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Re: Petition to amend the Washington Administrative Code to require use of nonlethal techniques to reduce livestock-wolf conflict

This petition seeks to amend the current rules pertaining to lethal removal of wolves in Washington and address the chronic conflict with livestock that has plagued the state for years. The proposed amendments will clarify requirements for the use of appropriate non-lethal deterrence measures to enhance their efficacy. Further, they will help the Department address areas where livestock-wolf conflict occurs year after year. Initiation of a formal rulemaking process would create enforceable requirements that maximize the Department's credibility, provide transparency to the public whom it serves and fulfill the Commission's mandate under RCW 77.36.030.

The public rulemaking process is a powerful tool that has become a backbone of the nation's procedures to create enforceable law. The process exists to increase the accountability of our public agencies and allow for the public to have a say in governing laws. Rulemaking gives everyone the ability to voice their concerns, interests and expertise and seeks to avoid situations where only a hand-picked group of citizens with specific interests have an impact on regulations affecting a much broader number of people and public interest.

Over the years, the state has developed a wolf-livestock interaction protocol that sets the policy the Department purports to follow when deciding whether to kill wolves following conflicts with livestock. This protocol was created in conjunction with the Wolf Advisory Group ("WAG"), composed of citizens who were selected by Department staff to advise on wolf management in Washington. The protocol fails to include enforceable requirements for livestock operators to use non-lethal conflict-deterrent measures.

Currently, the state uses the protocol to check the necessary boxes in order to make kill decisions, but behind closed doors admits to failing to follow the protocol when deciding to kill wolves.

By using the current process, the citizens of Washington have been shut out of how the decision to kill wolves is reached. Opening the doors to that decision-making process will not only give the public a voice on the matter, but it will provide everyone with the necessary certainty and accountability that is currently lacking. The proposed rule seeks to provide clarity to the requirements relating to non-lethal deterrent measures, including tailoring the type of deterrents to the specific circumstance and assuring that they are fully and properly implemented. The rule also intends to deal with specific situations where livestock operators refuse to implement the necessary non-lethal deterrents, giving the Department clear guidelines on how these situations are handled. Further, the rule seeks to codify language regarding chronic conflict areas and implement requirements for these specific areas where controversy is occurring on a regular basis. Currently, the Department is repeating the same actions within these areas year after year without seeing any changes; new rules in these areas will end this ineffective, cyclical approach.

The Commission is required pursuant to state law to formulate limitations and conditions as to when wildlife causing property damage can be trapped or killed. RCW 77.36.030. The rules as currently written establish some requirements for private parties, but fail to describe the necessary limitations and conditions the Department must follow as required by law. The rules below would establish the necessary limitations and conditions as required by RCW 77.36.030 to ensure the Department has complied with this mandate.

Because of the protocol's fundamental flaws, the state's wolf management program has been fraught with controversy and has cultivated significant public distrust of the Department. An enforceable rule seeks to solve the problems inherent in the Department's current system. Codifying rule language will provide the Department and the public with greater certainty, accountability and transparency. It will also break the dangerous cycle that Washington has found itself in by using available resources to elevate non-lethal methods, finally address chronic conflict areas and reach the ultimate end goal of reducing livestock-wolf conflict. We request that the Commission promulgate regulations amending the Washington Administrative Code ("WAC") to, finally, meaningfully address these concerns.

I. PETITIONERS

The Center for Biological Diversity, Cascadia Wildlands, Western Watersheds Project and WildEarth Guardians ("Petitioners"), hereby petition the Commission and the Washington Department of Fish and Wildlife, under RCW § 34.05.330, to amend various sections of WAC Title 220, Chapter 440 to revise code language to promote the use of non-lethal conflict deterrents, address issues with chronic conflict and provide further transparency and accountability. Each of these groups has worked for years to restore and protect Washington's wolves, and together represent tens of thousands of Washington citizens as members and supporters.

Existing regulations, as interpreted by the Department, provide for the lethal removal of wolves. This petition seeks to revise those regulations to place enforceable constraints on when, where and how lethal removal may occur. Petitioners generally view lethal removal of wolves as ineffectual and contrary to the best available science. This petition should not be interpreted as an endorsement of the effectiveness and/or appropriateness of any lethal removal activities that may still be carried out by the Department under the proposed revised regulations.

This petition initiates a process requiring a detailed response within 60 days upon receipt. RCW 34.05.330(1). If this petition is denied, the Petitioners may exercise their right to a review of this petition by the Governor for a final executive determination on the appropriateness of this request. RCW 34.05.330(3).

I. HISTORY OF WOLVES IN WASHINGTON, CURRENT PROTECTIONS AND STATUS

Though an estimated two million wolves once existed across North America, by the late nineteenth and early twentieth centuries, government eradication programs drove wolves to extinction in most of the lower 48 States. The listing of the gray wolf (*Canis lupus*) under the federal Endangered Species Act in 1974 began to halt the extinction of the species. A small, extant population of wolves in Minnesota began to increase in number and expand in range to Michigan and Wisconsin. Wolves were reintroduced to Yellowstone National Park and central Idaho in 1995-1996, and this northern Rockies wolf population began to increase in size, expand in territory, and become a source population for dispersing wolves which started heading west into Oregon and Washington. Wolves north of the border, in British Columbia, also gradually began to make their way into the State. By that time, the gray wolf had been added to Washington's own state list of protected animals, as an endangered species in 1980. WAC 220-610-010.

