



May 16, 2022

The Rewilding Institute (TRI) and Project Coyote (PC) appreciate the opportunity to comment on the following action by the U.S. Fish and Wildlife Service (FWS):

**DEPARTMENT OF INTERIOR**

**United States Fish and Wildlife Service**

**Docket No. FWS-R2-ES-2022-0018; FXES111302WOLF0-223-FF02ENWF00**

**Re: Endangered and Threatened Wildlife and Plants; Final Mexican Wolf Recovery Plan, Second Revision.**

These comments were prepared by TRI's Carnivore Conservation Biologist and PC's Science Advisor, David R. Parsons, PC's National Carnivore Conservation Manager, Dr. Michelle Lute, PC and TRI's Big River Connectivity Science and Conservation Manager, Dr. Francisco J. Santiago-Ávila, and PC and TRI's Carnivore Conservation Advocate, Renee Seacor. Mr. Parsons, who holds B.S. and M.S. degrees in Wildlife Biology, was a career wildlife biologist with the U.S. Fish and Wildlife Service (FWS) for 24 years and served as the FWS's first Mexican Wolf Recovery Coordinator from 1990 to 1999. He was the primary author of the original rule (1998) that established a Nonessential Experimental Population of the Mexican gray wolf in Arizona and New Mexico. Dr. Lute has a PhD in wolf management from Michigan State University. Dr. Santiago-Ávila has a PhD in Environment & Resources from the University of Wisconsin-Madison. Renee Seacor has a B.S. degree in environmental science and a J.D. from the University of Oregon School of Law.

TRI and PC have a long history of involvement and consistent support for full recovery of Mexican gray wolves (*Canis lupus baileyi*) throughout suitable habitats in the U.S. Southwest and Mexico. We have consistently opposed proposals to weaken Mexican wolf recovery efforts and reduce their chance of recovery and long-term survival. We have provided substantial science-based comments at all stages of development of the *2017 Mexican Wolf Recovery Plan, First Revision* and beyond.

The *Final Mexican Wolf Recovery Plan, Second Revision* (Recovery Plan) was required due to a court order issued on October 14, 2021, in which the *First Revision* was remanded pursuant to Endangered Species Act (ESA) provision 16 U.S.C. § 1533(f)(1)(B) for failure to include site-specific management actions addressing the recognized threat of human-caused mortality (HCM) of Mexican wolves. Rather the FWS superficially stated the vague goal of "reduce human-caused mortality of Mexican wolves" without any specifics or practical steps for how the

FWS planned to address this critical and increasing threat to the population. (USFWS 2017 Mexican Wolf Recovery Plan, First Revision at pg. 31)

We view this as an opportunity to greatly improve protections and recovery prospects for this still critically endangered gray wolf subspecies by addressing the most immediate threat that has faced the Mexican wolf in the 40-plus year history of recovery efforts. We fear that if the FWS doesn't seize this opportunity to significantly improve protections and address the critical threat of HCM for the *lobos* of the Southwest, they will be doomed to eventual extinction.

We are disappointed that the FWS has again failed to sufficiently address the threat of HCM facing the population. FWS has previously identified that HCM, including illegal killings, of Mexican wolves causes "excessive" mortality, accounting for 70% of all Mexican wolf mortality and necessitating a serious and immediate response from FWS to address this dire situation. (USFWS 2019 Mexican Wolf Recovery Program, Progress Report #22 at pg. 29)

We find that the Recovery Plan fails to use the best available science to adequately address HCM and effectively guide the recovery of the species. Our recommendations to address HCM in the population guided by the best-available science are the following:

- 1. FWS must reinforce the strictest Endangered Species Act protections for Mexican gray wolves.**

The FWS should firmly state a position that reinforces the strongest ESA protections for Mexican wolves asserting the only condition under which a Mexican wolf can be killed is under imminent threat to human safety. Substantial research documenting HCM in both Mexican wolves and other North American wolf subspecies has found that liberalized killing of wolves results in a direct increase in the hazard and incidence of illegal killings. (Louchouart et al. 2021, Santiago-Ávila et al. 2022, Santiago-Ávila et al. 2020, Treves et al. 2021).

