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CENTER for BIOLOGICAL DIVERSITY



PROJECT COYOTE
FOSTERING COEXISTENCE



July 15, 2015

RE: Pre-decision Environmental Assessment, Mammal Damage Management in California APHIS-WS' North District

To Whom It May Concern:

On behalf of the Animal Welfare Institute, Center for Biological Diversity (CBD), Animal Legal Defense Fund (ALDF), Project Coyote, International Fund for Animal Welfare (IFAW), Western Watersheds Project, Born Free USA, and the Mountain Lion Foundation (and our supporters), please accept the following comments on the pre-decision environmental assessment (EA) for Wildlife Services' (WS) mammal damage management (MDM) in California, dated May 29, 2015.

WS identifies three decisions that are to be made based on the information and analysis contained in the draft EA:

- Should California APHIS-WS MDM program, as currently implemented in the District, be continued?
- If not, how can California APHIS-WS best assist the public with reducing wildlife damage in the District?
- Might this proposal have significant impacts requiring preparation of an EIS?

The following comments are submitted in response to these questions and WS' corresponding analysis of proposed alternatives. Based on the EA and other available information, we conclude that WS improperly excluded from consideration an alternative that would restrict WS' involvement in California's mammal management efforts to use nonlethal measures which minimize animal suffering and do not include cruel leghold traps and neck snares.

WS' weak scientific analysis and justification for finding that Alternative 1 (the Proposed Action Alternative), which would continue lethal and otherwise inhumane mammal "management" practices, would have low cumulative effects on target and non-target species and the lowest negative environmental impacts, is inconsistent with the mandate of the National Environmental Policy Act (NEPA), 42 U.S.C. § 4321 *et seq.*, as well as mammal conservation objectives.

Killing mammals in California, pursuant to Alternatives 1 and 4, will have significant environmental impacts, thus WS must prepare a complete environmental impact statement (EIS). The EIS should include a detailed analysis of predicted impacts on mammals, including effects on social dynamics, threatened and endangered species in the region, other species, and the public, if WS elects to proceed with its lethal control proposal.

I. California WS should not continue its involvement in MDM as currently practiced

a. The EA overstates the damage caused by mammals

In its discussion of the purpose and need for the proposed action, WS overstates the threat posed by mammals in the state. The EA states that “[m]any studies have shown that coyotes inflict high predation rates on livestock. Coyotes accounted for 93% of all predator-killed lambs... in Idaho... and were also the predominant predator on sheep throughout a Wyoming study...”¹ Yet, WS fails to provide current data to support these assertions.

The EA goes on to state that it is “impossible to accurately determine the number of livestock saved from predation by District personnel and actions,”² and continues to cite outdated studies and statistics regarding livestock loss in areas without some level of damage management. The EA also fails to cite to any studies comparing loss of livestock based on WS’ methods versus non-lethal methods only.³

b. Wildlife Services’ refusal to address the impacts to ecosystems and biodiversity is patently unreasonable

Wildlife Services refuses to consider impacts to biodiversity or ecosystems in detail. This deliberate oversight is indefensible, as the program has significant impacts to ecosystem integrity.

This is clear from the sheer number of animals that are killed by the program. In Fiscal Year 2014, Wildlife Services reports that it killed more than 2.7 million animals across the United States, including 61,702 coyotes, 580 black bears, 796 bobcats, 305 mountain lions, 2,930 foxes, 454 river otters, and 322 gray wolves.⁴ More than four million

¹ USDA WILDLIFE SERVICES PRE-DECISIONAL ENVIRONMENTAL ASSESSMENT: MAMMAL DAMAGE MANAGEMENT IN CALIFORNIA APHIS-WS’ NORTH DISTRICT 13 (2015) [hereinafter EA].

² EA at 14.

³ See *Appendix studies*.

⁴ See U.S. DEPARTMENT OF AGRICULTURE, ANIMAL PLANT HEALTH INSPECTION SERVICE, TABLE G. ANIMALS TAKEN BY WILDLIFE SERVICES – FY 2014, available at http://www.aphis.usda.gov/wildlife_damage/prog_data/2014/G/Tables/Table%20G_ShortReport.pdf (last visited June 11, 2015).

animals were killed the year before.⁵ But as astonishing as these numbers are, “[t]he field guys do not report even a fraction of the non-target animals they catch.”⁶

Indeed, killing wildlife at this scale has contributed to the localized extinction (extirpation) of many North American species, and has fundamentally altered ecosystems at a local, regional, and continental scale. As the *New York Times* Editorial Board put it, this “undercuts other programs intended to protect the balance of natural ecosystems” in the process.⁷ The targeting of predators like coyotes, bears, and mountain lions in particular causes a wide range of “unanticipated impacts” that are often profound, altering “processes as diverse as the dynamics of disease, wildfire, carbon sequestration, invasive species, and biogeochemical cycles.”^{8,9} The removal of so many animals from the environment – especially predators – certainly alters native ecosystems directly, indirectly, and cumulatively.¹⁰

Wildlife Services claims that it need not consider these impacts because its lethal activities does not affect species at the population level, and that it only kills target animals. This is patently false. As explained above, requiring “population-level impacts” is not the proper test for analysis under NEPA. Even if it were, the sheer scale of killing that occurs under the program belies Wildlife Services’ claims that only a few offending animals are killed.

⁵ U.S. DEPARTMENT OF AGRICULTURE, ANIMAL PLANT HEALTH INSPECTION SERVICE, TABLE G. ANIMALS TAKEN BY WILDLIFE SERVICES – FY 2013, *available at* http://www.aphis.usda.gov/wildlife_damage/prog_data/2013/G/Tables/Table%20G_ShortReport.pdf (last visited June 11, 2015); *see also* Darryl Fears, *USDA’s Wildlife Services Killed 4 Million Animals in 2013; Seen as an Overstep by Some*, WASHINGTON POST (June 4, 2014), *available at* http://www.washingtonpost.com/national/health-science/governments-kill-of-4-million-animals-seen-as-an-overstep/2014/06/06/1de0c550-ecc4-11e3-b98c-72cef4a00499_story.html.

