; stand/area = 0.72; landscape = 0.62), but there was significance at each scale.
- Horizontal cover has emerged as significant in each of the following lynx habitats: den sites, summer use, winter kill sites, winter use.

In its discussion of the effects of compacted snow on lynx habitat quality (73 Fed Reg at 10869), FWS fails to mention that a current lynx/snowmobile study is now underway in northwestern Wyoming (N. Berg, personal communication, February 2008).

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

The ESA dictates that critical habitat include the species' occupied habitat which contains the physical or biological features essential to the conservation of the species and "which may require special management considerations or protection." 16 U.S.C. § 1532(5)(A)(i). FWS's implementing regulations define "special management considerations or protection" as "any methods or procedures useful in protecting physical and biological features of the environment for the conservation of listed species." 50 C.F.R § 424.02(j).

While the definition of critical habitat requires FWS to determine what occupied areas may "require special management," the provision does not allow the exclusion of areas simply because some alternative management prescriptions are already in place. *See Center for Biological Diversity v. Norton*, 240 F. Supp. 2d 1090, 1098 (D. Ariz. 2003) ("CBD") ("FWS [has] been repeatedly told by federal courts that

the existence of other habitat protections does not relieve [it] from designating critical habitat.").[7] As the court in *CBD* explained, the position embraced in the original lynx critical habitat designation by FWS that critical habitat does not need to be designated on areas that it has determined "did not require *additional* special management according for [sic] the definition of critical habitat," 71 Fed. Reg. 66,028 (emphasis added), is "knowingly unlawful" as it violates the plain meaning of the Act, "eliminate[s] a crucial part of the consultation requirements of the ESA, namely the 'adverse modification' prong [and is] in direct contravention of the express purpose of the ESA: to conserve 'the ecosystems upon which endangered species and threatened species depend.'" *CBD*, 240 F. Supp. 2d. at 1100-1102 (citation omitted).

Specifically, in the final designation, FWS relied on the Lynx Conservation Assessment and Strategy ("LCAS") to negate the need for critical habitat on the majority of federal lands. 71 Fed. Reg. at 66,033. However, even if the statute would allow for the existence of an alternative management mechanism to supplant the required critical habitat designation, which it does not, the LCAS is neither the functional equivalent of critical habitat, nor does it provide anywhere close to the same level of protections and therefore could not stand in the place of a critical habitat designation. The stated "overall goals of the LCAS are to *recommend* lynx conservation measures, *to provide a basis for reviewing* the adequacy of [the Forest Service] and [BLM] land and resource management plans with regard to lynx conservation, and *to facilitate conferencing and consultation* under section 7 of the Act." LCAS p. 1 (emphasis added); 71 Fed. Reg. at 66034. The LCAS is used by the federal land management agencies to both inform decisions on specific actions and to guide the revision of land management plans, but fails to provide meaningful protections for the lynx in either role. First, when used outside of the resource management plans, the LCAS is simply a voluntary guidance document that does not specifically prohibit any particular actions which may result in the destruction of lynx habitat. Second, even when the measures are incorporated into management plans, the measures adopted do not carry sufficient weight to prohibit harmful or adverse activities.[8] In contrast, the ESA is designed to provide significant, concrete protections for the areas upon which listed species depend by prohibiting federal agencies from taking or permitting an action that will destroy or adversely modify designated critical habitat.

Moreover, the advantages to the species of a critical habitat designation over alternative management practices are even more pronounced after *Gifford Pinchot*. Simply put, critical habitat has a mandatory recovery component not found in other management regimes, such as the LCAS. In fact, in this situation the LCAS and the federal land management plans that incorporate the standards, should complement – but not provide an excuse to avoid – the critical habitat designation. *CBD*, 240 F. Supp. 2d at 1100 ("So long as they are useful, the more protections the better . . .. The stated purpose [of the

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[7] *See Natural Resources Defense Council v. United States Department of the Interior*, 113 F. 3d 1121, 1126 (9th Cir. 1997) ("Neither the [ESA] nor the implementing regulations sanctions nondesignation of habitat when designation would be merely *less* beneficial to the species than another type of protection.") (emphasis in original); *Middle Rio Grande Conservancy District v. Babbitt*, 206 F. Supp. 2d 1156, 1169 (D.N.M. 2000) (stating that the ESA "compels the designation despite other methods of protecting the species the Secretary [through FWS] might consider more beneficial."); *Conservation Council for Hawaii v. Babbitt*, 2 F. Supp. 2d 1280, 1286 (D. Haw. 1998) (stating that FWS decision not to designate critical habitat because it would offer little additional benefit is not rational.).

[8] Moreover, the available information demonstrates that the Forest Service and BLM are not faithfully implementing the LCAS. For example, FWS notes that the Superior National Forest "excluded certain LCAS standards, guidelines and objectives," 71 Fed. Reg. 66035, and seven other National Forest have yet to incorporate any of the LCAS standards or guidelines into their management plans. *Id.* at 66033.

ESA] is not for some agencies and departments to conserve endangered species; all must do so. Thus, any and every protective method or procedure should be employed to further that purpose."). Indeed, the "Conservation Agreements," which commit the Forest Service and the BLM to abiding by the LCAS prior to the incorporation of the measures into resource management plans, discuss at length that notwithstanding compliance with the LCAS the federal land management agencies must comply with the requirements of the ESA. *See*, *e.g.*, Canada Lynx Conservation Agreement, U.S. Forest Service and U.S. Fish and Wildlife Service (2005) (attached). Therefore, at best, the LCAS is a useful tool which may "guide" federal land managers when making effects determinations pursuant to section 7 of the ESA, 71 Fed. Reg. at 66034, but even in this role, unless an area is designated as critical habitat, potentially harmful projects may be allowed to go forward because the only check that will be in place is the duty of the agency to avoid jeopardizing the species, the more lenient of the section 7 standards. *See* 16 U.S.C. § 1536(a)(2).