Cryptic poaching (i.e., illegal take followed by concealment of evidence such as destruction of radio-collar) has likely resulted in slowed or stopped growth of the Mexican wolf population during periods of reduced ESA enforcement. (Louchouart et al. 2021). Namely, when the FWS liberalizes wolf removal, more illegal and cryptic poaching occurs, intolerance increases, and opposing factions subvert the will of the US public by killing wolves. Therefore, it is critically important for the FWS to reinforce the strictest enforcement of ESA protections for Mexican wolves to reduce HCM.

In addition, FWS must stop sharing telemetry frequencies and GPS receivers for Mexican wolf radio collars with members of the public that may have competing interests causing them to oppose wolf recovery. FWS should only share sensitive GPS information with authorized federal employees providing conflict avoidance services. Such services should be increased. The current practice of sharing sensitive information openly and broadly likely contributes to illegal killing of wolves.

**2. FWS should remove population boundary designations that limit the population to south of I-40 to establish spatially consistent protections that would decrease illegal killings.**

Wolves that reside within the Mexican Wolf Experimental Population Area (MWEPA) have less protection than wolves that disperse outside of the boundary. Wolves outside the MWEPA receive an “endangered” classification. This fragmented protection conveys to the public that wolves inside the MWEPA are expendable, devaluing them and incentivizing much higher rates of illegal killing within the MWEPA, where the population is concentrated and managed. Public messaging by FWS reinforcing strict ESA protections both inside and outside of the MWEPA, would publicly signal the value of Mexican wolves regardless of location and disincentivize poaching.

The FWS and cooperating agencies often use outreach messaging that implies that wolves do not belong north of I-40, potentially leading to increased intolerance (and associated poaching) towards wolves dispersing outside of the MWEPA. In fact, the last Mexican wolf known to have traveled north of I-40 was illegally killed. Messaging must change to mitigate the hostile environment and increase tolerance for dispersing wolves. We strongly urge FWS to address how their outreach and messaging may be inadvertently contributing to intolerance for wolves.

**3. FWS should focus efforts on the exclusive promotion and implementation of scientifically-proven effective and proactive non-lethal approaches to mitigating wolf conflicts with domesticated animals across Mexican wolf range.**

FWS should implement requirements for ranchers to use non-lethal deterrence methods to prevent wolf-livestock conflicts. Any policies that allow take by managers, issuance of permits for take, or lethal control of wolves in response to conflicts will incentivize and increase poaching. The FWS erroneously supports lethal intervention as a mitigation strategy for predation events on domestic animals. (2017 Mexican Wolf Recovery Implementation Strategy). Instead, the FWS and cooperating agencies should focus their efforts on the exclusive promotion of a host of scientifically proven, functionally effective non-lethal approaches to prevent wolf-livestock conflicts. Moreover, there is no evidence for lethal interventions being functionally effective at mitigating subsequent predation events on domestic animals in this context, and there is plenty of evidence against lethal interventions. (Santiago-Ávila et al. 2018; Treves et al. 2016; Van Eeden et al. 2018).

We offer Project Coyote’s *Ranching with Wildlife* program as a model. Our program works collaboratively with diverse stakeholders united by the goal of coexistence among humans, livestock, and wildlife. We work directly with local wildlife organizations, ranchers, scientists, and county officials across the country to directly and simultaneously protect both domesticated and wild animals. Our work includes developing and implementing long-term carnivore coexistence programs, field testing predator deterrents, and promoting the understanding and appreciation of the key ecological role of carnivores on the landscape.

Strategies we recommend to prevent livestock losses in wolf range that have been proven effective include fencing and night confinement, fladry, and adjusting calving timing and location. (Moreira-Arce et al. 2018; Treves et al. 2016; Miller, et al. 2018; Bruns et al. 2020; Khorozyan & Waltert 2019). In addition, range riding is effective over large pastures and rangeland grazing. (Parks et al. 2015; Louchouart & Treves 2021). Lastly, lethal removal of carnivores can prove more costly than non-lethal deterrence measures and is less tolerated by the general public.

