

THE REWILDING INSTITUTE

Albuquerque, NM March 24, 2014

Attn: FWS–HQ–ES–2013–0073

Division of Policy and Directives Management
U. S. Fish and Wildlife Service
4401 N. Fairfax Drive MS 2042-PDM
Arlington, VA 22203

The Rewilding Institute (TRI) appreciates the opportunity to comment on: Endangered and Threatened Wildlife and Plants; Removing the Gray Wolf (*Canis lupus*) From the List of Endangered and Threatened Wildlife and Maintaining Protections for the Mexican Wolf (*Canis lupus baileyi*) by Listing It as Endangered and the peer review of that document.

ACTION: Proposed rule; notice of availability and reopening of comment period.

These comments have been prepared by TRI's Carnivore Conservation Biologist, David R. Parsons. Mr. Parsons served as the U.S. Fish and Wildlife Service's (FWS) first Mexican Wolf Recovery Coordinator from 1990-1999 and was the primary author of the original rule that established a *Nonessential Experimental Population of the Mexican Gray Wolf in Arizona and New Mexico*. Mr. Parsons has continued to follow the progress of the Mexican wolf recovery program from his retirement from FWS in 1999 to the present day. Mr. Parsons holds B.S. and M.S. degrees in Wildlife Biology, served as a career wildlife biologist for FWS for 24 years, and has lectured nationally and internationally on wolf biology, ecology, and conservation.

We remain concerned about ongoing and potential further delays by the FWS in advancing the conservation and recovery of the critically endangered Mexican gray wolf (*Canis lupus baileyi*). The FWS has acknowledged that at even the currently authorized population objective of 100 wolves in the Blue Range Wolf Recovery Area (BRWRA), Mexican wolves will remain in danger of extinction. At a most recent population estimate of only 83 wolves with deleterious levels of inbreeding, Mexican

wolves need aggressive recovery actions immediately.

Currently, the proposal to list *Canis lupus baileyi* as an endangered subspecies is an integral part of the proposal to remove all other presently listed gray wolves (*Canis lupus*) within the United States from the list of endangered species, and thusly end their protection under the Endangered Species Act (ESA).

A FWS-initiated peer review has concluded that the science that the FWS relied upon to support their proposal to delist gray wolves is not the best available science. This makes the proposed delisting of gray wolves in violation of the ESA mandate that decisions made pursuant to the ESA be based on the best available science.

Given that FWS has reissued for a second public review the exact same proposal found by the peer reviewers to be scientifically deficient, it is not clear if FWS plans to make any substantive changes to the proposed delisting rule before issuing the final rule. We are assuming here that FWS will either (1) issue the final delisting rule without substantively addressing the scientific deficiencies found by the peer reviewers, or (2) further delay the release of a final rule to allow FWS biologists time to address the scientific deficiencies found by the peer reviewers. Either scenario will have adverse consequences for the critically endangered Mexican gray wolf as we explain below.

We note, however, that the peer reviewers and the FWS are in agreement that *Canis lupus baileyi* is a unique and taxonomically distinct subspecies of *Canis lupus* deserving of separate protection and recovery actions under the ESA. And in fact, FWS has proposed the separate listing of the Mexican wolf within this proposed rule. The only disagreement between the peer reviewers and the FWS is over the probable historic range of the Mexican wolf. This disagreement is essentially rendered moot by language in the proposed list rule declaring Mexican wolves to be endangered “where found.”

Disagreement over the extent of the Mexican wolf’s historic range is best addressed by the Mexican Wolf Recovery Team using the best available science and settled in a final Mexican Wolf Recovery Plan, not in this proposed rule. The work of the Mexican Wolf Recovery Team, suspended since November 2011, needs to be resumed immediately. While not procedurally necessary, it appears that FWS is waiting for the promulgation

of the final rule placing Mexican wolves on the endangered species list before resuming work of the recovery team.

History has shown that proposals by the FWS to remove gray wolves from the endangered species list have always been litigated, often delaying or even reversing actions proposed by the FWS. And history has shown that the FWS tends to suspend legitimate recovery actions for Mexican wolves in the face of litigation over proposals related to other gray wolves.

Furthermore, there is no scientific disagreement over the FWS's proposal to list *Canis lupus baileyi* as an endangered subspecies of the gray wolf. And Mexican wolves are in critical need of recovery actions that are hampered by current regulations and the lack of a current recovery plan based on the best available science (see comments submitted by TRI on the draft proposed rule for Mexican wolves dated 10/24/2013 and incorporated in their entirety here as Appendix A of these comments).

Therefore, to enhance the likelihood of survival and recovery of Mexican wolves, it follows that **FWS must decouple the proposal to list *Canis lupus baileyi* from the proposal to delist gray wolves elsewhere.** No legitimate purpose is served by continuing link these two distinct actions into one combined process that is destined to be litigated solely over the gray wolf delisting part of the proposal.

As for the proposal to delist *Canis lupus*, TRI recommends that the FWS honor the independent peer review process and base its final decision on the best available science.

As for the proposal to list *Canis lupus baileyi* TRI recommends that FWS issue an expedited final rule completing this action separate from the gray wolf delisting proposal. And we further recommend that the existing Mexican Wolf Recovery Team be reactivated immediately with a goal of completing a science-based recovery plan as soon as possible.

As always, The Rewilding Institute appreciates this opportunity to comment on these proposals.

Sincerely,

A handwritten signature in blue ink that reads "David R. Parsons". The signature is written in a cursive style and is set against a light blue rectangular background.

David R. Parsons

Carnivore Conservation Biologist

APPENDIX A

THE REWILDING INSTITUTE

Albuquerque, NM October 24, 2013

Attn: FWS-R2-ES-2013-0056 / 78 FR 35719-35742

Division of Policy and Directives Management
U. S. Fish and Wildlife Service
4401 N. Fairfax Drive MS 2042-PDM
Arlington, VA 22203

The Rewilding Institute (TRI) appreciates the opportunity to comment on the **Proposed Revision to the Nonessential Experimental Population of the Mexican Wolf** (*Canis lupus baileyi*).

These comments have been prepared by TRI's Carnivore Conservation Biologist, David R. Parsons. Mr. Parsons served as the U.S. Fish and Wildlife Service's (FWS) first Mexican Wolf Recovery Coordinator from 1990-1999 and was the primary author of the original rule that established a *Nonessential Experimental Population of the Mexican Gray Wolf in Arizona and New Mexico*, which will be replaced by this proposed rule revision. Mr. Parsons has continued to follow the progress of the Mexican wolf recovery program from his retirement from FWS in 1999 to the present day. Mr. Parsons holds B.S. and M.S. degrees in Wildlife Biology, served as a career wildlife biologist for FWS for 24 years, and has lectured nationally and internationally on wolf biology, ecology, and conservation.

TRI has several concerns about the rule being proposed.

