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U.S. Department of the Interior
1849 C St., N.W.
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October 8, 2015

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Re: Exercising authority to release Mexican gray wolves (*Canis lupus baileyi*) to the Gila National Forest in New Mexico.

Dear Secretary Jewell, Director Ashe, Regional Director Tuggle and Ms. Barrett:

As described and supported in detail below, the undersigned 41 conservation organizations, representing tens of thousands of members, and wildlife biologists, respectfully request that the U.S. Fish and Wildlife Service (Service) expeditiously – this year through early next year — release five or more family packs of endangered Mexican gray wolves from captivity into the Gila Wilderness and encompassing Gila National Forest in New Mexico. These regions were opened this year to releases of wolves bred in captivity.

We also request that the Service — in consultation with independent scientists, the breeding facilities participating in the Mexican wolf species survival program, and with state and local government bodies with which the Service customarily coordinates — develop and implement an ambitious, multi-year schedule of wolf releases to demographically boost and genetically

diversify the small and inbred Mexican wolf population inhabiting southwestern New Mexico and southeastern Arizona.¹

Scientists warn that the lack of timely releases of wolves to the wild jeopardizes the recovery of this unique subspecies of the gray wolf and may doom it to extinction through inbreeding depression. Five years ago the Service acknowledged the same.² On January 16, 2015 the Service promulgated a final rule permitting release of wolves into the Gila National Forest, thereby providing needed space for new wolf releases. Releasing five or more family packs from captivity over the course of this fall, winter and early next spring, and following up with additional releases at the same scale of magnitude in succeeding years, would slow the ongoing loss of genetic diversity and increase the reproductive success of the wild wolves. It would make a real difference.

Revised Wolf-Management Rule Provides Vital Authorities to Alleviate a Worsening Genetic Crisis

We are cheered by the growth of the wolf population in 2014 to 110 animals, reflecting in large part forbearance on the part of the Fish and Wildlife Service, which has allowed more wolves to stay in the wild in recent years by capturing and killing fewer of them than it had in the past.³ Nonetheless, we are troubled that achievement of the interim population objective of at least 100 wild wolves, projected before reintroduction began to be reached in 2006 and anticipated to be accompanied by 18 breeding pairs,⁴ was accompanied instead by only eight breeding pairs. That perilously low number highlights the population's vulnerability and also signifies the inbreeding depression that is reducing wolves' fertility and pup-survival rates. Ameliorating the inbreeding requires releasing wolves with more diverse genetic backgrounds and doing so as soon as possible.

¹ Consultation with states and local government bodies must not extend to allowing such entities to block or slow down releases of wolves. The Supremacy Clause of the U.S. Constitution and longstanding Supreme Court precedent hold that Federal laws pre-empt state laws. . See e.g., U.S. Const. Art. VI, Cl. 2.; *M'Culloch v. Maryland*, 17 U.S. 316, 436 (1819) (“the States have no power, by taxation or otherwise, to retard, impede, burden, or in any manner control, the operations of the constitutional laws enacted by Congress to carry into execution the powers vested in the general government.”). The broad authority and responsibility conveyed in the Endangered Species Act suffices to authorize the U.S. Fish and Wildlife Service to release endangered Mexican gray wolves in the Gila National Forest. Moreover, section 1535(f) of the Act specifically renders void “[a]ny state law or regulation which applies with respect to the importation or exportation of, or interstate or foreign commerce in, endangered species . . . to the extent that it may effectively (1) permit what is prohibited by this chapter or by any regulations which implements this chapter, or (2) prohibit what is authorized pursuant to an exemption or permit provided for in this chapter or in any regulation which implements this chapter.” 16 U.S.C. § 1535(f) (2012). On this basis, you should disregard the vote of the New Mexico Game Commission on September 29, 2015 that seeks to prohibit the Service from releasing wolves in the Gila National Forest, and you should disregard the Arizona Game and Fish Commission's vote of August 7, 2015 seeking to prohibit any releases of adult wolves in that state.

