

June 29, 2018

Mr. James E. Smith, Commissioner Siskiyou County Department of Agriculture 525 South Foothill Drive Yreka, CA 96097

Siskiyou County Board of Supervisors 1312 Fairlane Road Yreka, CA 96097

RE: Violations of the California Environmental Quality Act, the California Endangered Species Act, the Public Trust Doctrine, and other laws

Dear Commissioner Smith and Supervisors,

Pursuant to the California Environmental Quality Act (CEQA), Public Resources Code §21000 et seq., the California Endangered Species Act (CESA), Fish and Game Code § 2050 et seq., and the public trust duty held by the State of California and its political subdivisions, the Animal Legal Defense Fund, the Center for Biological Diversity, Project Coyote, the Animal Welfare Institute, the Mountain Lion Foundation, WildEarth Guardians, Environmental Protection Information Center, the individual injured members of these groups in Siskiyou County, and other aggrieved citizens of the State of California (collectively, Petitioners) hereby request that the Siskivou County Department of Agriculture, by and through the Siskiyou County Board of Supervisors (the Board), immediately terminate, or decline to renew, the Siskiyou County Integrated Wildlife Damage Management (IWDM) Program supervised and carried out by the United States Department of Agriculture's Animal and Plant Health Inspection Service (APHIS) Wildlife Services (Wildlife Services). Petitioners further request that Siskivou County institute a non-lethal animal damage control program in Siskiyou County that recognizes the ecological benefits of individual wild animals, including predators.

Should Siskiyou County continue the Program, it must undertake legallyrequired environmental review under CEQA, comply with legal requirements under CESA, and properly preserve and protect Siskiyou County wildlife for the benefit of all state citizens pursuant to common law and statutory public trust requirements prior to reauthorizing the killing of wildlife by Wildlife Services.

Each year Siskiyou County spends nearly \$70,000 in taxpayer dollars to employ Wildlife Services to kill hundreds of native predators and other "nuisance" animals under its IWDM Program, primarily on behalf of commercial agricultural interests. To Petitioners' knowledge, the County does so without environmental analysis under CEQA, without performing consultation or obtaining incidental take permits (ITPs) under CESA, and with minimal oversight over Wildlife Services' activities. The methods and model employed in Siskiyou County ignore current understanding of the important role wild carnivores play in our ecosystems and conflict with sound science regarding wildlife management. To better reflect modern scientific understanding of natural ecosystems and to better align with the views of Siskiyou County residents, we urge you to take the actions requested. Until these steps are taken and the deficiencies outlined herein are remedied, the Siskiyou County IWDM Program is operating in violation of California law.

I. Siskiyou County's Duties Under CEQA

Under CEQA, Siskiyou County has a duty to review the impacts of activities that affect California's environment, including wildlife. Through repeated renewal of its contract with Wildlife Services without adequate environmental analysis, the County has failed to follow the legal procedure mandated by CEQA.

CEQA requires review of the environmental impacts of discretionary projects undertaken or approved by public agencies, which may cause adverse physical changes to the environment. The IWDM Program meets the definition of a "project" under title 14 of the California Code of Regulations § 15378(a). Typically, compliance with CEQA requires the generation of an environmental document called an Environmental Impact Report (EIR), which contains a statement of the environmental impacts of the proposed project and analysis of the viable alternatives to the project. "[I]f a lead agency is presented with a fair argument that a project may have a significant effect on the environment, the lead agency shall prepare an EIR even though it may also be presented with other substantial evidence that the project will not have a significant effect."¹ After preparing an EIR, the agency may only issue a "negative determination" if there is no substantial evidence, in light of whole record, that the project may have a significant effect.²

In order to justify use of a categorical exemption, rather than prepare an EIR, the County must establish that it had substantial evidence to support its claim that an exemption applies. In assessing whether an exemption is lawful, courts will determine whether there is a fair argument that the Program may have a significant effect on the environment, *i.e.* if there is a fair argument that the Program is not assuring the maintenance, restoration, or enhancement of a natural resource.³ In determining whether a fair argument exists, the court owes no deference to the lead agency's determination; review is de novo, with a preference for resolving doubts in favor of environmental review.⁴ Thus, courts have routinely held that there is a fair argument that actions affecting wildlife populations may have a significant impact on the environment, such that the natural resources and environmental protection exemptions do not apply.⁵ Similarly, the "common sense"

exemption applies only if it is *certain* that there is no possibility that the activity in question may have a significant impact on the environment.⁶

Notably, both Monterey and Mendocino Counties prepared EIRs after Petitioners successfully challenged in court the use of categorical exemptions for their IWDM Programs.⁷ The Superior Court of Monterey County found that the County "abused its discretion and failed to proceed in the manner required by law" when it failed to complete an initial study, prepare an EIR, or other CEQA document before executing the approval of the Work and Financial Plan with Wildlife Services.⁸ The County subsequently agreed to pay Petitioners' attorneys fees in the amount of \$100,000. Mendocino County is currently preparing an EIR as part of a settlement agreement with Petitioners.

II. Siskiyou County's Duties Under CESA

The California Legislature has declared that: "it is the policy of the state to conserve, protect, restore, and enhance any endangered species or any threatened species and its habitat."⁹ "Central to CESA is its prohibition on the taking of an endangered or threatened species."¹⁰ Section 2080 of the Fish and Game Code states: "[n]o person shall . . . take, possess, purchase, or sell within this state, any species, or any part or product thereof, that . . . [is] determin[ed] to be an endangered species or a threatened species." To "take" means to hunt, pursue, catch, capture or kill or attempt to hunt, pursue, catch, capture, or kill.¹¹ "Person" has been found to include state agencies,¹² and the prohibition against take applies to wildlife located on public as well as private land.¹³

As explained by the Supreme Court of California:

CESA allows the [Department of Fish and Wildlife] to authorize a "take" that is incidental to an otherwise lawful activity if certain conditions are met. . . At the heart of CESA is the obligation to mitigate such takes. The impacts of the authorized take shall be minimized and fully mitigated. The measures required to meet this obligation shall be roughly proportional in extent to the impact of the authorized taking on the species. Where various measures are available to meet this obligation, the measures required shall maintain the applicant's objectives to the greatest extent possible. All required measures shall be capable of successful implementation. For purposes of this section only, impacts of taking include all impacts on the species that result from any act that would cause the proposed taking.¹⁴