FWS Point 5. Whether Tribal lands in the Northern Rockies, Maine, and Minnesota units need to be included as critical habitat pursuant to Secretarial Order Number 3206.

We support exclusion of Tribal lands from the lynx critical habitat proposal for sovereignty reasons.

FWS Point 6. Whether lands the Southern Rocky Mountains contain the physical and biological features that are essential for the conservation of the species and the basis for why that might be so.

FWS must designate critical habitat in Colorado. Identified as a "provisional core" area in the Recovery Outline, this area is clearly inhabited by a breeding population of lynx and contains suitable lynx habitat. Verified historical records of lynx in Colorado date back to the late 1800's. Native lynx were widely believed to be functionally extirpated in the Southern Rockies by the mid-1970s, though reliable reports of native lynx tracks exist into the 1990's. In an effort to restore a viable population of Canada lynx to Colorado, the Colorado Division of Wildlife (CDOW) initiated a reintroduction effort in 1997, with the first lynx released in Colorado in February of 1999. From 1999 to 2007, 218 lynx were released in Colorado. CDOW has intensively monitored the reintroduced lynx and their offspring since the first release in 1999.[9] The results of this monitoring effort to date have demonstrated that the reintroduction effort has resulted in high initial post-release survival, followed by long-term survival, site fidelity, reproduction, and recruitment of Colorado-born lynx into the breeding population. CDOW is engaged in ongoing monitoring to determine whether Colorado can support sufficient recruitment to offset annual mortality for a viable lynx over time.

Here, FWS fails to even attempt to apply its unlawful interpretation of what constitutes "occupied" habitat when defending its decision to avoid designating critical habitat in Colorado. Rather, FWS gives two primary justifications for its decision to avoid designating critical habitat in the Southern Rocky Mountains (in Colorado, Utah and Wyoming). First, the FWS states that, "the Southern Rocky Mountains are disjunct from other lynx habitats in the United States and Canada". (Federal Register,

[9] *See* Shenk, Tanya M. 2007. Post-release monitoring of lynx (*Lynx Canadensis*) reintroduced to Colorado. Period covered: July 1 2006 – June 30, 2007. Wildlife research report, Colorado Division of Wildlife.
These and other reports are available on the Colorado Division of Wildlife's lynx page:
http://wildlife.state.co.us/WildlifeSpecies/SpeciesofConcern/Mammals/Lynx

Vol. 73, No. 40, pg. 10860). Second, FWS states that, "Although Colorado's reintroduction effort is an important step toward the recovery of lynx, we are not proposing revised critical habitat in the Southern Rockies because of the current uncertainty that a self-sustaining lynx population will become established." Neither of the above constitutes acceptable rationale for the Service's failure to designate critical habitat in the Southern Rockies, which currently support a breeding population of Canada lynx.

Whether a population is self-sustaining is not a legitimate rationale for not designating critical habitat under the ESA. Nowhere in the ESA does it state that critical habitat will be designated only in the areas where populations are found to be viable over the long-term. Species that are listed under the Endangered Species Act are, by definition, at risk of extinction, and thus not currently self-sustaining or viable over the long-term. The intent of listing a species under the Endangered Species Act, and subsequent designation of critical habitat, is to address threats to the viability of populations of threatened and endangered species, so that population declines are reversed, and populations are restored to levels that are viable over the long-term, thus recovering the species. Limiting designation of critical habitat only to those areas that contain populations that are currently self-sustaining, would undermine the purpose of the Endangered Species Act, and make it impossible to recover endangered species. Further, determining a population's long-term viability requires long-term monitoring of a number of demographic parameters, and is particularly difficult in the case of rare species. If FWS required that the long-term probability of persistence of a population be determined prior to critical habitat designation, then FWS would be unable to designate critical habitat for the large majority of listed species. In fact, the Recovery Outline states that, "[a]t the present time, there are inadequate methods available to develop lynx population estimates for each of the six core areas. Without methods to assess population size or trends, it is not yet possible to develop demographic criteria for delisting the species." This statement suggests that FWS does not know whether the populations in any of the core areas are viable over the long term. Yet, these six core areas are being proposed for revised critical habitat designation while the Southern Rockies is being excluded from designation as critical habitat because of uncertainty regarding whether the Southern Rockies population will be viable over the long-term. This is clearly arbitrary and capricious. In addition, though there is no conclusive evidence that the reintroduced lynx population in the Southern Rockies will be self-sustaining, there is also no conclusive evidence that they will not.

Further, in the case of listed species, the question of whether or not populations will be self-sustaining is inextricably linked to how such populations are managed, and particularly to how existing threats to the species are addressed. Designation of critical habitat could contribute significantly to the likelihood that the Southern Rockies population will be viable over the long-term. Failure to designate critical habitat may compromise the viability of this population. In the past, critical habitat has often been designated in habitats where populations of a particular species were not self-sustaining at the time of critical habitat designation. This is key to addressing the threats to a species, and making progress down the long road to recovery.

In addition, the USFWS has not sufficiently defined its criteria on which to decide when the Southern Rockies population will become self-sustaining. Although it is stated in the critical habitat proposal that it is uncertain whether this population will become self-sustaining, they do not lay out any measures in the proposal for determining if and when it has done so. Site specific criteria would be in the recovery plan, another of the Secretary's duties as described in the ESA. 16 U.S.C.A. § 1533 (f) (1) states: "The Secretary shall develop and implement plans…for the conservation and survival of endangered species and threatened species listed…unless he finds that such a plan will not promote the conservation of the species." In 16 U.S.C.A. § 1533 (f) (1) (B), it says the Secretary shall "incorporate in each plan—(i) a

description of such site-specific management actions as may be necessary to achieve the plan's goal for the conservation and survival of the species," and "(ii) objective, measurable criteria which, when met, would result in a determination, in accordance with the provisions of this section, that the species be removed from the list." As of yet, no such plan has been developed for the Canada lynx in the contiguous United States.