² U.S. Fish and Wildlife Service. 2010. [Mexican Wolf Conservation Assessment](#), p. 11.

³ http://www.fws.gov/southwest/es/mexicanwolf/pdf/MW_removal_outcomes_web.pdf.

⁴ U.S. Fish and Wildlife Service. 1996. Final Environmental Impact Statement on Reintroduction of the Mexican Wolf Within its Historic Range in the Southwestern United States. Albuquerque. Available on-line at http://www.fws.gov/southwest/es/mexicanwolf/pdf/MW_EIS.pdf. Table 2-2, p. 2-8. The table projects 102 wolves including 18 breeding pairs by end of 2005, but bases that on wolf releases beginning in 1997. Releases commenced in 1998, hence the table's projections should be regarded as a year too early.

The Service acknowledged in 2010 that “[t]he longer these threats persist, the greater the challenges for recovery, particularly as related to genetic fitness and long-term adaptive potential of the population.”⁵ Yet during the entirety of the Obama Administration the Service has only released four captive-born-and-bred wolves into the wild,⁶ despite reiterated warnings by scientists that release of more than a few wolves was imperative to stanch inbreeding and concomitant lower reproductive and survival rates.⁷ The Service justified the infrequency of releases and the low total of freed animals, well below the numbers that scientists recommended for release for over a decade, in part by pointing to the limited area, located solely within the Apache National Forest in Arizona, authorized for releases. Most of that small area has long supported wolf families that would act territorially aggressive toward any new wolves appearing suddenly in their home ranges.

Of those four animals released over the past nearly-seven years, three are dead and one was taken back into captivity.

The January 16, 2015 [final rule](#) on management of the Mexican wolf experimental population (80 Fed. Reg. 2512) which became effective on February 17, 2015, vastly expands the area in which new releases can take place from around 175,000 to over eight million acres. Most importantly, it opens up the entire Gila National Forest to release of captive-bred wolves. As we summarize further in this letter, numerous reviews have pointed to the 3.3-million-acre Gila National Forest,⁸ about half of which still supports no wolves, as vital territory for release of wolves to give them the best opportunities to survive. The 569,600-acre Gila Wilderness within the national forest provides extensive, remote habitat where wolves new to the wild would enjoy relatively greater protection from human interference than almost anywhere else in the Southwest.

The imperative to release wolves in the Gila stems foremost from the urgent need to diversify the genetics of the wild wolves through greatly increasing the anemic rate of releases from captivity to the wild. The small size of the wild population and the fact that most of the wolves are closely related exacerbates the genetic “bottleneck effect” from the previous era of deliberate extermination (conducted by the Service itself and its antecedent the Bureau of Biological Survey from 1915 until passage of the Endangered Species Act in 1973) in which just seven Mexican wolves survived to pass on their genes through captive breeding. After the last confirmed Mexican wolf was captured alive in 1980 in Mexico, no Mexican wolves were known to survive in the wild until reintroduction began in the United States in 1998. As noted, today many of the descendants of those last wolves, living in the wild in Arizona and New Mexico, suffer from inbreeding depression — meaning reduced fitness due to loss of genetic diversity. In 2007, scientists correlated inbreeding among Mexican wolves in the wild with fewer observed pups, revealing a genetic basis for how many pups are born and/or survive in the wild population.⁹

⁵ U.S. Fish and Wildlife Service (2010), p. 78.

⁶ http://www.fws.gov/southwest/es/mexicanwolf/pdf/MW_initial_releases_translocations_web.pdf.

⁷ For a review of such warnings, see the March 29, 2012 [letter](#) to the Secretary of the Interior urging new releases and a rule-change to facilitate such releases, signed by many of the same organizations sending this letter.

⁸ The 3.3-million-acre Gila National Forest as we refer to it here includes areas of the Apache N.F. in New Mexico that are administered by the Forest Service’s Gila N.F. staff and subject to the Gila National Forest’s Forest Plan and amendments.