Take of a listed species may occur pursuant to an incidental take permit (ITP) issued by the California Department of Fish and Wildlife (CDFW). No permit

may be issued if it would jeopardize the continued existence of the species.¹⁵ In order to obtain a permit, applicants must submit an application to CDFW that addresses, among other topics: (1) an analysis of whether and to what extent the project or activity for which the permit is sought could result in the taking of species to be covered by the permit; (2) an analysis of the impacts of the proposed taking on the species; (3) an analysis of whether issuance of the incidental take permit would jeopardize the continued existence of a species; (4) a complete, responsive jeopardy analysis that shall include consideration of the species' capability to survive and reproduce, and any adverse impacts of the taking on those abilities in light of known population trends, known threats to the species; and reasonably foreseeable impacts on the species from other related projects and activities; (5) proposed measures to minimize and fully mitigate the impacts of the proposed taking; (6) a proposed plan to monitor compliance with the minimization and mitigation measures and the effectiveness of the measures; and (7) a description of the funding sources and the level of funding available for implementation of the minimization and mitigation measures. Under CESA, the County is required to obtain an ITP prior to engaging in activities that would result in the incidental take of CESA listed species. Wildlife Services' use of traps and poisons have a high likelihood of taking non-target listed species, and the County must therefore apply for and receive one or more ITPs from CDFW before deploying such taking methods in order to comply with CESA.

III. Siskiyou County's Duties Under the Public Trust Doctrine

The California public trust doctrine further obligates Siskiyou County to regulate the State's wildlife resources in a manner that benefits all citizens of the County and State.¹⁶ The State of California and its political subdivisions have a legal duty to actively manage natural resources, including wildlife, in a manner that benefits all Californians. This duty is derived from a long common law tradition requiring each state to protect and preserve the natural resources shared by its citizens.¹⁷

Common law principles reaching back to antiquity place a duty on the State, as a sovereign representative of the people, to hold common resources in trust for its citizens. This trust duty requires the State to preserve natural resources and to protect its citizens' interests in those resources by safeguarding against their exploitation for private gain at the expense of the public good. These principles, known as the "public trust doctrine," arose to protect the public's access to tidelands and navigable waters, especially for use in navigation, commerce, and fishing. Over time, California courts have recognized additional trust duties beyond such waters and uses. California case law recognizes that the doctrine expresses a state's intrinsic responsibility to protect the public's interest in shared natural resources, including wildlife. California courts have made this determination directly, citing the important shared resource provided by wildlife.¹⁸ California courts have also made this determination implicitly, by recognizing that the proper allocation of California water resources must consider the ecological impact of usage because aquatic resources are inextricably tied to wildlife.¹⁹ California law treats wildlife as an important natural resource that provides significant public benefits and requires judicially enforced governmental protections ensuring wise use.

Pursuant to the California public trust doctrine, government actors like Siskiyou County are charged with fulfilling state trust duties. In fulfilling those duties, the government must consider the ecological impacts on wildlife resources before authorizing government activities affecting natural resources, and strike an appropriate balance between protecting wildlife and competing demands. Implicit in this duty is the mandate that state actors must retain control over management of natural resources, rather than relinquish oversight to non-state or private parties.²⁰

IV. Siskiyou County's IWDM Program

APHIS-Wildlife Services mission is ostensibly to resolve wildlife conflicts to allow people and wildlife to coexist. In reality, its specialization—both historically and presently—is to kill wild animals, per the interests of some agricultural producers, hunters, and airports. Beginning in 1915, the agency's earliest iteration provided federal funding for trappers and hunters who exterminated wolves to support the interests of beef producers. Over time, Wildlife Services' programs grew and increased their effectiveness in destroying predators. During the first half of the 20th century, federal trappers played a crucial role in virtually eliminating wolf, grizzly bear, and mountain lion populations throughout much of the American West. In recent decades, Wildlife Services has also killed numerous other species, including black bears, bobcats, red and gray foxes, skunks, badgers, raccoons and especially coyotes, which thrived partially in response to the decline of wolves. Since 2000, Wildlife Services has killed over 1.4 million coyotes and thousands of other predators across the United States.²¹

Many of Wildlife Services' methods are indiscriminate, often killing unintended victims. Some of the animals the agency has mistakenly killed are members of species that have been the subjects of costly conservation efforts (*e.g.* gray wolves, wolverines, river otters, swift and kit foxes, and bald and golden eagles). Since 2000, Wildlife Services has killed more than 50,000 members of over 150 non-target species, including birds of prey (*e.g.*, red-tailed hawk, great horned owl), armadillos, pronghorns, porcupines, long-tailed weasels, javelinas, marmots, snapping turtles, turkey vultures, great blue herons, ruddy ducks, sandhill cranes, and ringtail cats.

Wildlife Services data also shows that, in the period from 2008-2016, in Siskiyou County alone Wildlife Services killed: 250 badgers, 1,582 coyotes, 4 bobcats, 136 black bears, 82 gray foxes, 85 beavers, 4550 Brewer's blackbirds, 100 eed-winged blackbirds, 2 feral cats, 1100 brown-headed cowbirds, 37 mountain lions, 207 Virginia opossums, 5 porcupines, 648 raccoons, 64 ravens, 7 spotted skunks, 1,083 striped skunks, 18,150 starlings, 4 feral swine, and 3 white-throated woodrats.²² From July 2016-July 2017, Wildlife Services killed 1,047 individual animals, including 222 coyotes, 10 mountain lions, 16 black bears, 25 striped skunks, 22 raccoons, 3 Virginia opossums, and 10 beavers—overwhelmingly on behalf of agricultural producers.²³

V. Siskiyou County Should Discontinue Its IWDM Program

Siskiyou County's IWDM Program should be discontinued as a matter of public policy. The Program contravenes modern, science-based wildlife management principles and is cruel, ineffective, unnecessary, and not cost effective. Siskiyou County should follow the lead of Marin County and choose comprehensive, non-lethal alternatives to wildlife management rather than continue its outdated and unnecessary Program.

1. The IWDM Program contravenes modern, science-based wildlife management principles.

There is no credible scientific evidence to support the notion that the indiscriminate killing of predators serves any genuine interest in managing other species, whether by reducing livestock losses or predator populations.²⁴ Rather, sound science shows that indiscriminate killing is ineffective and likely leads to *increases* in both predator populations and risk of depredations.

The evidence is clear: more than 100 years of coyote killing has not reduced their populations. In fact, since mass killings of coyotes began in 1850, the range of this species has tripled in the United States.²⁵ In addition, since only a few, individual predators participate in depredation, indiscriminate and preemptive killing of predators can lead to the disruption of predators' social structure and foraging ecology in ways that increases the likelihood of predations, *i.e.* by increasing the number of surviving pups and transient individuals that are predisposed to depredate livestock.