⁶ Tom Knudson, *Neck Snare Is a ‘Non-Forgiving and Nonselective’ Killer, Former Trapper Says*, SAC BEE (Apr. 30, 2012) (“Knudson, *Neck Snares*”) (quoting former agency trapper).

⁷ *NY Times* Editorial; Kim Murray Berger, *Carnivore-Livestock Conflicts: Effects of Subsidized Predator Control and Economic Correlates on the Sheep Industry*, 20 CONSERV. BIOLOGY 751 (2006); James A. Estes et al., *Trophic Downgrading of Planet Earth*, 333 SCIENCE 301 (2011) (“Estes et al. (2011)”); Bergstrom et al. (2013).

⁸ Bergstrom et al. (2013); Estes et al. (2011)

⁹ For this reason, a 1979 policy from the U.S. Department of the Interior (which oversaw Wildlife Services at that time) directed Wildlife Services to limit predator control, *i.e.*, in order to “recognize the importance of predators to natural ecosystems,” “strive to reduce conflicts between predators and livestock as far as possible,” “direct lethal controls at offending animals, not the species as a whole,” and to “maintain public land use and wildlife resource values as a public trust.” Memorandum from Cecil D. Andrus, Secretary of the U.S. Department of the Interior to the Assistant Secretary, Fish and Wildlife and Parks (Nov. 8, 1979) (“1979 Policy”). The 1979 Policy was reversed due to politics, according to Dr. Lee M. Talbot, one of the primary authors, who has called on the County to end its contract with Wildlife Services. Lee M. Talbot, *Stopping the Slaughter of America’s Native Wildlife, One County at a Time*, SAC BEE, April 25, 2015.

¹⁰ *See* 1976 AG Opinion (as “it is impossible to specifically determine whether the cumulative effect of repeated trapping will be significant,” “[w]e are ... unable to conclude that it will not be significant”).

Indeed, most of Wildlife Services' methods are indiscriminate and often kill unintended victims.¹¹ Since 2000, Wildlife Services has killed more than 50,000 members of more than 150 non-target species, including federally- and/or state-protected animals such as Mexican gray wolves, grizzly bears, kangaroo rats, eagles, falcons, California condors, red-tailed hawks, great horned owls, armadillos, pronghorns, porcupines, long-tailed weasels, javelinas, marmots, snapping turtles, turkey vultures, great blue herons, ruddy ducks, sandhill cranes, and ringtail cats.¹² These killings undermine federal efforts to conserve and recover the affected species – which, oftentimes, need protection under state and/or federal laws in part *due* to Wildlife Services' practices.¹³

Many of the species targeted by APHIS-Wildlife Services play critical roles in ecosystems, and their removals result in a cascade of unintended consequences. The loss of top predators in particular is well documented to cause a wide range of “unanticipated impacts” that are often profound, altering “processes as diverse as the dynamics of disease, wildfire, carbon sequestration, invasive species, and biogeochemical cycles.”¹⁴

An overview of ecological principles illustrates this. “Predators” are animals that prey on other animals.¹⁵ “Apex” predators have few or no predators of their own and occupy the top of the food chain.¹⁶ Terrestrial apex predators include coyotes, bears, and mountain lions.¹⁷ Apex predators create a “trophic cascade” of beneficial effects that flow through and sustain ecosystems and the web of life.¹⁸ For example, wolves in Yellowstone and

¹¹ See Bradley J. Bergstrom et al., *License to Kill: Reforming Federal Wildlife Control to Restore Biodiversity and Ecosystem Function*, 6 CONSERV. LETTERS 1 (2013) (“Bergstrom et al. (2013)”); Knudson, *Pandora's Box*.

¹² Tom Knudson, *Suggestions in Changing Wildlife Services Range from New Practices to Outright Bans*, SAC BEE (May 6, 2012).

¹³ Over the past century, Wildlife Services played a leading role in the decimation of populations of a multitude of wildlife species, contributing to the endangerment of the bald eagle, California condor, Canada lynx, kit fox, swift fox, Utah prairie dog, Gunnison's prairie dog, grizzly bear, gray wolf, Mexican gray wolf, fisher, and others. 41 Fed. Reg. (July 12, 1976) (bald eagle); U.S. FISH AND WILDLIFE SERVICE (“FWS”), ANIMAL DAMAGE CONTROL “MAY AFFECT” DETERMINATIONS FOR FEDERALLY LISTED THREATENED AND ENDANGERED SPECIES, USFWS BIOLOGICAL OPINION 44 (1997) (California condor); FWS, SPECIES ASSESSMENT AND LISTING PRIORITY ASSIGNMENT FORM, GUNNISON'S PRAIRIE DOG (2010); FWS, RECOVERY PLAN FOR UPLAND SPECIES OF THE SAN JOAQUIN VALLEY, CALIFORNIA (1998) (San Joaquin kit fox); FWS, UTAH PRAIRIE DOG (*CYNOMYS PARVIDENS*) REVISED RECOVERY PLAN (2012); FWS, GRIZZLY BEAR RECOVERY PLAN (1993); FWS, NORTHERN ROCKY MOUNTAIN WOLF RECOVERY PLAN (1987); FWS, SPECIES ASSESSMENT AND LISTING PRIORITY ASSIGNMENT FORM, WEST COAST POPULATION OF FISHER (2012). By targeting predators, the Wildlife Services program acts as a subsidy for livestock producers in contravention of other federal expenditures – e.g., more than \$43 million spent by the federal government since 1974 to recover the gray wolf. Bergstrom et al. (2013).

