NATURAL RESOURCES DEFENSE COUNCIL

By electronic mail and facsimile

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Comments Re: Gray Wolf Damage Management in Idaho for Protection of Livestock and Other Domestic Animals, Wild Ungulates, and Human Safety, Draft Environmental Assessment

To Whom It May Concern:

On behalf of the Natural Resources Defense Council, The Humane Society of the United States, Predator Defense, our over 12 million members, activists, and constituents, 50,000 of whom live in Idaho, we write to comment on Wildlife Services' draft Environmental Assessment evaluating the impacts of alternatives for gray wolf (*Canis lupus*) damage management in Idaho. See U.S. Dept. of Agriculture, Animal and Plant Inspection Service, Wildlife Services, "Draft Environmental Assessment for Gray Wolf Damage Management in Idaho for Protection of Livestock and other Domestic Animals, Wild Ungulates, and Human Safety" (August 2010) ("Draft EA"). For the reasons set forth below, we urge Wildlife Services to withdraw the Draft EA and instead prepare an environmental impact statement ("EIS"). The preparation of an EIS is required in this case because the widespread reduction of Idaho's wolf population, proposed by the Draft EA, will have a significant effect on the environment. In addition, the Draft EA contains flaws and deficiencies and thus also fails to comply with the requirements of the National Environmental Protection Act.

We also take this opportunity remind Wildlife Services of its obligation to conduct a full suite of consultations with the U.S. Fish and Wildlife Service ("FWS") under the Endangered Species Act. These consultations must include all reasonably foreseeable adverse impacts, including any indirect impacts on grizzly bears caused by removal of wolves from the landscape.

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I. Statutory Requirements

A. National Environmental Policy Act

The National Environmental Policy Act ("NEPA") is "our basic national charter for protection of the environment." 40 C.F.R. § 1500.1(a). It was enacted in 1970 to put in place procedures to insure that, before irreversibly committing resources to a project or program, federal agencies "encourage productive and enjoyable harmony between man and his environment," "promote efforts which will prevent or eliminate damage to the environment," and "enrich understanding of the ecological systems and natural resources important to the Nation." 42 U.S.C. § 4321.

Section 102(2)(C) of NEPA requires federal agencies to prepare an environmental impact statement for any "major Federal action significantly affecting the quality of the human environment." 42 U.S.C. § 4332(2)(C). The fundamental purpose of an EIS is to force the decision-maker to ensure that the policies and goals defined in NEPA are infused into the actions of the federal government. 40 C.F.R. § 1502.1. An EIS analyzes the potential environmental impacts, alternatives and mitigation opportunities for major federal actions. Significant effects need not be certain to occur to trigger the EIS requirement—rather, "an EIS must be prepared if 'substantial questions are raised as to whether a project . . . may cause significant degradation of some human environmental factor.'" Idaho Sporting Congress v. Thomas, 137 F.3d 1146, 1149 (9th Cir. 1998) (quoting Greenpeace Action v. Franklin, 14 F.3d 1324, 1332 (9th Cir. 1992)).

"In determining whether to prepare an environmental impact statement the Federal agency shall . . . prepare an environmental assessment." 40 C.F.R. § 1501.4(b). An environmental assessment (EA) is "a concise public document" that serves, *inter alia*, to "provide sufficient evidence and analysis for determining whether to prepare an environmental impact statement or a finding of no significant impact." Id. As with any document prepared under NEPA, an environmental assessment is intended to "ensure that environmental information is available to public officials and citizens before decisions are made and before actions are taken." 40 C.F.R. 1500.1(b). If the environmental assessment concludes that a proposed action will not have a significant effect on the environment, the federal agency prepares a "finding of no significant impact." 40 C.F.R. § 1508.13. If the environmental assessment concludes that a proposed action will have a significant effect on the environment, the agency must prepare an environmental impact statement. 42 U.S.C. § 4332(2)(C).

B. Endangered Species Act

Congress passed the Endangered Species Act ("ESA") in 1973 in response to growing concern over the extinction of fish, wildlife, and plants stemming from human activities "untempered by adequate concern and conservation." 16 U.S.C. § 1531(a)(1). Recognizing the aesthetic, ecological, educational, historical, recreational, and scientific value of these species, Congress enacted ESA with the express purpose of "provid[ing] a means whereby the ecosystems upon which endangered species and threatened species depend may be conserved, [and] . . . provid[ing] a program for the conservation of such endangered species and threatened species." Id. § 1531(b).

Section 7 of ESA requires each federal agency, in consultation with FWS, to "insure that any action authorized, funded, or carried out by [a federal] agency . . . is not likely to jeopardize the continued existence of any endangered species or threatened species or result in the destruction or adverse modification of habitat of such species which is determined by the Secretary [of the Interior or of Commerce] . . . to be critical." 16 U.S.C. § 1536(a)(2).

Consultation pursuant to Section 7 can take place in two forms: informal consultation and formal consultation. Informal consultation is defined as "an optional process that includes all discussions, correspondence, etc., between [FWS] and the Federal agency . . . prior to formal consultation, if required." 50 C.F.R. §§ 402.02, 402.13. "If during informal consultation it is determined by the Federal agency, with the written concurrence of [FWS], that the action is not likely to adversely affect listed species or critical habitat, the consultation process is terminated, and no further action is necessary." Id. § 402.13. With limited exceptions, if it is determined that an action "may affect listed species or critical habitat, formal consultation is required." Id. § 402.14.

Formal consultation is defined as "a process between [NMFS and/or FWS] and the Federal agency that commences with the Federal agency's written request for consultation under section 7(a)(2) of the Act and concludes with the . . . issuance of a biological opinion under section 7(b)(3)." Id. §§ 402.02, 402.14; see also 16 U.S.C. § 1536(b)(3). Following formal consultation, NMFS and/or FWS issues a "biological opinion" indicating "whether or not the Federal action is likely to jeopardize the continued existence of listed species or result in the destruction or adverse modification of critical habitat." 50 C.F.R. § 402.02.

II. Wildlife Services Is Not Authorized Under Section 10(j) of ESA to Lethally Remove Wolves for Ungulate Control

As an initial matter, it is not clear from our review of the Draft EA and its associated documents that Wildlife Services actually has the legal authority to engage in wolf control activities for the purpose of ungulate management. On August 5, 2010, a federal court overturned the U.S. Fish & Wildlife Service's decision to remove gray wolves in the Northern Rockies, except Wyoming, from the federal list of endangered species. Defenders of Wildlife v. Salazar, --- F.Supp.2d ----, 2010 WL 3084194 (D. Mont., August 5, 2010). The Draft EA states that, in the event wolves were relisted under the Endangered Species Act, "IDFG could still authorize WS wolf removal to protect elk with the approval of USFWS under provisions of the applicable 10j rule." (Draft EA at 78.) It is not clear, however, that the 10(j) rule grants Wildlife Services such authority.

