

Mexican Wolf Blue Range Reintroduction Project 5-Year Review:
AMOC Recommendations Component

by

Adaptive Management Oversight Committee

Arizona Game and Fish Department
New Mexico Department of Game and Fish
U.S.D.A. – APHIS, Wildlife Services
U.S.D.A. Forest Service
U.S. Fish and Wildlife Service
White Mountain Apache Tribe

December 31, 2005

Mexican Wolf Blue Range Reintroduction Project

5-Year Review: Recommendations Component

by

Adaptive Management Oversight Committee

Mexican wolf reintroduction in Arizona and New Mexico is conducted under authority of a 1998 Final Rule (USFWS 1998; 63 Fed. Reg. 1752-1772, January 12, 1998) that defines a Mexican Wolf [nonessential] Experimental Population Area (MWEPA). Within the MWEPA, the Reintroduction Project is focused in the Blue Range Wolf Recovery Area (BRWRA) of eastern Arizona and western New Mexico. The Final Rule requires a 5-Year Review to determine whether and how to modify the Reintroduction Project.

Below, the Adaptive Management Oversight Committee (AMOC) presents Recommendations from its 5-Year Review of the Blue Range Reintroduction Project. Recommendations (1) through (14) are offered to the U.S. Fish and Wildlife Service (USFWS) Region 2 Director, for consideration, and to elicit USFWS guidance to AMOC on whether and how to pursue them. Recommendations (15) through (37) are essentially findings that are within AMOC's purview to pursue (though see below, regarding process issues). These Recommendations are guidance and not rules or regulations. They are not legally binding.

Consistent with the existing Final Rule, all these Recommendations identify changes that are intended to (a) facilitate progress toward establishing a viable Mexican wolf population in Arizona-New Mexico, (b) contribute toward rangewide recovery, and (c) accomplish both within the framework of a landscape mosaic of multiple-use public, Tribal Trust, and private lands.

Although AMOC will diligently pursue timely action on these Recommendations, the time-frame and/or content of one or more might need to be adjusted, or AMOC might need to add or delete Recommendations, as necessary to respond to changes in law, regulation, policy, management issues, budget allocations, workloads, acts of nature, etc.

In short, these Recommendations should not be considered etched in stone. AMOC will change them as necessary to adaptively manage the Reintroduction Project, consistent with the Final Rule and a Memorandum of Understanding under which AMOC operates. Any changes, however, would be discussed within AMOC's Adaptive Management Work Group, and vetted through appropriate processes, before they are implemented. Further, all actions undertaken pursuant to these Recommendations and the Standard Operating Procedures (SOPs) referenced therein shall be in full compliance with applicable State, Tribal, and Federal laws, including but not limited to the Endangered Species Act of 1973, as amended.

Also, interested parties should realize that these AMOC Recommendations do not constrain any of the individual AMOC Lead Agencies or Cooperators from advocating agency-specific

positions on each of the relevant issues as AMOC begins moving forward to act on these Recommendations in 2006. If formal agency positions are needed, or desired, they will be developed through the appropriate internal or public processes for each agency, whether that includes Board of Supervisor meetings, Commission meetings, Tribal Council discussions, etc.

Finally, the appropriate Federal, State, and/or Tribal regulatory processes will be used to propose, vet, and reach final decisions on any of the following Recommendations that trigger a requirement for procedural compliance, including review and rulemaking pursuant to the Administrative Procedures Act (APA), Endangered Species Act (ESA), Federal Advisory Committee Act (FACA), National Environmental Policy Act (NEPA), and other applicable State, Tribal, and Federal laws.

Other Abbreviations, Acronyms, and Terms Used Below

AUM: Animal Unit Month – the tenure of one animal unit (AU) for a one-month period (M), or the amount of forage required by one animal unit for one month. Example: an AUM for cattle is typically defined as one mature (1000 lb) cow and her suckling calf grazing for one month. AUMs for other livestock species, such as sheep, are typically calculated via conversion factors as ratios of the cattle AUM. For sheep in Arizona, the conversion factor currently is 5. See the Society for Range Management Glossary for further information.

BRWRA: The existing Blue Range Wolf Recovery Area as designated by the current Final Rule, consisting of the Primary and Secondary Recovery Zones in Arizona and New Mexico and (per a Memorandum of Understanding between the U.S. Fish and Wildlife Service and the White Mountain Apache Tribe) the Fort Apache Indian Reservation in Arizona.