¹⁴ Estes et al. (2011) (note 10); Bergstrom et al. (2013) (note 9).

¹⁵ See, A.S. Leopold et al., *Predator and Rodent Control in the United States*, U.S. Fish and Wildlife Service (1964) at 9 (“The assertion that native birds and mammals are in general need of protection from native predators is supported weakly, if at all, by the enormous amount of wildlife research on the subject conducted in the past two or three decades.”).

¹⁶ Prugh, L.R., Stoner, C.J., Epps, C.W., Bean, W.T., Ripple, W.J., Laliberte, A.S. & Brashares, J.S., 2009, The Rise of the Mesopredator, *BioScience*, v. 59(9), p. 779 [hereinafter “Prugh et al. (2009)”].

¹⁷ *Id.*

¹⁸ Ripple, W.J. and Beschta, R.L., 2011, Trophic cascades in Yellowstone: The first 15 years after wolf reintroduction, *Biological Conservation*, v. 145, p. 205 [hereinafter “Ripple and Beschta (2011)”]; Estes et

Grand Teton national parks have been found to benefit a host of species, including aspen, songbirds, beavers, bison, fish, pronghorn, foxes, and grizzly bears.¹⁹ By reducing numbers and inducing elk to move, wolves have reduced browsing on aspen and other streamside vegetation, which has benefitted beavers, songbirds and fish populations.²⁰

Studies have also shown how wolves and coyotes interact, and how wolves can aid pronghorn populations because “wolves suppress[] coyotes and consequently fawn depredation.”²¹ Wolves also benefit scavengers by leaving carrion derived from predation; hence, wolf removal leads to reduced abundance of carrion for scavengers in specific areas.²² For instance, the extirpation of wolves works to the detriment of grizzly bears, which are listed as a threatened species and which, in addition to acting as apex predators, can scavenge carrion left by wolves. A 2013 study shows that wolves benefit grizzly bears in Yellowstone through another trophic mechanism as well – specifically, wolf predation on elk has led to less elk browsing of berry-producing shrubs, providing grizzlies with access to larger quantities of fruit.²³

The removal of apex predators may have other unexpected outcomes – for example, it can cause the “release” of mid-sized or “mesopredators” like foxes, raccoons, and skunks that are not at the top of the food chain in the presence of coyotes.²⁴ Increased abundance of mesopredators in turn can negatively affect populations and diversity of other species, including ground-nesting birds, rodents, lagomorphs, and others. In some cases, declines in these species results in reduced prey for other predators and contribute to their decline and extirpation.

An example is the variation of the distribution and abundance of coyotes in coastal Southern California – where wolves do not occur and, hence, coyotes have assumed the role of apex predator but have declined or disappeared due to urbanization and

al. (2011); Ripple, W.J., Beschta, R.L., Fortin, J.K. & Robbins, C.T., 2013, Trophic cascades from wolves to grizzly bears in Yellowstone, *Journal of Animal Ecology*, doi: 10.1111/1365-2656.12123 [hereinafter “Ripple *et al.* 2013”].

¹⁹ Ripple and Beschta (2011); Bergstrom *et al.* (2013); Estes *et al.* (2011).

²⁰ *Id.*

²¹ Berger, K.M. & Gese, E.M., 2007, Does interference competition with wolves limit the distribution and abundance of coyotes? *Journal of Animal Ecology*, v. 76, p. 1075; Smith, D.W., Peterson, R.O. & Houston, D.B., 2003, Yellowstone after Wolves, *BioScience*, v. 53(4), p. 330; Berger *et al.* (2008) (note 10); Prugh *et al.* (2009) (note 146); Bergstrom *et al.* (2013) (note 9).

²² Ripple and Beschta (2011) (note 148); Wilmsers C.C., Crabtree R.L., Smith D.W., Murphy K.M. & Getz, W.M., 2003, Trophic facilitation by introduced top predators: grey wolf subsidies to scavengers in Yellowstone National Park, *Journal of Animal Ecology*, v. 72, p. 909; Wilmsers C.C., Stahler, D.R., Crabtree, R.L., Smith, D.W. & Getz, W.M., 2003, Resource dispersion and consumer dominance: scavenging at wolf- and hunter-killed carcasses in Greater Yellowstone, USA, *Ecology Letters*, v. 6(11), p. 996.

²³ Ripple *et al.* 2013.

²⁴ Crooks, K.R. and Soulé, M.E., 1999, Mesopredator release and avifaunal extinctions in a fragmented system, *Nature*, v. 400, p. 563 [hereinafter “Crooks & Soule (1999)”]; Prugh *et al.* (2009). Although coyotes are mesopredators when wolves are present, they can act as apex predators where wolves have been extirpated. See, e.g., Crooks & Soulé (1999).

fragmented habitat.²⁵ As a study of this area observed, “[i]t appears that the decline and disappearance of the coyote, in conjunction with the effects of habitat fragmentation, affect the distribution and abundance of smaller carnivores and the persistence of their avian prey.”²⁶ An estimated 75 local extinctions of native, scrub-breeding bird species may have occurred over the past century in these areas.²⁷

Studies have also found that coyotes have a positive effect on rodent species diversity.²⁸ For example, one study determined that Ord’s kangaroo rat became the dominant species in areas without coyotes. As their numbers increased, so did their competitive advantage. This had an overall negative effect on species diversity and richness throughout the ecosystem.²⁹ Correspondingly, coyotes were found to keep kangaroo rat populations in check, which removed their competitive advantage and increased overall rodent species diversity.³⁰ The presence of coyotes in their native ecosystems is critical to maintaining ecological balance; accordingly, WS’ proposal to disrupt coyote populations and displace other keystone species in the District is inconsistent with protecting the region’s environment and wildlife.