The Proposed Rule is Pre-decisional. An overriding concern is that publishing this proposed rule at this time is inappropriate from both a procedural and legal perspective. The rule prejudices the outcome of a NEPA process that is currently in the scoping stage. The scoping stage of the NEPA process solicits input from the public and other interested parties on the scope of issues and range of alternatives that should be considered and evaluated in a draft Environmental Impact Statement (EIS) and, following additional public review, a final EIS. All reasonable alternatives must be evaluated with equal rigor in the draft EIS. FWS is vulnerable to litigation

on this issue alone, and litigation would delay progress toward recovery of the critically endangered Mexican gray wolf.

The proposed rule presupposes the content of a DEIS that has not yet been published. Additionally, it assumes a predetermined “proposed action” which appears to be already selected as the “preferred alternative.” Drafts of chapters 1 and 2 of the DEIS were made available to the public for the purpose of continuing the “scoping” process. Having this level of detail presented is helpful for developing our scoping comments, but the results of the scoping process are to be used to develop the alternatives evaluated in the DEIS, which appear to be already developed. We have submitted our scoping comments on chapters 1 and 2 separately.

Proposed Rule and related NEPA Documents Are Not Supported By The Best Available Science. Another overriding concern is that the proposed rule is not supported by the best available science (as required by the ESA) and is not guided by a modern science- based recovery plan for the Mexican gray wolf (also required by the ESA).

In recent times (2003 and 2010) the FWS has convened two official Recovery Teams to develop a new and up-to-date (both legally and scientifically) Mexican Wolf Recovery Plan. The 2003 Recovery Team was disbanded for no valid reason in 2005 before completing its work, but the Science Subgroup made significant progress in developing criteria for full recovery. According to Dr. Philip Hedrick (personal communication), a member of that Science Subgroup, “a majority of the Science Subgroup of the recovery team concluded that three populations of 250 wolves each, connected by dispersal constituted a recovery criterion supported by the best available science.”

The 2010 Recovery Team began meeting in early 2011 and last met in November 2011. Subsequent meetings scheduled by FWS were canceled and no further meetings have been announced. Again, no valid reason has been given for suspending the work of the current Recovery Team. The Science and Planning Subgroup (SPS) of the 2010 Recovery Team has completed its work toward developing recovery criteria for Mexican wolves based on the best available science. The SPS’s review and development of the best available science and their recommendations for recovery criteria have been made available to the FWS through direct submission of draft documents, and have been made available to the public through a document (*Draft Mexican Wolf Revised Recovery Plan: Sections I.g, III, and Appendix*

B dated September 16, 2011) (SPS 2011) leaked by a member of the Arizona Game and Fish Commission and other sources with connections to the Stakeholder Subgroup of the MWRT. In addition, members of the SPS presented their findings at the International Wolf Symposium held in Duluth, MN, on October 10- 13, 2013. In brief, the recommendations of the SPS support the establishment of at least three interconnected (by dispersal linkages) subpopulations of Mexican gray wolves averaging at least 250 (but ≥ 200) wolves each within portions of the states of Arizona, Utah, New Mexico, and Colorado.

The consistency of recommendations from the scientists of two different recovery teams further corroborates the strength of the science that informs recovery of the Mexican gray wolf.

The FWS admits that the existing Mexican Wolf Recovery Plan (USFWS 1982) does not comply with current ESA requirements, and does not set forth criteria for full recovery of the Mexican gray wolf. And without question the science available prior to 1982 is no longer the “best available” science. Yet the 1982 Recovery Plan remains the only approved recovery plan for Mexican wolves and the guiding document for this proposed rule. This is wrong and misguided, and could lead to decisions and established regulations that would preclude the implementation of future recovery actions without being rescinded and without repeating another lengthy and costly NEPA process.

Even in the absence of an approved recovery plan, the current proposals must, by law, be based on the best available science relative to the recovery of Mexican gray wolves (50 CFR §17.81(a)&(b)). The best available science has been developed and compiled by the Science and Planning Subgroup (SPS) of the Mexican Wolf Recovery Team (MWRT) and the peer-reviewed published literature they relied upon. We incorporate by reference all of the literature cited in *Draft Mexican Wolf Revised Recovery Plan: Sections I.g, III, and Appendix B* dated September 16, 2011) (SPS 2011) on pages 13-17 (*LITERATURE CITED IN SECTION I.G.*) and the section titled *LITERATURE CITED IN SECTION III* on unnumbered pages.

One example of a future conflict arising from the current proposal follows: Two of the geographic areas recommended by the SPS for the establishment of subpopulations of Mexican wolves lie well outside the proposed Mexican Wolf Experimental Population Area (MWEPA) boundary delineated in the proposed rule. And the proposed rule requires the capture of and return to

the wild or to captivity wolves that disperse outside the MWEPA. Thus, natural migration of wolves among the three proposed subpopulations would be precluded by this proposed rule.

Another conflict arises from restricting Mexican wolves to the MWEPA. A separate proposal (Docket No. FWS-HQ-ES-2013-0073: *Endangered and Threatened Wildlife and Plants; Removing the Gray Wolf (Canis lupus) from the List of Endangered and Threatened Wildlife and Maintaining Protections for the Mexican Wolf (Canis lupus baileyi) by Listing It as Endangered*) (USFWS 2013a) would officially add the Mexican gray wolf (*Canis lupus baileyi*) to the list of endangered species and grant the subspecies “endangered” status “throughout its range,” or “wherever found.” Dispersal restrictions and capture requirements set forth in the proposed rule would prevent Mexican wolves from establishing their own “range” thus restricting and controlling where they can be found.

Further evidence of the FWS’s prior commitment to capture and return wolves dispersing from the MWEPA is found in a recent letter from Larry Voyles, Director of Arizona Game and Fish Department to Dan Ashe, Director of FWS dated August 1, 2013. The following is a direct quote from that letter:

This topic was discussed at the July 23, 2013 ESA/SARA Working Group meeting and the Nongame and Endangered Species Committee meeting during the WAFWA summer meeting in Omaha, Nebraska where Rowan Gould and Gary Frazer both acknowledged that the capture and return provision’s absence from the rule [meaning the proposed 50 CFR §17.11(h)] as opposed to the preamble to the rule where the language does occur] was an oversight and that the final rule will direct the USFWS to capture and return any Mexican wolf that disperses outside the MWEPA. We greatly appreciate Gary and Rowan’s frank acknowledgement and assurance that this matter will be corrected.

We must assume that the configuration of MWEPA for purposes of these commitments per the above discussion is that depicted in Figure 2 of the proposed rule subject to this review. Such a pre-decisional commitment blatantly violates NEPA.

Recovery plans, required by Section 4(f)(1) of the ESA, are the road map for recovery actions, and for the rules and NEPA processes required to

implement specific recovery actions. Leaked recommendations from the SPS of the current Mexican Wolf Recovery Team (SPS 2011) and subsequent peer reviewed literature (Carroll et al. 2013) clearly demonstrate that many provisions within this proposed rule will undercut eventual recovery of the Mexican wolf.

Time and expenses dedicated to this rudderless proposal are a waste of public funds, counter-productive to recovery of Mexican wolves, and will most certainly need to be revised following completion of the required, science-based, Mexican Wolf Recovery Plan.