⁹ Fredrickson, R. J., Siminski, P., Woolf, M. and P. W. Hedrick. 2007. Genetic Rescue and Inbreeding Depression in

The Fish and Wildlife Service Underestimates How Many New Wolves Are Needed

Releases of captive-born wolves can enhance the genetics of the wild population, but only if the Fish and Wildlife Service releases a sufficient number. Although the final rule's provision allowing releases into the Gila National Forest and other areas was promulgated in large part to increase wolf numbers, distribution and genetic diversity,¹⁰ the November 2014 final environmental impact statement underlying the new rule declined to provide a schedule of new releases to achieve those goals.¹¹ Nevertheless, the rule explained and enumerated the Service's intended use of that authority. What worries us, in addition to the absence of releases in the seven and a half months since the rule went into effect, is that the Service's final numbers — 35 to 50 wolves to be released over the course of 20 years, with more at the outset and fewer later on — seem not to take into account evidence that far more releases will be required to address the crisis of inbreeding. The rule states:

We consider a successful initial release to be any Mexican wolf that ultimately breeds and produces pups in the wild. Between 1998 and 2013, our initial release success rate has been about 21 percent (Service 2014, Appendix D, p. 4). In other words, for every 100 wolves we release, only 21 of them survive, breed, and produce pups, therefore becoming effective migrants. Based on this success rate, and during the first 20 years of management under this final rule, we expect that each time we initially release wolves we will need to release 10 wolves to achieve 2 effective migrants, one component of our population objective for the MWEPA [Mexican Wolf Experimental Population Area]. Migrants are important to the conservation of the species to help alleviate genetic threats to the population including reducing kinship (the relatedness of animals to one another) and reducing loss of genetic variation. Based on assessment of the initial release success of various historical release strategies (single wolves, pairs, packs, etc.), we would expect to achieve this target by releasing 2 packs, each with an adult pair and several pups, during years 1 to 4 and 4 to 8, and 1 or 2 packs during the next three successive generations until year 20, or for 5 generations. We may conduct several additional releases in the immediate future in excess of 2 effective migrants per generation to specifically address the high degree of relatedness of wolves in the current BRWRA [Blue Range Wolf Recovery Area]. The number of effective migrants needed to alleviate genetic threats to the population could decrease in the third and subsequent generations, assuming the population is above 250, as a population of that size is more robust. We may also conduct infrequent initial releases over time for other management purposes such as replacing wolves that have been removed from the wild. This number of effective migrants (7 to 10 wolves over 5 generations) is negligible from a population size standpoint, but should be significant from a genetic standpoint assuming animals selected for initial release are genetically desirable contributions to the population (Carroll *et al.* 2014, p. 81).¹²

Mexican Wolves. Proc. R. Soc. B, 274:2365–2371.

¹⁰ 80 Fed. Reg. 2512 (Jan. 16, 2015).

¹¹ Final Environmental Impact Statement on the Proposed Revision to the Regulations for the Nonessential Experimental Population of the Mexican Wolf (*Canis lupus baileyi*). 2014; chapter 4, p. 21.

¹² 80 Fed. Reg. 2524 (Jan. 16, 2015).

Releasing just enough wolves to insert seven to ten effective migrants over five generations, averaging 1.4 to 2 effective migrants per generation, even accounting for the weighting of releases toward the immediate future and the tapering off of releases later on,¹³ is inadequate to mitigate the genetic crisis afflicting the Mexican wolf. The Service relies on calculations of population viability in Carroll et al. (2014)¹⁴ which in fact suggest that more than two effective migrants per generation – the maximum in the range the Service intends to create — will be required to reduce the presently high risk of extinction. This reliance is incorrect because the genetic diversity in the wild U.S. population is lower than in the modeling that the Service relies on. In addition, the mortality rate in the wild U.S. population is much higher than in the model, and that mortality rate may rise even further.