The removal of apex predators from an ecosystem will have a substantial negative effect on the environment and should be taken into account when determining whether there are significant environmental impacts associated with a given alternative.

c. The EA does not provide a sufficiently detailed plan for WS’ implementation of nonlethal mammal management measures

In discussing its preferred alternative, WS provides little detail about the extent to which it presently makes or intends to make use of individual management methods. The program’s track record with mammal management leaves us questioning how much it will rely on nonlethal measures. WS has a long history, both in California and elsewhere, of relying heavily on lethal and inhumane wildlife control methods. Indeed, the Government Accountability Office (“GAO”) has confirmed that, despite its rhetoric, WS primarily employs lethal control methods and that “field personnel rarely use nonlethal

²⁵ Crooks & Soulé (1999) (note 154). For additional examples *see*: Soulé, M.E., 1988, Reconstructed dynamics of rapid extinctions of chaparral-requiring birds in urban habitat islands, *Conservation Biology*, v. 2, p. 75; Sovada, M.A., Sargeant, A.B. & Grier, J.W., 1995, Differential effects of coyotes and red foxes on duck nest success, *Journal of Wildlife Management*, v. 59, p. 1; Palomares, F., Gaona, P., Ferreras, P. & Delibes, M, 1995, Positive effects on game species of top predators by controlling smaller predator populations: an example with lynx, mongooses, and rabbits, *Conservation Biology*, v. 9, p. 295; Rogers, C.M. & Caro, M.J., 1998, Song sparrows, top carnivores, and nest predation: a test of the mesopredator release hypothesis, *Oecologia*, v. 116, p. 227; CONTINENTAL CONSERVATION: SCIENTIFIC FOUNDATIONS FOR REGIONAL RESERVE NETWORKS (1999).

²⁶ *Id.* It is also noteworthy that coyotes are a primary target of killing by APHIS-Wildlife Services, yet the program’s activities have contributed to growth of coyote populations. The EA acknowledges this, stating that killing coyotes will only lead to habitation by dispersing coyotes.

²⁷ Crooks & Soulé (1999) at 565.

²⁸ Scott E. Henke and Fred C. Bryant, *Effect of Coyote Removal on the Faunal Community in Western Texas*, 63 J. of Wildlife MGMT. 4, 1070

²⁹ *Id.*

³⁰ *Id.* at 75.

methods when controlling livestock predators.”³¹ The GAO also noted that “an operator’s use of nonlethal control methods is not a prerequisite for receiving program assistance.”³² Assurances that nonlethal tools will be used where possible are vague, unsupported by past actions, and unconvincing.

It is crucial that WS make an actual, tangible commitment to advancing nonlethal practices. We are greatly concerned that, although the EA suggests that WS will balance lethal and nonlethal approaches to mammal management in California, it provides no insight into the extent to which certain methods will be used, or the impacts that this so-called balance will have on the region’s ecosystems. At a minimum, before lethal methods can even be considered, WS should mandate that: a) all feasible nonlethal management tools are used (including prophylactically in known wildlife-livestock conflict zones); b) such methods are documented; c) relevant results are measured; and d) these results are reported—before it considers lethal methods.

d. The EA does not sufficiently address the number of non-target species expected to be taken, how WS will reduce take of non-target species, and the environmental effects these takes will have

Although the EA alleges that specific animals that cause “problems” will be targeted, there is a lack of detail as to *how* this can be accomplished. Most of the methods used by WS are indiscriminate and operate such that WS has no way to determine if an animal killed by WS has in fact been responsible for livestock depredation or other conflicts. The traps and snares used to capture predators are not equipped to distinguish between a coyote, an endangered species, or a family pet.

Among the most common non-target animals killed by WS’ traps are dogs. California WS trappers, in particular, have been reported as purposely targeting dogs. For example, Mendocino County trapper Chris Brennan has been reported as routinely shooting dogs without any concern as to whether they belong to someone.³³ It is estimated that he has killed almost 400 dogs without being arrested or charged with a crime.³⁴

Leghold traps (this includes padded leghold traps)³⁵ and neck snares are fundamentally nonselective and environmentally destructive. In an effort to address the nonselective nature of these devices, the EA suggests that leghold traps and snares can be modified to prevent indiscriminate killing. Yet WS fails to provide any detail on how these can be used to reduce non-target capture. Similarly, while WS suggests that the use of pan-

³¹ GOVERNMENT ACCOUNTABILITY OFFICE, ANIMAL DAMAGE CONTROL, EFFORTS TO PROTECT LIVESTOCK FROM PREDATORS, GAO/RCED-96-3 (1995).

³² *Id.*

³³ Peter Firmate, *Wildlife groups take aim at lethal control of predators*, THE SAN FRANCISCO GATE, (June 1, 2015). Accessed at:

<http://www.sfgate.com/science/article/Wildlife-groups-take-aim-at-lethal-control-of-6296956.php>

³⁴ *Id.*

³⁵ Cal. Fish & Game Code § 465.5(a) Traps Defined. Traps are defined to include padded-jaw leg-hold, steel-jawed leg-hold, and conibear traps, snares, dead-falls, cage traps and other devices designed to confine, hold, grasp, grip, clamp or crush animals’ bodies or body parts.

tension devices can be used with leghold traps to promote selectivity, these cannot be effectively used to exclude all non-target wildlife: leghold traps capture many non-target animals, regardless of modifications.³⁶

II. WS' mitigation measures should include the implementation of humane, nonlethal wildlife management practices

a. WS should not rely on leghold traps, neck snares, gas cartridges, or other inhumane and indiscriminate methods for mammal management in California

Under Alternatives 1 and 4, WS would use leghold traps (with a reference to padded leghold traps) and snares, as well as gas cartridges, as wildlife management tools. We strongly oppose these methods and support the use of practical and effective nonlethal livestock protection practices—such as the use of human shepherds, shed-lambing, fencing, electronic sensors, and noise-making devices—in place of lethal approaches. Lethal devices such as leghold traps inflict substantial pain and suffering on animals, many of whom die as a result of being trapped. To describe them as “humane” by stating that “wildlife would be removed as humanely as possible using shooting, snares, trapping, registered pesticides, or other techniques”³⁷ represents a profound misrepresentation of their impacts.