A top priority for the FWS should be the expedited completion and approval of the Mexican Wolf Recovery Plan.

The BRWRA Population of *Canis lupus baileyi* is Essential to the Continued Existence of the Subspecies in the Wild.

The proposed rule assumes that the only wild population of Mexican gray wolves in existence (numbering 75 at the beginning of 2013) will retain its original classification as a Nonessential Experimental Population (NEP) under provisions set forth in Section 10(j) of the Endangered Species Act (ESA) following the official listing of *Canis lupus baileyi* as an endangered subspecies. We recommend at a minimum that the only existing wild population be reclassified as an Essential Experimental Population (EEP) under Section 10(j) of the ESA. The only remaining appropriate classification would be full “endangered” status, and TRI would support and prefer that classification.

The Congressional Record sheds considerable light on this determination. It says that in making the determination of essential or non-essential. “the Secretary shall consider whether the loss of the experimental population would be likely to appreciably reduce the likelihood of survival of that species in the wild. If the Secretary determines that it would, the population will be considered essential to the continued existence of the species.” [H. Conf. Rep. No. 97-835, at 33-34 (1982), reprinted in 1982 U.S.C.C.A.N., 2860, 2874-75]

We will demonstrate below that the NEP classification can no longer be supported by the best available science for both the wild and captive populations of Mexican gray wolves.

In 1998 the USFWS justified the determination that the BRWRA population of Mexican gray wolves was nonessential to the continued existence of the subspecies on the basis that the genetic integrity of the subspecies was being protected in the captive population. In promulgating the existing rule, the FWS concluded that “even if the entire experimental population died, this would not appreciably reduce the prospects for future survival of the subspecies in the wild. That is, the captive population could produce more genetically fit surplus wolves and future reintroductions still would be feasible if the reasons for the initial failure are understood.”

While such a conclusion may have been justified in 1998 and for a short time thereafter, it cannot be justified today as a safe harbor for mismanaging and excessively removing wolves in the wild (USFWS 2010). The FWS (USFWS 1998) also asserted that “Releasing captive-raised Mexican wolves furthers the objective of the Mexican Wolf Recovery Plan”; and that “This reintroduction will establish a wild population of at least 100 Mexican wolves and reduce the potential effects of keeping them in captivity in perpetuity. If captive Mexican wolves are not reintroduced to the wild within a reasonable period of time, genetic, physical, or behavioral changes resulting from prolonged captivity could diminish their prospects for recovery” (underlining added). A review of research by Frankham (2007) entitled *Genetic Adaptation to Captivity in Species Conservation Programs* confirms this cautionary prediction and raises serious concerns about genetic deterioration leading to maladaptive traits in captive populations.

The process of evolution causes animals to adapt to their environment. Frankham (2007), citing several peer-reviewed studies, states that “Characteristics selected for under captive conditions are overwhelmingly disadvantageous in the natural environment,” and that these adverse evolutionary changes “jeopardize the ability of captive populations to reproduce and survive when returned to the wild.” He advises that “genetic adaptation to captivity should be minimized for populations likely to be used for reintroduction,” and that the most effective way to minimize genetic adaptation to captivity is to “minimize the number of generations in captivity” and return the species to the wild “as rapidly as possible” (underlining added). Mexican wolves have been bred in captivity for approximately 35-50 years or possibly longer (records of the establishment of the Aragon Lineage are not available), depending upon the lineage. This research reconfirms the FWS’s cautionary concern in the 1998 rule about prolonged captivity cited above.

Endangered species recovery takes place in the wild, not in captivity (50 CFR §17.80(b)).

Both the wild and captive populations face critical genetic issues. The wild population is dangerously inbred and the captive population has lost substantial gene diversity present in the initial seven founders. FWS has been aware of this looming genetic problem for many years and describes the dire genetic status of wild and captive populations in elaborate science-supported detail in a section titled *Inbreeding, Loss of Heterozygosity, and Loss of Adaptive Potential—Canis lupus baileyi* (USFWS 2013a; Docket No. FWS- HQ-ES-2013-0073).

Here are some excerpts from that FWS document:

As of October 2012, the captive population of Mexican wolves consisted of 258 wolves, of which 33 are reproductively compromised or have very high inbreeding coefficients, leaving 225 wolves as the managed population (Siminski and Spevak 2012). The age structure of the population, however, is heavily skewed, with wolves 7 years old and older comprising about 62 percent of the population—meaning that most of the population is comprised of old wolves who will die within a few years. This age structure has resulted from the high reproductive output of the F1 wolves and their descendants in captivity, the combination of few releases of captive-born wolves to the wild in recent years, removal of wolves from the wild population to captivity, and limited pen space for pairings, and means that additional gene diversity will be lost as the captive population continues to age.

The SSP strives to minimize and slow the loss of gene diversity of the captive population but (due to the limited number of founders) cannot increase it. As of 2012, the gene diversity of the captive program was 83.37 percent of the founding population, which falls below the average mammal SSP (93 percent) and below the recognized SSP standard to maintain 90 percent of the founding population diversity. Below 90 percent, the SSP states that reproduction may be compromised by low birth weight, smaller litter sizes, and related issues.

Representation of the Aragon and Ghost Range lineages in 2012 was 18.80 percent and 17.65 percent, respectively (Siminski and Spevak 2012, p. 6). More specifically, the representation of the seven founders is very unequal in the captive population, ranging from about 30 percent for the McBride

founding female to 4 percent for the Ghost Ranch founding male. Unequal founder contributions lead to faster inbreeding accumulation and loss of founder alleles. The captive population is estimated to retain only 3.01 founder genome equivalents, suggesting that more than half of the alleles (gene variants) from the seven founders have been lost from the population.

The genetically effective population size (N_e) of the captive population is estimated to be 20 wolves and the ratio of effective to census size (N_e / N ; that is, the number of breeding animals as a percentage of the overall population size) is estimated to be 0.0846 (Siminski and Spevak 2012, p. 7). The genetically effective population size is defined as the size of an ideal population that would result in the rate of inbreeding accumulation or heterozygosity loss as the population being considered. The effective sizes of populations are almost always smaller than census sizes of populations. A rule of thumb for conservation of small populations holds N_e should be maintained above 50 to prevent substantial inbreeding accumulation, and that small populations should be grown quickly to much larger sizes ($N_e \geq 500$) to maintain evolutionary potential (Franklin 1980, entire). The low ratio of effective to census population sizes in the captive population reflects the limitations on breeding (due to a lack of cage space) over the last several years, while the low effective population size is another indicator of the potential for inbreeding and loss of heterozygosity.