Indiscriminate killing of coyotes can stimulate increases in their populations by disrupting their social structure, which encourages more breeding and migration, and ultimately results in more coyotes.²⁶ The alpha pair in a pack of coyotes is normally the only one that reproduces. When one or both members of the alpha pair are killed, other pairs will form and reproduce. At the same time, lone coyotes will move in to mate, young coyotes will start having offspring sooner, and pup survival may increase.²⁷ While widespread killing may temporarily reduce coyote numbers in a given area, coyote populations recover quickly, even when up to 70 percent of their numbers are removed.²⁸ It is impossible to completely eradicate coyotes from an area.²⁹ New coyotes will quickly replace vacant territorial niches where coyotes have been removed. Coyote pairs hold territories, which leaves single coyotes ("floaters") continually looking for new places to call home.³⁰ When they are not lethally targeted by humans, unexploited coyotes and certain other predator populations self-regulate their numbers by means of dominant individuals defending non-overlapping territories and suppressing breeding by subordinate pack members.

Disrupting the coyote family structure by killing individual animals, especially alpha canids, may also actually increase conflicts with livestock. Targeted coyote populations tend to have younger, less experienced individuals, increased numbers of yearlings reproducing, and larger litters. For adult coyotes with dependent young, the need to feed pups provides significant motivation for coyotes to switch from killing small and medium-sized prey to killing sheep and other livestock.³¹

Indeed, other states have recognized that wildlife management programs based on predator control are ineffective. The Pennsylvania Game Commission issued the following statement in 2016:

During the late 1800s and early 1900s, the Game Commission focused much of its energy and resources into predator control efforts. During this period, we did not understand the relationship between predators and prey. After decades of using predator control . . . with no effect, and the emergence of wildlife management as a science, the agency finally accepted the reality that predator control does not work. . . . ³²

In recommending against a year-round hunting season on coyotes, the New York State Department of Environmental Conservation similarly concluded that "random" removal of coyotes will not control or reduce coyote populations, nor reduce or eliminate predation on livestock.³³ California should similarly heed sound science and adopt effective wildlife management practices.

2. The practices authorized by the IWDM Program are dangerous, cruel, and ineffective.

In addition to being ecologically destructive, Wildlife Services' methods are cruel and pose a danger to both people and other animals. Devices such as "Conibear" traps, leghold traps, and snares indiscriminately kill wildlife harm, injure, and kill animals regardless of age, sex and species, and often result in injury, pain, suffering or death of target and non-target animals—including companion animals, livestock, and threatened and endangered wildlife. Nationwide, these traps and other similarly non-selective lethal control devices have unintentionally killed many pets, vertebrates of 150 species,³⁴ and thousands of mammals of at least 20 different taxa that are listed as threatened or endangered federally or in certain states.³⁵ More than 80 countries and 7 states have banned or severely restricted use of steel-jaw leghold traps.³⁶ In addition to outlawing these traps, California has outlawed the use of two predacides, Compound 1080 and sodium cyanide which is used in M-44 devices. These laws, largely enacted through referenda, are evidence of the public's concern regarding wildlife trapping procedures and distaste for brutal and indiscriminate killing. Indeed, these cruel methods of predator control have been widely condemned.

Nonetheless, Wildlife Services' records show that the use of traps and snares by its employees is ubiquitous in California and that it routinely makes use of the exception that allows federal employees to use hounds to hunt predators. Given its methods in neighboring Shasta County, Petitioners believe that Wildlife Services still uses leghold traps, "Conibear" traps, wire snares, and poisons in Siskiyou County. Each of these methods causes horrible injuries and prolonged agony to animals, which are compounded by the animals' violent struggles to escape. Animals often remain trapped for days without food or water. Wildlife Services' traps, which are often carelessly placed and left unmonitored, have also permanently injured hikers. Traps have also snared and caught companion animals, many of whom have been killed or seriously injured. Such incidents have occurred not only in wilderness or rural areas, but often in populated suburban landscapes.

In addition, Wildlife Services employees have committed egregious acts violating decency and, likely, state anti-cruelty laws. Examples include a Specialist named Jamie P. Olson, who drew public scorn for posting pictures on Twitter (taken while on official duty) of his hunting dogs mauling a coyote caught in a leg-hold trap.³⁷ Another Wildlife Services employee, Russell Files, was charged with animal cruelty for intentionally capturing his neighbor's dog in multiple steel-jaw leghold traps, also while on duty.³⁸ The police found the dog covered in blood from her frantic attempts to escape. The investigating detective stated that the trapping "ranks up there with the worst [animal abuse] I've seen."³⁹

Beyond the unnecessary cruelty of these methods, the methods employed by Wildlife Services in Siskiyou County may not target the offending predator, the site where depredation has occurred, or the time when depredation occurred. Killing coyotes, for example, without regard to time of year has the potential to orphan dependent coyote pups. Coyotes give birth in February and March, and they provision their pups in the spring and summer. As such, they are particularly vulnerable at their den sites in March. Killing adult coyotes will leave dependent pups to die from thirst, starvation, predation or exposure. Rather than lethal control, prevention is the best method for minimizing conflicts with predators such as coyotes.⁴⁰ Eliminating access to easy food sources, such as bird seed and garbage, supervising dogs while outside, and keeping cats indoors reduces conflicts with wildlife. Practicing good animal husbandry and using strategic nonlethal predator control methods to protect livestock (such as electric fences, guard animals, and removing dead livestock) are more effective than lethal control in addressing coyote-human conflicts.⁴¹

3. The IWDM Program is unnecessary.

Further illustrating the wisdom of discontinuing Siskiyou County's Program is Marin County's success in providing assistance to ranchers without employing Wildlife Services. Marin County does not contract with Wildlife Services for predatory animal damage control services and it has been without a federal trapper for more than ten years. Instead, Marin County's program is based on non-lethal control measures.⁴² As mentioned above, and to the surprise of many ranchers in Marin County, non-lethal methods have proven more effective than the methods employed by Wildlife Services.⁴³ Some ranchers have seen losses due to predation drop by over sixty percent.⁴⁴ The Marin Program emphasizes the use of fencing, both electric and conventional, guard animals, including dogs and llamas, and other non-lethal means to keep livestock safe. Rather than spending money to kill wildlife, Marin County uses its funds to help defray the cost of building fences and employing non-lethal deterrents to ranchers who take steps to properly protect their animals, and directly reimburses ranchers for livestock killed by coyotes. Marin's program does not preclude ranchers from removing problem animals on their own ranch.