Leghold traps, in general, are internationally recognized as inhumane and have been banned in many countries. Mammals, upon being trapped, frantically struggle to free themselves both by attempting to pull the trapped limb out of the device and by chewing at the trap itself (or even their own limbs). The force of the jaws clamping on the animal's limb and the subsequent struggle result in severe trauma including mangling of the limb, fractures, damage to muscles and tendons, lacerations, injury to the face and mouth, broken teeth, loss of circulation, frostbite, and amputation.³⁸ In addition to the pain and fear associated with the struggle to get free, animals captured in leghold traps and snares are left unable to protect themselves from predation and return to their young.

In fact, California has a ban on the use of steel-jawed leghold traps, whereby it is unlawful for any person to use or authorize the use of any steel-jawed leghold trap, **padded or otherwise**.³⁹ Although there is an exception, that is only available to federal, state, county, or municipal government employees or their duly authorized agents in the extraordinary case where the otherwise prohibited padded-jaw leghold trap is the only method available **to protect human health or safety**.⁴⁰ In the EA, WS is proposing to

³⁶ Tom Knudson, Long Struggles in Leghold Device Make for Gruesome Deaths, SACRAMENTO BEE, Apr. 29, 2012, at 15A.

³⁷ EA at 8.

³⁸ Robert L. Phillips et al., Leg Injuries to Coyotes in Three Types of Leghold Traps, 24 WILDLIFE SOC'Y BULLETIN 260 (1996); Detlef K. Onderka et al., Injuries to Coyotes and Other Species Caused by Four Models of Legholding Devices, 18 WILDLIFE SOC'Y BULLETIN 175 (1990).

³⁹ Cal. Fish & Game Code § 465.5(e).

⁴⁰ Cal. Fish & Game Code § 465.5(e)(1).

use leghold traps in order to protect livestock, not for the purposes of protecting human health or safety, hence violating state law.

Relying on leghold traps with offset and laminated jaws (or so-called “padded jaws”) will also not prevent the injury and pain associated with capture. These variations do not prevent severe, drawn-out pain and fear. Data reflecting injuries suffered by coyotes captured in leghold traps is instructive. USDA itself found that 97 percent of coyotes trapped in “padded” traps experienced edematous swelling or hemorrhage in the restrained limb, while 94 percent of coyotes captured in offset traps and 95 percent of those in laminated traps experience such injury.⁴¹ Many other injuries were observed, and some of the coyotes examined had broken bones.⁴²

Snares can be similarly inhumane. Neck snares are particularly worrisome. Even if wildlife captured in snares is not killed prior to release, it is subjected to a great deal of pain and distress. Animals captured in snares experience joint luxation, soft tissue erosion, tooth fractures, severe lacerations, damage to neck and throat tissue, internal bleeding, and other injuries.⁴³

The EA suggests that snare modifications such as stops may be applied to the cable to make it less “lethal” and most snares incorporate a “breakaway” feature to release non-target wildlife, but such features can be difficult to operate correctly and, in addition, there is no detail provided concerning the extent to which snares would be equipped with these devices or the circumference at which stops would be attached. Again, the assurances made by WS are vague at best and should be treated with skepticism.

WS’ own records indicate that nearly every animal captured in leghold traps and foot and neck snares is killed, including the majority of non-target animals captured using these methods.⁴⁴ Even the animals that are released may not survive because they are left susceptible to gangrene following loss of circulation in the trapped limb, as well as stress-related illness and death.⁴⁵ WS cannot accurately represent these methods as “humane.”

Trap monitoring devices consist of transmitter equipment that serves to notify WS staff when an animal has been captured in a trap. A WS agent, once aware of the capture, may go to the trap site and release or kill the animal. These devices are characterized as having a high degree of accuracy, and WS itself has identified many benefits associated with the use of trap monitoring devices, including not only improved animal welfare, but also savings in agency time and resources.⁴⁶

⁴¹ *Id.*

⁴² *Id.*

⁴³ For a review of relevant literature, see IRENE ROCHLITZ, THE IMPACTS OF SNARES ON ANIMAL WELFARE 14–20 (2010).

⁴⁴ USDA WILDLIFE SERVICES, ANIMALS TAKEN BY COMPONENT/METHOD TYPE AND FATE BY WILDLIFE SERVICES IN MONTANA – FY 2011 (2012).

⁴⁵ ROCHLITZ, *supra* n. 43.

⁴⁶ WILDLIFE SERVICES NATIONAL WILDLIFE RESEARCH CENTER, EVALUATION OF REMOTE TRAP MONITORS (2008).

TTDs also have the potential to reduce the suffering of trapped and snared animals. They contain a tranquilizer and are attached to traps or snares and are intended to subdue captured animals and prevent excessive struggle and associated physical harm. USDA itself has determined that TTDs can substantially reduce injury to animals captured in traps,⁴⁷ and similar results have been observed when TTDs are used with snares.⁴⁸

To be clear: we are not, by any means, condoning the use of leghold traps. We are simply pointing out that Wildlife Services fails to consider additional measures that have the potential to reduce the suffering of trapped and snared animals. The EA omits any discussion of trap monitoring devices and tranquilizer trap devices (TTDs), both of which have been shown by the agency's own data to reduce animal suffering. Although leghold traps cannot be used without causing some amount of animal suffering, these tools can reduce the duration of a captured animal's pain and struggle and have not even been considered.