The USFWS has, however, come up with a recovery outline. The purpose of this outline is to guide recovery efforts and "inform the critical habitat designation process for the contiguous United States population of the Canada lynx" until the draft recovery plan is developed. The recovery outline states the Southern Rockies region is a "provisional core" area but, again, gives no criteria for it to become a core area. The outline defines a core area as one with "both persistent verified records of lynx occurrence over time and recent evidence of reproduction." The reason the Southern Rockies are a provisional core is because, again, the population can not yet be determined whether it is a self-sustaining.

The recovery outline does, however, go into detail about the next category listing which is called "secondary areas." These areas are classified as areas with historical records of lynx but no evidence of reproduction or no recent surveys recording presence of lynx or reproduction. The outline continues to say that "[i]f future surveys document presence and reproduction in a secondary area, the area could be considered for elevation to core." So, the provisional core of the Southern Rockies region is provisional because it is not yet proven to be self-sustaining even though there is evidence of presence and reproduction of Canada lynx. Yet, the criteria of presence and reproduction are the basis for which a secondary core area could be elevated to core. Therefore, the USFWS is being inconsistent and has not clearly defined the criteria for what it means for the Southern Rockies to be self-sustaining.

Interestingly, the recovery outline also states "[a]t the present time, there are inadequate methods available to develop lynx population estimates for each of the six core areas. Without methods to assess population size or trends, it is not yet possible to develop demographic criteria for delisting the species." So, no habitat in the Southern Rockies region is going to be designated because it is not known if the populations are viable; yet, as seen here, the USFWS does not have a clear idea about the populations in any of the core areas.

In D.C. "Jasper" Carlton v. Babbitt, Biodiversity Legal Foundation v. Babbitt, the court found the USFWS decision not reclassify the Selkirk grizzly population as endangered arbitrary and capricious because they "failed to sufficiently explain how they exercised their discretion with regard to the statutory listing factors and drew conclusions that cannot be supported by the evidence in the record." Similarly, the USWFS in the current case is acting in an arbitrary and capricious manner because they have failed to adequately define the guidelines by which the Southern Rockies lynx population can be defined as self-sustaining.

Similarly, the ESA contains no provision for eliminating habitat that supports disjunct populations of a species as critical habitat. Disjunct populations may contribute to species persistence through a number of mechanisms, and FWS has often designated critical habitat in areas that support disjunct populations in the past. Further, lynx can move long distances, and the FWS has not clearly established that the Southern Rockies population is actually isolated from populations further North.

In addition, Section [1533] (b)(2) states that the Secretary may only exclude portions of habitat 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." The USFWS does not state anywhere that they have compared the benefits of this exclusion against the risks and have found the benefits to outweigh the risks.

According to the FWS's own definition, the Southern Rockies contains habitat that meets the criteria for critical habitat designation. FWS uses the following criteria to determine which areas may be appropriate for critical habitat designation: 1) the area was occupied by lynx at the time of listing; 2) there is strong evidence that lynx are currently widely distributed throughout area; 3) breeding and recruitment have been recorded in several locations; 4) boreal forest with primary constituent elements are present in that unit; 5) the area seems to support the highest density of lynx for that region; and 6) the habitat is in need of special management. The Southern Rockies unit fits all six of those criteria.

The reintroduction effort started in Colorado in 1999 so there were definitely documented animals present at the time of listing. Because the reintroduction effort began before the actual listing, this effort does not officially fall under the ESA. Even so, it is unclear how many animals were in the area before the reintroduction effort began. The last legal taking was recorded in the winter of 1973 to 1974. However, evidence of native lynx had been recorded as late as 1998. Thus, there is a strong indication that lynx did inhabit the southern Rockies in Colorado at the time of listing.

There is also strong evidence that lynx are widely distributed throughout the southern Rockies region. The most recent report on the status of the lynx reintroduction effort suggests that lynx are well distributed throughout large parts of Colorado, and have also dispersed into Utah, Wyoming, New Mexico, Nebraska and Montana. The Southern Rockies geographical area is mainly in Colorado, extending into northern New Mexico and southern Wyoming. Thus, there is evidence that the lynx populations are distributed throughout this region.

Within the Southern Rockies unit, breeding and recruitment have been documented at multiple locations, and over several years. It is also likely that there are undocumented births by females that are no longer being tracked or were born in Colorado and have never been collared. In the recovery outline put out by the USFWS, they state that boreal forest habitat able to support Canada lynx populations extends down into the southern Rockies. Although this habitat is patchier in the southern extent, the boreal forests in the southern Rockies are indeed comprised of the primary constituent elements essential to lynx recovery. These elements are: "(1) Boreal forest landscapes supporting a mosaic of differing successional forest stages and containing: (a) Presence of snowshoe hares and their preferred habitat conditions…; and (b) Winter snow conditions that are generally deep and fluffy for extended periods of time; and (c) Sites for denning that have abundant coarse woody debris…" The Canada Lynx Conservation Assessment and Strategy verifies the presence of all these elements within the Southern Rocky Mountains of Colorado. Therefore, the Southern Rocky Mountains do have boreal forest habitats consisting of the primary elements necessary for lynx conservation.

Finally, the Southern Rockies region, especially the core reintroduction area, is in need of special management. The Canada Lynx Conservation Assessment and Strategy details several risk factors particular to lynx in the Southern Rocky Mountains. These include fire exclusion, grazing, recreational uses, and predator control only to name a few. In the 2003 report "Lynx Conservation in the Southern Rocky Mountains: Agency Neglect Threatens Lynx Recovery," Center for Native Ecosystems (CNE) and other Southern Rocky regional non-profit groups outline several promises made by the U.S. Forest Service and the Bureau of Land Management to conserve lynx populations on federal lands. Many of these promises were made through the signing of the "Lynx Conservation Agreement" in 2000 by both of these agencies. With these promises in mind, the USFWS stated in its 2000 Biological Opinion that

the management strategies of these agencies would not jeopardize lynx survival. However, at the time of CNE's report, neither agency had fulfilled several of its promises. As eighty-two percent of land in the Southern Rocky Mountains is federal land, this habitat is definitely in need of the added critical habitat protection.