Sonoma County has also declined to renew its contracts with Wildlife Services based on concerns over the legality of the County's approval of Wildlife Services activities.

4. The IWDM Program is not cost effective.

Economic concerns also counsel for discontinuing the County's relationship with Wildlife Services. Siskiyou County pays Wildlife Services nearly \$70,000 each year. However, despite this high cost, the Program does not effectively protect agricultural resources. Spending County funds to kill a large number of beneficial predatory species rather than using those tax dollars to introduce effective alternative methods of controlling harm to livestock is simply wasteful. Indeed, Wildlife Services' actions actually harm, rather than protect, the County's valuable natural resources and environment. With many other pressing issues facing the County government, a lethal predatory animal control program is not a costeffective means of protecting the County's citizens, agricultural producers, environment, or natural resources—including individual wild and domestic animals.

VI. The Current IWDM Program Operates in Violation of California Law

Siskiyou County's IWDM Program has significant effects on the environment of the State, and as a result, is subject to review under CEQA. As the lead agency under California Public Resources Code § 21067, Siskiyou County should prepare an EIR pursuant to California Public Resources Code § 21165. Failure to do so before renewing the Wildlife Services contract would violate CEQA. Siskiyou County's decision to continue the IWDM Program without consideration of the effects outlined herein would also violate CESA, the public trust doctrine, and federal laws.

1. Categorically exempting the IWDM Program violates CEQA.

CEQA requires review of the environmental impacts of discretionary projects undertaken or approved by public agencies that may cause adverse physical changes to the environment. The IWDM program has significant environmental effects that demand consideration under CEQA, and make a categorical exemption inappropriate.

As explained above, sound science shows that indiscriminate killing is ineffective and likely leads to an *increase* in both predator populations and risk of depredations. As a consequence of killing so many animals each year, population dynamics and delicate natural equilibriums are destabilized. The unchecked destruction of native predators degrades California's natural resources and can lead to broad and unexpected environmental impacts because predators are essential for ecological systems to function properly.

Disruption at the highest "trophic" level of the food chain, where major predators reside, has profound effects on other trophic levels and can fundamentally change ecosystems. Trophic cascades occur when apex predators no longer limit the density or behavior of their prey and thereby enhance survival of the next lower trophic level.⁴⁵ The removal of apex predators 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 large carnivores like wolves.⁴⁶ 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 result in reduced prey for other predators and contribute to their decline and extirpation.⁴⁷ Trophic cascades thus harm California's natural resources by changing the behavior patterns of wild animals, reducing plant and animal recruitment, spoiling key habitat for wildlife, reducing

biodiversity, and increasing the number of "pest" animals present on the landscape.⁴⁸

Studies of trophic cascades show that it is a deeply complex process. Studies in Yellowstone National Park assessing the effects of past lethal predator control efforts have shown that killing a large number of predators can cause ungulates (*i.e.* hooved herbivores) to over-browse shrubs and saplings. Over-browsing, in turn, reduces the recruitment (*i.e.* the number of juvenile members of a species that survive to join the adult populations) of trees and understory plants, reducing habitat for smaller mammals, birds, and insects.⁴⁹ Even the localized reduction in predator populations can change some sensitive habitat permanently and harm wildlife. For example, an increase in ungulates can change river morphology and harm fish. Destruction of plant matter by grazers, which is essential for maintaining the integrity of river and stream banks, leads to broadened river channels and decreased channel depth. These effects, in combination with the reduction in shade provided by shore plants, lead to increased water temperatures, which negatively impact fish health.⁵⁰

Numerous studies analyze how carnivore removal, in particular, can cause a wide range of unanticipated impacts that are often profound, including on native plant communities, wildfire severity, biogeochemical cycles, and the spread of disease or invasive species⁵¹, and more.

The IWDM Program also fails to recognize and protect predators' valuable contribution to the health and vitality of our ecosystems. Coyotes, for example, are an integral part of healthy ecosystems, providing a number of free, natural ecological services.⁵² They help to control disease transmission by keeping rodent populations in check, curtailing hantavirus, a rodent-borne illness that can sicken and kill humans. In addition, coyotes clean up carrion, increase biodiversity, remove sick animals from the gene pool, disperse seeds, and foster soil fertility. Coyotes balance their ecosystems and have trophic cascade effects such as indirectly protecting ground-nesting birds from smaller carnivores and increasing the biological diversity of plant and wildlife communities.⁵³

Healthy predator populations can control other species that, if left unchecked, increase and become detrimental to long-term ecosystem health. Coyotes, for example, do not focus on any one species or on livestock species. Instead, they eat a diverse diet, including small mammals and insects; rabbits and rodents are their favorite prey.⁵⁴ Studies indicate that where predator populations are absent or significantly reduced, rodent and rabbit populations can explode. The increased rodent populations compete with livestock for grazing resources, damage crops and property, and spread disease. Studies have also shown how wolves can aid pronghorn populations because "wolves suppress[] coyotes and consequently fawn depredation."⁵⁵

As explained further below, Siskiyou County's IWDM Program also has effects on endangered, threatened, and sensitive species that demand analysis under CEQA.

Despite this, the County has not adequately considered the ecological impacts of the Program—nor has it attempted to balance the allocation of wildlife resources to better serve the public good in light of those effects. Rather, the County authorized the destruction of those resources to benefit a small number of commercial interests when, in fact, according to data from the United States Department of Agriculture, livestock losses to wild carnivores are minuscule. In 2015, U.S. cattle and sheep inventories (including calves and lambs) numbered approximately 118.8 million animals.⁵⁶ Of that total, 474,965 cattle and sheep (including lambs and calves) were lost to all carnivores combined (including coyotes, unknown predators, and dogs), or 0.39 percent of the inventory.⁵⁷ The predominant sources of mortality to livestock, by far, are non-predator causes including disease, illness, birthing problems, and weather.⁵⁸ Thus, the killing of hundreds of animals annually in Siskiyou County is not justified for natural resource or environmental protection.

In sum, the wholesale destruction of predators and other animals, like that occurring in Siskiyou County, harms California's wildlife resources and ecosystems both directly, indirectly, and cumulatively. The Program reduces biodiversity, decreases habitat, and increases the number of "pest" species, thereby degrading the value of California's environment and natural resources. As such, the use of a categorical exemption to avoid subjecting Siskiyou County's IWDM program to a substantive review pursuant to CEQA is illegal.