We are committed to helping communities across New Mexico and Arizona employ non-lethal strategies on the ground. We offer our services and support in guiding the implementation of science-based Mexican wolf management throughout the region. Implementation of non-lethal deterrence strategies will result in a reduction of wolf-livestock conflicts and therefore decrease both legal and illegal killings of Mexican wolves.

In addition, we recommend that FWS change the Section 10(j) designation of wolves in the final rule from experimental “non-essential” to “essential” status. This change of status will obligate other federal agencies, such as the U.S. Forest Service and Bureau of Land Management to abide by the full provisions of Section 7 of the ESA, requiring affirmative conservation actions and formal consultations and assessments of the potential adverse effects of proposed actions (e.g., issuance of grazing permits) on the existence of Mexican wolves in the wild. An example of a positive result would be enforceable provisions in grazing permits and management plans that are more protective of Mexican wolves, thus reducing HCM.

**4. FWS claims to hire more Conservation Law Enforcement Officers (CLEO) to enforce and investigate poaching are baseless unless proper funding to support these positions is also provided.**

FWS states in the Recovery Plan they will increase law enforcement capacity and presence to investigate poaching, but the associated funding would cover salaries for less than two CLEO’s for Mexican wolf range throughout the region in Arizona and New Mexico. (Table 1 USFWS 2022). Two officers covering a range of over 98.5 million acres is preposterous. The FWS needs to provide adequate funding for more officers to adequately cover the entirety of Mexican wolf range. Proper enforcement covering this entire area will require at a minimum 10 new CLEO’s and adequate funding to support those officers. In addition, it is important that an increase in CLEO presence happens synchronously with messaging conveying to the public the increase of patrolling and enforcement of poaching, which will indirectly work to dissuade poachers.

**5. All poaching incidents of Mexican wolves should be prosecuted in federal courts; in order to prosecute these cases, the FWS must convince the DOJ to suspend the McKittrick policy.**

Prosecutions for illegally killing Mexican wolves have been extremely rare in large part due to the Department of Justice’s (DOJ) McKittrick Policy, which has been in effect since 1998. From 1998 through 2019 known illegal killings took the lives of 105 Mexican wolves, comprising 56% of all known mortalities (FWS 2022). Although, the number of wolves illegally killed is likely much higher due to substantial cryptic poaching. Recent research using methods for estimating

cryptic poaching in the wild population of Mexican wolves (Louchouart et al. 2021) found evidence of significant cryptic poaching in the population. Examining the circumstances of radio-collared wolves that disappeared for unknown reasons, referred to by FWS as “lost to follow-up” (LTF), Louchouart et al. (2021) concluded that “LTF wolves were most likely killed and the evidence of the illegal action was concealed, e.g. by the destruction of transmitters.” From 1998 through 2016, known poaching accounted for the deaths of 52 Mexican wolves; whereas, 67 Mexican wolves disappeared (LTF). This suggests that cryptic poaching is likely as prevalent as FWS recorded poaching, and more prevalent when protections are reduced (Louchouart et al. 2021).

In 1998, at the time the Mexican gray wolf reintroduction program was developed, FWS predicted that illegal shooting and trapping Mexican wolves represented a “major obstacle to successful wolf recovery.” However, FWS predicted that “strong law enforcement will keep abuse levels low.” Moreover, the Final Rule stated that “[t]aking a wolf by shooting will not be considered unavoidable, accidental, or unintentional take. Shooters have the responsibility to be sure of their targets.” (50 C.F.R. §17.84(k)(15)). The FWS knew illegal killings of Mexican wolves would occur and vowed to enforce these incidents of illegal killings. Today’s Recovery Plan is counter to those initial conclusions and yet again does little to adequately address HCM.