There are a number of additional reasons why lynx habitat in the Southern Rockies meets the criteria for critical habitat designation. First, the Southern Rockies contains no less than eight percent of the remiaing lynx habitat in the contiguous United States. Second, given that the Southern Rockies population is distant from other populations in the contiguous U.S., and occupies somewhat different habitat, its population fluctuations (due to environmental stochasticity or catastrophes) may be asynchronous with those of more connected lynx populations, and thus may help reduce the risk of extinction due to environmental stochasticity or catastrophe. Third, habitat in the Southern Rockies constitutes an important component of the historic geographic and ecological distribution of the species. Fourth, lynx can disperse over long distances, and may persist as a metapopulation, and the Southern Rockies population may contribute to metapopulation persistence through a number of mechanisms. Finally, Emerging theoretical work and empirical evidence suggests that populations at the margin of species' geographic ranges may make a larger contribution than previously thought, to species persistence, among and within-population genetic diversity, and local ecosystem structure and function.

Designating critical habitat in the Southern Rockies would positively contribute toward ensuring the long-term viability of the Southern Rockies lynx population, and therefore would contribute toward the long-term survival and recovery of the species. Colorado contains no less than eight percent of remaining lynx habitat in the contiguous United States. Critical habitat designation would be an effective regulatory mechanism to address several of the most critical factors affecting lynx survival in the Southern Rockies as well as several of the greatest sources of habitat fragmentation, degradation, and loss.

It is clear that the remaining suitable lynx habitat in Colorado must be protected because it has been, and will continue to be, impaired by a variety of human activities. Colorado Division of Wildlife data indicates that human-caused mortality accounts for 30.6% of all lynx mortality in the Southern Rockies . This includes significant mortality from motor vehicle collisions. As the regional population continues to grow and its concomitant infiltration into the mountain habitat of the lynx continues, pressures on lynx habitat and the opportunities for human disturbance of lynx and their habitat will only grow. As development, including infrastructure to support oil and gas drilling and development associated with ski area expansion, continues to encroach on lynx habitat in the Southern Rockies, the opportunities for collisions with vehicles and other human-related mortality will only grow. As development continues to encroach, the secondary negative effects such as increased access to lynx habitat for competitors like coyotes will only grow.

Critical habitat designation offers the opportunity to appropriately scale, refine, and redirect such future development to maintain the viability of the most crucial segments of habitat and minimize its contribution to individual mortality as well as habitat fragmentation, degradation, and loss. Currently, a significant amount of new development activity is approved in lynx habitat, even after consultation under Section 7 of the ESA, which is incompatible with maintaining habitat usability and viability. This indicates that the current mechanisms available to effect preservation of crucial habitat for lynx in the Southern Rockies are inadequate. Given the nature and magnitude of the primary threats to lynx habitat in the Southern Rockies, such as logging, conversion through residential and industrial development, and fragmentation and degradation from roads, we must take a landscape-level approach to identifying

and protecting the most important patches of core lynx habitat in the Southern Rockies while also having the ability to significantly mitigate or deny truly inappropriate activities in those crucial patches. Critical habitat allows us to do both by providing the appropriate standard of consideration for habitat viability in the appropriate locations.

Colorado contains no less than eight percent of remaining lynx habitat in the contiguous United States, and it is clear that the remaining suitable lynx habitat in Colorado must be protected as it has been, and will continue to be, impaired by a variety of human activities.[10] For example, the increased interest in skiing poses an increasing threat to lynx in Colorado. Kelley, J. 2006. Number of visits piling up at Colorado's ski resorts. *Rocky Mountain News*. March 14, 2006. Snow sports are noted throughout the LCAS as one of the primary causes of lynx habitat degradation. The compaction of snow that results from winter activities, such as skiing and snowmobiling, effectively removes the lynx's morphological advantages in deep snow and provides access to potential competitors into areas they would normally be unable to infiltrate.

FWS Point 7. Whether lands in any unoccupied areas, such as the "Kettle Range" in Ferry County, Washington, are essential to the conservation of lynx and the basis for why that might be so.

Comments by lynx researcher John Weaver submitted to FWS in response to its previous proposed rule indicate that 57 lynx were trapped in the Kettle Range during the course of three years just over three decades ago (1969, 1975, and 1976), compared to just 32 lynx trapped elsewhere in Washington State during those same three years. Weaver also reports that lynx were trapped or shot as recently as 2001 in British Columbia within 15 miles of the Washington border, and that this area is considered to be high quality lynx habitat. Given the dramatic effects that trapping can have on the occupancy of suitable lynx habitat like this, FWS should broaden its CH designation to include this and other areas where significant numbers of lynx have been trapped since the mid-20th century.

Ongoing research by Gary Koehler and others with the Washington Department of Wildlife is consistent with Weaver's findings that the Kettle Range provides suitable habitat to support resident lynx, that the extirpation of lynx from the area was likely due to overtrapping, that there are barriers to dispersal from Canadian lynx populations that explain its lack of recolonization, and emphasize the area's importance due to fires and other disturbances in other areas of lynx habitat in northeastern Washington. Similarly, habitat and connectivity mapping by the U.S. Forest Service highlight the value of the Kettle Range for lynx, and provide evidence for connectivity between disjunct habitats along the Washington/Canada border that represent the best hope for long-term lynx recovery in the U.S. Pacific Northwest.[11]

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[10] *See, e.g.*, 68 Fed. Reg. 40076 (July 3, 2003) (Notice of Remanded Determination of Status for the Contiguous United States Distinct Population Segment of the Canada Lynx) at 40,093 (acknowledging that in the "Southern Rocky Mountains 77 percent" of lynx habitat is in "developmental allocations," and that "[a]ctivities that may be detrimental to lynx or lynx habitat, such as some timber harvest regimes and fire suppression, can occur in developmental allocations"); *id*. at 40,097 (acknowledging that "[i]n local areas, lynx may be negatively influenced by high traffic volume on roads that bisect suitable lynx habitat and associated suburban developments that contribute to the loss of habitat connectivity" and that this risk is "higher" in Colorado than elsewhere).