By its terms, the 10(j) regulations only authorize states and tribal governments, not federal agencies such as Wildlife Services, to take wolves for the purpose of preventing unacceptable impacts to wild ungulate populations. Specifically, where gray wolves are having an "unacceptable impact" on wild ungulate populations, the 10(j) Rule provides that "*a State* or *Tribe* may lethally remove the wolves in question." 50 C.F.R. § 17.84(n)(4)(v)(emphasis added). The 10(j) rule makes clear that this grant of authority is exclusive. Id. at § 17.84(n)(4)(v) ("Other than as expressly provided in this rule, all other forms of take are considered a violation of section 9 of the Act.")

Wildlife Services cannot be considered a mere contractor of the State of Idaho, as it is an independently funded federal agency. Its wolf damage management activities in Idaho are not being entirely paid for by the State, and Wildlife Services' activities would be carried out in accordance with its own independent policies and procedures. At most, Wildlife Services is a cooperating agency with Idaho.

Nor do the memoranda of understanding and agreements referenced in the Draft EA authorize Wildlife Services to take gray wolves for the purpose of preventing impacts on wild ungulates. Although the Draft EA asserts that "[a]ny actions conducted under . . . the Proposed Action . . . would be consistent with the guidance" in a 2006 Memorandum of Understanding ("MOU") between Idaho Fish and Game ("IDFG"), that MOU exclusively discusses Wildlife Services role in controlling wolf impacts on livestock, not wild ungulates. See (Draft EA at 24; Memorandum of Understanding Between IDFG and ISADCB, 5-7 (May 22, 2006). Further, while the 2006 MOU cites a 1988 MOU as having delegated to Wildlife Services the Idaho State Animal Damage Control Board's (ISADCB) responsibility for "prevention and control of predatory animals," Id. at 1, the 1988 MOU reveals no such delegation. See Memorandum of Understanding Between ISADCB and U.S. Dept. of Agric. Animal Plant Health Inspection Service Animal Damage Control, 1 (Jan. 7, 1988). Rather, the 1988 MOU between ISADCB and Wildlife Services only commits the two entities to meet annually "to formulate statewide policies and procedures that address program requirements," and for ISADCB to "issue animal damage control policy directives to effectuate policies and procedures developed" at these meetings. Id.

Finally, although Wildlife Services is authorized, through a "subpermit" from FWS, to take gray wolves in Idaho, the language of that permit limits its authorization to the take of gray wolves to: (1) nonlethal monitoring and control activities; and (2) nonlethal and lethal depredation control activities for the protection of livestock. See, U.S. Fish and Wildlife Serv., U.S. Dep't of the Interior, Subpermit FWSIFWO-12, Recovery Subpermit to Take Gray Wolf and Other Species (Aug. 13, 2010) (stating that "[c]ontrol actions shall be selective for the offending wolves (i.e., those depradating on lawfully present livestock).").

In short, it does not appear that either the existing 10(j) rule, existing MOUs with state agencies, or Wildlife Services' permit from FWS authorizes the agency to engage in lethal control activities for the protection of wild ungulates. As part of the Draft EA, Wildlife Services should address what legal authority it has to take gray wolves for purposes of managing impacts on wild ungulate populations.

III. Wildlife Services Has Failed to Satisfy NEPA

A. The Draft EA's Purpose and Need Statement Does Not Support Widespread Removal Wolves to Address Transmission of Disease or the Protection of Human Health

It is a fundamental requirement of NEPA that agencies preparing an EIS specify their project's "purpose and need." 40 C.F.R. § 1502.13. Here, the Draft EA states that Wildlife Services' "activities would be intended to conserve wolf populations while protecting livestock and other domestic animals, ungulate populations, and human

health and safety in Idaho." (Draft EA at 11.) Yet, to the extent that Wildlife Services' wolf management activities are premised on the need to protect livestock from disease transmission or "human health and safety," it rests on a fundamental error, as there is very little evidence that wolves act as a disease vector or pose a risk to human safety, and certainly not at current population levels.

1. Prevention of disease transmission does not justify wolf removals.

Section 1.3.2 in the Purpose and Need statement, "Potential Role of Wolves in Disease Transmission to Wildlife, Livestock, and Humans" (Draft EA at 17-18), provides no basis for removing wolves. Wolves either play no role in the spread of the identified diseases or, in some cases, their presence may actually prevent these diseases from being transmitted.

Wolves play no role in the spread of the protozoan parasite *Neospora caninum*. The Draft EA explicitly states that "[p]resently, domestic dogs and coyotes are the only two species that have been determined to be able to host and transmit *N. caninum* (Gondim et al. 2004*a*, b)." (Draft EA at 17.) Further, even if wolves were capable of transmitting *N. caninum*, the Draft EA notes that "it is unclear whether the presence of wolves would add to the risk already posed by other canids." (Id.) Indeed, as the Draft EA acknowledges, it is possible (although unproven) that the presence of wolves may actually *reduce* the potential of disease spread. (Stronen et al. 2007.)

Further, many experts think wolves will help stop the spread of chronic wasting disease ("CWD") as it moves farther west.[1] According to Doug Smith, Yellowstone wolf biologist, "Wolves are probably the single best way to stop the spread of CWD. Chronic wasting disease causes animals to act weird. Wolves kill animals like that."[2] And according to University of Calgary professor Valerius Geist, an expert on deer and elk, "Wolves will certainly bring [chronic wasting] disease to a halt. They will remove infected individuals and clean up carcasses that could transmit the disease." (Id.)

Nor is there convincing evidence that wolves play a role in the potential transmission of *Brucella abortus* or *B. canis*. Testing of wolves for *Brucella* infections bears this out. For example, all 17 wolves captured near Jackson, Wyoming during the winter of 2009 tested negative for *B. canis*, 15 wolves tested negative for *B. abortus*, and only two wolves tested positive for *B. abortus*. (Draft EA at 17.) As the Draft EA states, the Supervisory Veterinarian for the Wyoming Game and Fish Department commented that while wolves can become infected with *B. abortus* and transiently shed the bacteria in the feces, "'the amount of shed bacteria is thought to be insufficient to infect cattle, elk,

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[1] Theo Stein, *National News : Officials Fighting CWD Ponder a Natural Partner: Wolves*, DENVER POST, Dec. 22, 2003, *available at* http://www.cwd-info.org/index.php/fuseaction/news.detail/ID/34b9f5502d2485d8db29e78d4baeb68b (last visited Aug. 25, 2010), and Theo Stein, *Study: Wolves May Help Control Wasting Disease*, DENVER POST, Aug. 9, 2005, *available at* http://trib.com/news/state-and-regional/article_883b4e4b-863d-510f-8616-e1200ae88190.html (last visited Aug. 25, 2010).