In 2011, Congress removed federal protections for wolves in the eastern third of Washington. The western two-thirds of Washington currently retain federal protections, but the U.S. Fish and Wildlife Service has a pending proposal to remove protections for wolves in most of the Lower 48 States, including the remaining part of Washington. For wolves in Washington, this would leave only two measures of protection – their continued listing as endangered under the State's own list of protected species, and the provisions of the Plan.

The Department's end of year annual wolf report for 2019, which was released in April of 2020, documented 21 packs in the state, 10 of which had breeding pairs, and an overall population of 108 wolves. The top three sources of mortality indicated in annual reports from 2012-2019 are agency lethal removal actions, legal harvest by members of the Colville or Spokane Tribes, and other human-caused mortalities such as poaching, and vehicle strikes.

II. ECOLOGICAL IMPORTANCE OF WOLVES

The role of wolves as apex predators in the ecosystems where they live is well-documented in the scientific literature. Wolves are highly interactive with their environments, have direct and indirect effects on multiple animal and plant species, and promote ecosystem biodiversity.

Ongoing studies of wolf populations show that, as their chief diet, wolves prefer wild ungulates (e.g., deer and elk, primarily, but also bison, moose and other region-specific species). As coursing predators which test their prey for vulnerability, wolves tend to select prey animals that are older, young, injured, sick or less fit in some way (Halfpenney 2003, Mech 1970, Stahler et al. 2006). This thinning of less healthy and non-reproductive age animals leaves more forage available for the prime-age, reproductive members of the herd, and may contribute to a reduced prevalence of chronic wasting disease and other diseases in wild ungulates (Wild et al. 2011). Wolves are by no means the efficient "killing machines" that folk tales make them out to be, in fact, the majority of wolf hunts are unsuccessful (National Park Service 2015).

Yet, the mere presence of wolves may result in increased wariness and altered behavior by prey animals (Pyare and Berger 2003). This, in turn, has trickle-down effects on the vegetation browsed by these prey animals, with cascading effects to other species.

Interactions by wolves with their natural prey species, such as deer and elk, can result in decreased over-browsing of vegetation, allowing plant re-growth that will support nesting sites for birds, soil erosion control along riparian banks, and building materials for beavers whose dams then result in cool deep ponds that benefit fish and other species (Ripple et al. 2013, Ripple et al. 2014). Wolves also put food on the ground for other species. Wolf-killed elk carcasses in Yellowstone National Park are scavenged by multiple species ranging from coyotes, bears, and eagles, to magpies, ravens, and even hundreds of species of beetles (Fortin et al. 2005, Smith et al. 2003, Weiss et al. 2007, Wilmers et al. 2003).

These positive ecological effects demonstrate the value wolves have in healthy, functioning ecosystems. The critical role of apex predators in general has been demonstrated in both terrestrial and marine ecosystems. Apex predators fill an essential niche that cannot be replicated by other species within the food webs in which they have evolved over millions of years. However, around the globe, apex predators' numbers have been vastly reduced by human activities -- including outright campaigns to eradicate such predators in many places, as was done with wolves in North America. As a result, scientists are noting that, globally, conservation measures must include the protection of habitat sufficient to ensure the existence of healthy, sustainable populations of apex predators. (Beschta and Ripple 2018, Beschta and Ripple 2016, Brechtel et al. 2019, Ripple et al. 2013, Estes et al. 2011, Ripple et al. 2014).

A recent report by the Washington Department of Fish and Wildlife concluded that Washington's growing population of wolves (115 by the end of 2016) is not harming the state's populations of elk, deer, moose or bighorn sheep. The Department studied ungulate populations from 2015-2017 and found that none showed clear signs of being limited by predation. The Department's assessment shows that Washington's elk herds are generally meeting population objectives (and for some herds exceeding population objectives) despite the expansion of wolves, and that the majority of mortality to elk in Washington state is human-caused. The report also reveals that human disturbance, forest management practices and severe winters are key factors affecting elk population dynamics. (Wildlife Program 2015-2017 Ungulate Assessment.)

Science also shows that wolves play a role in curbing the spread of disease, including but not limited to Chronic Wasting Disease (CWD) and treponeme-associated hoof disease, commonly known as TAHD or hoof rot. CWD, which infects deer and elk, has so far not been detected in Washington, but is spreading widely in wild ungulate populations in the Midwest and other Western states. Hoof rot is an emerging disease already present in elk in parts of southwestern Washington. Several studies have shown a promising correlation between wolf presence and the reduction or elimination of the spread of CWD and possible prevention of its emergence in new areas. A 2011 study suggests that selective predation by predators is more effective than nonselective hunting by humans to reduce incidence of CWD in deer populations, and notes that the ability of wolves to detect subtle behavioral evidence of compromised individuals in a prey population and the coursing nature of wolves means wolves likely have even greater potential selective capability for diseased prey than ambush predators like mountain lions (Wild et al. 2011). The authors of this study suggest that as elk populations and wolf range overlap in the future, wolf predation might work to suppress disease emergence or limit the prevalence of such diseases, and that if wolves had been present to selectively predate when CWD first emerged, it is possible the disease might never have gotten established or been detected.