BRWRZ: The future Blue Range Wolf Reintroduction Zone, as it would be defined by proposed changes in the current Final Rule.

Fair Market Value: The price that a seller is willing to accept and a buyer is willing to pay on the open market in an arms-length transaction, meaning the point at which supply and demand intersect (i.e. agreement is reached that results in sale). Methods and resources used to determine fair market value (i.e. compensation value) of animals killed or injured by wolves might include, for example, auction market operators and/or county animal damage committees. In the case of purebred breeding stock, breeders seeking compensation might be required to furnish purchase receipts for the animals damaged, or if raised on a farm or ranch, sale receipts for animals of similar age, weight, and breeding value. Factors to consider when determining fair market value include: a) class and weight of animals; b) stage of production for breeding animals; and c) age.

MWEPA: Mexican Wolf Experimental Population Area.

Stakeholders: People and organizations that have a vested or other interest in an issue.

Tribal Trust Lands: lands set aside by Congress as reserved for governance by a Native American Tribe (i.e. Congressionally allocated reservation lands, as opposed to Tribal lands acquired by fee-simple, purchase, easement, lease, etc.).

Recommendations

1. No later than March 31, 2007, AMOC will use the results of Recommendations (3) through (14), below, to draft a recommended Mexican Wolf Nonessential Experimental Population Rule by which to redefine the MWEPA, including appropriate external and internal (i.e. BRWRZ) boundaries.
2. No later than April 30, 2007, AMOC will submit its recommended Mexican Wolf Nonessential Experimental Population Rule to the USFWS Region 2 Director.

Note: Recommendations (3) through (14), below address actions undertaken in the course of recommending a new or amend final rule. While that process is underway, all components and requirements of the current Final Rule continue to apply, and the Reintroduction Project shall be conducted in strict accordance with them.

3. AMOC recommends continuing the Reintroduction Project with modifications as outlined below. In other words, AMOC does not recommend terminating the Reintroduction Project.
4. AMOC recommends that any amended or new Mexican Wolf Nonessential Experimental Population Rule drafted in conjunction with Recommendations (1) and (2), above, not include White Sands Missile Range as a Mexican Wolf Recovery Area (i.e. its designation in the current Final Rule) or as a Reintroduction Zone.
5. AMOC will determine, on biological/ecological grounds, and conclude in a written report to the USFWS Region 2 Director no later than June 30, 2006, whether (and, if so, the extent to which) the current MWEPA outer boundaries should be expanded within Arizona-New Mexico to enable the Arizona-New Mexico Mexican wolf population to exist within a metapopulation context consistent with Leonard et al. 2005 and Carroll et al. *in press*. AMOC may convene, if necessary, a technical advisory group of individuals with appropriate expertise to assist with this assessment.

Note:

- a. The AMOC assessment will also consider other relevant issues, such as: likelihood of expansion area occupancy by wolves dispersing from northerly states or from Mexico; the merits of extending nonessential experimental population status beyond the current boundaries; and estimated costs associated with managing wolves in an expanded area.

- b. The technical advisory group, if convened, shall be chaired by an AMOC representative and shall include no more than 15 other members, each with appropriate scientific expertise.
 - c. AMOC will advocate that the MWEPA recommendation constructed under Recommendations (1) and (2), above, allow wolves to disperse from the BRWRZ (see Recommendation [7], below) throughout the MWEPA, subject to management consistent with current Blue Range Reintroduction Project SOPs.
 - d. Any recommendation to amend the existing Final Rule or to create a new Final Rule would ultimately, if acted on by USFWS, be in full compliance with all applicable APA, ESA, FACA, and NEPA requirements.
6. AMOC will propose, within the context of Recommendation (5), above, that the MWEPA population (management) objective be to establish and maintain a total of at least 100 wolves.

Note: The Reintroduction Project's population (management) objective is not a recovery goal for delisting the Mexican wolf from the list of threatened and endangered species; an updated recovery goal covering the Blue Range has not yet been determined by a Recovery Team. A population (management) objective of at least 100 wolves is, however, consistent with the Mexican Wolf Recovery Plan (USFWS 1982), Final Environmental Impact Statement (USFWS 1996), and Record of Decision for Mexican wolf reintroduction within the BRWRA of the MWEPA (USFWS 1997).