[11] *See* Singleton, Peter H.; Gaines, William L.; Lehmkuhl, John F. 2002. Landscape permeability for large carnivores in Washington: a geographic information system weighted-distance and least-cost corridor

FWS Point 8. How the proposed boundaries of the revised critical habitat could be refined to more closely circumscribe the boreal forest landscapes occupied by lynx. Refined maps that accurately depict the specific vegetation types on all land ownerships are not readily available. We are especially interested in this information for the Greater Yellowstone Area unit.

The proposed 4000' elevation boundaries west of the Continental Divide in the N. Rockies and east of the Cascade Crest in the Northwest are not well justified or practical to implement and enforce. We suggest expanding these proposed boundaries to the nearest administrative border for simplicity and efficiency, and site-specific biological input will ensure that only functional lynx habitat in those areas will trigger a review for lynx impacts.

The Greater Yellowstone boundaries seem to be arbitrary and biased toward political rather than biological boundaries. Grand Teton National Park is excluded, despite a verified sighting within the park this past winter (Nate Berg, Kerry Murphy, personal communications, December 2007). The Caribou-Targhee National Forest is omitted, as is the Madison Range on the Gallatin National Forest, and the southeastern portion of the Bridger-Teton National Forest, despite the designation of these areas as "occupied lynx habitat" by the U.S. Forest Service (USDA Forest Service Northern Rockies Lynx Management Direction, March 2007).

FWS Point 9. Whether our proposed revised critical habitat for the lynx should be altered in any way to account for climate change.

Climate change provides added justification for FWS to designate large areas of critical habitat, including travel corridors between core habitat areas to accommodate changes in suitable habitat over time. FWS mistakenly assumes that we may expect a shift northward: "any northward shifts in range would likely move the species and its suitable habitat into Canada." 73 Fed. Reg. at 10,867. Climate models indicate that Canadian habitat may be more at risk than the U.S. Rockies, especially lower elevations in Canada, since the climates of those areas are likely to change faster due to small increases in temperature. This underscores the importance of protecting lynx habitat in the contiguous United States as potential refuges against climate change effects.

A recent study on the effects of climate change on mesocarnivores concluded that a precautionary approach is warranted (Carroll 2007):[12]

> "The strong impact of climate change in the results imply not that conservation action to address other threats will be useless, but that it is essential to move toward more precautionary management of populations that may today still appear robust. Unless steps are taken now to begin more regionally coordinated management of these species, they may also suffer a range contraction in areas that are now considered the core of their regional range (Gaspé for the lynx, northern Maine for the marten). A key

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assessment. Res. Pap. PNW-RP-549. Portland, OR: U.S. Department of Agriculture, Forest Service, Pacific Northwest Research Station.

[12] Carroll, Carlos. 2007. Interacting Effects of Climate Change, Landscape Conversion, and Harvest on Carnivore Populations at the Range Margin: Marten and Lynx in the Northern Appalachians. Conservation Biology 21(4):1092–1104.

component of a precautionary management strategy will be improved monitoring of the response of populations to climate change and other stressors and an adaptive management policy concerning trapping harvest and habitat conservation." (p. 1103)

FWS Point 10. Whether the proposed revised critical habitat designation for the lynx should include private lands, or whether the proposed Federal lands are sufficient to conserve lynx.

The designation of critical habitat on private lands should not even be a matter of debate, since without these areas lynx would have no habitat at all in Maine, plus private lands comprise a significant portion of the area occupied by lynx in Montana's Swan Valley. The loss or destruction of these areas would have devastating effects on the future of lynx in these areas.

Despite this, pursuant to section 4(b)(2) of the ESA, FWS excluded all non-federal land from the lynx critical habitat designation. 71 Fed. Reg. at 66,036-51. The ESA requires that critical habitat must be designated on the basis of the best available scientific data after taking into account "the economic impact, and any other relevant impact, of specifying any particular area as critical habitat." 16 U.S.C. § 1533(b)(2). Under this provision, the Service may exclude an area from critical habitat if "the benefits of such exclusion outweigh the benefits of specifying such area" as critical habitat, unless the failure to designate the area will result in the extinction of the species. *Id.* FWS's implementing regulations specify that when conducting this analysis, the Service must "identify any significant activities that would either affect an area considered for designation as critical habitat or be likely to be affected by the designation, and . . . consider the probable economic and other impacts of the designation upon proposed or ongoing activities." 50 C.F.R. § 424.19.

FWS utterly failed to conduct a meaningful comparison of the benefits of including or excluding the various areas of lynx habitat. Most notably, FWS grossly underestimated the conservation benefits of critical habitat, and over-estimated the patently speculative benefits that the species might receive from future actions taken by State and private entities if critical habitat is not designated. FWS's decision process on this issue appears to have been tainted by the improper political interference of former Deputy Assistant Secretary McDonald. An FWS employee working on the critical habitat rule reported that "the project team felt that to continue to move the package forward …, that Ms. MacDonald would want to hear that areas of habitat mapped and proposed as critical could be removed later if suitable lynx management plans were developed ...." Memorandum from Regional Director, Region 6, Fish and Wildlife Service, to Director, Fish and Wildlife Service (July 21, 2007). The same employee "had the impression that if a large landowner (whether private or governmental) felt that Canada lynx critical habitat designation would adversely impact their current land use, a verbal promise to manage for Canada lynx was enough to have their land removed from the designation." *Id.* Consequently, FWS has not properly "balanced" the benefits of exclusion as compared to designation, rendering its 4(b)(2) exclusions unlawful.