The Service’s calculation of the needed release rate is premised on a higher level of genetic diversity than actually exists in the wild population. It is premised on a level of diversity representing an average of the wild population’s depauperate state along with two hypothetical additional wild populations that Carroll et al. (2014) suggest will be necessary for recovery and that would be created through additional reintroduction programs starting from captive stock; in other words, two additional populations that would be more diverse at the outset. Given the actual genetic composition of the existing U.S. wild population, two effective migrants per generation would represent a greater risk of extinction than the Service acknowledges.¹⁵

Furthermore, the calculations of extinction risk in Carroll et al. (2014) are significantly influenced by adult mortality rates. Adult mortality was the most consequential among eleven analyzed demographic factors in predicting extinction risk. Carroll et al. presented results according to three varying adult-mortality rates of 22.9%, 25% and 27%; the extinction-risks that the Service relies on are premised on a baseline of 22.9% “on the assumption that recovery actions would be effective in reducing the Blue Range population’s currently high mortality rates,” in the words of Carroll et al. (2014), who added: “Alternate mortality-rate parameters would result in different population size and connectivity rates being required to achieve adequate population persistence (Fig. 3).”¹⁶

Such recovery actions would have to be much more effective than current management: The wild population’s combined removal / mortality rate from 1998 to 2003 was an alarming 64%;¹⁷ the Service’s annual “progress reports” do not provide figures for 2004 to 2006 (years of high removals), but from 2007 to 2013 the annual average removal / mortality rate was 32%.¹⁸

¹³ The Service’s summary account — “this number of effective migrants (7 to 10 wolves over 5 generations)” — makes clear the “several additional releases in the immediate future” over and above a baseline of two effective migrants per generation would not be additive but rather would come at the cost of fewer or perhaps no wolf releases in ensuing generations.

¹⁴ Carroll C., R.J. Fredrickson, and R.C. Lacy. 2014. Developing metapopulation connectivity criteria from genetic and habitat data to recover the endangered Mexican wolf. *Conservation Biology*, 28(1):76-86; p. 81, figure 1(b). 80 Fed. Reg. 2517 (Jan. 16, 2015).

¹⁵ 80 Fed. Reg. 2517 (Jan. 16, 2015).

¹⁶ Carroll et al. (2014), pp. 79, 82 (figure 3), 84.

¹⁷ U.S. Fish and Wildlife Service (2010), p. 61.

¹⁸ U.S. Fish and Wildlife Service Mexican wolf reintroduction project annual reports, listed at <http://www.fws.gov/southwest/es/mexicanwolf/documents.cfm>.

Moreover, the Service acknowledges that the final rule is likely to increase the removal and mortality rate:

One of the most significant differences the experimental population will experience due to project implementation is exposure to a matrix of suitable and unsuitable habitat, as opposed to the current BRWRA composition of 87% suitable habitat on primarily National Forest land. We consider the potential for wolf mortality due to illegal killing, vehicular mortality, or removal due to depredation or nuisance issues as likely to occur at the same or increased levels, compared to current levels, as wolves disperse within the MWEPA. However, we expect boundary related removals to be reduced, compared to past levels.¹⁹

The Service also minimizes the magnitude of the net additional mortality that can reasonably be anticipated. First, the number of boundary-related removals from 1998 to 2014 averaged fewer than three per year,²⁰ so reducing the number of such removals will make a difference but not an enormous one, particularly since many of those removed wolves were later released back to the wild.

Second, the Service fails in the summary above and elsewhere in the final EIS to account for additional authorized mortalities of wolves for reasons other than “depredation or nuisance issues” – for example mortalities due to (a) legal strangulation-snaring of wolves within zone 3 and on Indian reservations,²¹ (b) killing of non-depredating wolves on private and tribal lands as per permits that the Service can now issue²² or (c) killing of non-depredating wolves by U.S. Department of Agriculture Wildlife Services agents who are now exculpated in advance for shooting wolves on the assumption that they are coyotes.²³

While the Service acknowledges that mortality rates will not go down and may go up (but likely underestimates to what degree), even keeping the mortality rate at the recent-years average of 32% would commensurately add to the extinction risk.