[2] Theo Stein, *National News: Officials Fighting CWD Ponder a Natural Partner: Wolves*, DENVER POST, Dec. 22, 2003, *available at* http://www.cwd-info.org/index.php/fuseaction/news.detail/ID/34b9f5502d2485d8db29e78d4baeb68b (last visited Aug. 25, 2010).

or bison' (USWFS 2009)." (Draft EA at 18.) Proffitt, White, and Garrott (2010) looked at the spatio-temporal overlap between Yellowstone bison and elk and the implications of wolf restoration related to the risk of brucellosis transmission. Ultimately, "[their] results suggest that risk-driven elk behavioral responses to wolves are unlikely to have important disease implications. Management of brucellosis in [G]reater [Y]ellowstone [E]cosystem elk populations should focus on reducing elk-to-elk transmission risk and, wherever possible, curtailing practices that increase elk density and group sizes during the potential abortion period." (Proffitt, White, and Garrott 2010, p. 281.) In one news article, Mike Jimenez, U.S. Fish and Wildlife Service biologist and Wyoming wolf management project leader, was direct about the lack of concern over wolves spreading brucellosis: "Wolves are not a player in the transmission of brucellosis."[3]

Finally, regarding the fact that the tapeworm *Echinococcus granulosus* has been found in wolves in Idaho, as Dr. Mark Johnson, the wildlife veterinarian who oversaw the health of the wolves before they were reintroduced in the mid-1990s, said earlier this year, "[r]educing the number of wolves, or density of wolves, will not change the abundance of *Echinococcus* in any way, shape, or form, because the wolves are not getting it from each other."[4] Indeed, this tapeworm has been present in the Idaho ecosystem much longer than wolves (the reintroduced wolves did not have *Echinococcus*, as they had been treated for it with an injection of praziquantel at least twice), and the way the tapeworm spreads has nothing to with how many wolves, foxes or coyotes there are (wolves get the tapeworm from local deer and elk, not each other). Lastly, in a separate interview earlier this year, wolf biologist Dr. David Mech explained that the tapeworm controversy was used to make the wolf look like "the bad guy."[5]

In short, there is no evidence before Wildlife Service that reducing the population of wolves in Idaho would reduce the spread of disease to livestock, domestic dogs, or humans. Indeed, there are indications that wolf populations actually reduce disease transmittal.

2. Threats to human health do not justify wolf removals, except in very limited circumstances.

Section 1.3.4 in the Purpose and Need section, "Wolf Damage Management to Protect Human Safety", (Draft EA at 20-22), also provides little basis for removing wolves in significant numbers.

While the Draft EA mentions various historical wolf attacks on humans that have occurred in different places around the world, nothing in this section justifies systematically removing wolves in Idaho to protect human safety. As the Draft EA expressly states, "There are no verified instances of wolves having attacked and

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[3] Angus M. Thuermer Jr., *Wolves Brucellosis-Free*, JACKSON HOLE NEWS AND GUIDE, Mar. 14, 2009, *at* http://www.jhnewsandguide.com/article.php?art_id=4357 (last visited Aug. 25, 2010).

[4] Deb Courson, *Vet's View on Tapeworms, Wolves, Coyotes, Foxes and Elk*, PUBLIC NEWS SERVICE, May 6, 2010, *at* http://www.publicnewsservice.org/index.php?/content/article/13806-1 (last visited Aug. 25, 2010).

[5] International Wolf Center, *Reality Check: Western Wolves and Parasites*, Mar. 12, 2010, *at* http://www.wolf.org/wolves/news/live_news_detail.asp?id=4768 (last visited Aug. 25, 2010).

seriously injured people in the lower 48 United States." (Draft EA at 21.) The threat posed to humans by wild wolves is minimal. .

If, on the other hand, a wild wolf, in an extremely rare case, becomes habituated in some way and begins to exhibit threatening or unusual behavior, such an animal can be dealt with on a case-by-case basis. Yellowstone National Park, for example, receives over 3 million visitors annually, many of them camping, backpacking, fishing, hiking, etc. In May 2009, Yellowstone, for the first time since it reintroduced wolves in 1995, euthanized a wolf that had become habituated (likely food-conditioned) and was exhibiting abnormal behavior.[6]

Removing the odd wolf in Idaho that becomes habituated, should it occur, makes sense; justifying reducing wolf numbers based on a threat to human health does not.

B. The Draft EA's Consideration of Nonlethal Alternatives is Flawed

At bottom, an EIS or an EA must "inform decision-makers and the public of the reasonable alternatives which would avoid or minimize adverse impacts or enhance the quality of the human environment." 40 C.F.R. §§ 1502.1, 1508.9. The agency must therefore "[r]igorously explore and objectively evaluate all reasonable alternatives, and for alternatives which were eliminated from detailed study, briefly discuss the reasons for their having been eliminated." Id. § 1502.14(a). In addition, "[a]n agency cannot define its objectives in unreasonably narrow terms" so as to exclude consideration of reasonable alternatives. City of Carmel-by-the-Sea v. United States Dep't of Transp., 123 F.3d 1142, 1155 (9th Cir. 1997) (citing Citizens Against Burlington, Inc. v. Busey, 938 F.2d 190, 196 (D.C. Cir. 1991)). Instead, the statement must reflect the agency's core aim without foreclosing reasonable alternatives. Id. Indeed, "[t]he existence of a viable but unexamined alternative renders an environmental impact statement inadequate," Idaho Conservation League v. Mumma, 956 F.2d 1508, 1519 (9th Cir. 1992), and an EIS (or EA) fails to conform to NEPA when it accepts "as a given" parameters that it should have studied and weighed. Simmons, 120 F.3d 664, 667 (7th Cir. 1997). As discussed more fully below, the Draft EA falls into this very trap.

1. The Draft EA fails to properly analyze nonlethal methods of wolf management.

As the Draft EA properly recognizes in its selection of alternatives, nonlethal techniques for managing wolf conflicts are critical to Wildlife Services' analysis. Nonlethal techniques hold the promise of avoiding the need to kill wolves, while simultaneously minimizing conflicts between wolves and livestock operators. With nonlethal methods, though no single practice or technique will work for all livestock producers in all places all of the time, a combination of practices based on the unique characteristics of the landscape where the livestock are located can be extremely effective. Unfortunately, however, the Draft EA fails to consider the full range of nonlethal management methods available, draws hasty conclusions about the effectiveness of many techniques, and neglects to mention others altogether.

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[6] Press Release, National Park Service, Yellowstone Staff Remove Habituated Gray Wolf (May 19, 2009) *at* http://www.nps.gov/yell/parknews/09032.htm (last visited Aug. 25, 2010).