7. AMOC will propose, within the context of Recommendation (5), above, combining the current BRWRA Primary and Secondary Recovery Zones, the Fort Apache Indian Reservation, and/or any other appropriate contiguous areas of suitable wolf habitat into a single expanded Blue Range Wolf Reintroduction Zone (BRWRZ) and allowing initial releases and translocations throughout the BRWRZ in accordance with appropriately amended AMOC SOPs 5.0: Initial Wolf Releases and 6.0: Wolf Translocations.
8. AMOC will propose, within the context of Recommendation (5), above, prohibiting initial releases outside the new BRWRZ, except as necessary to allow latitude for any new Tribal "Statement of Relationship" based agreements with USFWS within the MWEPA that might allow initial releases on Tribal Trust Lands.
9. AMOC will propose, within the context of Recommendation (5), above, that wolves occurring within the MWEPA (but outside the re-defined BRWRZ) that must be relocated to address nuisance or livestock depredation issues (per AMOC SOP 13.0: Control of Mexican Wolves), may be translocated anywhere within the MWEPA except into the BRWRZ. Conversely, AMOC will also propose, within the context of Recommendation (5), above, that wolves occurring within the BRWRZ that must be relocated to address nuisance or livestock depredation issues (per SOP 13.0) may only be translocated to other areas within the BRWRZ. Regardless, all translocations must be carried out in accordance with AMOC SOP 6.0: Wolf Translocations.

10. AMOC will propose, within the context of Recommendations (5) and (6), above, that States and Tribes be authorized to issue permits, in accordance with an appropriately revised AMOC SOP 13.0: Control of Mexican Wolves, to private individuals and/or their delegated representative(s) to use authorized non-lethal means (e.g. cracker shells, rubber bullets) to harass wolves engaged in nuisance behavior or livestock depredation, or which are attacking domestic pets on private, public, or Tribal Trust lands, and to take (i.e. permanent removal by authorized lethal means) wolves in the act of attacking domestic dogs on private or Tribal Trust lands.
11. AMOC will propose, within the context of Recommendations (5) and (6), above, that, when the MWEPA population (management) objective estimate on December 31 for two sequential years is 125 wolves or more, in each immediately subsequent year the States of Arizona and New Mexico and any Tribal AMOC Cooperators may:
 - a. Take (i.e. permanently remove by any authorized means) as many wolves as necessary, above a MWEPA baseline of 125 wolves, to resolve documented wolf nuisance and livestock depredation incidents, consistent with AMOC SOP 13.0: Control of Mexican Wolves;
 - b. Issue State or Tribal permits to private individuals to take (i.e. permanently remove by any authorized means) as many wolves as necessary, above a MWEPA minimum baseline of 125 wolves, to resolve documented wolf nuisance and livestock depredation incidents, consistent with AMOC SOP 13.0: Control of Mexican Wolves;
 - c. Take (i.e. permanently remove by any authorized means) as many wolves as necessary, above a minimum baseline of 125 wolves, to resolve local unacceptable impacts on native ungulate populations.

Note: Unacceptable impacts” will be defined in AMOC’s recommended Mexican Wolf Nonessential Experimental Population Rule (see Recommendations [1] and [2], above).

12. AMOC will develop, no later than June 30, 2006, a report describing a proposed Federally, State, and/or Tribally-funded incentives program to address known and potential economic impacts of wolf nuisance and livestock depredation behavior on private, public, and Tribal Trust lands. AMOC may convene, if necessary, a technical advisory group of individuals with appropriate expertise to assist with this task. The conservation incentives discussion will consider all relevant livestock depredation issues, including: livestock depredation prevention; livestock depredation response; carcass discovery, monitoring, removal, burial, and/or destruction; and possible adjustment of the Federal grazing (AUM) fee (and any Tribal grazing subsidies) within the MWEPA to provide de facto compensation for documented and likely undocumented losses of livestock. The AMOC report shall also include a thorough evaluation of the effectiveness and procedural efficiency of the Defenders of Wildlife wolf depredation compensation fund, and provide recommendations for appropriate improvements.

Note:

- a. The technical advisory group, if convened, shall be chaired by an AMOC representative and include a maximum of 15 other members, each with appropriate expertise.
- b. AMOC as a body will not advocate regulatory changes to address carcass removal or disposal issues (but see Recommendation [12], above, regarding a process by which AMOC will explore possible mechanisms to address this issue).