2. Unless an incidental take permit is obtained, authorizing the IWDM Program violates CESA.

There are several species located in Siskiyou County that demand further protection under CESA. Pursuant to CESA, the County is required to obtain a state incidental take permit (ITP) prior to engaging in activities that would result in the incidental take of CESA listed species. As noted above, Wildlife Services' activities have resulted in the unintentional take of thousands of mammals of at least 20 different taxa, many of which are listed as threatened or endangered either federally or in certain states. As explained below, Wildlife Services' use of traps and poisons have a high likelihood of taking non-target species, including listed species, due to the indiscriminate nature of those methodologies. Therefore, if the County elects to continue to contract with Wildlife Services for lethal wildlife control activities, the County must apply for and receive one or more ITPs from the California Department of Fish and Wildlife.

Species listed under the CESA as threatened, endangered, or species of special concern that are known to occur in Siskiyou County include the Gray Wolf, North American Wolverine, Sierra Nevada mountain beaver, Sierra Nevada red fox, Oregon snowshoe hare, western mastiff bat, Humboldt marten, fisher-West Coast DPS, American badger, Townsend's big-eared bat, pallid bat, spotted bat, western pond turtle, southern long-toed salamander, Pacific tailed frog, Yosemite toad, Scott Bar salamander, Siskiyou Mountains salamander, foothill yellow-legged frog, Cascades frog, Oregon spotted frog, southern torrent salamander, western spadefoot, northern goshawk, Swainson's hawk, northern harrier, Bald eagle, black swift, western snowy plover, western yellow-billed cuckoo, Oregon vesper sparrow, greater sandhill crane, bank swallow, tricolored blackbird, yellow-headed blackbird, loggerhead shrike, black tern, yellow-breasted chat, yellow warbler, American white pelican, greater sage-grouse, Columbian sharp-tailed grouse, yellow rail, long-eared owl, burrowing owl, northern spotted owl, California spotted owl, olive-sided flycatcher, Catalina Hutton's vireo, green sturgeon, Klamath largescale sucker, riffle sculpin, Upper Klamath marbled sculpin, bigeye marbled sculpin, Lower Klamath marbled sculpin, blue chub, Pacific lamprey, Klamath Mountains Province DPS-steelhead, summer-run steelhead trout, McCloud River redband trout, chinook salmon-upper Klamath and Trinity Rivers ESU, bull trout, and coho salmon-south Oregon/northern California ESU.

The tricolored blackbird is especially susceptible in Siskiyou County. The tricolored blackbird was listed as threatened under CESA in April 2018. The species is also currently designated as a sensitive species by the Applegate Field Office (which includes Siskiyou County) of the federal Bureau of Land Management and is under formal status review for listing as endangered under the federal ESA. These birds have declined by nearly 90 percent since the 1930s, and comprehensive statewide surveys found only 145,000 of the birds in 2014-the smallest population ever recorded. While the 2017 survey appears to show a small population rebound, with 177.656 blackbirds observed, the population increase came only after legal protections were put in place in 2016, and scientists caution that one year of data cannot be relied on to show population stability.⁵⁹ The tricolored blackbird's range includes portions of Siskiyou County, and they are regularly observed around the County.⁶⁰ Siskiyou County killed 4550 Brewer's blackbirds and 100 red-winged blackbirds from 2008-16. These types of blackbirds flock with tricolored blackbirds, making it possible—if not highly likely—that tricolored blackbirds are being dispersed and/or killed by Wildlife Services. Yet, to Petitioners' knowledge, tricolored blackbirds are not addressed or even acknowledged in any environmental analysis of the IWDM Program in the County, which violates both CEQA and CESA.

Siskiyou County is also home to a number of threatened and endangered species listed under the federal Endangered Species Act whose members could be impacted by the IWDM Program. Some of the species most susceptible to non-target impacts from wildlife "management" are the gray wolf, North American wolverine (proposed threatened), and northern spotted owl. Additional species present in Siskiyou County that are federally protected include the yellow-billed cuckoo, California red-legged frog, marbled murrelet, Oregon spotted frog, delta smelt, longfin smelt (candidate for federal listing), Lost River Sucker, Shortnose Sucker, valley elderberry longhorn beetle, conservancy fairy shrimp, Shasta crayfish, vernal pool fairy shrimp, and vernal pool tadpole shrimp. Siskiyou County also contains federally designated critical habitat for several species, including the marbled murrelet and northern spotted owl.

Furthermore, the following migratory birds are designated by the United States Fish and Wildlife Service (USFWS) as Birds of Conservation Concern and are present in Siskiyou County during certain parts of the year: Allen's hummingbird, black swift, Brewer's sparrow, burrowing owl, California thrasher, Clark's grebe, great blue heron, green-tailed towhee, lesser yellowlegs, Lewis's woodpecker, long-billed curlew, marbled godwit, olive-sided flycatcher, pinyon jay, rufous hummingbird, sage thrasher, sagebrush sparrow, semipalmated sandpiper, short-billed dowitcher, tricolored blackbird, western screech-owl, whimbrel, white headed woodpecker, willet, Williamson's sapsucker, and willow flycatcher. These species are a subset of migratory species that receive protection under the Migratory Bird Treaty Act. Bald eagles and Golden eagles are also present in Siskiyou County, which are protected under both the Migratory Bird Treaty Act and the Bald and Golden Eagle Protection Act.

Two additional species that may be unintentionally targeted by Wildlife Services' use of traps and poisons are bobcats and mountain lions. As of 2015, it is unlawful to trap bobcats anywhere within California.⁶¹ Mountain lions are designated as a "specially protected mammal" in California and it is "unlawful to take, injure, possess, transport, import, or sell a mountain lion or a product of a mountain lion" in the state.⁶² Under state law, mountain lions can only be taken or removed by the California Department of Fish and Wildlife (CDFW) or an appropriate local agency authorized by the CDFW if the animal is "perceived to be an imminent threat to public health or safety or that is perceived by the department to be an imminent threat to the survival of any threatened, endangered, candidate, or fully protected sheep species."⁶³ The CDFW, upon confirmation that a lion has injured, damaged, or destroyed livestock or other property, can issue depredation permit (subject to certain conditions) to take the animal.⁶⁴ Because Siskiyou County authorizes Wildlife Services to kill members of these species, it must comply with these requirements.