Given that even higher mortality rates may have been locked in through the January 16, 2015 final rule, to reduce the risk of extirpation to this actual (rather than idealized) Mexican wolf population, more effective migrants will have to enter the population, not just seven to ten over 20 years – even accounting for weighting the numbers toward the immediate future.

Since for each additional projected effective migrant, five wolves will have to be released, and we are requesting you create at least five effective migrants this year and in early 2016, and more in upcoming years depending on the advice of experts, significant habitat without resident, territorial wolves will be needed for such releases. The best places for them are in the Gila Wilderness and other areas of the Gila National Forest.

¹⁹ FEIS (2014), Appendix D, pp. 1-2.

²⁰ http://www.fws.gov/southwest/es/mexicanwolf/pdf/MW_removal_causes_web.pdf.

²¹ 80 Fed. Reg. 2558, 2560 (Jan. 16, 2015).

²² 80 Fed. Reg. 2561 (Jan. 16, 2015).

²³ 80 Fed. Reg. 2562 (Jan. 16, 2015).

The Gila National Forest Provides the Necessary Habitat for Many New Releases

The Gila National Forest has long been identified by experts and the general public as important habitat for release of Mexican gray wolves from captive breeding facilities. Two years before the first Mexican wolves were released to the wild, in its 1996 response to a public comment on the reintroduction proposal's draft environmental impact statement, the Fish and Wildlife Service anticipated possibly "propos[ing] an amendment to the experimental population rule to establish release sites elsewhere in the designated wolf recovery areas," given the possibility of "aggressive, even fatal, encounters between wolves . . . if future releases were conducted in areas already occupied by previously established wolves."²⁴ In January 1999, in the wake of illegal shootings of several wolves in Arizona, and wolf attacks on domestic animals, the Service convened a Mexican wolf program review "in which experts strongly recommended modifying the [1998 reintroduction] rule to gain authority to release wolves in remote areas (i.e. the Gila National Forest) in the NM portion" of the recovery area, to minimize the conflicts, according to a later review of the program.²⁵ In February 2000, in an environmental assessment that affirmed the Service's authority to translocate captured wolves into New Mexico, the agency announced its intent to propose an amendment to the reintroduction rule providing it authority for direct release of wolves from captivity into New Mexico.²⁶ In 2001, another expert panel of independent biologists undertook a broader, scientific assessment of the Mexican gray wolf reintroduction program for the Service, constituting a three-year review of the program that the 1998 rule had stipulated along with a five-year review. The panel recommended "develop[ing] the authority to conduct initial releases into the Gila National Forest," noting that

The Gila Forest includes about 700,000 acres that are roadless and free of livestock. Several high-quality release sites are available in the area. Using them is the best way for improving the cost-effectiveness and certainty of the reintroduction project. Accordingly, we strongly recommend that the Service immediately take whatever action is necessary to conduct initial releases of captive-born (and wild-born if appropriate) Mexican wolves to the Gila National Forest."²⁷

²⁴ U.S. Fish and Wildlife Service (1996), pp. 5-87 to 5-88. Such intraspecific aggression occurred in precisely the envisioned circumstances, in 2001, contributing to the destruction of the short-lived, nine-member Lupine Pack released in an Arizona area occupied by resident wolves.

²⁵ Mexican Wolf Blue Range Adaptive Management Oversight Committee and Interagency Field Team. 2005. Mexican wolf Blue Range reintroduction project 5-year review. Report to U.S. Fish and Wildlife Service, on-line at <http://www.fws.gov/southwest/es/mexicanwolf/pdf/MW5YRAdministrativeComponent20051231Final.pdf>; p. AC-15.

²⁶ Environmental Assessment for the Translocation of Mexican Wolves Throughout the Blue Range Wolf Recovery Area in Arizona and New Mexico. U.S. Fish and Wildlife Service, Albuquerque, 2/10/2000, on-line at <http://www.fws.gov/southwest/es/mexicanwolf/pdf/EAFNL.2000.pdf>; p. 2.