While the Draft EA states that nonlethal methods tend to be cost-ineffective because wolves will ultimately need to be lethally removed anyway (Draft EA at 74), this conclusion is contradicted by the studies the Draft EA cites. For example, Musiani et al. (2003) conclude: "Our depredation data indicate that protecting livestock from wolves reduces the necessity for killing wolves." (Musiani et al. 2003, p. 1538.) The authors further add that some nonlethal techniques "offer a cost-effective mitigation tool for the problem of livestock depredation on a local scale" (Musiani et al. 2003, p. 1538.).[7] Another example is fladry, a technique discounted by the Draft EA because the method is not effective indefinitely, despite citing studies (Musiani et al. 2003; Davidson-Nelson and Gehring 2010) that show fladry can work long enough to protect livestock during their most vulnerable period (i.e. calving/lambing season). Indeed, the Draft EA admits that electrified "turbo-fladry" is one of the more effective methods of non-lethal conflict prevention (Draft EA at 52.)

Other methods mentioned in the Draft EA may also be more useful than indicated by the document's pessimistic conclusion about the general ineffectiveness of nonlethal methods (Draft EA at 81.) Shivik (2004), for instance, concludes that human presence is a costly but highly effective means of preventing depredations. Breck et al. (2002) similarly conclude that Radio Activated Guard (RAG) technology is effective for protecting livestock in some situations. While the Draft EA does cite these studies (at 74), its general dismissal of nonlethal conflict prevention as ineffective is incongruous with their actual analysis. Recent experimentation with these techniques has continued to show their effectiveness, particularly with the proliferation of "range rider" programs that use human presence to deter wolf depredation. Gese et. al. (2005), a paper published by APHIS staff but not considered in the Draft EA, states, "[u]sing herders is a time-tested tradition that can reduce predation in many range situations." (Id. at 13.)

The Draft EA also dismisses animal husbandry practices as an important factor in preventing depredation but fails to examine the full range of practices currently in use. Although the Draft EA cites two studies (Mech et al. (2000); Bradley and Pletscher (2005)) to support the claim that husbandry practices have little effect on depredation rates (Draft EA at 75), it fails to note that Mech et al. (2000), in fact, leave open the possibility that proper carcass disposal can play a role in reducing depredations. According to this paper, "[t]he role of proper carcass disposal as a possible factor predisposing farms to wolf depredations remains unclear" (Mech et al. 2000, p. 623), but the authors noted that there was "evidence of at least an intermittent carcass dump on all except two of the 41 farms with chronic losses" in their study. (Id. at 627). Again, even papers published by APHIS staff, such as Gese et al. (2005), cite multiple studies

[7] The Draft EA cites Mech (1995) to support the claim that nonlethal methods are generally ineffective (Draft EA at 74, 81); yet a closer reading reveals that Mech does suggest that some techniques, such as guard dogs, can be effective in certain situations. Mech notes, for instance, "[c]urrently an electric fence in use in Sweden seems to hold some promise for protecting livestock from wolves, but it has not yet been subject to controlled testing." (Mech 1995, p. 273.) This technology has now been tested and improved. Moreover, this relatively old paper was published before many of today's most promising nonlethal methods had been developed, tested, or refined. Evidence based on research conducted over 15 years ago, before the first wolf was reintroduced to the Northern Rockies, does not provide a compelling case that nonlethal conflict prevention is ineffective in this region.

showing that husbandry practices are a solid "first line of defense against predators" (Gese et al. 2005, p. 13). This paper goes on to state that "[r]emoval or burial of carrion will not encourage predators to remain in the area and perhaps learn to kill livestock" (Id. at 13).

The Draft EA also fails to fully consider many other animal husbandry practices such as night penning or guard dogs, which have been effective in recent applications. Gese et al. (2005) note that "[c]onfining or concentrating flocks during periods of vulnerability (e.g., at night or during lambing) can decrease depredation problems" (p. 13-14), but the Draft EA fails to cite this paper in its analysis. Moreover, anecdotal evidence – which is particularly important where situational factors vary widely from one application to another, as with conflict management – makes a compelling case for the effectiveness of many other husbandry practices.

A great success story in the Northern Rockies involves the Mountain Livestock Cooperative ("MLC"),[8] which has been working on the ground to prevent conflicts between large carnivores and livestock for almost two decades throughout Idaho, Wyoming, Montana, and Alberta. MLC merges ranchers' knowledge about livestock, their land and surroundings with scientific knowledge about carnivore behavior and ecology.

In late April and early May 2010, MLC put together a workshop for ranchers on the interactions between large carnivores and livestock in the Mountain West. MLC opined that traditional grazing practices in the Rocky Mountains exacerbate livestock vulnerability to wolves. Conference organizers and attendees shared valuable and proven information on how to manage livestock differently to nonlethally prevent livestock conflicts with large carnivores. Much of that information – or discussion of similar techniques – is absent from the Draft EA's discussion of the efficacy of nonlethal methods.

Examples include:

- Incorporating foraging theory into conflict-avoidance practices (i.e., using feeding strategies to bunch livestock together, move them to less vulnerable areas, etc.);
- "Opportunity teaching" and managing livestock to defend themselves against wolves (e.g., large animals, like cattle, that stand their ground in the face of wolves are very successful in thwarting attacks, while flight behavior makes such animals vulnerable);
- Using knowledge of the landscape and the local wolves to the rancher's benefit (i.e., understanding a wolf pack's home range and how they use it, keeping livestock away from wolves and ungulates, etc.);
- Keeping wolf packs intact (e.g., no hunting) when such packs are successfully hunting wild ungulates and not attacking livestock[9];

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[8] Mountain Livestock Cooperative brochure (available at http://www.nrccooperative.org/pdfs/MLC_brocure.pdf (last visited Aug. 26, 2010).

[9] An interesting anecdote was shared about livestock operators in Alberta who allow elk-hunting on their ranches, but specifically instruct any visiting hunters that they are prohibited

- Changing management practices to make livestock more vigilant and less vulnerable (e.g., livestock are less vulnerable when grazed as a group, not scattered across the landscape);
- Calving in May and June (e.g., longer days and shorter nights mean less risk of depredation – and fewer dead calves from cold, snow, etc.); and
- Changing feeding practices (e.g., late-afternoon feeding leads to day-calving, which cuts down on depredations because most depredations occur at night).

There is no silver bullet or boilerplate solution when it comes to animal husbandry practices, but there are a number of practices (many not considered in the Draft EA) that can be employed to reduce conflicts between wolves and livestock – and many such practices often lead to better livestock production and results overall.[10] The EA should examine a wider range of animal husbandry practices before ruling out husbandry as an ineffective means of reducing depredations.