In fact, WS has failed to seriously consider any measures to reduce animal suffering in its EA. Traps should not be used—particularly since they are illegal for use in California unless they are necessary for human health or safety—however, if they are ever used, they must be equipped with trap monitoring devices and TTDs, with a mandatory 24-hour trap check time (in any given state where leghold traps are legal to use) if WS is truly committed to making any efforts to prevent unnecessary suffering to any animal, target or non-target.

b. Nonlethal mammal management methods that minimize animal suffering are effective and should be adopted if WS remains involved in California's mammal management efforts after additional, far more thorough, environmental review

If WS elects to work with CDFW to manage the state's mammals, the program's resources should be directed strictly toward the implementation of nonlethal and noninvasive controls and the provision of technical assistance to encourage the use of such tools. If WS proceeds with its proposed lethal control plan, it should exhaust all nonlethal options before resorting to lethal control—an alternative that was considered but rejected with very little explanation in the EA.⁴⁹

As noted, a variety of alternative methods have been successfully used to prevent livestock depredations. WS implies that these methods would be ineffective because they “likely would be applied by some persons with little or no training or experience and methods could be used improperly.”⁵⁰ However, WS improperly dismisses these

⁴⁷ Doris E. Zemlicka et al., Development and Registration of a Practical Tranquilizer Trap Device (TID for Foot-hold Traps, Proc. Great Plains Wildlife Damage Control Workshop (1997).

⁴⁸ Shelley D. Pruss et al., Evaluation of a Modified Neck Snare to Live-Capture Coyotes, 30 WILDLIFE SOC'Y BULLETIN 508 (2002).

⁴⁹ EA at 37.

⁵⁰ *Id.*

methods in the EA, ignoring the fact that when properly combined and adjusted to the size, nature and location of a livestock operation, these tools are ultimately more effective and cost-efficient than traditional lethal methods. By doing so, WS ignores that these practices have proven highly effective in preventing and reducing depredation.⁵¹

In addition, the EA has described the current program (the proposed, preferred Alternative 1) as “cost-efficient.” However, WS kills between 45,000 and 65,000 animals in California each year on the behalf of commercial agriculture. Nationally, the agency killed at least 4 million animals in the year 2013 alone and has spent roughly 1 billion dollars over the past 15 years. Under the Comprehensive Environmental Response, Compensation, and Liability Act, or the Oil Pollution Act, if a polluter injured or killed that many animals, it would owe millions of dollars in natural resource damages to state and federal natural resource trustees for wildlife restoration projects.⁵² For example, state and federal trustees negotiated a \$627 million settlement for early restoration projects to restore services lost from natural resources after the Deepwater Horizon Oil Spill, which among other things, caused the death of millions of terrestrial and ocean wildlife.⁵³ To represent the current program as “cost-efficient” in the EA when the same federal entities would assess private parties thousands, if not millions, of dollars for the same widespread wildlife deaths, thus seems fraudulent to say the least.

It should also be noted that lethal control does not permanently stop livestock predation—in fact, research suggests that coyotes respond to aggressive control by increasing their reproductive rates and increasing their litter size. This, coupled with an increase in offspring survival rate, means that coyote populations will bounce back quickly in response to aggressive control, even when 70 percent of their population is removed.

Coyotes not only change their reproductive behavior in response to control; a high level of lethal control also disrupts their social structure/hierarchy. Specifically, removal of alpha males from the pack leads to a proliferation of multiple packs controlled by young and inexperienced males. Males that do not ascend to the role of alpha through the traditional means will lack the knowledge or ability to properly control other members of their pack. Traditional and learned behaviors become lost and individuals are more likely to try out novel prey or habitat types.⁵⁴ Pack members could seek easier prey, such as livestock, instead of natural prey. This is the opposite outcome that WS is hoping to achieve through lethal coyote removal.

Coyotes are also more likely to search for new habitat because of the increase in young individuals in the environment. This increases the likelihood of coyote-human interaction and conflict with wildlife. Coyotes are naturally wary of humans and will seek to avoid

⁵¹ See, e.g., Sarah J. Davidson-Nelson & Thomas M. Gehring, Testing Fladry as a Nonlethal Management Tool for Wolves and Coyotes in Michigan, 4 HUMAN–WILDLIFE INTERACTIONS 87 (2010).

⁵² See 42 U.S.C. 9607; 33 U.S.C. 2702.

⁵³ See Deepwater Horizon Natural Resource Damage Assessment, 2013, available at http://www.gulfspillrestoration.noaa.gov/wp-content/uploads/TC_P3_news_FINAL_12_5_13.pdf.

⁵⁴ Crabtree R.L., Sheldon J.W., *Coyotes and Canid Coexistence in Yellowstone National Park*.

them,⁵⁵ but destabilizing their social structure can eliminate that fear through the loss of traditional behaviors. These important natural behaviors will not be re-learned through continued lethal predator control, but by preserving healthy and stable social structures.

Furthermore, it is almost impossible to completely eradicate coyotes from an area. WS would have to achieve a minimum 75 percent annual removal to consistently lower coyote density.⁵⁶ This is exemplified by coyotes' historic ability to recover from aggressive predator control and scientifically by their life history adaptations in response to control. Coyotes have not only bounced back, they have thrived and even expanded their range throughout the United States and Canada in response to lethal control.