²⁷ Paquet, P. C., Vucetich, J., Phillips, M. L., and L. Vucetich. 2001. [Mexican wolf recovery: three year program review and assessment](#). Prepared by the Conservation Breeding Specialist Group for the United States Fish and Wildlife Service. 86 pp.; p. 65. The science panel also stated: "The number of free-ranging Mexican wolves at the end of third year is similar to that projected in the EIS. Survival and recruitment rates, however are far too low to ensure population growth or persistence. Without dramatic improvement in these vital rates, the wolf population will fall short of predictions for upcoming years." (p. 27) As seen, during the 14-year delay in implementation of the panel's recommendations, that prediction came to pass.

That panel also calculated that elk and deer in the combined Apache and Gila national forests (three quarters of which comprises the Gila) — not counting other potential wolf prey such as collared peccary (javelina), jackrabbits, beaver, pronghorn and bighorn sheep — could support 468 wolves.²⁸

The science behind the early assessments that wolves must be released into the Gila has been reaffirmed repeatedly. In a 2002 statement to the Service to serve as a review of the 2001 review that had been requested by Congress,²⁹ the Arizona and New Mexico departments of game and fish stated that “the findings and recommendations of the [2001] Biological Review are scientifically valid.”³⁰ In 2005, the Service’s and agency partners’ five-year review of the reintroduction recommended allowing initial releases in the Gila National Forest,³¹ noting that it constitutes 75 percent of the Blue Range Wolf Recovery Area with “much of the best wolf habitat, due to existence of areas with low or no road densities, good populations of large native ungulates (primarily elk), and few to no permitted livestock.” The review added that the prohibition on direct wolf releases into the Gila “restricts the pool of available release candidates and limits AMOC’s ability to release wolves for management purposes, such as replacement of lost mates or genetic augmentation. The ability to augment the wild population with wolves that are genetically underrepresented is important to increasing the overall fitness of the population, thereby aiding recovery of the species.”³²

In 2007, the Service announced an upcoming NEPA process for changing the 1998 rule in part because “Management experience has demonstrated” that the restriction of initial releases from captivity to Arizona

[S]ets impractical limits on available release sites and wolves that can be released into the secondary recovery zone [i.e. the Gila National Forest], limits the Mexican Gray Wolf Reintroduction Project’s (Project) ability to address genetic issues, and results in a misperception that the secondary recovery zone is composed largely of “problem” animals that have been translocated to the secondary zone after management removal due to livestock depredation events.³³

The Service added: “In other words, a change in this aspect of the 1998 NEP [non-essential experimental population] final rule would possibly provide the Service the authority to release Mexican gray wolves from the captive breeding population into New Mexico.”³⁴

²⁸ Id., p. 48.

²⁹ House of Representatives Report 107-103, Department of Interior and Related Agencies Appropriations Bill, 2002 (language inserted by Rep. Joe Skeen, R-NM).

³⁰ Arizona-New Mexico Review of the U.S. Fish and Wildlife Service’s 3-Year Review of the Mexican Wolf Reintroduction Project, 9/30/2002, p. 18.

³¹ Mexican Wolf Blue Range Adaptive Management Oversight Committee and Interagency Field Team, 2005, online at <http://www.fws.gov/southwest/es/mexicanwolf/pdf/MW5YRRecommendations20051231Final.pdf>; p. ARC-4.

³² Mexican Wolf Blue Range Adaptive Management Oversight Committee and Interagency Field Team, 2005, online at <http://www.fws.gov/southwest/es/mexicanwolf/pdf/MW5YRAAdministrativeComponent20051231Final.pdf>; p. AC-15. “AMOC” is short-hand for the Mexican Wolf Adaptive Management Oversight Committee, an earlier and unsuccessful incarnation of interagency cooperation.

³³ 72 Fed. Reg. 44066 (August 7, 2007).

³⁴ Ibid.