III. MANAGEMENT OF WOLVES IN WASHINGTON

A. *Development of the Washington Wolf Conservation and Management Plan*

Department regulations codified in 1990 required the Department to prepare a recovery and management plan for the gray wolf by 1995. WAC 220-610-110. Despite this requirement, the Department did not begin the recovery and management plan process for the gray wolf for seventeen years.

In 2007, the Department initiated development of a draft Environmental Impact Statement and simultaneously convened a stakeholder group, representing diverse interests, to assist the agency in developing the Washington Wolf Conservation and Management Plan. The 17 members of the stakeholder group met regularly over 15 months to identify, discuss, negotiate and draft components of the Plan. The State also held 23 public scoping meetings plus official comment periods that generated more than 65,000 written comments submitted by members of the public. Drafts of the Plan were also peer-reviewed by 43 reviewers, plus an additional blind peer-review by four scientists.

The Plan contains several key requirements regarding management of livestock-wolf conflicts, which include:

- Non-lethal management techniques “will be emphasized throughout the recovery period and beyond.” (Plan p. 85.)
- “Proactive deterrents . . . combined with a fair and effective compensation program offer the best solution for both limiting livestock losses and compensating producers for any unavoidable losses.” (Plan p. 78.)
- “Lethal removal may be used to stop repeated depredations if it is documented that livestock have clearly been killed by wolves, non-lethal methods have been tried but failed to resolve the conflicts, depredations are likely to continue, and there is no evidence of intentional feeding or unnatural attraction of wolves by the livestock owner.” (Plan at p. 88.)

The Plan additionally cites to science offering guidance on the use of lethal removal on small, recovering wolf populations so as to least impact recovery. Recommendations (at p. 81) include:

- Limiting lethal control to solitary individuals or territorial pairs when possible.
- Removals from reproductive packs should not occur unless pups are more than six months old, packs contain six or more members (including three or more adults or yearlings), neighboring packs exist nearby, and the population totals 75 or more wolves.

In December of 2011, the Commission formally adopted the Plan. The Plan generally incorporates the best available science, at that time, as well as social and economic considerations that were thoroughly discussed and vetted by stakeholders whose views regarding wolves spanned the widest possible range. It also incorporates the views of the public, whose attitudes towards wolves, wolf conservation, and wolf management, were captured not only by the public scoping meetings and comment periods but also in two independent public opinion surveys (one conducted in 2008 by a professional research firm and the other conducted in 2009 by Colorado State University in collaboration with the Department).

B. Department Killing of Wolves Under the Washington Wolf Plan

In the fall of 2012, the Plan was put to the test when a pack in northeastern Washington, the Wedge pack, was implicated in livestock conflicts and ultimately eradicated by marksmen in helicopters following through on an order by the Department to kill the entire pack. The incident involved conflicting opinions from different experts as to whether initial livestock injuries and deaths were in fact caused by wolves. During these events, the owner of the livestock in question, Diamond M Ranch, had failed to implement adequate non-lethal conflict-prevention measures, as required by the Plan. The Department largely ignored additional Plan elements and in August and September, killed seven of the pack's eight members, thus destroying the pack.

The Department's decision to eradicate the Wedge pack, despite the livestock operator's failure to implement nonlethal measures, conflicting expert opinions, the fact that the pack's pups were only 4-5 months old, and that Washington had only 27 known wolves at the end of 2011 caused a firestorm of public controversy. Further, predations in the Wedge pack area continued through the following year.

In the summer of 2014, in a different area, there were conflicts with livestock and members of the Huckleberry pack, which concluded with the Department killing the breeding female by helicopter. Public outrage resulted in the Governor calling a meeting with the Department immediately after this kill order and the order was subsequently halted based on this meeting.

In the summer of 2016 the Department killed seven of the 11-member Profanity Peak pack for conflict with livestock owned by Diamond M Ranch grazing in the Colville National Forest, leaving behind only one subadult female to care for the pack's three four-month-old pups, which likely failed to survive the winter. The cattle involved were turned out without any range riders and had a salt block that was placed in close proximity to the Profanity Peak's den and rendezvous sites. Despite both the Department and the operator knowing about the poor placement of the salt block, nearly a month and a half passed before the salt block was moved. Its presence drew cattle to key wolf use sites, resulting in the conflicts which ultimately led to the deaths of both cattle and wolves.

During the 2017 grazing season a range rider killed the breeding female of the Smackout pack for conflict with livestock, leaving her two two-month old pups without a mother. A few weeks later, after further conflict the Department killed two more wolves from this pack. During this same season the Department killed one of the two-member Sherman pack, destroying the pack. This was done on behalf of Diamond M Ranch in the same area in which the Profanity Peak pack had been removed the year before. Similar issues with salt block proximity to den and rendezvous sites persisted.