3. Authorizing the IWDM Program violates Siskiyou County's public trust duties.

Contrary to the public trust, Wildlife Services kills ecologically valuable predators for the supposed benefit of a small number of commercial agricultural producers. This use of wildlife resources does not benefit all of California's citizens, and fails to strike the appropriate balance between competing uses. As such, Siskiyou County has failed to fulfill its legal duty under the public trust doctrine.

Under the public trust doctrine, Siskiyou County must take an active role in the management of California's public trust resources. However, in Siskiyou County, a non-state actor (Wildlife Services) has become the *de facto* manager of a sizable portion of state and county wildlife resources and ultimately controls the fate of an ecologically significant number of wild animals in the State.

Once Siskiyou County authorizes its Wildlife Services Program, it appears to retain little oversight over Wildlife Services' activities. Generally, a federal "Wildlife Specialist" employed by the USDA, and supervised by the state director of Wildlife Services (also a federal official), carries out Wildlife Services' activities, including the destruction of wild animals. On behalf of the USDA, these employees enter into agreements with commercial agricultural producers directly. They independently determine the magnitude of killing and which methods they perceive as necessary to control wildlife conflicts subject to Wildlife Services' policy. As a result, wildlife resource management—properly the duty of Siskiyou County—is surrendered to Wildlife Services, its individual employees operating in the County, and private commercial interests.

Further, Siskiyou County appears not to track or analyze Wildlife Services' activities or their impacts within its borders in any way. In general, pursuant to the Work & Financial Plans used by Wildlife Services in California, the USDA is obligated to submit quarterly reports to county agricultural commissioners summarizing Wildlife Services' activities in counties where the agency operates. Boilerplate language in the Work & Financial Plan states that "[t]he cooperator [i.e. County] will be kept advised of the status of the project on a regular basis" by the Wildlife Services' District Office in Sacramento. However, these *ex post* records provide only the barest facts about Wildlife Services' activities—often including little more than the number and species of animals that Wildlife Services has killed and a purported, estimated dollar amount of damage to agricultural resources in the county. As such, these documents contain no substantive analysis of the impact of the Program on wildlife resources in Siskiyou County.

Again, Wildlife Services manages wildlife resources for the benefit of a small number of commercial interests by killing predators and many other animals, including birds, to protect agricultural interests. However, these same predators are essential to healthy ecosystems and to the maintenance of California's natural resources. As such, the County must carefully consider the harm the majority of California residents will suffer as a result of Wildlife Service's activities and those citizens' interest in preserving the State's environment, including its wildlife resources. It must closely scrutinize the actual and potential ecological and wildlife impacts of the implementation of the IWDM Program, including the cumulative effects of the ecological changes caused by removing predators from the landscape. Then it must weigh those impacts and the resulting harm to all California's citizens against the private benefits of Wildlife Services' continued operation in the County. During this analysis, the County must determine how best to serve the common good. Until Siskiyou County undertakes such a review, the County's approval of the IWDM Program and continued relationship with Wildlife Services violates the public trust doctrine.

VII. Conclusion

Wildlife Services' activities harm individual animals within California, and scientific evidence does not support the notion that indiscriminately killing individual members of predator species will diminish their populations or reduce conflicts with people, domestic animals, or livestock. Indeed, lethal control of predators may likely lead to more predators and more conflicts.

In light of the information provided herein, Siskiyou County's failure to analyze the environmental impacts of Wildlife Services' activities before renewing its IWDM Program would violate the County's statutory duty under CEQA, CESA, and the federal statutes addressed herein. This failure would also violate its public trust duty to consider and allocate common resources for the benefit of all of its citizens.

Siskiyou County should immediately terminate its IWDM Program. Should Siskiyou County elect to continue the Program, it should immediately suspend the Program pending appropriate review of the activities of Wildlife Services within the County under CEQA, CESA, and the public trust doctrine. In the event the County continues the Program, Petitioners request to be informed of and given the opportunity to participate in any review process and to provide additional information and assistance in the County's review of the ecological and resource allocation impacts of the IWDM Program.

Thank you for your time and attention to this matter.

Sincerely,

Cristina Stala

Cristina Stella Staff Attorney **Animal Legal Defense Fund** 525 E. Cotati Ave. Cotati, CA 94931 (707) 795-2533 ext. 1055 cstella@aldf.org

On behalf of:

Tara Zuardo Senior Wildlife Attorney **Johanna Hamburger** Wildlife Attorney

Animal Welfare Institute

900 Pennsylvania Ave., SE Washington, DC 20003 (202) 337-2332 tara@awionline.org johanna@awionline.org

Tom Wheeler

Executive Director Environmental Protection Information Center (EPIC) 145 G Street, Suite A Arcata, CA 95521 (707) 822-7711 tom@wildcalifornia.org

Lynn Cullens

Executive Director **Mountain Lion Foundation** P.O. Box 1896 Sacramento, CA 95812 (916) 606-1610 lcullens@mountainlion.org

Collette Adkins

Senior Attorney **Center for Biological Diversity** P.O. Box 710 Tucson, AZ 85702-0710 (651) 955-3821 cadkins@biologicaldiversity.org

Camilla H. Fox

Founder & Executive Director **Project Coyote** P.O. Box 5007 Larkspur, CA 94977 cfox@projectcoyote.org

Michelle Lute

Wildlife Coexistence Campaigner WildEarth Guardians 516 Alto Street Santa Fe, NM 87501 (406) 848-4910 mlute@wildearthguardians.org

Citations

¹ Cal. Code Regs. tit. 14 § 15064(f)(1).

² Cal. Code Regs. tit. 14, § 15070.

³ See Protect Telegraph Hill v. City & Cty. Of San Francisco, 16 Cal. App. 5th 261 (Cal. Ct. App. 2017); Banker's Hill, Hillcrest, Park West Cmty. Pres. Grp. v. City of San Diego, 139 Cal. App. 4th 249, 266–67 (Cal. Ct. App. 2006) ("Because the Secretary is only authorized to formulate exemptions that do not have a significant effect on the environment . . . no statutory policy exists in favor of applying categorical exemptions where a fair argument can be made that a project will create a significant effect on the environment.").

⁴ Pocket Protectors, v. City Of Sacramento, 124 Cal. App. 4th 903, 928 (2004).

⁵ E.g., Wildlife Alive v. Chickering, 18 Cal. 3d 190, 206 (Cal. 1976); Mountain Lion Found. v. Fish & Game Comm'n, 16 Cal. 4th 105, 125 (Cal. 1997).