FWS unquestionably failed to consider objectively the recovery benefits of designating critical habitat. *See Gifford Pinchot*, 378 F.3d at 1070 ("[T]he purpose of establishing 'critical habitat' is for the government to carve out territory that is not only necessary for the species' survival but also essential for the species' recovery."). Pursuant to section 7 of the ESA, each federal agency must insure that any action authorized, funded, or carried out by the agency "is not likely to . . . result in the destruction or adverse modification" of designated critical habitat. 16 U.S.C. § 1536(a)(2). As noted above, the critical habitat provisions, and the associated prohibition against the adverse modification or destruction of

designated habitat, are central to the Act's objective of recovering imperiled species. Yet, despite this significant protection, specifically crafted by Congress, FWS continues to ignore the plain language of the Act by undervaluing or dismissing entirely the role critical habitat plays in securing the species' habitat, and thus in assuring the species' ultimate recovery. Indeed, rather than fully exploring the conservation benefits of critical habitat, FWS limits its discussion of benefits to a perfunctory and vague discussion of educational benefits. 71 Fed. Reg. at 66,037. This discussion does not evidence a lawful consideration of recovery benefits, as highlighted by FWS's claim that the benefits of a critical habitat designation are "limited." *See, e.g.*, *id.* at 66,039 (discussing the benefit of including lands managed for commercial forestry in Maine); *CBD v. BLM*, 422 F. Supp. 2d at 1146 ("[R]eferences to 'conservation' in the proposed and final rules cannot be squared with the reasoning in the final rule which essentially equates 'jeopardy' and 'adverse modification' determinations to conclude that the regulatory benefits of critical habitat in the excluded areas was negligible."). The Service therefore has failed to properly consider the "benefits of specifying such areas as part of the critical habitat." 16 U.S.C. § 1533(b)(2).

Furthermore, it is untenable for FWS to provide a cursory acknowledgement of the conservation benefit of critical habitat – as emphasized in *Gifford Pinchot* – only to dismiss its importance in the species' recovery simply because consultation will occur even absent designation. *See Ctr. for Biological Diversity v. Bureau of Land Mgmt.*, 422 F. Supp. 2d 1115, 1146 (N.D. Cal 2006) ("*CBD v. BLM*"); *Home Builders Ass'n v. United States Fish & Wildlife Serv.*, 2006 U.S. Dist. LEXIS 80255, *89-93 (E.D. Cal. 2006). Here, FWS asserts that since there will be section 7 consultation on the impacts of any actions that may affect the species regardless of the designation of critical habitat, there would be "little additional conservation benefits realized through the regulatory burden of a critical habitat designation on these lands under section 7 of the Act because Federal actions are uncommon." 71 Fed. Reg. at 66042; *id.* at 66013-14 (FWS states that because consultation occurs "infrequently on private lands" exclusion of those lands was appropriate.). The court in *CBD v. BLM* declined to accept this exact reasoning, concluding "that by finding that there were no additional regulatory benefits to be gained by designating critical habitat in the areas ultimately excluded, *the Service improperly ignored the recovery goal of critical habitat*." 422 F. Supp. 2d. at 1146; *Id.* at 1145 (emphasis added) ("Defendants' argument misses the point, however, because although they are correct that the critical habitat designation of the excluded areas would not increase the *number* of opportunities for Section 7 consultation, the *scope and nature* of these consultations would be affected, as would the extent of the protections afforded excluded areas.") (emphasis in original). The court went on to point out that in the absence of critical habitat designation, FWS "would not be required to insure that, with respect to these areas, the proposed action will not result in the destruction or adverse modification of the designated critical habitat . . . [and] the focus of those consultations will be on the species' survival, not recovery." *Id.*

Finally, FWS justifies its failure to designate critical habitat on private or state lands by asserting that excluding such lands will "preserve the partnerships that have been and *will be* developed to conserve habitat for the lynx." *See, e.g.*, 71 Fed. Reg. at 66040 (discussing the benefits of excluding lands managed for commercial forestry in Maine) (emphasis added); *see also id.* at 66042 (same for excluding state lands). This, however, is simply a rationale manufactured by FWS to justify exempting private landowners from the designation. As FWS has noted, Ms. MacDonald met personally with representatives from Plum Creek Timber Company and the Maine Forest Products Council, and the "Washington Office verbally directed that critical habitat would not be designated on Plum Creek properties." MacDonald Memo, at 2. Once this decision had been handed down, the FWS field office delegated with crafting the designation determined that "[b]ecause of the inequity that would result if the only private commercial forest land excluded from the designation was Plum Creek property, . . . all

private commercial forest lands should be excluded thereby maintaining cooperative working relationships with landowners." *Id.*

Furthermore, the potential benefits from future agreements with landowners are in no way a substitute for the concrete regulatory benefits of critical habitat. *Cf. Southwest Center for Biological Diversity v. Babbitt*, 939 F. Supp. 49 (D.C. 1996) (FWS's reliance on future actions by Forest Service does not comport with the language of statute that FWS base its listing decisions on "existing" regulatory mechanisms); *see also* 50 C.F.R. § 424.19 (FWS may "consider the probable economic and other impacts of the designation upon *proposed or ongoing activities*.") (emphasis added). As discussed above, alternative management regimes, including those on private and state lands, cannot substitute for critical habitat because they do not meet the recovery standards highlighted in *Gifford Pinchot*. For example, Habitat Conservation Plans ("HCPs") are particularly inappropriate substitutes for critical habitat because FWS explicitly states that HCPs are not required to meet a recovery standard in order to be approved by the Service. According to its 1996 "Habitat Conservation Planning Handbook," an HCP applicant must only "minimize and mitigate" the impacts of any "incidental taking" authorized by section 10 permits. Handbook at 3-20 (attached). FWS believes a section 10 permit "does not explicitly *require* an HCP to recover listed species, or contribute to their recovery objectives outlined in a recovery plan" and, as a result the Service does not ensure HCPs provide for, or are even consistent with, species recovery. *Id.* (emphasis in original); *see also id.* ("No explicit provision of the ESA or its implementing regulations requires that an HCP must result in a net benefit to a species."). Yet, in this instance, FWS excluded land subject to HCPs, citing the "benefits [of] relieving landowners, communities, counties, and States of *any additional regulatory* burden that might be imposed by a critical habitat designation."[13] 71 Fed. Reg. at 66,038 (emphasis added).