In 2018 the Department killed the breeding male of the Togo pack as well as one member of the Smackout pack and two members of the Old Profanity Territory (OPT) pack. Both the wolf from Smackout as well as the two from OPT were killed on behalf of Diamond M Ranch. The OPT wolves were killed in the same area where conflict had arisen in the past. There were once again issues with failure to remove salt blocks. There were also issues with dead and injured cattle not being removed and according to state documents range riders failing to monitor livestock while claiming they had done so. The Smackout wolf was killed when Diamond M moved some cattle to a private pasture in a different locale but with no human presence or other protections.

The 2019 grazing season saw the killing of another nine endangered wolves. Eight of these were from the OPT pack, for conflicts with Diamond M cattle in the same area that the previous conflicts had occurred. The Department first killed the breeding male of this pack, and after an intervening lawsuit, proceeded to kill another three members. The Department killed the final four members of the pack hours before a restraining order was granted by the court. The Department also killed a member of the Grouse Flats pack for conflict in Southeastern Washington during a similar time period.

Table 1 below summarizes the timeline of wolf killing that has been laid out above:

TABLE 1

Pack	Wolves Killed by WDFW	Year	Wolves Killed for Diamond M Ranch
Wedge	7	2012	7
Huckleberry	1	2014	0
Profanity Peak	7	2016	7
Smackout	2	2017	0
Sherman	1	2017	1
Togo	1	2018	0
Smackout	1	2018	1
OPT	2	2018	2
OPT	8	2019	8
Grouse Flats	1	2019	0
TOTAL	31		26

As is evident by these numbers, the Department has killed 31 wolves since 2012. Twenty-six of those wolves, or 84% of the wolves that have been killed by the Department, have been killed on behalf of Diamond M Ranch in the same area that has seen conflicts year after year.

C. 2013 and 2014 Petitions for Rulemaking

In 2013, following the Department’s controversial removal of the Wedge Pack at the behest of the livestock industry, several environmental organizations filed a petition for rulemaking. The Department promised a negotiated process to develop a rule with relevant and interested parties. The Department ended up drafting rule language, which it provided to the WAG and petitioners before filing a CR-101 in May of 2014 to initiate the rulemaking process. The conservation representatives on the WAG at the time requested that the Department not move forward with the rulemaking until a mediated process was completed to develop the draft rule. Based on this request, the Department never proposed rule language

to the Commission and instead decided to hire a facilitator in hopes of having these negotiations in the WAG instead of as part of a formal rulemaking process.

On June 6, 2014 the same group of petitioners who filed the 2013 petition filed a more narrowly tailored petition for rulemaking that focused specifically on lethal removal criteria and areas of chronic conflict. On August 1, 2014, the Commission denied the petition on the following basis, outlined in a letter sent to petitioners August 6: “1) determining the need to use lethal control to stop repeated depredations is a complicated issue; 2) limiting the flexibility articulated in the Wolf Conservation and Management Plan reduces the ability to address each case-specific wolf-livestock conflict; 3) establishing a new advisory group undermines the existing advisory body composed of diverse groups to provide technical advice and policy counsel to implement the Wolf Conservation and Management Plan.” The Commission then directed the Department to hire an independent facilitator to “revisit the role and responsibilities of the Wolf Advisory Group, along with a facilitated discussion on the necessity of a rule.”

Petitioners appealed, and in September 2014 Governor Inslee denied the appeal explaining that in the specific circumstances, where the petition requested a brand new rule entirely, appeal to the Governor was improper. The Department has not proposed any rules or language to the Commission on this subject as of the time this petition was filed.

D. WAG Creates an Interaction Protocol

The incident with the Huckleberry pack in summer 2014, as well as the Department’s prior actions, instigated a meeting in fall of 2014 with conservation groups, the Department and the Governor’s staff. In that meeting, the conservation groups requested that the Department engage in a mediated process, bringing together stakeholders to develop rulemaking language that would dictate when wolves could be killed for livestock conflict.

The Department never undertook a rulemaking process, but instead engaged the WAG and adopted a document titled *Protocol for consideration and implementation of lethal removal of gray wolves during recovery to stop wolf depredations on livestock*, issued on May 31, 2016 (“2016 Protocol”). The protocol attempted to describe when the Department “considers lethal removal of gray wolves during recovery to stop repeated wolf depredations on livestock and the implementation of lethal removals.” The 2016 Protocol set forth expectations, but no enforceable requirements, for measures to be taken by livestock operators. The 2016 Protocol highlighted the expectation that operators haul away animal carcasses to prevent attracting predators and implement one additional non-lethal deterrent. The protocol also set forth parameters instructing that the Department follow, telling them not to undertake lethal removal of wolves unless there have been four or more confirmed predation events within one calendar year (Jan 1-Dec 31) or six or more confirmed predation events in two consecutive calendar years.