*The gene diversity of the reintroduced population of *C. l. baileyi* can only be as good as the diversity of the captive population from which it is established. Based on information available on July 11, 2012, the genetic diversity of the wild population was 74.99 percent of the founding population (Siminski and Spevak 2012, pp. 6–7), with 4.97 percent and 13.80 percent representation of Aragon and Ghost Range lineages, respectively. Although *C. l. baileyi* (in the reintroduced population) reached an all-time high population size in 2012 (minimum estimate of 75 wolves), it is currently a poor representation of the genetic variation remaining in the captive population. Founder representation in the reintroduced population is more strongly skewed than in the captive population. Mean inbreeding levels are 61 percent greater (0.1924 versus 0.1197), and founder genome equivalents are 33 percent lower (2 vs. 3.01) than in the captive population. In addition, the estimated relatedness of *C. l. baileyi* in the reintroduced population is on average 50 percent greater than that in the captive population (population mean kinship: 0.2501 vs. 0.1663; Siminski & Spevak 2012, p. 8). This suggests that *C. l. baileyi* in the reintroduced population*

are on average as related to one another as outbred full siblings are related to each other. Without substantial management action to improve the genetic composition of the population, inbreeding will accumulate and heterozygosity and alleles will be lost much faster than in the captive population.

There is evidence of strong inbreeding depression in the reintroduced population. Fredrickson et al. (2007, pp. 2365–2371) estimated that the mean observed litter size (4.8 pups for pairs producing pups with no inbreeding) was reduced on average by 0.8 pups for each 0.1 increase in the inbreeding coefficient of the pups. For pairs producing pups with inbreeding coefficients of 0.20, the mean litter size was estimated to be 3.2 pups. Computer simulations of the Blue Range population incorporating the Mexican wolf pedigree suggest that this level of inbreeding depression may substantially reduce the viability of the population (Carroll et al. in prep ; Fredrickson et al. in prep).

The recent history of Mexican wolves can be characterized as a severe genetic bottleneck that began no later than the founding of the Ghost Ranch lineage in 1960. The founding of the three lineages along with their initial isolation likely resulted in the loss of most rare alleles and perhaps even some moderately common alleles. Heterozygosity loss was accelerated as a result of rapid inbreeding accumulation. The merging of the captive lineages likely slowed the loss of alleles and heterozygosity, but did not end it. The consequences to Mexican wolves of the current genetic bottleneck will be future populations that have reduced fitness (for example, smaller litter sizes, lower pup survival) due to inbreeding accumulation and the full expression of deleterious alleles. The loss of alleles will limit the ability of future Mexican wolf populations to adapt to environmental challenges.

*Based on data from the SSP documenting loss of genetic variation, research documenting viability-related inbreeding effects in *C. l. baileyi*, and our awareness that the wild population is at risk of inbreeding due to its small size, we conclude that inbreeding, and loss of heterozygosity, and loss of adaptive potential are significantly affecting *C. l. baileyi* and are likely to continue to do so in the future. If *C. l. baileyi* was not protected by the Act, these risks would remain, and may increase if states or other parties did not actively promote genetic diversity in the reintroduced population by releasing wolves with appropriate genetic ancestry to the population.*

TRI commends FWS for presenting the best available science on the critical

genetic issues present in both the captive and reintroduced populations. This information alone justifies a protective classification of at least Essential Experimental Population for the BRWRA reintroduced population, and we believe would support listing the Mexican as “endangered” wherever found. The FWS admits above that the reintroduced population is significantly less genetically fit than the captive population, yet the captive population is classified as endangered. How can a less protective classification be justified for the wild population?

Additionally, this information should be an immediate call to action for FWS to take extraordinary measures to improve the genetic composition of the BRWRA population. Indeed, FWS admits, disingenuously, (USFWS 2010; p. 73) that “intensive management of genetic variation is an integral component of the recovery effort.” The urgency of such intensive genetic management of the BRWRA population and the FWS’s squandering of opportunities to implement such management are described in Hedrick and Fredrickson (2010). Both the 3-Year Review (Paquet et al. 2001) and the 5-Year Review (AMOC and IFT 2005) recommended that the 1998 rule be revised to allow wolves from captivity to be released throughout the BRWRA, rather than only within the Primary Recovery Zone. FWS refused to take action on that critical recommendation, and the genetic makeup of the BRWRA population has deteriorated as a result.

To be fair, genetic management of the captive population under the direction of the independent Species Survival Plan (SSP) Management Group has followed state-of-the-art science, modeling, and planning in its management of the captive population.

Further justification for EEP classification comes from the leaked recommendations of the SPS (SPS 2011) of the current Mexican Wolf Recovery Team and their presentation at the 2013 International Wolf Symposium. We note that the scientists on SPS were appointed by FWS Regional Director Dr. Benjamin Tuggle for their recognized expertise in scientific disciplines relevant to Mexican wolf recovery. As we point out above, the SPS scientists have recommended three interconnected subpopulations averaging at least 250 wolves each with not less than 200 wolves in any of the three subpopulations (SPS 2011). One of these populations is identified as the existing BRWRA population. Clearly, the SPS has determined that the BRWRA population is essential to the survival and recovery of Mexican gray wolves in the wild.

Indeed FWS admits in this proposed rule on pages 35732-35733 (USFWS 2013b) that the BRWRA population is essential to Mexican wolf recovery:

Continuing the effort to reestablish the nonessential experimental population, and making modifications to improve it, will substantially contribute to the recovery of the species, as it is currently extirpated in the wild except for the nonessential experimental population in the United States and a fledgling reestablishment effort in Mexico. We recognize that more than one population of Mexican wolves will need to be established for recovery (Service 2010, pp. 68-70); therefore, achieving the objective of at least 100 wolves for this population serves as a fundamentally necessary component of Mexican wolf recovery. (underlining added)

This refreshing admission is a fundamental component of our argument, as well, in support of a more protective classification for the BRWRA population of Mexican gray wolves – either essential experimental or full endangered. We note that Webster’s Dictionary lists “necessary” as a synonym for “essential” (www/Merriam-webster.com/dictionary/essential).

The opportunity for revising the classification of the BRWRA population of Mexican wolf is ripe because FWS is proposing to list Mexican gray wolves (*Canis lupus baileyi*) separately as an endangered subspecies; whereas, the previously listed entity was *Canis lupus*. Fifteen years following its initial establishment, an argument that the BRWRA population of *Canis lupus baileyi* is not essential to the continued existence of *Canis lupus baileyi* is not supported by material facts fully admitted to by the FWS.

Furthermore, this determination is not supported by any references to published literature or modern scientific analyses. Not only is the “nonessential” determination not based on the best science, it is not based on any science.

If there ever is a case to be made for the first ever designated “essential” experimental population under Section 10(j) of the ESA, this is it.

The discussion below under the subheading Pages 35731-35732 – Is the Experimental Population Essential to the Continued Existence of the Species? is incorporated here in its entirety.

Page by Page Comments on the Proposed Rule.

Disclaimer. TRI opposes this proposed rule as written and will offer an

alternative later in these comments. However, should FWS not accept our alternative, we offer the following specific comments on the rule as proposed.

Page 35721 - Peer Review. Recent revelations of interference in the peer review process and FWS's exclusion of three prominent scientists from the peer review panel leave doubts as to the impartiality of a peer review process under the control of FWS. As is authorized by the ESA §4(b)(5)(C) and required by (59 FR 34270), TRI recommends that FWS solicit an independent review from reputable a professional scientific organization, such as the National Academy of Sciences/National Research Council.