⁶ See Davidon Homes v. City of San Jose, 54 Cal. App. 4th 106, 116-118 (Cal. Ct. App. 1997).
⁷ See Judgment Granting Petition for Writ of Mandate, Animal Legal Def. Fund v. Monterey County, No. 16-cv-001670 (Super. Ct. 2017) (provided concurrently herewith).
⁸ Id.

⁹ Fish & G. Code, § 2052.

¹⁰ Envtl. Prot. & Info. Ctr. (EPIC) v. CA Dept. of Forestry & Fire Prot., 44 Cal. 4th 459, 507 (Cal. 2008) (citing Fish & G. Code, § 2080).

¹¹ Fish & G. Code, § 86.

¹² Watershed Enforcers v. Dept. of Water Res., 185 Cal. App. 4th 969, 975, 988 (Cal. Ct. App. 2010).

¹³ See Fish & G. Code, § 2080.

¹⁴ *EPIC*, 44 Cal. 4th at 507 (citing Fish & G. Code, § 2081(b); Cal. Code Regs., tit. 14, § 783 *et seq.*).

¹⁵ Fish & G. Code, § 2081(c).

¹⁶ See Nat'l Audubon Soc'y v. Superior Court, 33 Cal.3d 419 (Cal. 1983); Ctr. for Biological Diversity, Inc. v. FPL Grp., Inc., 166 Cal. App. 4th 1349, 1361–63 (Cal. Ct. App. 2008); Cal. Fish & G. Code, § 1801(b).

¹⁷ See Nat'l Audubon Soc'y, 33 Cal.3d at 441; Ctr. for Biological Diversity, Inc., 166 Cal. App. 4th at 1360–1363 (2008).

¹⁸ See Ctr. for Biological Diversity, Inc., 166 Cal. App. 4th at 1360–1363.

¹⁹ See Nat'l Audubon Soc'y, 33 Cal.3d at 419.

²⁰ See Illinois Cent. R.R. Co. v. State of Illinois, 146 U.S. 387 (1892).

²¹ Based on a review of USDA, APHIS, Wildlife Services Program Data Reports from 2000 to 2017. *See* USDA-APHIS, 2017 Program Data Reports,

https://www.aphis.usda.gov/aphis/ourfocus/wildlifedamage/sa_reports/sa_pdrs/ct_pdr_home _2017.

²² See USDA-APHIS Response to Freedom of Information Act Request, County Summary Take Data 2008-2016 (on file with author) (provided concurrently herewith).

²³ See USDA-APHIS Wildlife Services Annual County Summary for the County of Siskiyou (on file with author) (provided concurrently herewith).

²⁴ Letter from Project Coyote to Governor Deal, et al., (Mar. 2, 2017), available at

http://www.projectcoyote.org/wp-content/uploads/2017/03/2017.03.02_Revised-Science-Letter_Science-Letter_GACoyoteChallenge.pdf.

²⁵ Robert Crabtree and Jennifer Sheldon, Coyotes and Canid Coexistence in Yellowstone, in *Carnivores in Ecosystems: The Yellowstone Experience*, ed. T. Clark et al.(New Haven [Conn.]: Yale University Press, 1999).

²⁶ F. F. Knowlton, E. M. Gese, and M. M. Jaeger, Coyote Depredation Control: An Interface between Biology and Management, Journal of Range Management 52, no. 5 (1999); Robert Crabtree and Jennifer Sheldon, Coyotes and Canid Coexistence in Yellowstone, in *Carnivores in Ecosystems: The Yellowstone Experience*, ed. T. Clark et al.(New Haven [Conn.]: Yale University Press, 1999); J. M. Goodrich and S. W. Buskirk, Control of Abundant Native Vertebrates for Conservation of Endangered Species, *Conservation Biology* 9, no. 6 (1995).

²⁷ Knowlton, F.F. 1972. Preliminary interpretations of coyote population mechanics with some management implications. J. *Wildlife Management*. 36:369-382.

²⁸ Connolly, G.E. 1978. Predator control and coyote populations: a review of simulation models. Pages 327-345 in M. Bekoff, ed. *Coyotes: biology, behavior, and management.* Academic Press, New York, N.Y.

²⁹ Washington Department of Fish and Wildlife, *Living with Wildlife*, http://wdfw.wa.gov/living/coyotes.html.

³⁰ Gehrt, S.D. 2004. Chicago coyotes part II. *Wildlife Control Technologies* 11(4):20-21, 38-9, 42.

³¹ F. F. Knowlton, E. M. Gese, and M. M. Jaeger, "Coyote Depredation Control: An Interface between Biology and Management," *Journal of Range Management* 52, no. 5 (1999); B. R. Mitchell, M. M. Jaeger, and R. H. Barrett, "Coyote Depredation Management: Current Methods and Research Needs," *Wildlife Society Bulletin* 32, no. 4 (2004).

³² Frye, Bob. (July 25, 2016). "Habitat, not predators, seen as key to wildlife populations," *Trib Live*, http://triblive.com/sports/outdoors/10756490-74/game-predator-predators.

³³ New York State Department of Environmental Conservation. (June 1991). *The Status* and Impact of Eastern Coyotes in Northern New York,

http://www.dec.ny.gov/docs/wildlife_pdf/coystatnny91.pdf.

³⁴ Knudson, T. The killing agency: Wildlife Services' brutal methods leave a trail of animal death—wildlife investigation. *The Sacramento Bee*, April 29, 2012.

³⁵ Bergstrom, B.J., L.C. Arias, A.D. Davidson, A.W. Ferguson, L.A. Randa, and S.R. Sheffield. 2014. License to kill: reforming federal wildlife c ontrol to restore biodiversity and ecosystem function. *Conservation Letters* 7: 131-142.

³⁶ Fox, C.H. and C.M. Papouchis (eds.). 2004. Cull of the Wild: A Contemporary Analysis of Wildlife Trapping in the United States. Animal Protection Institute, Sacramento, California.

³⁷ T. Knudson, U.S. wildlife worker's online photos of animal abuse stir outrage, SACRAMENTO BEE, Nov. 2, 2012, available at http://www.wildearthguardians.org/site /DocServer/SacBeeWSCoyoteKill11.2.12.pdf?docID=6923.

³⁸ T. Knudson, U.S. wildlife agent accused of trapping a neighbor's dog, SACRAMENTO BEE, Jan. 31, 2013, available at http://www.sacbee.com/2013/01/31/5153892/us-wildlife-agent-accused-of-trapping.html.

³⁹ Id.