2. Wildlife Services should consider another alternative that gives priority to a combination of practicable nonlethal techniques.

As discussed above, federal regulations require Wildlife Services to rigorously explore all reasonable alternatives to the proposed action. 40 C.F.R. § 1502.14(a). "[A]n alternative is properly excluded from consideration in an environmental impact statement only if it would be reasonable for the agency to conclude that the alternative does not 'bring about the ends of the federal action.'" City of Alexandria, Va. v. Slater, 198 F.3d 862, 867 (D.C. Cir. 1999) (quoting Citizens Against Burlington, Inc. v. Busey, 938 F.2d 190, 195 (D.C. Cir. 1991)). Further, an agency cannot limit its analysis to alternatives that skew its decision or lead effectively to the desired result. See, e.g., California v. Block, 690 F.2d 753, 768 (9th Cir. 1982); NRDC v. Evans, 279 F.Supp.2d 1129, 1164-1166 (9th Cir. 2003); Massachusetts v. Clark, 594 F.Supp. 1373 (D. Mass. 1984). Yet, this is exactly what Wildlife Services has done in the Draft EA.

Wildlife Services must consider an alternative that would require the use of some nonlethal techniques before resorting to the lethal removal of wolves. Instead the agency sets up, and then dismisses, a straw man nonlethal alternative whose purpose seems more designed to let the agency proceed with its preferred course of action, rather than seriously consider other options.

In Section 3.5, "Alternatives Considered But Not in Detail, With Rationale," the Draft EA briefly considers and then dismisses an alternative where "Agencies Exhaust All Nonlethal Methods Before Attempting Lethal Methods" (Section 3.5.3). With this alternative, "all nonlethal methods would have to be attempted and proven ineffective

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from killing wolves – because the ranchers' conflict-prevention practices are working successfully on that landscape with those wolf packs and they do not want to risk pack disruption leading to livestock predation.

[10] One sheep rancher at the MLC workshop explained how fladry and night-fencing have helped deter predator conflicts (he went from losing 50-70 sheep per year to predators to losing none in two years), and both methods have improved his sheep operation (i.e., his sheep breeding has improved because the rams are enclosed until later in the morning than normal with the other sheep).

prior to using lethal wolf damage management methods . . . ." (Draft EA at 57.) While requiring the use of *all* nonlethal methods prior to the use of lethal methods would likely be impractical, requiring the use of *some* nonlethal methods prior to the use of lethal methods would be practical and, more than likely, effective. Unfortunately, the Draft EA failed to consider any such alternative.

There is precedent for including such an alternative in an EA, as past documents from Wildlife Services have considered an alternative that would mandate a practicable combination of non-lethal and lethal methods. Wildlife Services' Washington office, for instance, recently released a Summary Environmental Monitoring Review of the "Predator Damage Management in Washington" EA and Supplement to the EA, in which the following alternative is considered (USDA 2010, p. 2):

> **Nonlethal Before Lethal Methods** Alternative requires that: 1) cooperators show evidence of sustained and ongoing use of nonlethal/husbandry techniques aimed at preventing or reducing predation prior to receiving services from WS, 2) WS would use or recommend, as a priority, nonlethal techniques in response to a confirmed damage situation, and 3) lethal techniques would only be used when the use of nonlethal methods failed to keep damages below an acceptable level.

This alternative is commendable in its use of lethal methods only if nonlethal methods have failed in a particular situation. The Draft EA should have considered such an alternative. By failing to consider a practicable combination of lethal and non-lethal methods, the Draft EA fails in its mandate to consider the full range of reasonable alternatives.

C. Impact Assessment

Fundamental to satisfying NEPA's requirement of fair and objective review, agencies must ensure the "professional integrity, including scientific integrity," of the discussions and analyses that appear in environmental impact statements. 40 C.F.R. § 1502.24. Agencies are further required to identify their methodologies, indicate when necessary information is incomplete or unavailable, acknowledge scientific disagreement and data gaps, and evaluate indeterminate adverse impacts based upon approaches or methods "generally accepted in the scientific community." 40 C.F.R. §§ 1502.22(2), (4), 1502.24.

Further, the law requires agencies to evaluate all "reasonably foreseeable" and "cumulative" impacts of its actions. 40 C.F.R. §§ 1502.22, 1508.25(c). "Cumulative impacts" are defined as "the impact on the environment which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency (Federal or non-Federal) or person undertakes such other actions." 40 C.F.R. § 1508.7. The purpose of the cumulative impacts requirement is to ensure that the public is provided with a "realistic evaluation of the total impacts" of various activities by avoiding just looking at individual activities "in a vacuum." Grand Canyon Trust v. Federal Aviation Administration, 290 F.3d 339, 342 (D.C. Cir. 2002). In order to ensure that this goal is achieved, NEPA requires an analytical discussion of cumulative impacts, not just a statement filled with generalities or a simple listing of possible adverse impacts. See e.g., Muckleshoot

Indian Tribe v. United States Forest Service, 177 F.3d 800, 811 (9th Cir. 1999) ("very broad and general statements devoid of specific, reasoned conclusions" held insufficient); Friends of the Earth v. United States Army Corps of Engineers, 109 F.Supp. 2d 30 (D.C.D.C. 2000) (cumulative impacts analysis that contained "no actual analysis" and only a "conclusory statement" was insufficient).

Here, Wildlife Services has failed to grapple with the reasonably foreseeable and cumulative impacts of the widespread lethal removal of wolves. This is true both in terms of the direct impacts on wolf populations themselves—that is, impact on the ability of this endangered species' to sustain a viable population in the Northern Rocky Mountains—but also the collateral effects on the environment that significant reductions in wolf populations are likely to have.

1. Reducing wolf populations to levels authorized by Idaho/10(j) rule would have effect wolf viability in the region

Idaho's current wolf population is estimated to be 843; however, as stated in the Draft EA, with the assistance of Wildlife Services, the State intends reduce and maintain its population to around 518 (Draft EA at 25; IDFG 2009a). If carried out, such a reduction would result in a 40% decline in the overall population and would effectively stop any population growth from occurring in the future. Yet the Draft EA fails to take a hard look at the effects of such a substantial decrease in wolf populations in Idaho, the very subject of the Wildlife Services program, by assuming that the resulting population levels would be "acceptable and appropriate." Draft EA at 45. While the U.S. Fish and Wildlife Service did approve Idaho's wolf management plan, which contemplates wolf removal at the levels stated in the Draft EA, Wildlife Services cannot rely on the U.S. Fish and Wildlife Service's approval of the state wolf removal plan to comply with its obligation to take a "hard look" at the effects of its proposed action. 42 U.S.C. § 4332; 40 C.F.R. § 1508.9; Robertson v. Methow Valley Citizens Council, 490 U.S. 332, 351 (1989). Killing more than 300 wolves plainly would have an adverse effect on wolves, regardless of whether the Fish and Wildlife Service believes such killing is acceptable. Wildlife Services is required to analyze these adverse effects in order to fairly inform the public and decisionmakers of the environmental effects of the action.