Page 35722 - Texas. (3) TRI does not object to removing this portion of west Texas from the MWEPA. (4) TRI agrees with the removal of the White Sands Wolf Recovery Area designation as a possible reintroduction area. However, we do not support removal of the White Sands Missile Range from the MWEPA, and it does not appear that this is being proposed.

Page 35727 – More Information. The 3-Year Review (Paquet et al. 2001) is omitted from the list of additional sources of information.

Page 35727 – Adaptive Management. The Adaptive Management Oversight Committee, which made field operational decisions from 2003-2009 purported to use “adaptive management” as a guiding principle for their decision making. Under the AMOC's authority the wild population consistently declined until their authority was vacated by a litigation settlement agreement. TRI hopes that this reference to an adaptive management approach envisions a true science-based application of a legitimate adaptive management process as described in the scientific literature (e.g., Bormann et al. 1999).

The FWS has demonstrated that it cannot be trusted with the level of discretionary management authority granted by the current rule. Having failed to meet all three components of the established reintroduction objective—a viable, self-sustaining population of at least 100 Mexican gray wolves in the BRWRA by about the year 2006—the FWS has clearly failed to achieve the “conservation” mandate of ESA § 10(j)(2)(A). By logical extension, the FWS is now in ongoing violation of the ESA. To bring the FWS back into compliance with federal law, any revision to the rule must contain absolute requirements for demonstrated forward progress toward meeting the reintroduction objective. We consider a minimum standard for

such progress to be an average population increase of at least 15% per year and an annual increase of at least two breeding pairs. This is well within the reproductive capacity of Mexican gray wolves, especially if properly managed.

Page 35728 – Conference Requirement for Nonessential Experimental Population. FWS acknowledges that under the NEP classification, other federal agencies are not

required to formally “consult” with FWS under the provisions of ESA Section 7(a)(2) on the potential effects of their actions on Mexican wolves. Rather, they are only required to “confer” on agency actions likely to jeopardize the continued existence of Mexican wolves. FWS recommendations resulting from conferences with other federal agencies are non-binding for the agency proposing an action. Furthermore, FWS admits beginning at the bottom of column two that “[B]ecause the nonessential experimental population is, by definition, not essential to the continued existence of the species, the effects of proposed actions affecting the nonessential experimental population will generally not rise to the level of jeopardizing the continued existence of the species. As a result, a formal conference will likely never be required for Mexican wolves established within the nonessential experimental population area.”

The current BRWRA lies entirely within the Apache and Gila National Forests. Incredibly, the NEP classification, grants the U.S. Forest Service a complete pass on taking any actions that might support recovery. Indeed, TRI consistently has seen the “non-jeopardy” determination justified by the NEP classification in actions proposed by the Forest Service. The expansion of wolf occupancy throughout the MWEPA which would be allowed under this proposed rule would include substantial additional areas under the jurisdiction of the Forest Service and the Bureau of Land Management.

The BRWRA population of Mexican wolves needs all the help that can be mustered to ensure population growth and survival. An EEP classification would invoke ESA Section 7(a)(2) requiring federal agencies to consult with FWS to “insure that any action authorized, funded, or carried out by such agency...is not likely to jeopardize the continued existence of any endangered species... .”

Evidence submitted by the FWS in this and related documents and by TRI in these comments clearly justifies this added level of protection for the

BRWRA population of Mexican gray wolves.

Page 35728 – Prime Objective of 1982 Recovery Plan. This paragraph states the following: “The purpose of the nonessential experimental population was, and remains, to accomplish the prime objective of the 1982 Mexican Wolf Recovery Plan to establish a viable, self-sustaining population of at least 100 Mexican wolves in the wild.” The best available science clearly demonstrates and the FWS freely admits that a population of this size is not self-sustaining, requires genetic supplementation, and must be enlarged and connected to at least two additional populations to accomplish meaningful recovery of the Mexican wolf.

This statement epitomizes the fallacy of basing a proposal on a recovery plan so out of date (1982) that it was written on a manual typewriter. The “prime objective” of the 1982 Recovery Plan has been made obsolete by a mountain of science generated over the past 31 years. The ESA requires listing decisions to be based on the best available science, which the FWS has before it, but is blatantly ignoring in this proposal.

The best science supports a proposal that would immediately address critical genetic issues and grow the BRWRA population of Mexican wolves quickly to a population size of at least 350. We note that the SPS recommendations for recovery criteria (SPS 2011) specify three populations totaling at least 750 wolves with each of the three populations having no less than 200 wolves. Thus, if two subpopulations have 200 wolves, then the remaining subpopulation must have 350 wolves. Since it is impossible to know which subpopulation, if any, will need to support a higher population, it is prudent and precautionary to establish a 350 wolf threshold for the only subpopulation currently in existence. This is the minimum population objective that will be certain to contribute to eventual recovery of the newly listed *Canis lupus baileyi*.

Page 35729 – Expanding the MWEPA. TRI supports unrestricted dispersal from the current BRWRA. This would eliminate the need to establish a MWEPA. The only way that expanding the MWEPA to the U.S. / Mexico border would support Mexican wolf recovery according to the best available science is if the MWEPA were also expanded northward to Interstate Highway 70. This would facilitate dispersal among all presently conceived locations for future subpopulations of Mexican wolves in the United States and Mexico.

Page 35729 – Adding Additional USFS Districts to BRWRA. TRI supports the addition of these forest districts to the BRWRA.

Page 35729 – Nonessential Experimental Designation Enables.... FWS fails to point out that an EEP designation similarly enables the Service to develop measures for management of the population that are less restrictive than the mandatory prohibitions that protect species with endangered status. The regulatory authority and procedures are exactly the same for issuing a “10(j)” rule for EEP and NEP populations.

Page 35729 – Initial Releases Throughout BRWRA. TRI supports initial releases of captive-raised Mexican wolves throughout the entire BRWRA. We implore FWS to be creative in finding a way to allow such releases as soon as possible. FWS has described in detail the dire genetic situation of the BRWRA population and the critical need to release captive-raised wolves to boost gene diversity, lower inbreeding, and grow the wild population.

TRI has identified three ways that FWS may legally accomplish such expedited releases prior to completing this NEPA process:

1. Issue an environmental assessment / proposed rule limited to only BRWRA-wide release authority concurrently with the ongoing NEPA process for this more comprehensive proposed rule.
2. Issue a Section 10(a)(1)(a) "recovery" permit that authorizes BRWRA-wide releases of captive Mexican wolves. If FWS's proposed Wolf Management Plan can be implemented under this authority to promote "recovery," then certainly so could range-wide releases which the FWS acknowledges would support genetic rescue and recovery of the Mexican wolf. We understand that FWS has released other endangered species under this administrative procedure.
3. Issue an "emergency regulation" under ESA Section 4(7). The Secretary can issue an emergency regulation "in regard to any emergency posing a significant risk to the well-being of any species of fish and wildlife". She can issue the regulation without process for 240 days by publishing detailed reasons why the regulation is necessary and notifying the states. The 240 days can be used to implement normal required rule making procedures. TRI believes that the best available science supports a conclusion that the current NEPA process for this proposed rule will take so long as to create a

significant risk of further genetic harm to the wild population. Such a regulation under Section 4(7) would take effect immediately.