The McKittrick policy directs DOJ attorneys who prosecute illegal take cases pursuant to the ESA to prove the defendant “knowingly” killed an endangered species. (*United States v. McKittrick*, 142 F.3d 1170 (9th Cir. 1998)). Pursuant to this policy, the DOJ has taken the position that it can only prosecute cases for the illegal killing of ESA-protected species when it can prove that the killer knew in advance the biological identity of the animal they intentionally killed. The DOJ very rarely — if ever — prosecutes an individual for illegally killing a protected animal if the killer claims that the killing resulted from a case of “mistaken identity.” Thus, Mexican wolf poachers now routinely claim that they thought they were shooting a coyote to avoid prosecution. And prosecutors rarely pursue cases because of the high bar set by the McKittrick policy requiring proof the poacher knew before pulling the trigger that the animal they were shooting was a Mexican wolf.

Addressing illegal killings will require the deterrent of prosecuting poachers, resulting in substantial fines and/or incarceration. We believe that the McKittrick Policy substantially emboldens poachers to kill Mexican wolves. Poachers know that prosecution of these cases is unlikely and thus do not fear repercussions for their illegal actions. FWS must address this critical impediment to stopping illegal killings of Mexican wolves.

We recommend FWS initiate a consultation with the DOJ, pursuant to ESA Section 7(a)(2) as to the impacts of the McKittrick Policy on the continued survival and recovery of Mexican wolves and urge the DOJ to suspend further application of the McKittrick Policy in connection with the illegal killing of Mexican wolves.

The McKittrick Policy is a major continuing hindrance to species recovery and must be suspended in order for FWS to successfully and fully address the illegal killing of Mexican wolves.



**6. FWS should increase monitoring and enforcement of poaching during hunting seasons for other large mammals, or consider closing the MWEPA to hunting.**

Recent studies from the Western Great Lakes and the red wolf experimental population associate periods of hunting for other large mammals, such as white-tailed deer and black bear, with significant increases in both detectable and undetectable poaching of wolves relative to non-hunting seasons. The relationship is particularly strong during periods of snow cover and low vegetative cover, which allows for increased wolf track detection. (Santiago-Avila & Treves 2022; Santiago-Ávila et al. 2022). This increase in poaching may be due to a seasonal surge in numbers of potential poachers or to some poachers augmenting their activities during those periods. Those studies suggest anthropogenic hunting seasons are the deadliest of all for wolves. Increased patrolling and monitoring may both mitigate poaching and increase its detection after it occurs (Santiago-Ávila et al. 2020). Continuous messaging conveying such changes to the public also works as an indirect policy intervention dissuading poachers. In addition, FWS and cooperating agencies should conduct more outreach to hunters and outfitters to reduce the risk of hunters mistaking the identity of Mexican wolves. A ban on the hunting of some unregulated species during authorized hunting seasons for regulated species should be considered.

**7. The FWS should implement a ban on coyote killing, including the use of lethal methods in response to predation or conflicts, in Mexican wolf range as a measure to mitigate illegal killing.**

Coyotes are prevalent throughout the MWEPA and are an unregulated species in New Mexico and Arizona, with year-round hunting seasons and no limits on how many can be killed. Mexican wolves and coyotes are very difficult to distinguish in the field, and it is widely known that coyotes are routinely killed within the MWEPA by local residents and hunters. Hence widespread coyote killing may lead to accidental Mexican wolf killing or deliberate, opportunistic illegal killing (concealed by coyote hunters).

Recent studies on red wolves, another critically endangered canid indistinguishable from coyotes under most field conditions, associate periods of liberalized coyote killing, as well as non-wolf, large-mammal Fall/Winter hunting seasons, with substantial increases in red wolf poaching (Agan et al. 2021; Santiago-Ávila et al. 2022). In North Carolina, to mitigate red wolf killing, a court injunction banned coyote hunting in the five county red wolf recovery area between July 2013 and May 2014 in order to protect red wolves from “mistaken identity” killings. (Red Wolf Coalition v. N.C. Wildlife 651 Res. Comm'n, No. 2:13-CV-60-BO)).

A similar measure was taken in Wisconsin when wolves began to recolonize the state. Beginning in 1980, the “[c]oyote season [was] closed in northern management units to protect nascent wolf population” (Wisconsin Department of Natural Resources 2020). The prohibition on shooting coyotes applied during the “gun” deer season for 33 years from 1980 to 2013.