In 2010, the Service wrote in its Mexican Wolf Conservation Assessment:

The ability of management to address inbreeding depression in the Blue Range population is constrained by regulatory and discretionary management mechanisms that do not incorporate consideration of genetic issues yet result in limitation or alteration of the genetic diversity of the population. For example, initial releases of cross-lineage wolves may be constrained by lack of space (i.e., unoccupied territories) in the Primary Recovery Zone [i.e. the south-central portion of the Apache National Forest in Arizona].³⁵

In 2011, the reintroduction project's interagency field team ranked 32 potential wolf release sites in the Blue Range Wolf Recovery Area, based on a formula accounting for the results from past releases of wolves at some sites, and for all sites their proximity to residences, towns, livestock, the recovery area boundary and other territorial wolves (all inversely correlated to likely release success), and higher densities of elk and deer (positively correlated). The three top-ranked sites were all in the Gila Wilderness.³⁶

Release of Family Groups of Wolves is Preferable to Experimental Cross-Fostering

The final environmental impact statement for the new rule stated that the Fish and Wildlife Service intends to release new wolves through cross-fostering of pups in addition to releasing family packs.³⁷ Cross fostering entails removal of one or more newly-born pups from their mother and their placement into a different female's den, to be reared as part of her litter. Last year, the Service successfully translocated two neonatal wolf pups from one wild female's den to another's. While we believe this technique has value in the reintroduction project, it is still experimental.³⁸ We urge you to rely primarily on releases of intact family groups into the wild. There is a role in supplementing such group releases with cross-fostering in extraordinary circumstances, such as occasioned last year's transfer of pups from a recently-released female whose mate had left her, to the more experienced and intact Dark Canyon Pack. But it should not become the norm.

The experimental nature of cross-fostering wolf pups is one reason not to rely on the technique in the case of the Mexican gray wolf. It is risky. The Service's 2006 attempt at cross-fostering five newly-captured pups from the Hon Dah Pack in Arizona resulted in their immediate deaths. Notwithstanding the initial success with the Dark Canyon Pack, as well as tentative success in cross-fostering red wolf (*Canis rufus*) pups in North Carolina,³⁹ the experience and science of cross-fostering is too new to rely on for the Mexican wolf's survival. The genetic problems of the Mexican wolf are pronounced, and will worsen with the growth of the wild population unless

³⁵ U.S. Fish and Wildlife Service (2010), p. 60.

³⁶ Mexican Wolf Blue Range Reintroduction Project Initial Wolf Release Proposal for Arizona 2011, Draft: May 18, 2011; distributed at Arizona Game and Fish Department meeting in Alpine, Arizona on 5/23/2011.

³⁷ FEIS (2014), chapter 4, p. 21.

³⁸ Scharis, I. and M. Amundin. 2015. Cross-Fostering in Gray Wolves (*Canis lupus lupus*). *Zoo Biology* 9999:1–6.

³⁹ Beck, K.B., C.F. Lucash, and M.K. Stoskopf. 2009. Lack of impact of den interference on neonatal red wolves. *Southeastern Naturalist*, 8(4):631-638.

new breeding wolves are made available. To rely on the logistically difficult and uncertain technique of cross-fostering, rather than the simpler release of adult wolves with pups and/or yearlings, is unsupportable.

Cross-fostering wolves should also not serve as the main option in new releases because, although it can increase wolf numbers and genetic diversity, it does not immediately increase wolf distribution – since the new wolves are placed in an already-occupied den and would not be expected to disperse and seek out new territories until almost two years after their release. The Service acknowledges that “species with a small population, narrowly distributed, is less likely to persist (in other words it has a higher risk of extinction) than a species that is widely and abundantly distributed.”⁴⁰ In order to increase wolf distribution more quickly and lower extinction risk as fast as possible, family groups of wolves should be released in areas that do not support resident wolves – such as vast areas of the Gila Wilderness and the encompassing Gila National Forest.