Scientists now agree that thousands of individual wolves, rather than hundreds, are necessary to ensure the long-term survival of a population (Traill et al. 2009). This consensus is built on decades of research on minimum population requirements. For example, a well-established principle of conservation biology has long been that populations of organisms need substantial and robust numbers of individuals to maintain viability. An often cited estimate for minimum population viability ("MPV") is an effective population size (the number of breeding animals or N_e) of 500 individuals to avoid the effects of genetic inbreeding (Soule and Wilcox 1980, Frankel and Soule 1981, Soule 1986, Franklin and Frankham 1998). For these reasons, Soule and Simberloff (1986) concluded that "estimates of MVPs for many animal species are rarely lower than an *effective size* of a few hundred." Since effective population sizes are generally only 10-20% of the census population, this lower limit translates into a total population count of 2,500-5,000 individuals (Frankham 1995).

Other estimates have predicted that viable population numbers should be even higher. For example, Lande (1988) criticized the application of a blanket number like N_e=500

because it fails to consider critical species-specific demographic data. Lande then outlined examples in which demographic parameters, such as an alee effect, stochasticity, edge effects or local extinctions in a patchy habitat, could require populations to have even larger numbers than an effective population of 500. Lande (1995) further explored this topic in the context of genetic variation and mutation and concluded that effective populations should number in the 5,000s. C. D. Thomas (1990) also estimated that MVPs should number in the thousands – ideally, 10,000 individuals for populations that experience fluctuations. Similarly, in 2004, Reed and Hobbs examined the population viability of 2,387 populations of 203 species and found that vertebrates need to number in the thousands for effective conservation.

Within the last decade, a number of studies have been published that examine population viability based on empirical data and gray wolves specifically. Brook et al. (2006) estimated the MVP for 1,198 species including the gray wolf and found that the median overall estimate was 1,377 individuals. Traill et al. (2007) conducted a meta-analysis of MVPs for 212 species including gray wolves and concluded that the MVP for most species will exceed a few thousand individuals. Finally, Reed et al. (2003) estimated the minimum viable population size for over 100 vertebrate organisms, including the gray wolf. The MVP for *adult* gray wolves was estimated at 1,403. Moreover, when Reed et al (2003) corrected for 40 generations worth of data, the MVP for gray wolves was estimated to be 6,332. Based on a critical review of these and other studies, Traill et al. (2009) concluded that, "[t]his literature collectively shows that thousands (not hundreds) of individuals are required for a population to have an acceptable probability of riding-out environmental fluctuation and catastrophic events, and ensuring the continuation of evolutionary processes."

FWS's recovery goal of 10 breeding pairs and the State's "threshold floor" of 15 breeding pairs (Draft EA at 25-26), therefore, severely underestimate the number of wolves necessary for a viable population. While Idaho is not responsible for separately maintaining a viable population of wolves, Idaho contains the largest amount of available habitat for wolves and is currently home to almost half of the regional population. The number of wolves in Idaho is thus integral to the regional recovery of wolves in the northern Rocky Mountains. Significantly reducing the number of wolves in Idaho will unquestionably affect the viability, including connectivity, of the entire distinct population segment. As discussed above, while the Draft EA argues that the issue of appropriate population levels is outside the scope of its analysis (Draft EA at 45), Wildlife Services must consider the effect total wolf removals would have on the viability of wolves in the region.

Beyond mere numbers, the agency must also take into account the impact that disrupting wolf social structure may have on behavior and health of the State's wolf populations. Wolves have evolved under complex family-based social structures, and maintaining pack structure is important.[11] See Haber (1996) (arguing that the

[11] It is also important to note that pack disintegration has been tied to a potential for increased livestock conflicts. In Section 2.4.2, "What about the possibility that wolf removal, whether through control actions or hunting, could disrupt a pack's social structure, thereby leading to an increased likelihood of conflicts?," the Draft EA claims that the data in Figure 1-1 in the Draft EA ("[m]inimum number of documented wolf packs in Idaho compared to number of depredation investigations, FY 03-09 (USDA 2010)") appears "to suggest that if the number of

emphasis on the numerical status of wolves overlooks the many qualitative traits and nuances of wolves and wolf packs; questioning the tendency to promote high wolf harvests; and advocating for more emphasis on qualitative biological features to determine the extent to which wolves and other predators should be harvested). Treves (2009) also discusses removing carnivores such as wolves through hunting and cautions:

> Even if the culprits are targeted selectively, property damage may increase if hunting disrupts carnivore social organization and promotes new individuals or new denser populations of different species of carnivores that, in turn, may have greater impacts on property. *Complex interactions within carnivore guilds compound the uncertainties about the effects of eliminating carnivores.*

(Id. at 1352-53 (emphasis added, citations omitted).)

Management policies for wolves must take into account the complex social structures of wolf packs and look beyond mere population numbers to biological and ecological considerations. Besides Treves (2009), the Draft EA fails to consider:

- Wallach, A. D., E. G. Ritchie, J. Read, A. J. O'Neill. 2009. More than mere numbers: The impact of lethal control on the social stability of a top-order predator. *PLoS ONE* 4(9): 6861. ("The long-term survival and ecological functioning of socially complex species such as wolves (*Canis lupus*) may depend on more than merely their numerical status. The stability of their social units (packs) may be as important as their population size, but often only the latter is considered. . . . Many profound implications of wolf control remain largely invisible when only numbers are considered. The control of wolves fractures their social structure, which may lead to changes in age composition, group size, survival rates, hunting abilities, territory size and stability, social behavior, genetic identity and diversity. Controlled populations tend to have a higher proportion of young, breeding pairs and litters, due to the loss of pack structure which regulates breeding. . . . Following control, territory boundaries dissolve, and dispersing individuals (floaters) immigrate into vacant areas. Complex behaviors that are learned and developed within stable packs, such as cooperative hunting techniques, may be lost, leading to simplification and aberration of social traditions.") (6861, citations omitted.); and

- Rutledge, L. Y., B. R. Patterson, K. J. Mills, K. M. Loveless, D. L. Murray, B. N. White. 2010. Protection from harvesting restores the natural social structure of

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wolf packs in Idaho could be reduced, the result would likely be a reduction in, rather than an increase in wolf predation on livestock (USDA 2010)." (Draft EA at 37.) This brief, analysis, however fails to grapple with the literature cited here, which suggests that loss of pack structure can lead young and inexperienced wolves to turn to livestock depredations. Further, the Draft EA recognizes that aging wolves may be more likely to depredate livestock due to "poor locomotor performance" but assumes that this fact argues in favor of harvesting older wolves. (Draft EA at 38). In fact, recent studies have shown that intact pacts care for and provide older pack members with food—which argues for keeping pack structure intact, rather than removing younger pack members through public hunts or other forms of take. MacNulty et al (2009).

eastern wolf packs. *Biological Conservation* 143 (2010) 332-339. ("Conservation and management strategies, including decisions to remove species from endangered lists, are largely based on estimates of population size and sustainable harvest. There is, however, growing evidence that maintenance of family groups within species that exhibit kin-based social structure can have fitness benefits associated with the adaptive evolution of sociality. Despite the potential importance of kinship, the role of social groups in long-term population persistence is routinely overlooked. . . . Our results demonstrate the need for conservation policies that look beyond numbers to include the subtler, but potentially important, impacts on social dynamics of wildlife.") (332, 338, citations omitted.)