Page 35730 – Initial Releases. FWS freely admits that it has released only two captive- raised Mexican wolves into the BRWRA in the last 6 years. This underscores the need for expedited authority to conduct initial releases throughout the BRWRA.

Page 35730 – Reaching the Population Objective. The proposed rule states “We are proposing to allow Mexican wolves to disperse naturally from the BRWRA into the MWEPA and to occupy the MWEPA because this modification will promote numeric and spatial expansion of the population, assisting us in reaching our population objective. We intend to capture and return Mexican wolves originating from the nonessential experimental population that disperse outside the MWEPA.”

The hidden message in the first sentence is that the “population objective” remains 100 wolves. We point out above that this outdated and insufficient objective can no longer be supported by the best available science. FWS agrees (see 78 FR 35695, column 1), “We continue to acknowledge that this population target is appropriate as an interim objective (Service 1982, p. 28, Service 1996, p. 1-1) but insufficient for recovery and delisting of *C. l. baileyi*, as the subspecies would still be in danger of extinction with a single population of this size (Service 2010, pp. 78-79; underlining added).”

Also at 78 FR 35697, column 2, FWS states that “estimated current ungulate populations in the BRWRA could support 203 to 354 wolves.” This population size range size for the BRWRA suggests that the proposed “expanded BRWRA” could achieve a subpopulation of at least 350 wolves. It also suggests that substantial additional population growth is possible within the BRWRA and that existing regulations and management practices have greatly impeded achieving this potential additional population growth (USFWS 2010). According to current draft recommendations from the SPS of the Mexican Wolf Recovery Team (SPS 2011), such a population would be sufficient for recovery when linked to two additional subpopulations of at least 200 wolves.

Page 35730 – Trappers. In column two, the FWS states “Any trappers concerned that they might incidentally take an endangered Mexican wolf can apply for a section 10(a) permit.” This must be a misprint. Otherwise it is absurdly permissive. Any trappers concerned that they might incidentally

take an endangered Mexican wolf should trap elsewhere or modify their methods to ensure they do not take a Mexican wolf.

Page 35730 – Take Permits on Public Land. The provision to issue take permits for livestock owners or their agents on public lands throughout the MWEPA when 100 wolves are established within the MWEPA cannot be supported by the best available science. This provision could trigger a substantial increase in authorized take of Mexican wolf at a population threshold which the FWS admits could leave the Mexican wolf “in danger of extinction.” Based on the best available science, and in keeping with the “Precautionary Principle,” TRI recommends this threshold be raised to at least 350 wolves. See justification above for the 350 wolf threshold.

Page 35730 – Provisions for Take by Pet Owners. The Mexican Wolf Conservation Assessment (USFWS 2010) provides a comprehensive assessment of the BRWRA reintroduction project performance under the existing regulation (USFWS 1998) that established the original NEP in the BRWRA. As such it is an assessment of the degree to which the levels of permissible take authorized under the 1998 rule supported the prime objective of establishing a population of at least 100 wolves in the BRWRA.

The short answer is that the 1998 rule has failed to achieve that objective and has failed the ESA mandate (Section 10(j)(2)(A)) that releases of experimental populations “will further the conservation of the species.” Simply put, it allowed too many opportunities to remove wolves.

The Conservation Assessment (USFWS 2010) identified threats “that are hindering the growth and fitness of the Blue Range population” as management and regulatory mechanisms, illegal shooting, and inbreeding. It further concludes that “[C]ombined sources of mortality and removal are consistently resulting in failure rates at levels too high for unassisted population growth.” While illegal killing, and road kills are largely outside FWS’s control, management and regulatory mechanisms are fully under their control.

The level of take authorized by this new 10(j) rule will make the difference between steady progress toward recovery and failure possibly leading to the extinction of the Mexican gray wolf. Government regulations are not easily changed. Given that the existing ineffective Mexican wolf NEP rule has been in effect for the past 15 years, this is likely the last chance for FWS to “get it right.”

The principle of adaptive management which monitors past performance to guide future actions would not support additional opportunities to remove wolves when previous levels of take were too high to protect Mexican wolves at a level that furthered the conservation of the species.

For these reasons, TRI opposes a provision for take by pet owners of any Mexican wolf engaged in the act of killing, wounding, or biting pets anywhere within the MWEPA.

Page 35730 – Provisions for Take by Private Landowners. For reasons set forth above and without knowing the “conditions that must be met before such a permit is issued,” TRI also opposes this take provision. At a minimum, the numerical threshold for triggering additional take must be consistent with the best available science that informs the parameters of full recovery of the Mexican wolf (i.e., ≥ 350 wolves). See justification above for the 350 wolf threshold.

Page 35731 – 5-Year Review. The required reviews under the 1998 rule at 3 years (2001) and 5 years (2005) have had no effect on revising the rule or improving the performance of the BRWRA reintroduction project until now—8 years after the 5-year review. And the rule now being proposed does not support Mexican wolf recovery. Why should we believe that future reviews would be taken more seriously?

TRI would favor eliminating this requirement for a 5-year review and replacing it with a provision requiring annual monitoring and evaluation presented in annual reports released within 3 months of the annual population count conducted in January of each year. This is the current practice of the Interagency Field Team. A mandate to act upon the recommendations in annual reports would force an ongoing adaptive management process that could lead to timely modifications that would improve the performance of the BRWRA reintroduction project in ways that contribute to the recovery of the Mexican wolf.

The Five-Year Review Recommendations Violate NEPA. Throughout all of the 5- year review recommendations we note a pre-decisional assumption that a revised rule will continue the previous designation of the BRWRA Mexican gray wolf population as a “nonessential experimental” population. We have demonstrated that this designation has not contributed to the conservation of the Mexican wolf by failing to achieve established objectives. This a priori declaration is a violation of NEPA which requires

the evaluation of a full range of reasonable alternatives prior to a final decision. See 40 C.F.R. § 502.14; see also *Van Abbema v. Fornell*, 807 F.2d 633, 638 (7th Cir.1986) (holding that because alternatives analysis is not subordinate to desires of the project proponent, reasonable alternatives should be identified by reference to a project’s general purpose, not the proponent’s narrow objective).

Analysis of areas suitable for wolf recovery in the western United States by Carroll et al. (2006 and 3013) confirm the high importance of the BRWRA to recovery of the Mexican wolf in the Southwest.

Under the new rule, a limitation on taking of Mexican wolves from all causes should be imposed (legal, illegal, and agency management actions)—except for the immediate defense of humans—such that the BRWRA population increases annually by at least 15% numerically based on the official end-of-year population count until the new numerical wolf objective has been met. Provisions should be included to allow and require the FWS to immediately reduce authorized take for all subsequent years following years when this conservation goal has not been met.