In response to the removal of the Profanity Peak pack in 2016 the WAG reworked the 2016 protocol into a new document titled the *Wolf-Livestock Interaction Protocol* (“2017 Protocol”). The stated purpose of this new document was “to influence/change wolf pack behavior to reduce the potential for recurrent wolf depredations on livestock while continuing to promote wolf recovery.” The new version of the protocol explicitly shifted away from the goals of the Plan, choosing instead to focus on the goal of changing pack behavior in an attempt to prevent livestock-wolf conflict. The 2017 Protocol included only a few notable changes from the 2016 version: (1) it stated an expectation that livestock operators employ two proactive non-lethal conflict deterrent measures instead of just one; (2) it changed the parameters for when wolves

could be killed to four predations in 10 months or three predations in 30 days; and (3) it allowed for “probable” wolf predations in addition to “confirmed” wolf predations to be counted for purposes of lethal removal. The new protocol was in place for the start of the 2017 grazing season, but did not seem to solve any of the problems with proper implementation of non-lethal deterrents or conflicts with Diamond M livestock.

E. Litigation Filed to Address Issues with Wolf Management

In the fall of 2017, the Center for Biological Diversity and Cascadia Wildlands sued the Department for violations of the State Environmental Policy Act (“SEPA”) and the Administrative Procedure Act (“APA”) for the destruction of the Sherman pack. The court declined to hear the merits of the case and dismissed it as moot. When the Department killed one member of the two-member Sherman pack, there was no pack left for which the court could provide a remedy. However, the court got the Department to agree that until the merits could be heard on any subsequent case filed making the same SEPA and APA claims, the Department must give the public eight court hours’ notice before beginning kill operations to allow for members of the public to seek a temporary restraining order.

The next season, plaintiffs filed a new lawsuit alleging violations of SEPA and the APA regarding lethal actions taken against the Togo pack, and subsequently the OPT pack and the Smackout pack.

The court granted a 2018 motion for a temporary restraining order to stop removal of Togo pack wolves, but subsequently denied a preliminary injunction, which resulted in the Department killing the breeding male. In the following two months, the Department killed two OPT wolves and one Smackout pack wolf on behalf of Diamond M.

It was later revealed that, during all of this controversy, there was evidence of alleged fraud by range riders contracted by the state. Department records revealed at least two range riders had been paid for hours of range riding they claimed to have done when they were elsewhere, such as shopping or at a casino. During the dates that the range riders should have been monitoring cattle but weren’t, conflicts arose between livestock and wolves and the Department ultimately killed wolves based on these conflicts. Additional Department records revealed its staff acknowledging quality range riding has never been done in the areas of the Diamond M grazing allotment where the Department keeps killing wolves following repeated conflicts with cattle. A criminal investigation based on these allegations has been underway since October 2018.

In response to the conflicts with Diamond M cattle and the OPT pack, in which the livestock operator refused to use range riding as a deterrent, a group of private citizens filed a lawsuit in King County, Washington alleging violations of SEPA and the APA. On the morning of a court hearing to determine whether a restraining order would be issued to halt the killing of additional pack members, the Department’s marksmen were already in the field and killed the remaining four wolves before the court hearing start time of 9:00 a.m.

After another summer of public outcry and more dead wolves, on September 30, 2019, Governor Jay Inslee sent a letter to the Department. The letter directed the Department to reduce its reliance on lethal removal as a tool and stated that the continued killing of wolves in northeast Washington was “simply unacceptable.” The Department’s response outlined several actions that had already been

taken and will continue, but largely failed to address new solutions to meaningfully resolve the issue of repeated conflict and the accompanying recurring lethal removals.

IV. WOLF–LIVESTOCK CONFLICTS AND THE CRITICAL ROLE OF NON-LETHAL MANAGEMENT TOOLS

While wolves rarely prey on livestock, conflicts do occur and, at times, result in losses to livestock operators. The Plan considered this issue by providing information about wolf predations on livestock, the background of management measures available for reducing wolf predations, an analysis of predicted livestock losses in Washington due to wolves, a description of management tools to be used for managing livestock-wolf conflicts in Washington, and steps to expand the use of proactive/non-lethal measures for reducing conflicts in Washington. Plan at 72.

In its discussion of the efficacy of killing wolves to resolve livestock-wolf conflicts, the Plan notes that “[t]wo recent analyses of long-term lethal control of wolves found that removals generally have limited or no effect in reducing the recurrence of depredation (Harper et al. 2008, Muhly et al. 2010a),” that “excessive levels of lethal removal can preclude the recovery of wolf populations, as noted with the Mexican gray wolf in New Mexico and Arizona (USFWS 2005),” and that to minimize negative impacts on recolonizing wolf populations, “constraints on lethal control have recently been recommended by Brainerd et al. 2008. . . .” Plan at 81.

Emerging science published since the creation of the Plan is concluding that killing wolves is the wrong approach to deterring conflicts. It can result in the remaining wolves moving to neighboring ranches and having conflicts with livestock there (Santiago-Avila et al. 2013). There are currently no scientific studies that have been conducted according to “gold” scientific standards that test the hypothesis that killing wolves prevents livestock-wolf conflict (Treves et al. 2016). However, the Department continues to state in its public outreach and internal and external advisory groups, that killing wolves is an effective means to deter conflicts with livestock.