The utility of nonlethal livestock protection tools is evidenced by successful programs in the United States. A demonstration project in central Idaho revealed that the use of nonlethal methods including turbo-fladry, increased human presence, and light- and sound-generating devices was highly successful in preventing predator depredation.⁵⁷

Marin County, California provides another strong illustration of the advantages and effectiveness associated with nonlethal predator control. In 2000, Marin redirected funds from lethal management toward nonlethal measures. Funds were allocated for the provision of tools such as night corrals, fencing, lamb sheds, noise- and light-generating devices, and compensation to farmers for livestock losses. These measures proved less expensive and more effective than lethal control; average annual losses declined from five percent to 2.2 percent. Marin's experience demonstrates that nonlethal wildlife management tools are both effective and affordable.

Unfortunately, many ranchers are not aware of the nonlethal livestock protection tools that are available to them.⁵⁸ Some engage in practices that specifically leave their animals vulnerable. Producers would benefit from WS' direct assistance in implementing nonlethal methods, in addition to technical assistance. WS should focus its attention on using and promoting nonlethal control methods that minimize animal suffering and providing ranchers and wildlife managers with technical assistance and education—about coexistence with wildlife. Furthermore, technical assistance through education—including one-on-one discussions, community events, and presentations at appropriate venues to promote best husbandry practices to reduce, prevent, or mitigate wildlife-livestock conflicts before they occur—is of particular importance and will likely improve the efficacy of non-lethal methods if subsequently needed to address particular incidents.

⁵⁵ THE HUMANE SOCIETY OF THE UNITED STATES, *Coyotes and People: What to Know if You See or Encounter a Coyote*, (February 19, 2015) Accessed at: http://www.humanesociety.org/animals/coyotes/tips/coyotes_people.html

⁵⁶ Scott E. Henke and Fred. C Bryant, *Effects of Coyote Removal on the Faunal Community in Western Texas*, 63 J. of Wildlife MGMT. 4, 1080 (Oct. 1999)

⁵⁷ DEFENDERS OF WILDLIFE, FINAL REPORT: TURBO-FLADRY EXPERIMENTAL PROJECT (2012).

⁵⁸ See DEFENDERS, at 3 (“The greatest obstacle to the use of nonlethal deterrents to prevent wolf-related livestock losses is their lack of use by the majority of livestock producers. ... [M]ore needs to be done to help inform producers of their availability and correct application”).

Nonlethal methods must not be judged by unrealistic criteria while lethal control is given minimal scrutiny. The EA does not give adequate weight to the fact that nonlethal methods can provide protection to livestock during critical periods of vulnerability, such as calving seasons, and are therefore viable, preferable management options. With these successes in mind, we urge WS to direct its attention and resources toward promoting nonlethal mammal management and providing technical assistance to producers to implement nonlethal wildlife control methods that will minimize animal suffering if it decides to remain involved with wildlife management in California following more extensive environmental review.

c. Twenty-four-hour trap check requirements are a basic necessity when leghold traps are utilized

Historically, WS staffers have been exempt from laws that require frequent trap checks. Employees can check their trap lines as they see fit without considering the pain and suffering that an animal is enduring while caught in a trap.

Both target and non-target animals frequently sustain severe injuries from being trapped, and the type and severity of injuries vary with factors such as the type of trap, the species trapped, outdoor temperature and weather conditions, and duration of time in the trap. Reducing the length of time an animal spends in a trap can dramatically reduce its injuries and its suffering. However, the EA does not describe with adequate specificity the trap check times that will apply to traps and snares in California, nor does it mention the use of trap monitors, which would alert WS agents of the need to check traps that have been triggered.

Currently, thirty-one states require that traps be checked every 24 hours. Leghold traps are not permitted for use in California to protect livestock, thus WS cannot legally use them, as proposed in the EA. However, if WS insists on the use of traps in other states, the agency should commit to 24-hour trap checks for wildlife in any state. In addition, WS should use trap monitoring devices, which, as noted, can significantly reduce animal suffering. While traps that have not been triggered should be checked every 24 hours, WS should comply with a significantly shorter response time where a trap monitor shows that a trap has been set off. Traps should be checked as quickly as possible once triggered to minimize the suffering of both target and non-target animals that are captured.

III. WS' proposed action (Alternative 1) requires preparation of an environmental impact statement (EIS)

a. The proposed action will have significant impacts on the quality of the human environment

Because lethal wildlife management would have significant environmental impacts, WS must prepare an EIS, 42 U.S.C. § 4332(2)(C). Under Alternative 1, the preferred alternative, WS would continue to use lethal methods to manage mammals in California.

Mammals—in particular those that WS targets in California, such as bobcats, coyotes, gray and red foxes, and others—play a fundamentally important role in maintaining health ecosystems in their native range. Lethal control is inconsistent with wildlife conservation and would have substantial adverse impacts on the region’s ecosystems.⁵⁹

The EA fails to address any effects of lethally removing mammals in California, and the impacts warrant a thorough analysis in a complete EIS. Instead, in a very cursory fashion and without any scientific evidence offered as support, the EA states that the current program (under Alternative 1) will have the lowest negative environmental impact, and no federal program (Alternative 2) will likely result in the greatest negative environmental impact.⁶⁰ This does not constitute the thorough analysis that NEPA demands.

b. The EA does not adequately address the impacts of hunting on wildlife populations

Although WS describes the effects of the program on hunting and non-consumptive uses, the agency explicitly omits from its analysis the impacts that existing hunting seasons in California have on mammals and sustainable harvest levels, including cumulative effects. To suggest that the impacts of hunting seasons are irrelevant to WS’ mammal “management” activities is unreasonable, given the significant numbers of coyotes and other mammals killed via hunting. The EA does not adequately evaluate the cumulative impact of the proposed action by WS in light of the impact of the state’s hunting seasons, as is required by NEPA. WS should carefully consider the cumulative effects of all forms of wildlife mortality in an EIS.