2. Wildlife Services must analyze the impact of proposed wolf takes on other species/landscapes

Wildlife Services argues that, because a sustainable population of wolves will be maintained in the region, the agency does not have to consider the effects that its actions will have on other species and aspects of the environment (Draft EA a p. 40). As we point out above, however, a viable population of wolves in the region will require many more than several hundred wolves. Regardless, a 40% reduction in the number of wolves currently in the State is likely to have significant reasonably foreseeable and cumulative effects on the environment. These effects must be analyzed.

As the Draft EA acknowledges, wolves have both direct and indirect effects on many species through their ecological role as a top predator. In fact, the Draft EA outlines a number of effects that wolves have on other species such as changing herbivore behavior and density, and leading to the regrowth of willow and aspen stands which in turn provide improved habitat for fish, reptiles, amphibians, songbirds and small mammals (Draft EA at 39). Additionally, wolves have significantly reduced coyote populations, which, in turn, has resulted in increased numbers of pronghorn antelope (Berger et al. 2008, Berger and Conner 2008). The Draft EA also notes that carrion from wolf kills provides an important food source for up to 20 different species of vertebrates, including the federally threatened grizzly bear which is increasingly searching for alternative food sources due to the decline of whitebark pine (Draft EA at 40). Wolf kills are also used by hundreds of species of beetles and other decomposers and ultimately provide added nutrients to the soil (Id.).

Wildlife Services asserts that its actions are not likely to affect any of these processes "because IDFG intends to continue managing Idaho's wolf population in a sustainable manner." (Draft EA at 40). However, the overall size of the population – the number of individuals on the landscape – and not whether that population is deemed to be "sustainable" (a minimum viable population of wolves) is what will determine the extent that wolves affect other species and the environment. In this case, since Wildlife Services' preferred alternative contemplates reducing the Idhao wolf population to about 500 individuals from 843, the actions outlined in the Draft EA are very likely to have an effect on other species and the environment.

The Draft EA thus needs to analyze the effect that this significant reduction in wolves would have on other species both directly and indirectly. For example, the Draft EA should have considered what effect the reduction of wolves would have on ungulate

density and behavior and thus the resulting riparian habitat and species diversity. Wildlife Services must also analyze what effect this large reduction in wolves would have on coyote populations. Presumably a reduction in wolf numbers would result in an increase in coyote numbers which could subsequently increase coyote-caused predation on pronghorn antelope, livestock, other small mammals and birds. If an increase in coyote numbers would result in increased coyote control efforts, the Draft EA must also analyze what effect this would have on other species and the environment. Studies have found that the removal of apex predators such as wolves, and in other cases coyotes, can have profound effects on the ecosystem through the release of "mesopredators," or medium-sized predators that increase in the absence of more dominant predators (Prugh et al. 2009, Beschta and Ripple 2009, Roemer et al. 2009, Crooks and Soule 1999). This change in the abundance and type of predators can affect everything from the overall species diversity of an area to the composition of the surrounding plant communities.

The Draft EA also needs to analyze the effect that a reduction of wolf kills would have on the myriad of other species that scavenge the kills. In particular, the Draft EA points out that wolf kills will become increasingly important for grizzly bears as one of their main food sources, the whitebark pine seeds, declines. (Draft EA at 40.) A reduction in wolf kills is likely to affect other species as well. For example, research has shown that wolf kills help mediate the effects of global warming by providing a constant food source for scavengers regardless of whether winter conditions or mild or severe (Wilmers et al. 2005). When winters are mild, elk survival rates are higher. In the absence of wolf kills, milder winters mean fewer carcasses for scavengers to consume.

The EA acknowledges that wolves play an intricate role in the ecosystem with complex and profound effects on other species, but fails to analyze what effect the removal of 40% of the State's population of wolves would have on these species or the environment. A complete analysis of these effects is required.

D. Irretrievable Commitment of Resources

The Draft EA asserts that "the following resource values within Idaho would not be adversely affected by any of the Alternatives analyzed in this EA: soil, geology, minerals, water quality/quantity, flood plains, wetlands, visual resources, air quality, prime and unique farmlands, aquatic resources, timber, and range. These will not be analyzed further." (Draft EA at p. 68 (emphasis added).)

Given the effects that wolves have on riparian habitat, discussed above, it is simply not tenable to conclude that reducing the State's wolf population by 40% will have no effect on either wetlands or aquatic resources. The presence of wolves is known to help restore streamside vegetation, which would otherwise be over-browsed by elk and deer. This provides habitat for aquatic species, including cold-water fish and food for species such as beavers, which help create and maintain wetland habitat. Similarly, the reduction in coyote populations caused by wolves also aids in beaver survival.

E. Wildlife Services Must Prepare an Environmental Impact Statement

As discussed above, NEPA requires federal agencies to prepare an EIS for any major federal action "significantly affecting the quality of the human environment." 42 U.S.C.

§ 4332(2)(C). Significant effects need not be certain to occur to trigger the EIS requirement—rather, "an EIS *must* be prepared if 'substantial questions are raised as to whether a project . . . *may* cause significant degradation of some human environmental factor.'" Idaho Sporting Congress v. Thomas, 137 F.3d 1146, 1149 (9th Cir. 1998) (quoting Greenpeace Action v. Franklin, 14 F.3d 1324, 1332 (9th Cir. 1992).