Studies which concluded that killing entire wolf packs stopped conflicts either fail to mention – or specifically note – that once terrain is filled by a new pack in subsequent years the conflicts begin again (Bradley et al. 2015, Musiani et al. 2005, Muhly et al. 2010). This suggests that killing entire packs is a short-term solution to a problem which deserves innovative thinking and long-term results. The Department’s experience in the Kettle River Range has proven as much.

Additional recently published studies have compared the use of lethal and non-lethal deterrents in preventing livestock-wolf conflict and found that non-lethal deterrents are more effective at preventing conflict and also more cost-efficient in the long term (McManus et al. 2014, Imbert et al. 2016). A recent paper which analyzed the results of 140 different studies worldwide concluded that the only methods which have scientifically been shown to deter conflicts between livestock and wolves are non-lethal methods (van Eden et al. 2018).

Many of the most basic conflict-prevention tools and strategies are common-sense solutions that have been used in other parts of the world where humans have been raising livestock in close proximity to wolves for centuries:

- One of the most constructive ways to avoid livestock-wolf conflict is by separating wolves and livestock, including the following methods;

- Moving cattle to alternate grazing allotments when the usual allotment would interfere with a den or rendezvous site or waiting to move cattle onto an allotment until wolves have relocated.
- Range riding on the open range on a consistent basis in order to monitor cattle and prevent conflict. Additional human presence can be a supplemental measure, but not a replacement for range riding.
 - Human presence can involve watching for predators and hazing them away when they get near livestock. It can also allow livestock operators to know whether any of the herd is sick or injured and whether animals should be removed preventatively.
 - Range riding requires constant presence around livestock to make wolves aware and wary of the presence of humans. It requires time spent in the forest, off roads, near to the animals themselves with a deep knowledge of where livestock are present as well as where wolves are present.
 - Both human presence and range riding should be standardized by experts in the field so that all parties understand what constitutes effective human presence and range riding.
- Putting GPS ear tags on livestock to track them can inform livestock operators and range riders when livestock have strayed from the herd. GPS tags can also inform livestock operators when cattle are on allotments past grazing season.
- Removing attractants, such as carcasses or bone piles of dead livestock or injured or sick livestock that draw in predators and scavengers, as well as not having newborn calves or lambs on the range to attract wolves, are essential components of avoiding livestock-wolf conflict.
- Using guard dogs in the herds to alert herders, range riders and livestock operators to the presence of wolves provides an early warning system.
- During lambing and calving season, fencing with night pens provides a protective barrier. Fencing can also be fortified with a scare device such as fladry or turbo-fladry.
- Scare devices such as radio-activated guard boxes (“RAG-box”) can be used to administer loud sounds to wolves wearing radio-collars when approaching livestock to scare wolves away.
- Specific animal husbandry practices and deliberate breed choices, such as creating coordinated breeding and birthing periods, or experimenting with larger and/or more aggressive breeds of cattle.
- In addition to the methods and strategies described here, new innovations are being developed and tested on an ongoing basis. In locations where humans, livestock and wolves

are sharing the landscape, experience indicates that using several of these methods and tools in combination is most effective. Which ones will work best in any given circumstance is case-specific.

In Washington, non-lethal strategies and tools can and should be used before, if ever, resorting to killing wolves to prevent or to resolve conflicts. Modern-day research compels this conclusion. Just as importantly, the Plan that was carefully crafted over a five-year process with substantial public involvement supports an approach that emphasizes nonlethal methods of preventing and resolving conflicts.

V. A CODIFIED RULE IS REQUIRED TO PROPERLY IMPLEMENT THE PLAN

The years of controversy, as highlighted above, show that the Department's management of livestock-wolf conflicts needs to be governed by rules developed through a transparent, public process. While the WAG may serve an important advisory role, the Department's reliance on the WAG lacks the accountability and transparency that can be achieved through rulemaking.

The current system in place, based on the protocol under which the Department is operating, has several serious deficiencies a rule will meaningfully address. Firstly, the protocol does not require that livestock operators use non-lethal deterrents that are appropriate for their specific circumstances. The Department instead treats the policy of having two non-lethal deterrents in place, as outlined in the protocol, as boxes that must be checked in order to kill wolves, without giving any weight to the efficacy of the deterrents for the given situation. Non-lethal deterrents should be specifically tailored to factors such as the nature of the livestock operation in question, the specific landscape and habitat related to that operation and the time of year. Because of this, when the Department claims it is following the protocol, it is oftentimes because it is allowing livestock producers to employ non-lethal deterrents that are not effective or are being used completely improperly, but still allow for the Department to state that two or more non-lethal deterrents were in place before it went in and killed wolves.

Further, the protocol gives no direction for a situation in which a livestock operator refuses to use non-lethal measures or such measures do not seem to be working in a certain area. This is the situation the Department has come across again and again, yet it has no policy in place to guide it in these situations. Formalized language will give the Department requirements for how to act in these circumstances, providing guidelines for when lethal removal may be considered and requiring additional safeguards in areas of chronic conflict. This will take the uncertainty out of the oftentimes emotionally-heightened decision-making process it currently undergoes.