The new rule should include a provision that would allow future recovery objectives to override any provisions in rule authorizing the take of Mexican wolves (other than for the immediate defense of humans) within both the BRWRA and MWEPA. This would require the granting of discretionary authority to the FWS to reduce (but not increase) authorized take prescribed in the rule to accomplish future recovery objectives.

Pages 35731-35732 – Is the Experimental Population Essential to the Continued Existence of the Species? The words “in the wild” should be added to the end of this subtitle (see 50 CFR §17.80(b)).

The entire text above under the subtitle The BRWRA Population of *Canis lupus baileyi* is Essential to the Continued Existence of the Subspecies in the Wild is incorporated by reference here.

The proposal states “[O]ur finding of whether a population is nonessential is made with our understanding that Congress enacted the provisions of section 10(j) to mitigate fears that reestablishing populations of threatened and endangered species into the wild would negatively impact landowners and other private parties.” A designation of “essential” can “mitigate fears that reestablishing populations of threatened and endangered species into the

wild would negatively impact landowners and other private parties” in exactly the same ways that a designation of “nonessential” can mitigate these “fears.” Rules established for either classification can be sufficiently “flexible.” This is not a valid argument for justifying a “nonessential” designation.

The proposal states that “[I]t is instructive that Congress did not put requirements in section 10(j) to reevaluate the determination of essentiality after a species has been reestablished in the wild.” Perhaps the reason for this omission is that Congress expected the Secretary of the Interior to abide by the requirement that releases of experimental populations must “further the conservation of the species”—a requirement that FWS affirms at the bottom of the following paragraph.

The proposal states “[I]f importance to recovery was equated with essentiality, no reestablished populations of a species would qualify for nonessential status.” So far, FWS has refused to complete recovery planning for Mexican wolves. And no proposal for resuming recovery planning has been put forth. For all we know, establishment of the BRWRA may be the only wild population of Mexican gray wolves ever established in the wild. The current “nonessential” rule has not resulted in the “conservation” of that population even at a level (≥ 100 wolves) that the FWS now admits does not equate to recovery and leaves the population vulnerable to extinction. Furthermore FWS admits that identified threats occurring under the current nonessential regulation are “putting the population at risk of failure” (USFWS 2010). And failure of the BRWRA population would end its “existence in the wild.” Until FWS adopts a new recovery plan for Mexican wolves and establishes another wild population, “essential” is the only supportable classification.

The proposal states that Congress’ expectation was that the designation of an essential population would be a “special case” and not the general rule. This expectation and their establishing the authority for designating “essential” experimental populations implies an expectation that there would arise from time to time circumstances justifying such classification. FWS has “cherry-picked” the language in the Congressional Record regarding Congress’s intent for establishing “essential experimental populations.” The congressional Record states as follows:

“the Secretary shall consider whether the loss of the experimental population

would be likely to appreciably reduce the likelihood of survival of that species in the wild. If the Secretary determines that it would, the population will be considered essential to the continued existence of the species.” [H. Conf. Rep. No. 97-835, at 33-34 (1982), reprinted in 1982 U.S.C.C.A.N., 2860, 2874-75]

We submit that this is clearly one of those anticipated “special” cases, and that FWS has provided in this and related documents more than ample justification for changing the classification of the BRWRA population of Mexican wolves to “essential experimental.”

The proposal states that federal regulations (50 CFR §17.80(b)) define “survival” as the condition in which a species continues to exist in the future while retaining the potential for recovery.” Both the FWS and TRI have presented substantial evidence of a high likelihood that this is not the current “condition” of the BRWRA population. Currently and for the foreseeable future the BRWRA population of Mexican gray wolves represents the entire “species as a whole” in the wild.

FWS concludes that this proposal revalidates the nonessential experimental population determination set forth in the 1998 Final Rule and that “even if the entire population died, this situation would not appreciably reduce the prospects for future survival of the subspecies because Mexican wolves are still maintained in the captive-breeding program.” “Furthermore, the captive Mexican wolf population could produce enough wolves that future reintroductions in the wild would be feasible and we have a now proven capacity to successfully start a wild population from captive stock.”

This recycled 15-year-old determination is not supported by the best available science presented by both the FWS in this and related documents and by TRI herein. Indeed this determination is not supported by any references to published literature or modern scientific analyses conducted by FWS or others in support of this claim. Significant genetic decline in the captive population has been documented by the SSP Management Group (Siminski and Spevak 2012) and acknowledged by FWS. We are aware of no analysis of the capacity of the captive population to completely replace the BRWRA population, let alone support two additional reintroductions in addition to that replacement. Just because this proposed rule says it is so doesn’t make it so. ESA requires the support of the best available science for decisions made under the ESA.

Page 35732 – Will this Proposal Further the Conservation of the Species? The proposal states that “Mexican wolf dispersal from the BRWRA into the MWEPA will further the conservation of the species by allowing wolves access to additional habitat for establishment.” This statement is false if the proposed rule establishes a population objective of ≥ 100 wolves, liberalizes take throughout the MWEPA above a threshold of 100 wolves, and prevents dispersal outside the MWEPA. It would be true if the proposed rule establishes a population objective of ≥ 350 wolves and includes protections that will allow the BRWRA population to grow to at least 350 without restricting dispersal.

Page 53734 – Section 6. TRI supports the use of Section 6 of the ESA to provide funds to states to support their participation in management activities much like the present structure of the Interagency Field Team. TRI does not support the use of Section 6 to confer final decision authority to the states for reintroduction projects or the recovery program. This model was tried with the advent of the Adaptive Management Oversight Committee (AMOC) in 2003. The AMOC was established through a memorandum of understanding that required the transfer of decision authority to the states. Under AMOC control the BRWRA population of Mexican wolves actually declined from 2003-2009. Following return of authority to FWS through a litigation settlement agreement, the population has increased annually.

Given this record of performance of the AMOC and the fact that the state of New Mexico has since withdrawn from participating in the Mexican wolf recovery program, TRI recommends that this proposed rule clearly confers all decision authority to the U.S. Fish and Wildlife Service.

Page 53734 – (9). The proposal states that “Wildlife Services personnel will not be in violation of the Act or this rule for the take of a Mexican wolf that occurs while conducting official duties.” We question why this specific language occurs for Wildlife Service when similar language occurs previously for “Federal agencies.” Wildlife Services is a Federal agency. Some months ago a Wildlife Services agent shot a Mexican wolf and claimed he thought it was a coyote. If a similar incident would be excused by this specific language, then TRI is opposed to this provision.

Page 35737 – Takings. The proposal states “[O]ne of the reasons for the experimental nonessential designation is to allow the agency and private entities flexibility in managing Mexican wolves, including the elimination of a wolf when there is a confirmed kill of livestock.” We reiterate that similar

flexibility is available under the designation of essential experimental population. Additionally we are concerned by the language “including the elimination of a wolf when there is a confirmed kill of livestock.” This could be interpreted as a commitment to eliminate wolves that kill livestock and needs to be revised to preclude such an interpretation. “Elimination” of wolves should be the action of last resort after all other non-lethal options to resolve conflict have been exhausted. And even then there may be overriding factors in favor of keeping a wolf in the wild population.