There is Widespread Support for Releasing Wolves in the Gila

Not just biologists but also residents of the rural region near the recovery area have long supported releasing wolves in the Gila, as indeed do many people throughout the Southwest. Following release of the three-year review in 2001, the Fish and Wildlife Service and its federal and state agency partners held eleven “open houses” in Arizona and New Mexico, nine of which were in small towns and rural communities proximate to the recovery area, at which they accepted written comments from members of the public. Out of 364 written public submissions (each of which could address more than one issue), 83 comments – the single largest category of comments – recommended releasing wolves from the captive breeding program directly into New Mexico; only two comments opposed such a change.⁴¹ In August 2001, the Service convened a three-day “stakeholder workshop” to further refine recommendations for a rule-change; participants recommended: “Change the 10(j) management rule to allow direct releases of wolves anywhere within the Blue Range Recovery Area.”⁴² In 2002 and 2004, the *Albuquerque Journal* editorialized in favor of “direct releases into the Gila.”⁴³ And in 2004 the New Mexico State Game Commission, after hearing a day of overwhelmingly pro-wolf public testimony in Silver City, New Mexico⁴⁴ endorsed release of captive-bred wolves into the Gila and instructed the state game department to urge the Service to undertake a rule change enabling this and other reforms.⁴⁵

⁴⁰ FEIS (2014), chapter 1, p. 19.

⁴¹ The 364 enumerated comments on specific program policies do not include comments that expressed general support or opposition to wolf reintroduction. U.S. Fish and Wildlife Service and IUCN/SSC Conservation Breeding Specialist Group, *Mexican Gray Wolf: Three Year Review: Open House Participant Comments*, unpublished 543-page briefing book provided to stakeholder workshop participants, Aug. 7-10, 2001.

⁴² Kelly, B., M. Brown and O. Byers (eds.). 2001. *Mexican Wolf Reintroduction Program Three-Year Review Workshop: Final Report*. IUCN/SSC Conservation Breeding Specialist Group, Apple Valley, MN., available on-line at http://www.fws.gov/southwest/es/mexicanwolf/pdf/MW_Stakeholder_Workshop.pdf; p. 52.

⁴³ “Open Gila Forest To Direct Release of Lobos, *Albuquerque Journal*, 3/30/2002, p. A8; “Wolf Program Reforms Must Be Implemented,” *Albuquerque Journal*, 6/22/2004, p. A7.

⁴⁴ Thomas J. Baird, “Pro-wolf sentiment dominates hearing,” *Silver City Sun-News*, 4/8/2004.

⁴⁵ Bruce Thompson, Director of the New Mexico Department of Game and Fish, to John Slown, U.S. Fish and Wildlife Service, 12/31/2007.

The Mexican gray wolf is a beautiful, intelligent, social animal that is vital to restoring the balance of nature in the Southwest. Its extinction is a looming possibility and would be a tragedy, as is understood by the 69% of New Mexico residents and 77% of Arizona residents who, polled in 2008, supported the wolf's reintroduction.⁴⁶ Consequently, the undersigned strongly encourage you to release at least five wolf packs this year and early next year into the Gila National Forest including in the Gila Wilderness and, with the help of scientists and captive breeders, develop plans for many more similar releases in the years to come. Without robust action by the Fish and Wildlife Service using the authorities of the new rule to release wolves in sufficient numbers, the Mexican gray wolf may not be extant to enliven the Southwest for future generations.

Thank you for your consideration of this information and request.

Sincerely endorsed by:

Melissa Amarello and Jeffrey J. Smith, Co-founders
Advocates for Snake Preservation
Tucson, Arizona

Stephanie Smith, Co-leader
Aldo's Silver City Broadband of the Great Old Broads for Wilderness
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Eileen A. Lacey, Ph.D., President
American Society of Mammalogists
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Phil Carter, Wildlife Campaign Manager
Animal Protection of New Mexico
Albuquerque, New Mexico

Susan Millward, Executive Director
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Philip Hedrick, Ph. D., Ullman Professor of Conservation Biology
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Bozeman Broadband of Great Old Broads for Wilderness
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⁴⁶ Rene Romo, "'Large Margin' Supports Wolf; Survey: 69% Back Reintroduction," *Albuquerque Journal*, 6/17/2008, p. C4.

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