The Council on Environmental Quality ("CEQ") has enacted regulations to ensure compliance with NEPA. These regulations "are binding on all federal agencies and provide guidance to the courts for interpreting NEPA requirements." Or. Natural Res. Council v. United States Forest Serv., 834 F.2d 842, 847 n. 5 (9th Cir. 1987). In determining whether a proposed action "significantly" affects the environment and thus requires an EIS, CEQ regulations lay out ten factors for federal agencies to consider. 40 C.F.R. § 1508.27(b). Any one of these factors, standing alone, is sufficient to require preparation of an EIS. Ocean Advocates v. United States Army Corps of Eng'rs, 402 F.3d 846, 865 (9th Cir. 2005). In this case, at least the following seven factors strongly suggest that preparation of an EIS is required:

(1) Impacts that may be both beneficial and adverse. A significant effect may exist even if the Federal agency believes that on balance the effect will be beneficial;

(2) The degree to which the proposed action affects public health or safety;

(3) The degree to which the effects on the quality of the human environment are likely to be highly controversial;

(4) The degree to which the possible effects on the human environment are highly uncertain or involve unique or unknown risks;

(5) The degree to which the action may establish a precedent for future actions with significant effects or represents a decision in principle about a future consideration; and

(6) Whether the action is related to other actions with individually insignificant but cumulatively significant impacts. Significance exists if it is reasonable to anticipate a cumulatively significant impact on the environment. Significance cannot be avoided by terming an action temporary or by breaking it down into small component parts;

(7) The degree to which the action may adversely affect an endangered or threatened species or its habitat that has been determined to be critical under the Endangered Species Act of 1973.

See 42 C.F.R. § 1508.27.

In addition to the significant environmental effects that widespread reduction of wolf populations may have on Idaho's environment—which, in addition to wolves

themselves, could impact the health of willow and aspen stands, habitat for fish, reptiles, amphibians, songbirds and small mammals, pronghorn antelope population levels, carrion availability for vertebrate and invertebrate species, and nutrients deposition—several of these factors merit further elaboration.

First, Wildlife Services clearly believes that its preferred alternatives will have significant beneficial effects such as helping to increase ungulate populations. Wildlife Services also seems to assert that its wolf management activity will benefit human health and safety.

Second, it is plain that the effects of Wildlife Service's wolf management activities are uncertain and controversial. Wolves provide a wide variety of benefits to the ecosystems in which they live and significant reductions in wolf populations may affect those ecosystems in ways scientists do not yet fully understand. In addition the scientific literature is clear that there is substantial uncertainty over the effects that disrupting wolf social structure through widespread taking may have on the species behavior. Finally, there is significant public interest and controversy surrounding the lethal removal of wolves, particularly on a scale contemplated by the Draft EA.[12]

Third, Wildlife Services' preferred alternative will serve both as a precedent for future actions and is likely to have significantly cumulative effects. Wildlife Services carries out wolf damage management activities not only in Idaho, but also in Montana and Wyoming and, potentially, Utah, Oregon, and Washington. Moreover, Montana, like Idaho, is authorized by the U.S. Fish and Wildlife Service to reduce wolf populations to boost ungulate numbers. 50 C.F.R. § 17.84(n). Thus, Wildlife Services' wolf damage management activities in Idaho, and the manner in which those activities are analyzed by the agency, are very likely to act as precedent for similar actions in other states. Additionally, as the Draft EA recognizes, gray wolves in the Northern Rockies need to be managed as a single connected population, (Draft EA at 63), and any widespread reduction of wolf population numbers in Idaho is likely to have cumulative effects on wolf population viability and dynamics throughout the region (in addition to the cumulative impacts discussed above).

Fourth, gray wolves in the Northern Rockies were recently returned to the federal list of endangered species. Defenders of Wildlife, --- F.Supp.2d ----, 2010 WL 3084194. Moreover, as discussed below, Wildlife Service has already carried out consultations with the U.S. Fish and Wildlife Service over the impact of its wolf damage management activities on grizzly bears and Canadian lynx. While we disagree with the adequacy of these consultations, at a minimum the agency's proposed activities here are ones which "may adversely affect" listed species.

It should be clear, under this rubric, that Wildlife Services' proposed actions present the potential for significant adverse impacts on the gray wolf and Idaho's environment. The agency thus cannot authorize these activities absent the preparation of a full EIS.

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[12] See, e.g., The Associated Press, *Idaho Wants Public Input on Plan to Kill Wolves*, IDAHO STATESMAN, Aug. 14, 2010, at http://www.idahostatesman.com/2010/08/14/1302869/idaho-wants-public-input-on-plan.html (last visited Aug. 26, 2010); Laura Zuckerman, *Idaho Seeks to Kill Hundreds of Protected Wolves*, REUTERS, Aug. 6, 2010, at http://www.reuters.com/article/idUSTRE67503V20100806 (last visited Aug. 26, 2010).

IV. Wildlife Services Must Consult Under ESA on Any Indirect Adverse Effects to Listed Species.

Finally, we note here that Wildlife Services does not appear to have fulfilled its consultation obligation with the U.S. Fish and Wildlife Service under ESA. According to the Draft EA:

> Previously prepared Biological Assessments have determined that the grizzly bear and the Canada lynx are the only federally listed T/E species which might potentially be affected by WS wolf damage management activities. The USFWS has concurred that WS' wolf damage management methods are not likely to adversely affect grizzly bears in Idaho, and are not likely to jeopardize the continued existence of Canada lynx (USDI 1992, 1996, 2002). Although the possibility exists that a grizzly bear or Canada lynx could unintentionally be captured in traps or snares set for wolves, WS employees comply with USFWS prescribed reasonable and prudent measures and terms and conditions to reduce the likelihood of any unintentional captures of these species, and no lynx or grizzly bears have been unintentionally captured during wolf damage management efforts in the 15 years that WS has been involved in these efforts. WS has determined that neither the current program nor the proposed action are likely to have any negative effects on any other State or federally listed species.

(Draft EA at 41-42.) It appears from this text that Wildlife Services has thus consulted with FWS over the direct effects—unintentional takes—that its activities could have on grizzly bears and lynx. However, the Draft EA also acknowledges that "[g]rizzly bears benefit from wolf-killed prey throughout the year, whereas prior to wolf restoration, carrion was primarily only available in late winter. Carcasses may also be important to bears during fall when other food sources fail or are scarce (like whitebark pine nuts; grizzly bear use of wolf-killed ungulate carcasses increased during poor whitebark pine nut years). This illustrates an indirect effect between grizzly bears and whitebark pine as influenced by wolves." (Draft EA at 40.)

The reduction in wolf populations, as contemplated by the Draft EA, thus could indirectly adversely affect grizzly bear populations by reducing carcass availability. This is a likely adverse effect of the proposed action which, like direct takings, also requires consultations. 50 C.F.R. § 402.02 (requiring evaluation of indirect effects).

V. Conclusion

For the reasons set forth above, we urge Wildlife Services to withdraw its Draft EA, prepare a full EIS, and reinitiate consultations with the U.S. Fish and Wildlife Service under ESA.

Thank you for considering these comments.

Very truly yours,

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