FWS Point 11. Whether U.S. Forest Service (USFS) lands that occur in the wildland-urban-interface (WUI) should be excluded from critical habitat under section 4(b)(2) of the Act so that fuels reduction projects designed to protect human life and property from wildfire would not be impeded in any way in these areas.

The WUI lands comprise the outer perimeter of Forest Service lands and thus have outstanding importance for lynx dispersal movements and connecting lynx populations. Critical habitat designation will not preclude managing these areas as needed to reduce fire risk; it simply ensures that the needs of lynx will be considered alongside the need to manage these areas for fire prevention.

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[13] FWS's exclusions of private and state lands based on the speculative benefits of *uncompleted* HCPs or on the "ancillary" benefits the species may derive from HCPs designed to offset the impacts to *other species* are also patently unreasonable. *See, e.g.*, 71 Fed. Reg. at 66046 (Montana Department of Natural Resources and Conservation Forested Trust Land Habitat Conservation Plan, which was deemed sufficient to allow for the area's exclusion for critical habitat despite the fact the HCP has not been finalized); *see also id.* at 66016 ("Plum Creek lands are not included in the final designation in part because the company has demonstrated it is a willing partner in fish and wildlife conservation efforts, such as the Native Fish Habitat Conservation Plan, which provides some ancillary benefits to lynx."); *id.* ("Private lands [Plum Creek owned lands] in Montana are not included in the final designation [because the Service] believe[s] that preserving cooperative partnerships such as demonstrated with the Swan Valley Grizzly Bear Agreement, which provides some ancillary benefits to lynx, is essential for the conservation and recovery of lynx.").

FWS Point 12. Whether the Greater Yellowstone Area is essential to the conservation of lynx. Lynx in this proposed unit occur at lower densities than in other proposed units, and the population is not connected to Canada, which is an important source of lynx in the United States.

The Greater Yellowstone Area has outstanding importance as the southernmost range of naturally occuring lynx in North America. It also functions as a key connection between lynx populations up and down the Rocky Mountains. As mentioned in FWS Point 3 above, FWS wrongly describes Greater Yellowstone habitat as travel areas only with low value for lynx: native lynx are known to reside and reproduce in Wyoming within the past decade, and a study currently underway has found some of the highest recorded snowshoe hare densities in the lower-48 states (N. Berg, pers. comm., February 2008). Also as mentioned in our response to FWS Point 8 above, the proposed GYA critical habitat boundaries should be expanded to include all areas of occupied lynx habitat, plus suitable dispersal and travel habitats in the GYA.

FWS Point 13. Any foreseeable economic, national security, or other potential impacts resulting from the proposed designation and, in particular, any impacts on small entities, and the benefits of including or excluding areas that exhibit these impacts.

The ESA requires that the designation of critical habitat be preceded by an analysis of the economic impacts of designation, based on the best scientific data available, and allows for the exclusion of an area if the benefits of excluding that area outweigh the benefits of its inclusion. 16 U.S.C. § 1533(b)(2). In the past, FWS has misconstrued this requirement, and has only considered the economic *costs* while ignoring the economic *benefits*. Typically, FWS justifies this practice by stating that benefits are too hard to quantify and thus simply making no attempt to thoroughly analyze benefits (in either quantitative or qualitative fashion), although significant resources were spent on estimating costs.[14] Analyzing only the costs fails to meet the ESA's mandate to consider the total economic impacts of proposed critical habitat designations. By failing to consider and analyze economic benefits, FWS by definition cannot meet its statutory duty under section 4(b)(2) to balance the benefits of excluding critical habitat within the benefits of designating such habitat.

Section 7(a)(2) of the ESA provides two core protections of the statute, prohibiting federal agencies from undertaking, authorizing, or funding actions that: 1) are likely to jeopardize the continued existence of a listed species; or 2) will result in the destruction or adverse modification of designated critical habitat for such species. 16 U.S.C. § 1536(a)(2). Thus, properly designating and protecting critical habitat helps to ensure that listed species will not merely avoid extinction, but will eventually recover—a mandate separate and distinct from the protections provided by section 7's jeopardy provision.

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[14] The real reason for not including benefits, however, appears to be the White House's Office of Management and Budget ("OMB") blocking the application by FWS of feasible benefit quantification approaches that could incorporate uncertainties. At the same time, OMB accepts cost estimates of critical habitat designations that are based on multiple levels of reasonable, but nonetheless arbitrary and uncertain, assumptions. A conceptually correct economic impact analysis of designation of critical habitat requires the inclusion of all impacts, that is, of costs as well as benefits. If benefits are ignored, it is impossible to answer the crucial question as to the net economic impact of a designation, and whether or not exclusion of an area from designation is justified on economic grounds.

Unfortunately, FWS's long history of hostility to the essential protections provided by critical habitat, and its clearly unlawful assumption that critical habitat provides no additional protections beyond those provided by a species' listing are again reiterated here. 70 Fed. Reg. at 68296. This position—which essentially writes the critical habitat provisions out of the ESA—has recently been squarely rejected by the Courts. *See Gifford Pinchot Task Force v. U.S. Fish and Wildlife Service*, 378 F.3d 1059 (9th Cir. 2004); *Sierra Club v. U.S. Fish and Wildlife Service*, 245 F.3d 434 (5th Cir. 2001). These court decisions emphatically affirmed Congress's intent that critical habitat provides its own suite of protections which differ from section 7's jeopardy analysis. Most importantly, the courts in these cases held that the "conservation" mandate of critical habitat is a "much broader concept than mere survival" and thus, "requiring consultation only where an action affects the value of critical habitat to both the recovery *and* survival of a species imposes a higher threshold than the statutory language permits." *Sierra Club*, 245 F.3d at 441-42.