13. AMOC will convene a stakeholders group to assist AMOC in evaluating, and reporting in writing no later than December 31, 2006, social (human and socioeconomic) implications (including estimated annual livestock depredation losses) for any boundary expansions recommended per Recommendation (5), above.

Note: The stakeholders advisory group will be Co-Chaired by an AMOC representative and an AMWG Cooperator (County) representative, and include a maximum of 50 other members, representing, insofar as is possible, the full spectrum of stakeholders. This group will comply with FACA, if necessary.

14. No later than December 15, 2006, AMOC will complete a detailed plan for another Reintroduction Project Review.

Note: The Reintroduction Project Review will be conducted in 2009-2010 and completed no later than December 31, 2010.

15. AMOC will collaborate on a systems evaluation of all Reintroduction Project databases, to identify in a written report no later than December 31, 2006, recommendations for improving efficiency, reliability, and access relative to Reintroduction Project management information systems.
16. No later than March 1, 2006, AMOC will convene a science and research advisory group. The group will review, on a continuing basis, current and proposed management practices and recommend research priorities for AMOC to advocate to external entities and the cooperating agencies on all aspects of the Reintroduction Project. Review tasks will include, but not be limited to: overall Reintroduction Project effectiveness, statistically reliable wolf survey and population monitoring techniques, wolf population dynamics (demographics), prey base dynamics, total predator loads, seasonal wolf livestock depredation rates, annual wolf impacts on native ungulate populations, prey base monitoring techniques appropriate to determining when prescribed unacceptable levels of impact on native wild ungulates have been met or exceeded, wolf-related disease occurrence and prevention, seasonal livestock depredation rates, prevention and/or remediation of wolf nuisance and livestock depredation problems, livestock husbandry, wolf-related tourism, socioeconomics, and human dimensions.
17. AMOC will refine its annual population (management) objective estimates, including (if possible) developing a statistically valid confidence interval and making use of techniques in

addition to telemetric monitoring, and promptly implement any constructive changes in its population estimation methods.

18. AMOC will use its IFT Annual Work Plan process to determine the need for initial releases of wolf packs in Calendar Year 2007 and beyond. Note: Releases of individual wolves as appropriate for management purposes (e.g. enhancing genetic diversity within the wild population) are not affected by this Recommendation.
19. AMOC will maintain all AMOC Reintroduction Project SOPs and continue to require employee compliance with them. Note: herein, "maintain" includes modify, revise, or delete existing SOPs, or add new SOPs, as necessary for purposes of adaptive management.
20. AMOC will make all Reintroduction Project wolf management, outreach, and budget information (redacted as appropriate to protect confidential personal information) available to the public through Annual Reports for the Reintroduction Project, and other publications and outreach materials as appropriate.
21. AMOC will collaborate with the USDA National Wildlife Research Center to complete and report no later than December 31, 2006, an independent evaluation of modified #3 soft-catch traps, McBride #7 traps, and any other live traps considered appropriate or potentially appropriate for capturing Mexican wolves.
22. AMOC will identify no later than June 30, 2006, in a confidential report to USFWS, any law enforcement actions that might help prevent unlawful take of Mexican wolves or help achieve closure on existing active investigations.
23. AMOC will direct Reintroduction Project-related outreach efforts in 2006 through the IFT Annual Work Plan to identify and reach specific target audiences, with emphasis on local communities and cooperating agencies within the BRWRA (>75% of outreach activity) and outside the BRWRA (<25% of outreach activity).
24. AMOC will ensure that all Reintroduction Project-related outreach activities emphasize wolf conservation and management as an integrated component of the social (human) as well as the ecological landscape, and provide a balanced, objective perspective on positive and negative aspects of wolves as ecosystem components in a multiple-use landscape of intermingled public, private, and Tribal Trust lands.
25. AMOC will collaborate with State and Tribal wildlife agencies to obtain updated abundance and distribution information for deer and elk populations every two years for each Game Management Unit in the BRWRA, and for as much of the rest of the wolf-occupied MWEPA as feasible.