§ 17.84(k) Special rules -vertebrates

(1) *Purpose of the rule.* Per previous discussions above TRI does not concur in the findings that this rule revision will “further the conservation of the Mexican wolf subspecies” nor do we concur that the experimental population “is not essential under §17.81(c)(2)”.

(3) *Definitions.*

Affect game populations in ways that may inhibit further Mexican wolf recovery.

TRI recommends that this definition requires a science-based determination that wolf predation is the predominant cause of the decrease in game populations or hunter harvest.

Mexican Wolf Experimental Population Area (MWEPA). As stated earlier, TRI opposed the re-establishment of a MWEPA. But if a MWEPA is again authorized, we recommend that it be bounded on the south by the Mexican border and the north by Interstate Highway 70. Alternatively, TRI could support the establishment of a MWEPA of any configuration if the “capture and return” provision for wolves leaving the MWEPA was removed from the rule and the expanded BRWRA population goal was increased to 350 wolves.

Also, we recommend that the last sentence be edited to include in the list “various predator co-existence methods, and modifications to animal husbandry practices.”

Problem wolves. This definition lacks a threshold for number of depredation incidents on public lands. This threshold should be higher than on private or tribal lands.

(5) *Prohibitions*. In (iii)(B)&(C) remove the leading word “If” for each provision, and for (B) add the word “or” at the end, and for (C) delete the words “using one”.

(6) *Allowable Take*.

(i) (A) *Any person or other entity*. What “entity” other than a person might take a Mexican wolf?(iii)(A) *Livestock owners or their agents*. TRI is opposed to this provision for reasons stated elsewhere in these comments.

(iii)(C). For reasons provided above TRI recommends a threshold of at least 350 wolves throughout the MWEPA for this provision.(iv) *Authorized personnel*. (A) delete “attack pets or domestic animals other than livestock”. Also, insert after If Mexican wolf predation is shown the words “through science-based monitoring and/or research”.

An Alternative Proposal—The Conservation Alternative

TRI offers the following recommendations for an alternative proposed rule:

1. *Expand BRWRA by adding the Forest Service districts specified in 2.3.2 Alternative Two, Page 55 of Preliminary Draft EIS, 02 August 2013*
2. *Reclassify the expanded BRWRA population as an “essential” experimental population.*
3. *Adopt a population objective of at least 350 wolves for the expanded BRWRA population.*
4. *Allow unrestricted dispersal of Mexican wolves outside the expanded BRWRA.*
5. *Move the southern boundary of the MWEPA to the US/Mexico border and the northern boundary to I-70, and remove the “capture and return” provision allowing wolves to disperse unrestricted outside the MWEPA.*
6. *Authorize releases of captive wolves anywhere within the expanded BRWRA and translocations throughout the BRWRA and MWEPA.*
7. *Increase the threshold for relaxing take to at least 350 wolves in the expanded BRWRA population.*

TRI also urges FWS to explore all options for expediting releases of captive wolves throughout the BRWRA even before completion of this NEPA process. We offer suggestions for authorizing such releases elsewhere in these comments.

This alternative proposal is based on the best available science in support of recovery of *Canis lupus baileyi*. It would meet the ESA mandates of furthering the conservation and ensuring the continued existence of Mexican wolves in the wild.

The Rewilding Institute appreciates the opportunity to comment on this proposed rule.

Sincerely,

A handwritten signature in blue ink that reads "David R. Parsons". The signature is written in a cursive style and is positioned above a light blue rectangular background.

David R. Parsons

Carnivore Conservation Biologist

References Cited.

Adaptive Management Oversight Committee and Interagency Field Team [AMOC and IFT]. 2005. Mexican wolf Blue Range reintroduction project 5-year review. Unpublished report to U.S. Fish and Wildlife Service, Region 2, Albuquerque, New Mexico, USA.

http://www.fws.gov/southwest/es/mexicanwolf/MWNR_FYRD.shtml

Bormann, B.T., J.R. Martin, F.H. Wagner, G. Wood, J. Alegria, P.G. Cunningham, M.H. Brookes, P. Friesema, J. Berg, and J. Henshaw. 1999. Adaptive management. Pages 505- 534 in: N.C. Johnson, A.J. Malk, W. Sexton, and R. Szaro (eds.) Ecological Stewardship: A common reference for ecosystem management. Elsevier, Amsterdam.

Carroll, C., M.K. Phillips, C.A. Lopez-Gonzales, and N.H. Schumaker. 2006. Defining recovery goals and strategies for endangered species: the wolf as a case study. *BioScience* 56:25-37.

Frankham, R. 2008. Genetic adaptation to captivity in species conservation programs. *Molecular Ecology* 17(1):325-333.

Carroll, C., R. J. Fredrickson, R. C. Lacy. 2013. Developing metapopulation connectivity criteria from genetic and habitat data to recover the endangered Mexican wolf. *Conservation Biology* in press.

Hedrick, P.W. and R. Fredrickson. 2010. Genetic rescue guidelines with examples from Mexican wolves and Florida panthers. *Conservation Genetics* 11:615-626.

Paquet, P.C., J.A. Vucetich, M.K. Phillips, and L.M. 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, Albuquerque, New Mexico. Apple Valley, Minnesota, USA.

Siminski, D.P. and E.M. Spevak. 2011. Mexican Wolf (*Canis lupus baileyi*) Species Survival Plan: Technical Report. The Living Desert, Palm Desert, California, USA. 71 pages.

SPS (Science and Planning Subgroup). 2011. Draft Mexican Wolf Revised Recovery Plan Sections I.g, III, and Appendix B. Leaked Document of the U.S. Fish and Wildlife Service Mexican Wolf Recovery Team.

U.S. Fish and Wildlife Service [USFWS]. 1982. Mexican wolf recovery plan. Region 2, Albuquerque, New Mexico, USA.

U.S. Fish and Wildlife Service [USFWS]. 1996. Reintroduction of the Mexican wolf within its historic range in the southwestern United States: Final Environmental Impact Statement. Region 2, Albuquerque, New Mexico, USA

U.S. Fish and Wildlife Service [USFWS]. 1998. Endangered and Threatened Wildlife and Plants; Establishment of a Nonessential Experimental Population of the Mexican Gray Wolf in Arizona and New Mexico. Final Rule. 63 FR 1752-1772.

U.S. Fish and Wildlife Service [USFWS]. 2010. Mexican Wolf Conservation Assessment. Region 2, Albuquerque, New Mexico, USA.

U.S. Fish and Wildlife Service [USFWS]. 2013a. Endangered and Threatened Wildlife and Plants; Removing the Gray Wolf (*Canis lupus*) from the List of Endangered and Threatened Wildlife and Maintaining Protections for the Mexican Wolf (*Canis lupus baileyi*) by Listing It as Endangered. Proposed Rule. 78 FR 35664-35719.

U.S. Fish and Wildlife Service [USFWS]. 2013b. Endangered and Threatened Wildlife and Plants; Proposed Revision to the Nonessential Experimental Population of the Mexican Wolf. 78 FR