⁴⁰ Fox, C.H. and C.M. Papouchis, Coyotes in Our Midst: Coexisting with an Adaptable and Resilient Carnivore, Animal Protection Institute, Sacramento, California (2005).

⁴¹ Adrian Treves et al., "Forecasting Environmental Hazards and the Application of Risk Maps to Predator Attacks on Livestock," *BioScience* 61, no. 6 (2011); Philip J. Baker et al., "Terrestrial Carnivores and Human Food Production: Impact and Management," *Mammal Review* 38, (2008); A. Treves and K. U. Karanth, "Human-Carnivore Conflict and Perspectives on Carnivore Management Worldwide," *Conservation Biology* 17, no. 6 (2003); J. A. Shivik, A. Treves, and P. Callahan, "Nonlethal Techniques for Managing Predation: Primary and Secondary Repellents," *Conservation Biology* 17, no. 6 (2003); N. J. Lance et al., "Biological, Technical, and Social Aspects of Applying Electrified Fladry for Livestock Protection from Wolves (Canis Lupus)," *Wildlife Research* 37, no. 8 (2010); Andrea Morehouse and Mark Boyce, "From Venison to Beef: Seasonal Changes in Wolf Diet Composition in a Livestock Grazing Environment," *Frontiers in Ecology and the Environment* 9, no. 8 (2011).

⁴² Fox, C.H. and C.M., *Papouchis, Coyotes in Our Midst: Coexisting with an Adaptable and Resilient Carnivore*, Animal Protection Institute, Sacramento, California (2005).

⁴³ Fox, C.H., Analysis of The Marin County Strategic Plan for Protection of Livestock & Wildlife: An Alternative to Traditional Predator Control, Master's Thesis: Prescott College, Prescott, Arizona. p. 112 (2008).

⁴⁴ Fox, C.H., Analysis of The Marin County Strategic Plan for Protection of Livestock & Wildlife: An Alternative to Traditional Predator Control, Master's Thesis: Prescott College, Prescott, Arizona. p. 112 (2008); Fox, C. H. Coyotes and Humans: Can We Coexist?, R.M. Timm and J. H. O'Brien (eds.), Proceedings, 22nd Vertebrate Pest Conference. Publ. Univ. Calif.-Davis, pp. 287-293 (2006); Fimrite, P., Ranchers Shift From Traps to Dogs to Coyotes,

SAN FRANCISCO CHRONICLE, p. 1 (April 27, 2012) (available at

http://www.sfgate.com/science/article/Ranchers-shift-from-traps-to-dogs-to-).

⁴⁵ See Silliman and Angelini 2012 (provided concurrently herewith).

⁴⁶ See Crooks and. Soulé 1999; Prugh et al. 2009; Wallach et al. 2015 (provided concurrently herewith).

⁴⁷ See Crooks and Soulé 1999; Soulé 1988; Sovada et al. 1995; Palomares et al. 1995 (provided concurrently herewith).

⁴⁸ See e.g. William J. Ripple and Robert Beschta, Large Predators and Trophic Cascade in Terrestrial Ecosystems of the Western United States, Biological Conservation 142, 2401-2114 (2009).

⁴⁹ Beschta, R.L., Ripple, W.J., *Trophic Cascades in Yellowstone: The First 15 Years After Wolf Reintroduction*, BIOLOGICAL CONSERVATION (2009), *available at*

http://www.acsu.buffalo.edu/~jcallen/ large%20predators%20and%20trophic% 20cascades%20in%20w%20US.pdf.

⁵⁰ Beschta, R.L., Ripple, W.J., *The Role of Large Predators in Maintaining Riparian Plant Communities and River Morphology*, GEOMORPHOLOGY (2011), *available at* doi:10.1016/j.geomorph.2011.04.042.

⁵¹ See, e.g., Beschta and Ripple 2009; Estes et al. 2011; Levi et al. 2012; Bergstrom et al. 2013; Bergstrom 2017 (provided concurrently herewith).

⁵² Fox, C.H. and C.M. Papouchis. 2005. Coyotes in Our Midst: Coexisting with an Adaptable and Resilient Carnivore. Animal Protection Institute, Sacramento, California. (provided concurrently herewith).

⁵³ S. E. Henke and F. C. Bryant, "Effects of Coyote Removal on the Faunal Community in Western Texas," *Journal of Wildlife Management* 63, no. 4 (1999); K. R. Crooks and M. E. Soule, "Mesopredator Release and Avifaunal Extinctions in a Fragmented System," *Nature* 400, no. 6744 (1999); E. T. Mezquida, S. J. Slater, and C. W. Benkman, "Sage-Grouse and Indirect Interactions: Potential Implications of Coyote Control on Sage-Grouse Populations," Condor 108, no. 4 (2006); N. M. Waser et al., "Coyotes, Deer, and Wildflowers: Diverse Evidence Points to a Trophic Cascade," Naturwissenschaften 101, no. 5 (2014).
⁵⁴ A. M. Kitchen, E. M. Gese, and E. R. Schauster, Resource Partitioning between Coyotes and Swift Foxes: Space, Time, and Diet, Canadian Journal of Zoology-Revue Canadienne De Zoologie 77, no. 10 (1999).

⁵⁵ See Berger and Gese 2007; Smith et al. 2003 (provided concurrently herewith).

⁵⁶ See USDA. 2015. "Cattle and Calves Death Loss in the United States Due to Predator and Nonpredator Causes, 2015." USDA–APHIS–VS–CEAH. Fort Collins, CO (available at: file:///C:/Users/DJ%20Schubert/Documents/New%20Studies/cattle_calves_deathloss_2015.p df) and USDA. 2015. "Sheep and Lamb Predator and Nonpredator Death Loss in the United States, 2015." USDA–APHIS–VS–CEAH–NAHMS Fort Collins, CO (available at: file:///C:/Users/DJ%20Schubert/Documents/New%20Studies/SheepDeathLoss2015.pdf). ⁵⁷ Ibid.

⁵⁸ Ibid.

⁵⁹ See Ctr. for Biological Diversity, Saving the Tricolored Blackbird,

http://www.biologicaldiversity.org/species/birds/tricolored_blackbird/index.html.

- ⁶⁰ See eBird, Siskiyou County, https://ebird.org/region/US-CA-093?yr=all.
- ⁶¹ See Cal. Code Regs. tit. 14 § 478(c).
- ⁶² See Cal. Fish & G. Code, § 10-4800(b)(1).

63 Id. § 10-4801.

64 Id. §§ 10-4802, 10-4803, 10-4804.