Hence, a ban on coyote hunting would mitigate the accidental illegal killing of Mexican wolves and, coupled with point 5 above (prosecute all poaching incidents, suspend the McKittrick policy), would also mitigate their deliberate, opportunistic illegal killing. All conflicts with coyotes

can and should be handled exclusively through non-lethal methods. Congress anticipated problems that might arise when listed endangered or threatened species resemble other more common species. Section 4(e) of the ESA states: “The Secretary may, by regulation of commerce or **taking**, and to the extent, he deems advisable, treat any species as an endangered species or threatened species even though it is not listed pursuant to section 4 of this Act...” (emphasis added).

We believe that intentional and accidental shooting of Mexican wolves could be substantially reduced if coyote shooting is prohibited within the MWEPA during all hunting seasons allowing the use of guns. This provision should not be subject to the approval of the States of Arizona and New Mexico on federal public lands. Contrary to common practice by federal land management agencies (e.g., U.S. Forest Service and Bureau of Land Management), federal agencies possess full authority to issue and enforce regulations that deviate from state wildlife management policies and regulations for protecting species of special concern (e.g., endangered and threatened species) on federal public lands (see especially, Nie et al. 2017). A ban on coyote hunting within the MWEPA is fully within the authority of FWS and all other federal land management agencies, and we believe will substantially reduce the threat of illegal killing of Mexican wolves.

Banning the killing of coyotes during hunting and trapping seasons would solve two problems simultaneously, both of which could significantly reduce the illegal killing of Mexican wolves. First, the “McKittrick” excuse of “I thought it was a coyote” is mooted because the act of shooting a coyote has been made illegal. And second, making the shooting of coyotes illegal will likely reduce the number of “mistaken identity” killings of Mexican wolves.

Overall, these recommendations outline the best available science for effective policy to reduce HCM, most notably illegal killing of Mexican wolves.

**8. FWS should revise the vortex population viability analysis (PVA) model used in the 2017 Recovery Plan First Revision with conservative mortality assumptions to guide species recovery.**

The Recovery Plan justifies the use of lower mortality rates by assuming that future HCM rates will be lower than those observed in the past for Mexican wolves. However, there is no scientific evidence or logical justification for this assumption. The recovery criteria proposed are insufficient in addressing HCM and do not ensure that mortality rates will be low or lower than the rate assumed in the PVA. Therefore, the PVA paints an unrealistically optimistic picture of the success of future interventions to reduce HCM. No scientific basis for such optimism is presented.

Estimates of HCM fail to acknowledge recent research, which demonstrates that mortality of wolves from poaching is systematically underestimated by government agency biologists and policymakers (Treves et al. 2017). They found that the risk of mortality of Mexican wolves due to poaching was 0.07-0.21 higher than estimated by agency managers. Indeed, for every wolf population examined by Treves et al. (2017), which included Mexican wolves, they found

poaching was the greatest threat to wolf survival.

Recent research suggests the FWS should use more conservative modeling assumptions to ensure that high HCM does not jeopardize recovery efforts. (Carroll et al. 2019). The Vortex PVA model fails to acknowledge or incorporate these important new findings. Given the high sensitivity of the model to different mortality rates, the use of unrealistically low mortality rates could result in significant underestimates of the population sizes needed for recovery.

### Conclusion

In conclusion, the best available science provides compelling evidence that providing the strictest level of protection and suspending lethal control of Mexican wolves would prove to be the most effective policy to increase tolerance, reduce HCM, including most notably illegal killing, and further the conservation and recovery of the Mexican wolf. Additional and related measures such as the exclusive use of non-lethal methods in response to conflicts, protecting coyotes by invoking ESA Sec. 4(e) authority during hunting seasons allowing the use of guns,, restricting large mammal hunting, and suspending the McKittrick policy are indispensable for effectively reducing HCM in the population. We urge FWS to follow the above best available science in guiding the future of Mexican wolf recovery.

Thank you for this opportunity to comment and for your consideration of the above evidence and concerns.

Sincerely,

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