FWS typical economic analysis attributes costs associated with the listing of a species to its critical habitat designation, violates the ESA by discounting the protections which critical habitat designations are intended to provide to listed species, and ignores the economic impacts which are in fact directly attributable to the designation. *See Cape Hatteras Access Preservation Alliance v. United States Dep't of the Interior*, 344 F. Supp. 2d 108, 129 (D.D.C. 2004) (FWS's "own regulation causes it to undercut the importance of critical habitat, to underestimate the number of section 7 consultations, and thus, to undercount the economic impact of its regulations while simultaneously under-protecting the species it is statutorily charged with protecting."). In contrast to FWS's lumping of the economic impacts of its critical habitat designation and species listing into one analysis, sound economic analysis, as well as long-standing guidance such as Executive Order 12866, requires that an action, such as critical habitat designation, be analyzed in terms of its incremental impacts, where impacts are defined as changes in "the state of the world that would exist without the proposed action." *See* Executive Order 12866 (1993), "Regulatory Planning and Review," 58 Federal Register (190):51735. This "baseline" approach is also expressly promoted by the Office of Management and Budget, which gives the following advice to agencies conducting impact analysis:

> Identify a baseline. Benefits and costs are defined in comparison with a clearly stated alternative. This normally will be a "no action" baseline: what the proposed rule is not adopted.

Office of Management and Budget, Circular A-4: Regulatory Analysis 2 (Sept. 17, 2003). In other words, a proper economic analysis should only consider impacts that would not occur "but for" the proposed rule. Because the economic impacts of listing a species occur regardless of whether or not critical habitat is designated for that species, FWS's consideration of such impacts as coextensive in the draft economic analysis is improper and unlawful. A proper incremental, baseline approach to the impacts of critical habitat designation are limited to those that would not have occurred as a result of the listing of the species under the ESA. Given that the ESA as well as the Office of Management and Budget guidance explicitly demand the quantification of the economic impacts of a critical habitat designation, the omission of a comprehensive review of the beneficial economic impacts, flatly ignores the clear stipulations of the ESA as well as OMB directives. Id.

Here, FWS must use the best information available to analyze both the costs and benefits of designating lynx critical habitat. Such an analysis was recently completed by the economists at Defenders of Wildlife, in which common economic methodologies were used to determine the benefits

of designating critical habitat for the lynx. *See* Defenders of Wildlife, Economic Impact Assessment of Designating Critical Habitat for the Lynx (*Lynx canadensis*) (June 2004).[15] The beneficial effects of designating critical habitat for the lynx include an expected increase in lynx populations and the avoided loss of some ecosystem services as a result of the prevented conversion of some ecosystems to residential or commercial uses. The quantification of the monetary value of these benefits requires approaches that directly or indirectly estimate individuals' willingness to pay for these benefits, that is, the total monetary value individuals are willing to forego in order to obtain the benefits. In estimating the monetary value of the benefits of designating critical habitat for the lynx in Maine and Montana, the researchers at Defenders included the direct and non-use value of increased lynx populations, and the ecosystem service value of the forest areas whose conversion is prevented as a result of designation. The economic value of these benefits was estimated on the basis of values reported in the economics literature, which were adjusted to the study context using benefit transfer techniques. In this report, the researchers at Defenders determined that the estimated benefits of lynx critical habitat designation in Montana would generate is estimated at between $212 million and $563 million for the ten-year time frame considered. In Maine the value benefit derived from designation would be between $34-$70 million.

The important role economics plays in public debate about species protection makes it imperative that economic analysis be applied correctly if it is brought to bear on the debate about critical habitat designation. This requires that the benefits of designation be included in such analyses. By drawing on the disciplines of environmental and natural resources economics, Defenders' study shows that the tools exist for compiling such benefit estimates at a level of uncertainty and effort comparable to that commonly devoted to the estimation of the costs of critical habitat designations. This analysis represents the best scientific and commercial information available on the benefits that will flow from the designation of lynx critical habitat.

FWS Point 14. Whether we could improve or modify our approach to designating critical habitat in any way to provide for greater public participation and understanding, or to better accommodate public concerns and comments.

FWS' failure to provide an email address and fax line for public comments has precluded many American's who care about lynx, but lack the time, effort, and skills required to navigate the federal government's website portal to express their support for protecting lynx and lynx habitat. FWS should make it as easy as possible for the public to provide input on this proposal.

We also are deeply concerned that FWS refused our request to hold a public hearing, or any kind of a public meeting in Colorado, despite its stated interest in soliciting public input on that component of the proposal (FWS Point 6 above). We have received no explanation for this refusal, and this is unacceptable.

Conclusion

The Proposal falls well short of protecting the minimum habitat this species needs to recover. These inadequacies stem from the lack of provisions for the lynx's ecological and evolutionary

[15] A copy of the report, Economic Impact Assessment of Designating Critical Habitat for the Lynx (*Lynx canadensis*), has been made available FWS previously, and is available at http://www.biodiversitypartners.org/econ/pub/LYNX%20STUDY_Feb_2005.pdf.

requirements and the disregard of the mandates governing critical habitat designation outlined in the ESA. As such, this Proposal is unacceptable in its current form. FWS must revisit its decisions to narrowly define occupied territory and to exclude both unoccupied habitat and Federal lands. The revised Proposal must designate all of those areas that are essential to the conservation of the species and provide adequate protections for its continued recovery. We thank you for the opportunity to comment on this Proposal and we look forward to reviewing the revised plan.

Sincerely,

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