Chronic conflict areas have been a consistent issue in Washington. The proposed rule language seeks to provide proactive measures to undertake within these areas. Requiring these enhanced measures will not only assure the public that the Department is not simply repeating the same actions over and over again expecting different results, but will instead require proper analysis of the specific situation to determine a best path forward.

Codifying regulatory language addresses these concerns. A rule will help to bring greater certainty to all communities involved and allow for more accountability and transparency with the end goal of minimizing controversy. Pursuant to the Plan, we request the Commission to promulgate the following language amending the Washington Administrative Code.

VI. PROPOSED AMENDMENTS TO RULE LANGUAGE

Petitioners developed the following language for the proposed amendments by drawing from multiple sources, including the most effective elements of the Department's own Protocol and Plan¹. We also incorporate successful strategies implemented in Oregon, as outlined in the Phase I Rules for Oregon's Wolf Plan². Other language comes from Washington's WAG meetings. Synthesis of these multiple sources as well as supplemental ideas have led us to propose rule language that addresses the state's most pressing issues regarding livestock and wolf conflict management.

Petitioners suggest this rule language with the knowledge that the WAG is currently undergoing a process to revise the protocol in hopes of having an updated document for the 2020 grazing season. There have been several iterations of a protocol, all devised by the WAG, and all with the same result. Every grazing season the state kills endangered wolves, in some cases wiping out entire packs, and public outrage ensues. It's time to break this cycle and the way to do that is through wildlife management rules developed through a transparent, unbiased public rulemaking process.

Petitioners do not agree with killing wolves except in defense of human life or safety, do not support killing wolves for conflict with livestock and do not support any killing of wolves on public land. However, petitioners are acutely aware that the state of Washington may continue to kill wolves regardless of the science recommending against lethal removal of wolves as a means to resolve livestock-wolf conflict and regardless of the ethical questions posed by the killing of wolves. With the rules language we hereby propose, petitioners therefore seek to promote accountability, enforceability and transparency within the existing paradigm of wolf management by the state. The Department must continue to follow the requirements of the Wolf Plan and prioritize the use of appropriate non-lethal techniques and kill wolves only as a measure of last resort, understanding that killing wolves to deter conflicts with livestock contravenes best available science. The rules language we propose thus seeks to significantly improve the current system until the Department chooses to end the senseless killing of wolves.

Revised Section – Amending WAC 220-440-040 to add a new section as follows:

WAC 220-440-040 Wildlife/human interaction and conflict resolution for private property damage

(7) The provisions of WAC 220-440-080 also apply for all applicable situations dealing with gray wolves (*Canis lupus*).

Revised Section – Amending WAC 220-440-080 to add language to the existing section and add a new section as follows:

WAC 220-440-080 - Killing wolves attacking domestic animals

¹ Washington Department of Fish and Wildlife, Wolf-Livestock Interaction Protocol, §§ 3-6. June 1, 2017; Washington Department of Fish and Wildlife, Wolf Conservation and Management Plan, §4(B). December 2011.

² Or. Admin. R. 635-11-0010(7) (2019).

(3) In addition to the provisions of subsection (1) of this section, the director may authorize additional removals to address repeated wolf predations of livestock in very specific situations.

- (a) The Washington Department of Fish and Wildlife is required to use non-lethal techniques as the primary response in protecting property against damage from wolves.
- (b) The department must work with livestock operators to identify and plan the proactive deployment of the best suitable non-lethal techniques. Following a confirmed or probable predation, the department must work with operators to assess on-the-ground conditions and determine which additional responsive techniques should be deployed.
- (c) Non-lethal techniques to consider should include, but are not limited to:
 - (i) Range riding; (b) monitoring livestock; (c) protecting calving/lambing areas; (d) using scare devices; (f) guardian or herding dogs; (g) human presence (including hazing, herding and other experimental tactics); (h) permanent and portable fencing (fladry, electrified turbo fladry, calf panels); (i) any other likely effective techniques.
 - (ii) In considering non-lethal techniques, the department must work with livestock operators to determine what methods are likely to be most effective at preventing and mitigating livestock-wolf conflict on a case-by-case basis considering best available science, the nature of the livestock operations, habitat, landscape conditions, time of year or period of livestock production, history of predations with that particular operation and in that locality as well as any other relevant information.
- (a) The department must work with livestock operators to delay turnout to forested/upland grazing pastures until calves reach at least 200 lbs. and after wild ungulates are born in mid-June.
- (b) The department must work with livestock operators to offer assistance and ensure sanitation is being conducted. Sanitation is the removal, burying, burning, liming, or fencing off of livestock carcasses to prevent the carcasses from being an attractant to wolves and other predators.
- (c) Before the department may find that range riding has been properly implemented as an appropriate non-lethal technique it must determine:

- (i) An adequate number of range riders have been assigned to the areas where their proactive and responsive actions are most likely to prevent livestock-wolf conflict, and that they are spending enough hours in the field to reasonably deter such conflict, including nighttime hours as appropriate.
 - (ii) Range riders have taken appropriate responsive actions, both proactively and reactively, to prevent livestock-wolf conflict, including relocating cattle as necessary, locating cattle that have strayed from the herd and bunching up cattle, and locating and removing sick, injured, or dead livestock. All range riders counted as a non-lethal technique for purposes of section 4(d) must be equipped with a department-issued GPS unit used at all times while performing their duties. Department-contracted range riders must also prepare and submit to the department on a quarterly basis daily logs detailing the date, number of hours spent in the field and all observations of livestock and wolves and their behaviors.
- (a) To address the heightened risk of conflict from cattle presence near wolf den and rendezvous sites, the department must:
- (i) Confirm the presence of any den or rendezvous site; and
 - (ii) In conformance with all applicable rules and policies regarding sharing of sensitive information, instruct livestock operators to move salt blocks away from the den or rendezvous site(s), clean up the area around the salt block, and move and keep cattle at least one mile away from the known den or rendezvous site(s) until the department can confirm those sites are no longer being used.
- (4) Prior to confirming a livestock predation as counting for purposes of lethal removal, the department must make available on its website a public document detailing the livestock operator's use of non-lethal techniques, including (a) the techniques employed; (b) the time period employed; (c) the specific area employed; (d) any other information relevant to its efficacy; (e) a finding as to whether the technique was appropriate for that circumstance and; (f) whether an additional technique could deter additional conflict.
- (a) The department must make available on its website, at least two business days before taking lethal action against any wolves, a written finding that all of the following requirements have been met:

- (b) All requirements of WAC 220-40-080 (3) have been met.
- (c) Pursuant to department predation investigation protocol, trained and authorized department staff have found wolves responsible for three confirmed predation events all of which resulted in livestock mortality within a 30-day rolling window or four confirmed predation events all of which resulted in livestock mortality within a six-month rolling window.
- (d) Pursuant to WAC 220-40-080(3) (c), there were at least two department approved appropriate non-lethal techniques in place, the non-lethal techniques were applied to the specific group of livestock involved in the conflict and used for at least two weeks prior to the conflict occurring.
- (e) Sanitation as defined in WAC 220-40-080(3) (e) was carried out at all times, separate from the use of non-lethal techniques.
- (f) Range riding was used as one of the non-lethal measures where the qualifying predations took place if the predations occurred on public land.
- (g) If the qualifying predations took place on public land, the range riding required by subsection (f) of this rule was properly implemented pursuant to the requirements in WAC 220-40-080(3) (f).
- (h) The department does not reasonably believe other available non-lethal techniques exist that could be employed in the specific situation which would likely mitigate further conflict.
- (i) Predations are likely to occur again.
- (j) The wolf or wolves identified for removal are those the department reasonably believes to be associated with the qualifying livestock predations, the removal of which the department reasonably believes will decrease the risk of repeated predation in the affected locale.
- (k) The lethal removal of wolves is not expected to harm or delay the wolf population's ability to reach recovery objectives statewide or within individual wolf recovery regions.
- (l) Lethal removal will not orphan or jeopardize the survival of any pups under a year and a half old.
- (m) Livestock operators are operating pursuant to all relevant applicable laws, all terms and conditions of any applicable federal or state grazing permits, and all notification, investigation and reporting requirements of the department.

- (5) Livestock killed within 1000 yards of a known den or rendezvous site on public lands will not count toward the lethal removal thresholds of subparagraph (4) (c).
- (6) Conflicts which have occurred between livestock and wolves for at least two consecutive years, or two out of five years, in the same area or with the same livestock operator, pose a unique problem. In these situations of chronic conflict, the following requirements apply:
- (a) In areas of chronic conflict, as defined above in (6), producers will be required to GPS track their livestock to prevent unnecessary contact with gray wolves and further mitigate conflict and predation.
- (b) If lethal removal of wolves occurs over two consecutive years or two out of five years in the same area or with the same livestock operator, the department must, in coordination with affected landowners, livestock operators and other relevant interests, prepare and publicly disclose an area-specific livestock-wolf conflict deterrence plan. The plan shall outline prior conflicts in the area and examine the non-lethal techniques in place and why those may have failed to deter conflict. The plan will also identify appropriate non-lethal techniques for the upcoming year, considering the nature of the livestock operation, habitat, and landscape conditions, as well as particular times of the year or period of livestock production. The department, in conjunction with the other involved parties, must update an area-specific conflict deterrence plan as new data becomes available or after each year with an additional predation.
- (c) No lethal action will be taken against wolves on public lands grazing allotments or for livestock predations which occurred on public lands grazing allotments if there have been repeated livestock-wolf conflicts and wolf lethal removals on that same allotment for two consecutive years or in two out of five years.
- (7) Take authority issued pursuant to a written lethal removal order expires when the wolf or wolves identified in the order have been killed or after 30 days, whichever comes first. No more than two wolves will be lethally removed in any given removal action to allow time to assess the impacts of removal.

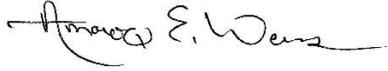
[Statutory Authority: RCW 77.04.12, 77.04.013, 77.04.020, 77.04.055, 77.12.047, RCW 77.12.240, RCW 77.36.030]



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