In sum, we urge WS to complete an EIS if it proceeds with its plan to remain involved in California’s mammal management program, and emphasize that additional review should take into account the shortcomings described in these comments.

c. The EA relies on outdated scientific information

Many of the studies cited in the EA were published in the 1980s, including those related to impacts on red-tailed hawks and other non-target species. Others research noted in the EA is outdated by up to 13 years.⁶¹ There have been significant advances in all aspects of the science and policy surrounding wildlife damage management since they were published, including work performed by WS scientists and policymakers themselves.

Instead of acknowledging these advances, WS relies on guidelines and conclusions from these outdated documents to develop its analytical model, select alternatives, and determine that the preferred alternative is not likely to adversely affect non-target and protected species. Rather than drawing broad conclusions based upon outdated analyses,

⁵⁹ See *Appendix studies*.

⁶⁰ EA at 92.

⁶¹ *Id.*

WS should complete a thorough environmental review that accounts for the unique ecological conditions in California and relies upon current data.

Specifically, the EA overlooks or omits recent and topical scientific findings, including theoretical and conceptual works describing advances in methodology in wildlife damage management. While NEPA's implementing regulations allow the agency to "tier-back" to prior environmental compliance analysis including EAs and EISs, reliance on outdated data and analyses is a hallmark of arbitrary and capricious action that violates both NEPA and the federal Administrative Procedure Act.

The EA fails to follow WS directives for holistic and integrated planning (Policy Directives 1.201, 2.105, and 2.201) and pays scant attention to the behavioral and ecological approaches to managing wildlife or to the use of human dimensions research to capture stakeholder interests and values.

d. Humaneness, welfare assessment, and ethics considerations

Although it is heartening that the EA discusses concepts of humaneness and ethical perspectives, the EA should address animal welfare standards as described by Proulx⁶² and others, as well as animal welfare protection measures. Indeed, better ways of assessing the welfare consequences of both non-lethal and lethal wildlife damage control methods need to be found and employed, and we highly recommend that a science-based welfare assessment approach be adopted.

WS contends that it supports the "most humane, selective, and effective damage management techniques."⁶³ However, this runs counter to the culture of cruelty that has been demonstrated by WS staff. For example, Russell Files, a WS trapper, was arrested for placing steel leg-traps to capture his neighbor's dog.⁶⁴ This shocking display of intentional cruelty left the dog maimed. In another instance, an employee allowed his dogs to attack and kill coyotes that were caught in steel-jaw leghold traps.⁶⁵ He also photographed the attacks and other dead animals caught in traps and posted them to social media.⁶⁶ This behavior directly violates the agency's 2011 directive, which was intended to ensure that employees "will exhibit a high level of respect and professionalism..."⁶⁷ when taking an animal's life.

⁶² Gilbert Proulx, Review of current mammal trap technology in North America, in MAMMAL TRAPPING 1, 1-46 (1999).

⁶³ Pre Decision EA section 4.1.3.

⁶⁴ Wild Earth Guardians, *Trapping Abuse by Federal Trappers*, accessed at: http://www.wildearthguardians.org/site/PageServer?pagename=priorities_wildlife_war_wildlife_kill_meth ods_trapping_abuse#.VZreUxNVikq.

⁶⁵ Tom Knudson, *US wildlife worker's photos of animal abuse stir outrage*, THE SACRAMENTO BEE, (Nov. 2, 2012) accessed at: <http://www.wildearthguardians.org/site/DocServer/SacBeeWSCoyoteKill11.2.12.pdf?docID=6923>.

⁶⁶ *Id.*

⁶⁷ *Id.*

These incidents are just a few isolated examples, but they are emblematic of a pervasive “culture of cruelty” within WS.⁶⁸ Trappers rarely consider nonlethal methods and, when they are not reprimanded for cruelty, there is no pressure to change. For example, the employee who posted pictures of his dogs attacking coyotes was cleared of any wrongdoing. The agency went so far as to say that his dogs were not seen attacking any coyotes and that there was no evidence to support the allegations of animal cruelty, despite the voluntary publication of photographs documenting the cruelty.⁶⁹ To address this culture and improve WS’ treatment of animals, change must come from the top.

Related to, but separate from, the concept of animal welfare assessment, is the justification for control and the stepwise procedures that should be followed in a comprehensive and holistic wildlife damage management planning process. Calls for an overarching policy framework in wildlife damage control must include principles and methodologies that establish ethical frameworks for management.

e. The EA improperly excludes several species from NEPA analysis

The EA states that “Some mammalian species [including mountain lions] and the damages they may cause to agriculture, natural resources, HHS and property are not included in the analysis in this EA because their management is governed by California regulations.”⁷⁰ However, the fact that California Department of Fish and Wildlife issues depredation permits to take mountain lions, for example, does not provide a basis for excluding these species from NEPA analysis (i.e. the EA). Once again, this does not constitute the thorough analysis that NEPA demands.

IV. Conclusion

If WS plans to proceed with its proposed course of action (Alternative 1), it must first draft a complete EIS and undertake a far more rigorous analysis of the direct, indirect, and cumulative consequences of lethal control. It must also give due consideration to the option of limiting its role to supporting the implementation of nonlethal methods that minimize the pain and suffering inflicted on wildlife to prevent conflicts with livestock.

Assurances that nonlethal tools will be used where possible are vague, unsupported by past actions, and unconvincing, particularly given that WS has a long history—both in California and elsewhere—of relying heavily on lethal and inhumane wildlife control methods.

We appreciate the opportunity comment on this EA, and we hope that WS will carefully consider the foregoing discussion as it proceeds.

⁶⁸ *Id.*

⁶⁹http://www.wildearthguardians.org/site/PageServer?pagename=priorities_wildlife_war_wildlife_kill_methods_trapping_abuse#.VZreUxNVikq.

⁷⁰ EA at 22.

Sincerely,

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