26. AMOC will recommend, through IFT Annual Reports, or a special report updated each year, wolf-related habitat enhancements that can be accomplished through private property incentives programs and Federal, State, Tribal, and County agency planning processes.
27. No later than June 30, 2006, AMOC will review the USFWS Recovery Protocols for pre-release husbandry in captive-breeding facilities and on-site acclimation pens, and advise USFWS as to whether AMOC believes they are adequate to maximize post-release survival and breeding success.
28. No later than December 15, 2007, AMOC and the IFT will identify training recommendations to build and enhance administrative, project management, supervisory, communication, and technical skills and knowledge as appropriate to each staff member's job functions within the Reintroduction Project.
29. AMOC will advocate creating an IFT position in the Alpine field office to work with cooperators and stakeholders throughout Arizona and New Mexico on proactive measures by which to avoid or minimize wolf nuisance and livestock depredation problems. Note: AMOC as a body will not advocate regulatory changes to address carcass removal or disposal issues (but see Recommendation [12], above, regarding a process by which AMOC will explore possible mechanisms to address this issue).
30. AMOC will collaborate with an appropriate entity to complete an IFT staffing needs assessment no later than June 30, 2007, based on (a) Reintroduction Project experience to date and (b) the Arizona-New Mexico Mexican Wolf Nonessential Experimental Population Rule recommended to USFWS per Recommendations (1) and (2), above.
31. AMOC will advocate creating sufficient IFT positions in each Lead Agency as appropriate to implement the staffing needs assessment conducted pursuant to Recommendation (30), above. AMOC will also recommend that at least one IFT member from each Lead Agency be stationed in the Alpine field office, to facilitate and enhance interagency communication and cooperation.
32. AMOC will collaborate with an independent entity to identify all information needs (e.g. data types and sample sizes) for a statistically valid habitat/population viability analysis for the BRWRZ wolf population to be conducted and completed in Calendar Year 2010.
33. AMOC will recommend to USFWS completion of a Mexican Wolf Recovery Plan no later than June 30, 2007.
34. AMOC will maintain and improve administrative and adaptive management processes for the Reintroduction Project to enhance meaningful opportunities for, and participation by, the full spectrum of stakeholders and interested parties. AMOC efforts will include meeting with the IFT twice each year at the Alpine field office, and offering to meet once each year with the Commission or Board of Supervisors for each County within the BRWRA.

35. AMOC will continue to advocate a clear and appropriate distinction between the AMOC-managed Blue Range Reintroduction Project and the USFWS-managed Mexican Wolf Recovery Program.
36. Concomitant with any recommended MWEPA Rule changes pursuant to Recommendations (1) and (2), above, AMOC recommends that State and Tribal Lead Agencies and non-Federal Cooperators make a contingent-obligation request for annual Congressional line item allocations sufficient to cover all aspects of AMOC and AMWG participation in NEPA processes and ESA-related rulemaking processes required by such activities, through to the Record of Decision.
37. AMOC recommends that no later than April 30, 2006, AMOC State and Tribal Lead Agencies and non-Federal Cooperators complete and deliver to Congress a funding request that is sufficient to fully staff and equip the Reintroduction Project as of October 1, 2006, at levels commensurate with all on-the-ground responsibilities in all areas of responsibility, including wolf management (including control), enforcement, outreach (including establishing a Mexican wolf education center in Hon-Dah Arizona), citizen participation in adaptive management, Reintroduction Project-related research, and landowner incentives.

Literature Cited

- Carroll, C., M.K. Phillips, C.A. Lopez Gonzalez, and N.A. Schumaker. *In press*. Defining recovery goals and strategies for endangered species: the wolf as a case study. *BioScience* 56(1):1-13.
- U.S. Fish and Wildlife Service. 1982. Mexican wolf recovery plan. U.S. Fish and Wildlife Service, Albuquerque, New Mexico. 115 pages.
- _____. 1996. Final environmental impact statement: reintroduction of the Mexican wolf within its historic range in the southwestern United States. U.S. Fish and Wildlife Service, Albuquerque, New Mexico.
- _____. 1997. Notice of record of decision and statement of findings on the environmental impact statement on reintroduction of the Mexican gray wolf to its historic range in the southwestern United States. U.S. Fish and Wildlife Service, Albuquerque, New Mexico. 21 pages.
- _____. 1998. Establishment of a nonessential experimental population of the Mexican gray wolf in Arizona and New Mexico. *Federal Register* 63: 1752-1772.